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October 1, 2014

RECEIVED
By Alameda County Environmental Health at 10:04 am, Oct 03, 2014

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

SUBJECT: SEMI-ANNUAL GROUNDWATER AND BASELINE WATER QUALITY 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:

- Semi-Annual Groundwater and Baseline Water Quality Monitoring and Sampling Report dated October 1, 2014 (document 0058.R25).

I declare under penalty of perjury that the contents and conclusions in the document are true and correct to the best of my knowledge.

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

Sincerely,
Xtra Oil Company

Keith Simas

0058.L55

P&D ENVIRONMENTAL, INC.

55 Santa Clara Avenue, Suite 240
Oakland, CA 94610
(510) 658-6916

October 1, 2014
Report 0058.R25

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

SUBJECT: SEMI-ANNUAL MONITORING AND SAMPLING (JANUARY THROUGH JUNE 2014) AND BASELINE GROUNDWATER QUALITY REPORT
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 semi-annual monitoring and sampling of the four historical groundwater monitoring wells (MW-1 through MW-4) and the four wells installed in 2011 for proposed site remediation (EW-2, EW-4, EW-5, and OW-2). The semi-annual monitoring and sampling was performed on June 19, 20, and 23 2014 for the reporting period of January through June 2014. At the time of the semi-annual monitoring event, the wells were also sampled for baseline water quality analysis in preparation for site remediation. Five air sparge points (ASP-2 through ASP-6) that had historically been installed for site remediation were also sampled during the June 2014 sampling event for baseline water quality determination in preparation for site remediation. The baseline water quality sampling of the wells was performed in accordance with P&D's In Situ Chemical Oxidation Feasibility Test Work Plan dated February 7, 2014 (document 0058.W6).

In accordance with a letter from the ACDEH dated August 6, 2014 additional monitoring and sampling of all of the wells was performed on August 20 and 21, 2014 for hexavalent chromium analysis in preparation for site remediation. A Site Location Map (Figure 1) and Site Vicinity Map (Figure 2) are attached with this report.

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 semi-annual monitoring and sampling during those quarters (during either the first and third or the second and fourth quarters). Based on our review, semi-annual 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 are 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).

FIELD ACTIVITIES

Water levels were measured on June 19, 2014 to the nearest 0.01 foot using an electric water level indicator in monitoring wells MW-1 through MW-4, and wells EW-2, EW-4, EW-5, and OW-2 for the semi-annual well monitoring and sampling event. All of the wells except OW-2 and the air sparge points were sampled on June 19, 2014. Well OW-2 was sampled on June 20, 2014 and the depth to water in air sparge points ASP-2 through ASP-6 was measured and the air sparge points were subsequently sampled on June 23, 2014. In addition to semi-annual well sampling analysis, the samples collected in June 2014 were also analyzed for baseline analytes in preparation for site remediation. On August 201 and 21, 2014 P&D personnel returned to the site and monitored and sampled the wells for hexavalent chromium analysis in preparation for site remediation. The water level monitoring data for the wells are summarized in Table 1A and for the air sparging points are summarized in Table 1B. Historical monitoring and sampling data obtained by others for the subject site are attached with this report as Appendix A.

Prior to sampling during each sampling event, wells MW-1 through MW-4, EW-2, EW-4, EW-5, and OW-2, and air sparge points ASP-2 through ASP-6 were purged using low flow purge procedures in accordance with U.S. EPA 1996 guidelines. Purging was performed with a peristaltic pump and new polyethylene tubing for a minimum of fifteen minutes at each sampling location or until the well dewatered. 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 low flow rate of approximately 225 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. Depth to water was not recorded in the air sparging points during purging because the small (1-inch) pipe diameter of the air sparging points is not large enough for both the discharge tubing and the water level indicator at the same time. Copies of the groundwater monitoring/well purging data sheet for each well for each sampling event are attached with this report as Appendix B.

During the June monitoring and sampling event petroleum hydrocarbon sheen was detected on the purge water from wells MW-2 and EW-4. In addition, strong petroleum hydrocarbon odors were detected on the purge water from wells MW-1 and EW-5; moderate to strong petroleum hydrocarbon odors were detected on the purge water from wells MW-2 and EW-4; moderate petroleum hydrocarbon odors were detected on the purge water from well MW-4; slight petroleum hydrocarbon odors were detected on the purge water from well OW-2; and no petroleum hydrocarbon odors were detected on the purge water from wells MW-3 and EW-2. Air sparging points ASP-4 and ASP-5 dewatered during the June monitoring and sampling event.

During the August monitoring and sampling event petroleum hydrocarbon sheen was detected on the purge water from wells MW-2, MW-4 and EW-4. Odors were not recorded on the purge data sheets for the August monitoring and sampling event. Air sparging points ASP-2, ASP-4, ASP-5 and ASP-6 dewatered during the August monitoring and sampling event.

Once the wells had been purged for a minimum of fifteen minutes and the field parameters were observed to have stabilized or the well dewatered and adequately recharged for sample collection, water samples were collected directly from the discharge tubing of the pump into the sample containers. During the June 2014 sample collection event the samples were collected into 40-milliliter glass Volatile Organic Analysis (VOA) vials and 125-milliliter and 500-milliliter polyethylene bottles which were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to ensure that no air bubbles were present. During the August 2014 sampling event all of the samples were filtered using a new in-line filter in the pump discharge tubing for each sample, with the sample collected into 125-millilter polyethylene bottles that were preserved with a borate hydroxide buffer that was provided by the laboratory. 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, and also are summarized in Table 1C with historical water quality field parameter data.

HYDROGEOLOGY

The measured depth to water on June 19, 2014 for groundwater monitoring wells MW-1 through MW-4 ranged from 7.20 to 7.79 feet, and the measured depth to groundwater in wells EW-2, EW-4, EW-5, and OW-2 was 7.09, 5.98, 6.02, and 6.18 feet, respectively. Additionally, the water levels in air sparge points ASP-2 through ASP-6 ranged from 6.52 to 6.73 feet. The measured depth to water on August 20 and 21, 2014 for groundwater monitoring wells MW-1 through MW-4 ranged from 8.01 to 8.51 feet, and the measured depth to groundwater in wells EW-2, EW-4, EW-5, and OW-2 was 7.71, 6.67, 6.77, and 7.08 feet, respectively. Additionally, the water levels in air sparge points ASP-2 through ASP-6 ranged from 7.13 to 7.46 feet on August 20 and 21, 2014.

Groundwater level data collected during the monitoring period are presented in Table 1A and Table 1B.

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 new wells EW-2, EW-4, EW-5, and OW-2. All of the calculated groundwater surface elevations in Table 1A 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).

Based on the water levels measured in wells MW-1, MW-2 and MW-3 on June 19, 2014 the calculated groundwater flow direction was to the east-southeast with a gradient of 0.0058. Since the previous monitoring and sampling event on November 19, 2013 the groundwater flow direction has shifted slightly south and the gradient has decreased from 0.0062. The calculated groundwater surface elevation contours based on the measured depth to the water surface in all of the wells at the subject site on June 19, 2014 and the calculated groundwater flow direction based on the groundwater surface elevations in wells MW-1, MW-2 and MW-3 on June 19, 2014 are shown on Figure 2. The calculated groundwater flow direction on June 19, 2014 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 June 19, 2014 and November 19, 2013 water levels in the wells shows that the water levels were higher on June 19, 2014 in all of the wells by amounts ranging from 0.55 to 0.83 feet. Well MW-4 is located in the landscaping on the north-northeast side of the property along the fence line. Historical smaller changes in water level 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 and air sparging points at the subject site were analyzed at McCampbell Analytical Inc. of Pittsburg, California. For the June 2014 semi-annual well sampling event 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), benzene, toluene, ethylbenzene, total xylenes (BTEX) using EPA Method 5030B in

conjunction with modified EPA Method 8015B and EPA Method 8021B; and for fuel oxygenates and lead scavengers by EPA Method 5030B in conjunction with EPA Method 8260B. Additionally, for the June 2014 baseline sampling event all of the groundwater samples were analyzed for carbon dioxide, ethane, ethane, and methane using EPA Method RSK175; nitrates and sulfates using EPA Method 300.1; total and speciated alkalinity as calcium carbonate using EPA Method SM2320B; and for dissolved and total iron using EPA Method E200.8. For the August 2014 baseline well sampling event all of the samples were analyzed for dissolved hexavalent chromium using EPA Method 218.6.

The laboratory analytical results are summarized in Tables 2A through 2C. Copies of the laboratory analytical reports 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) and the four wells related to proposed site remediation (EW-2, EW-4, EW-5, and OW-2) were monitored for water levels on June 19, 2014; wells MW-1 through MW-4, EW-2, EW-4, and EW-5 were sampled on June 19, 2014; well OW-2 was sampled on June 20,2014; and air sparge points ASP-1 through ASP-6 were monitored and sampled on June 23, 2014. 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 the DO data collected on June 19, 20, and 23, 2014 (Table 1C) shows that the DO values were inconsistent with historical DO data. The DO meter was subsequently determined to be defective. The DO meter was verified to be operating correctly during the August 2014 sampling event. The June 2014 DOI data should be disregarded as inaccurate and the August 2014 DO data should be considered representative of site baseline conditions.

Review of Table 2A shows the following site conditions associated with the semi-annual well sampling event:

- No analytes were detected in the groundwater sample collected from well MW-3.
- TPH-D was detected in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-4, EW-5, and OW-2 at concentrations of 4,200, 2,700, 1,400, 940, 2,200, and 150 micrograms per liter (ug/L), respectively;
- TPH-G was detected in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-2, EW-4, EW-5, and OW-2 at concentrations of 15,000, 4,700, 6,000, 650, 4,800, 16,000, and 200 ug/L, respectively;
- Benzene was detected in wells MW-1, MW-2, MW-4, EW-2, EW-4, EW-5, and OW-2 at concentrations of 3,100, 210, 940, 47, 1,200, 1,200, and 0.62 ug/L, respectively.
- The remaining BTEX compounds were detected at concentrations ranging from 0.70 to 1,300 ug/L.

- MTBE was detected using EPA Method 8260B in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-2, EW-4, EW-5, and OW-2 at concentrations of 350, 24, 70, 6.0, 190, 230, and 1.5 ug/L, respectively.
- Tert-Butyl Alcohol (TBA) was detected in the groundwater samples collected from wells EW-2, EW-4, EW-5, and OW-2 at concentrations of 8.6, 290, 310, and 2.4 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-4, EW-4, EW-5 and OW-2 as consisting of gasoline-range compounds, the samples from wells MW-1 and MW-2 as consisting of both gasoline-range compounds and diesel-range compounds with no recognizable pattern, and the sample from air sparge point ASP-4 as consisting of aged diesel.

Since the previous sampling event on November 19, 2013 all analyte concentrations in well MW-3 have remained not detected, all analyte concentrations in wells MW-1, MW-4, EW-2, EW-4, EW-5, and OW-2 remained not detected or decreased (with the exception of toluene in EW-5 and TPH-D and toluene in MW-1, which increased). In well MW-2 all analyte concentrations remained not detected or increased with the exception of TPH-G, TPH-D and ethylbenzene which decreased.

Review of Table 2A also shows the following site conditions associated with the June 2014 baseline water quality well sampling event for the air sparging points:

- The only analytes detected in any of the groundwater samples collected from air sparging points ASP-1 through ASP-6 were TBA in the samples collected from ASP-2 and ASP-4 at concentrations of 3,700 and 5.7 ug/L, respectively, and TPH-D and MTBE also in the sample collected from ASP-4 at concentrations of 220 and 0.78 ug/L, respectively.

Review of Table 2B shows that the following site conditions associated with the June 2014 baseline water quality well sampling event:

- Ethane was not detected in any of the groundwater samples collected from any of the wells or air sparging points.
- Ethene was detected in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-4, and EW-5 at concentrations of 1.3, 0.85, 0.59, 1.6, and 2.6 ug/L, respectively, and was not detected in any of the other wells or air sparging points,
- Methane was detected in all of the samples, except for the samples collected from ASP-4 through ASP-6, at concentrations ranging from 0.13 to 7,000 ug/L.
- Carbon dioxide was detected in all of the samples ranging in concentration from 240 to 77,000 ug/L.

Review of Table 2C shows that the following site conditions associated with the June 2014 baseline water quality well sampling event:

- Carbonate and hydroxide were not detected in any of the samples.
- Nitrate as nitrogen was only detected in wells MW-4 and OW-2, and air sparging point ASP-6 at concentrations of 360, 350, and 170 ug/L, respectively.
- Nitrate as nitrate (NO^3-) was detected in the same three samples (in wells MW-4 and OW-2, and air sparging point ASP-6) at concentrations of 1,600, 1,500, and 760 ug/L, respectively.
- Sulfate was detected in all of the samples at concentrations ranging from 310 to 110,000 ug/L;
- Total alkalinity as calcium carbonate and also as bicarbonate were detected in all of the samples at concentrations ranging from 134 to 455 milligrams of Calcium Carbonate per Liter,
- Dissolved iron was detected in all of the samples at concentrations ranging from 72 to 24,000 ug/L, and
- Total iron was detected in all of the samples at concentrations ranging from 520 to 370,000.

Review of Table 2C shows that the following site conditions associated with the August 2014 baseline water quality well sampling event:

- Dissolved hexavalent chromium was not detected in any of the samples.

Based on the sample results, P&D recommends that the following sampling locations in the vicinity of pilot test ozone sparging well MW-2 be sampled following the completion of the initial 30 days of ozone sparging: MW-1, MW-2, EW-2, EW-4, EW-5, ASP-4, ASP-5, and ASP-6. All of the samples should be analyzed for the baseline water quality analytes that were analyzed for in June 2014, and for dissolved hexavalent chromium. P&D also recommends that the semi-annual 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 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 12/31/15

Attachments:

Table 1A - Well Monitoring Data
Table 1B - Air Sparging Point Monitoring Data
Table 1C - Summary of Water Quality Field Parameters
Table 2A - Summary of Laboratory Analytical Results - TPH, MBTEX, Fuel Oxygenates, and Lead Scavengers
Table 2B - Summary of Laboratory Analytical Results - Ethane, Ethene, Methane, and Carbon Dioxide
Table 2C - Summary of Laboratory Analytical Results – Inorganic Analytes

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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0058.R25

TABLES

Table 1A
Well Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
MW-1	8/21/2014	22.36*	8.01	14.35
	6/19/2014		7.33	15.03
	11/19/2013		8.06	14.30
	5/16/2013		6.95	15.41
	12/11/2012		6.30	16.06
	6/21/2012		6.66	15.70
	11/28/2011		7.11	15.25
	6/16/2011		6.41	15.95
	5/26/2011		5.86	16.50
	5/24/2011		6.43	15.93
	11/18/2010	19.60**	7.78	11.82
	4/28/2010		6.35	13.25
	12/3/2009		7.84	11.76
	2/25/2009		6.07	13.53
	11/25/2008		7.91	11.69
	8/27/2008		8.03	11.57
	5/28/2008		7.28	12.32
	2/27/2008		6.15	13.45
	11/29/2007		7.82	11.78
	8/29/2007		8.29	11.31
	5/29/2007		7.44	12.16
	3/12/2007		6.34	13.26
	11/6/2006		7.99	11.61
MW-2	8/21/2014	23.10*	8.51	14.59
	6/19/2014		7.79	15.31
	11/19/2013		8.35	14.75
	5/16/2013		7.42	15.68
	12/11/2012		6.83	16.27
	6/21/2012		7.18	15.92
	11/28/2011		7.61	15.49
	6/16/2011		6.89	16.21
	5/26/2011		6.90	16.20
	5/24/2011		6.90	16.20
	11/18/2010	20.31**	8.17	12.14
	4/28/2010		6.76	13.55
	12/3/2009		8.23	12.08
	2/25/2009		6.37	13.94
	11/25/2008		8.21	12.10
	8/27/2008		8.40	11.91
	5/28/2008		7.72	12.59
	2/27/2008		6.49	13.82
	11/29/2007		8.15	12.16
	8/29/2007		8.55	11.76
	5/29/2007		7.79	12.52
	3/12/2007		6.82	13.49
	11/6/2006		8.25	12.06
MW-3	8/20/2014	23.35*	8.39	14.96
	6/19/2014		7.34	16.01
	11/19/2013		8.06	15.29
	5/16/2013		6.72	16.63
	12/11/2012		6.03	17.32
	6/21/2012		6.42	16.93
	11/28/2011		7.19	16.16
	6/16/2011		6.17	17.18
	5/26/2011		6.19	17.16
	5/24/2011		6.16	17.19
	11/18/2010	20.57**	7.93	12.64
	4/28/2010		6.00	14.57
	12/3/2009		7.83	12.74
	2/25/2009		5.42	15.15
	11/25/2008		7.83	12.74
	8/27/2008		8.23	12.34
	5/28/2008		7.36	13.21
	2/27/2008		5.75	14.82
	11/29/2007		7.88	12.69
	8/29/2007		8.31	12.26
	5/29/2007		7.26	13.31
	3/12/2007		6.03	14.54
	11/6/2006		8.09	12.48

Table 1A
Well Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
MW-4	8/20/2014	22.48*	8.03	14.45
	6/19/2014		7.20	15.28
	11/19/2013		8.03	14.45
	5/16/2013		6.77	15.71
	12/11/2012		5.86	16.62
	6/21/2012		6.00	16.48
	11/28/2011		6.62	15.86
	6/16/2011		5.79	16.69
	5/26/2011		6.41	16.07
	5/24/2011		5.82	16.66
	11/18/2010	19.69**	7.69	12.00
	4/28/2010		5.82	13.87
	12/3/2009		7.60	12.09
	2/25/2009		5.32	14.37
	11/25/2008		7.61	12.08
	8/27/2008		7.91	11.78
	5/28/2008		6.97	12.72
	2/27/2008		5.38	14.31
	11/29/2007		7.57	12.12
	8/29/2007		8.07	11.62
	5/29/2007		7.38	12.31
	3/12/2007		5.30	14.39
	11/6/2006		7.60	12.09
EW-2	8/21/2014	22.13*	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	8/21/2014	20.95*	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	8/20/2014	21.20*	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
OW-2	8/20/2014	21.55*	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

Abbreviations and Notes:
* = Surveyed by Kier & Wright on June 9, 2011.
** = Surveyed by Andreas Deak in April 1997.
*** = Prior to well development.
ft-MSL = feet above mean sea level
ft = feet

Table 1B
Air Sparging Point Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
ASP-2	8/20/2014	Unknown	7.13	Unknown
	6/23/2014		6.56	Unknown
ASP-3	8/20/2014	Unknown	7.23	Unknown
	6/23/2014		6.73	Unknown
ASP-4	8/21/2014	Unknown	7.45	Unknown
	6/23/2014		6.70	Unknown
ASP-5	8/21/2014	Unknown	7.13	Unknown
	6/23/2014		6.52	Unknown
ASP-6	8/21/2014	Unknown	7.46	Unknown
	6/23/2014		6.68	Unknown

Abbreviations and Notes:
ft-MSL = feet above mean sea level
ft = feet

Table 1C
Summary of Water Quality Field Parameters

Sample ID	Sample Date	D.O. (mg/L)	O.R.P. (mV)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Turbidity (NTU)
MW-1	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	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	--
MW-3	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	--

Table 1C
Summary of Water Quality Field Parameters

Sample ID	Sample Date	D.O. (mg/L)	O.R.P. (mV)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Turbidity (NTU)
MW-4	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	--
EW-2	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	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	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	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
ASP-2	8/20/2014	6.64	-47.5	7.53	808	21.1	0.00
	6/23/2014	4.91	104.5	6.88	719	18.8	0.00
ASP-3	8/20/2014	0.70	-58.7	7.55	688	21.0	0.00
	6/23/2014	2.62	89.9	7.38	627	21.5	0.00
ASP-4	8/21/2014	2.55	-21.7	6.95	664	24.1	0.00
	6/23/2014	7.31	22.9	6.59	630	22.9	0.00
ASP-5	8/21/2014	3.47	-60.0	7.53	664	23.9	0.00
	6/23/2014	4.59	60.1	7.22	378.9	23.2	0.00
ASP-6	8/21/2014	1.27	-111.1	7.72	727	23.3	0.00
	6/23/2014	4.85	-97.4	7.71	673	22.6	0.00

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

Table 2A

Summary of Laboratory Analytical Results - TPH, MBTEX, Fuel Oxygenates, and Lead Scavengers

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers
MW-1	6/19/2014	15,000	4,200, b,c	ND<250	NA	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
	11/28/2011	18,000	2,600, c	ND<250	ND<600	2,600	410	410	1,200	ND, except TBA = 460, MTBE = 210
	5/26/2011	15,000	2,400, b,c	ND<250	ND<500	2,000	430	400	1,300	ND, except TBA = 570, MTBE = 120
	11/18/2010	21,000	1,900, b,c	ND<250	1,700	6,300	340	340	860	ND, except TBA = 3,300, MTBE = 1,500
	4/28/2010	19,000	2,800, b,c	260, b,c	840	3,400	680	500	1,600	ND, except TBA = 3,200, MTBE = 750
	12/3/2009	19,000	1,900, b, c	ND<250	1,500	4,500	670	400	1,300	ND, except TBA = 10,000, MTBE = 1,100
	2/25/2009	21,000	2,200, b,c	ND<250	ND<2,500	4,300	750	580	1,700	ND, except TBA = 17,000, MTBE = 1,400
	11/25/2008	20,000	2,400, c	ND<250	1,900	5,500	490	530	1,300	ND, except TBA = 16,000, MTBE = 1,600
	8/27/2008	46,000	5,200, c	ND<250	1,300	4,600	1,800	2,000	5,200	NA
	5/28/2008	40,000	6,100, c	290	1,600	4,200	2,600	1,700	5,900	NA
	2/27/2008	45,000	4,900, c	310	2,600	6,200	3,100	1,300	5,100	NA
	11/29/2007	27,000	3,100, b,c	ND<250	2,600	4,700	930	770	2,600	NA
	8/29/2007	26,000	3,900, b,c	470	3,200	5,400	1,400	810	3,000	NA
	5/30/2007	22,000	3300, c	ND<250	ND<750	400	380	1,100	3,600	NA
	3/12/2007	38,000	3,500, b,c	300	3,500	5,400	2,900	1,300	5,100	NA
	11/6/2006	44,000,a	3,400, a,c	360	3,900	5,600	2,300	920	3,000	NA
MW-2	6/19/2014	4,700	2,700, b,c	350, b,c	NA	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
	11/28/2011	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	NA
	5/28/2008	12,000, a	25,000 a,c,d	7,200	ND<210	2,000	77	77	90	NA
	2/27/2008	11,000, a	21,000, a,c,d	6,800	ND<150	940	36	ND<10	22	NA
	11/29/2007	11,000, a	32,000, a,c,d	11,000	ND<50	1,000	28	120	31	NA
	8/29/2007	8,600, a	6,300, a, b, c	2,600	ND<100	1,300	36	48	48	NA
	5/30/2007	14,000, a	22,000, a,c,d	5,800	ND<210	2,200	51	100	99	NA
	3/12/2007	8,500, a	74,000, a, c,d	21,000	ND< 80	1,200	34	140	69	NA
	11/6/2006	14,000,a	45,000, a,c	11,000	ND<120	1,400	27	200	37	NA

Table 2A

Summary of Laboratory Analytical Results - TPH, MBTEX, Fuel Oxygenates, and Lead Scavengers

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers
MW-3	6/19/2014	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
	11/19/2013	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
	5/16/2013	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	12/11/2012	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	6/21/2012	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	11/28/2011	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	5/26/2011	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	11/18/2010	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	4/28/2010	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	12/3/2009	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	2/25/2009	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	11/25/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND
	8/27/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA
	5/28/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA
	2/27/2008	ND<50	ND<50	ND<250	15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA
	11/29/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA
	8/29/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA
	5/30/2007	ND<50	ND<50	ND< 250	ND< 5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA
	3/12/2007	ND< 50	ND< 50	ND< 250	ND< 5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA
	11/6/2006	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NA
MW-4	6/19/2014	6,000	1,400, c	ND<250	NA	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	NA
	5/28/2008	2,200	1,400, c	ND<250	ND<30	16	38	100	320	NA
	2/27/2008	8,000	1,900, c	ND<250	ND<50	47	110	270	1,300	NA
	11/29/2007	12,000	2,800, c	ND<250	ND<180	260	230	580	2,500	NA
	8/29/2007	12,000, a	560, c	ND<250	660	910	200	750	2,200	NA
	5/30/2007	43,000	4,500, c	610	3,600	5,800	3,700	1,400	5,400	NA
	3/12/2007	19,000	3,100, c	ND< 250	370	560	450	1,100	4,400	NA
	11/6/2006	23,000	4,300,c	850	ND<900	680	250	930	3,100	NA
EW-2	6/19/2014	650, g	ND<50	ND<250	NA	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
	11/28/2011	4,600	960, c	ND< 250	260	1,600	15	62	38	ND, except TBA = 270, MTBE = 270
	5/26/2011	2,700	560, b,c	ND< 250	ND<150	580	7.9	10	80	ND, except TBA = 290, MTBE = 97

Table 2A

Summary of Laboratory Analytical Results - TPH, MBTEX, Fuel Oxygenates, and Lead Scavengers

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers
EW-4	6/19/2014	4,800	940, c	ND<250	NA	1,200	12	110	21	ND, except TBA = 290, MTBE = 190
	11/19/2013	18,000	3,000, c	ND<250	ND<700	4,200	79	480	120	ND, except TBA = 320, MTBE = 270
	5/16/2013	76	ND<50	ND<250	14	4.0	ND<0.5	1.7	ND<0.5	ND, except TBA = 11, MTBE = 13
	12/11/2012	340	150, b,c	ND< 250	ND<30	28	1.5	6.9	0.91	ND, except TBA = 26, MTBE = 20
	6/21/2012	9,600	2,200, c	ND< 250	ND<75	270	22	340	290	ND, except TBA = 18, MTBE = 6.7
	11/28/2011	8,300	2,000, c	ND< 250	ND<150	520	40	510	530	ND, except TBA = 89, MTBE = 16
	5/26/2011	2,800	500, b,c	ND< 250	ND<150	99	9.9	20	300	ND, except TBA = 110, MTBE = 83
EW-5	6/19/2014	16,000	2,200, c	ND< 250	NA	1,200	140	950	1,100	ND, except TBA = 310, MTBE = 230
	11/19/2013	17,000	2,600, c	ND< 250	ND<800	2,400	110	1,100	1,700	ND, except TBA = 420, MTBE = 330
	5/16/2013	19,000	2,500, c	ND< 250	ND<300	1,500	100	1,700	2,100	ND, except TBA = 180, MTBE = 41
	12/11/2012	40,000	4,700, c	ND< 250	ND<250	700	1,300	2,500	5,900	ND, except TBA = 180, MTBE = 8.6
	6/21/2012	44,000	4,900, c	ND< 250	ND<1,000	710	2,400	2,300	8,800	ND, except TBA = 57, MTBE = 6.5
	11/28/2011	48,000	3,500, b,c	ND< 250	ND<400	930	3,400	2,400	9,000	ND, except TBA = 110, MTBE = 48
	5/26/2011	35,000	3,600, b,c	ND< 250	ND<450	1,000	2,700	850	11,000	ND, except TBA = 250, MTBE = 86
OW-2	6/20/2014	200	150, c	ND<250	NA	0.62	0.70	6.7	6.8	ND, except TBA = 2.4, MTBE = 1.5
	11/19/2013	610	370, c	ND<250	ND<5.0	2.2	1.5	8.8	14	ND, except TBA = 5.1, MTBE = 2.1
	5/16/2013	85	ND<100	ND<250	ND<5.0	0.57	0.88	ND<0.5	0.54	ND, except TBA = 7.6, MTBE = 0.99
	12/11/2012	61	ND<50	ND<250	ND<5.0	3.2	0.70	0.94	3.5	ND, except TBA = 39, MTBE = 3.1
	6/21/2012	4,600	840, c	ND< 250	ND<45	110	46	160	590	ND, except TBA = 60, MTBE = 5.4
	11/28/2011	5,300	1,100, b,c	ND< 250	ND<130	350	170	24	790	ND, except TBA = 210, MTBE = 50
	5/26/2011	450	430, b,c	ND< 250	ND<5.0	0.87	0.71	ND<0.5	7.7	ND, except TBA = 350, MTBE = 3.6
ASP-2	6/23/2014	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND, except TBA = 3,700
ASP-3	6/23/2014	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
ASP-4	6/23/2014	ND<50	220, f	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND, except TBA = 5.7, MTBE = 0.78
ASP-5	6/23/2014	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND
ASP-6	6/23/2014	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND

Abbreviations and Notes:

TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-G = Total Petroleum Hydrocarbons as Gasoline
MTBE = Methyl tertiary-butyl ether
TBA = tert-Butyl alcohol.
1,2-DCA = 1,2-Dichloroethane
ND = Not Detected.
NA = Not Analyzed.
a = Laboratory Note: lighter than water immiscible sheen/ product is present
b = Laboratory Note: diesel range compounds are significant; no recognizable pattern
c = Laboratory Note: gasoline range compounds are significant
d = Laboratory Note: unmodified or weakly modified diesel range compounds are significant
e = Analysis by EPA 8260B as part of fuel oxygenate analysis. All other results for MTBE and all results for BTEX are by EPA 8021B.
f = Laboratory Note: aged diesel is significant
g = Laboratory Note: one to a few isolated non-target peaks present in the TPH-G chromatogram.
Results are in micrograms per liter (µg/L), unless otherwise noted.

Table 2B

Summary of Laboratory Analytical Results - Ethane, Ethene, Methane, and Carbon Dioxide

Well Number	Sample Date	Ethane	Ethene	Methane	Carbon Dioxide
MW-1	6/19/2014	ND<0.20	1.3	3100	69,000
MW-2	6/19/2014	ND<0.20	0.85	2700	77,000
MW-3	6/19/2014	ND<0.20	ND<0.20	3	59,000.0
MW-4	6/19/2014	ND<0.20	0.59	2,500.00	63,000
EW-2	6/19/2014	ND<0.20	ND<0.20	160	11,000
EW-4	6/19/2014	ND<0.20	1.6	3200	47,000
EW-5	6/19/2014	ND<0.20	2.6	7000	67,000
OW-2	6/20/2014	ND<0.20	ND<0.20	17	36,000
ASP-2	6/23/2014	ND<0.20	ND<0.20	2	12,000.0
ASP-3	6/23/2014	ND<0.20	ND<0.20	0	2,800.00
ASP-4	6/23/2014	ND<0.20	ND<0.20	ND<0.10	4,800
ASP-5	6/23/2014	ND<0.20	ND<0.20	ND<0.10	3,200
ASP-6	6/23/2014	ND<0.20	ND<0.20	ND<0.10	240

Abbreviations and Notes:

ND = Not Detected.

Results are in micrograms per liter (µg/L), unless otherwise noted.

Table 2C
Summary of Laboratory Analytical Results - Inorganic Analytes

Well Number	Sample Date	Nitrate as N	Nitrate as NO3-	Sulfate	Total Alkalinity as Calcium Carbonate (mg $CaCO_3$/L)	Carbonate (mg $CaCO_3$/L)	Bicarbonate (mg $CaCO_3$/L)	Hydroxide (mg $CaCO_3$/L)	Dissolved Iron	Total Iron	Dissolved Hexavalent Chromium
MW-1	8/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/19/2014	ND<100	ND<450	310	438	ND<1.00	438	ND<1.00	19,000	370,000	NA
MW-2	8/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/19/2014	ND<100	ND<450	920	455	ND<1.00	455	ND<1.00	20,000	23,000	NA
MW-3	8/20/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/19/2014	ND<100	ND<450	28,000	134	ND<1.00	134	ND<1.00	1,600	2,800	NA
MW-4	8/20/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/19/2014	360	1,600	360	366	ND<1.00	366	ND<1.00	15,000	15,000	NA
EW-2	8/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/19/2014	ND<100	ND<450	110,000	186	ND<1.00	186	ND<1.00	840	1,000	NA
EW-4	8/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/19/2014	ND<100	ND<450	39,000	284	ND<1.00	284	ND<1.00	11,000	11,000	NA
EW-5	8/20/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/19/2014	ND<100	ND<450	640	372	ND<1.00	372	ND<1.00	24,000	26,000	NA
OW-2	8/20/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/20/2014	350	1,500	28,000	262	ND<1.00	262	ND<1.00	1,500	2,000	NA
ASP-2	8/20/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/23/2014	ND<100	ND<450	87,000	269	ND<1.00	269	ND<1.00	810	770	NA
ASP-3	8/20/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/23/2014	ND<100	ND<450	88,000	172	ND<1.00	172	ND<1.00	ND<20	520	NA
ASP-4	8/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/23/2014	ND<100	ND<450	90,000	150	ND<1.00	150	ND<1.00	520	3,200	NA
ASP-5	8/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/23/2014	ND<100	ND<450	87,000	151	ND<1.00	151	ND<1.00	99	760	NA
ASP-6	8/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND<0.20
	6/23/2014	170	760	92,000	191	ND<1.00	191	ND<1.00	72	22,000	NA

Abbreviations and Notes:
ND = Not Detected.
NA = Not Analyzed.
CaCO3 = Calcium Carbonate
Results are in micrograms per liter (µg/L), unless otherwise noted.

FIGURES

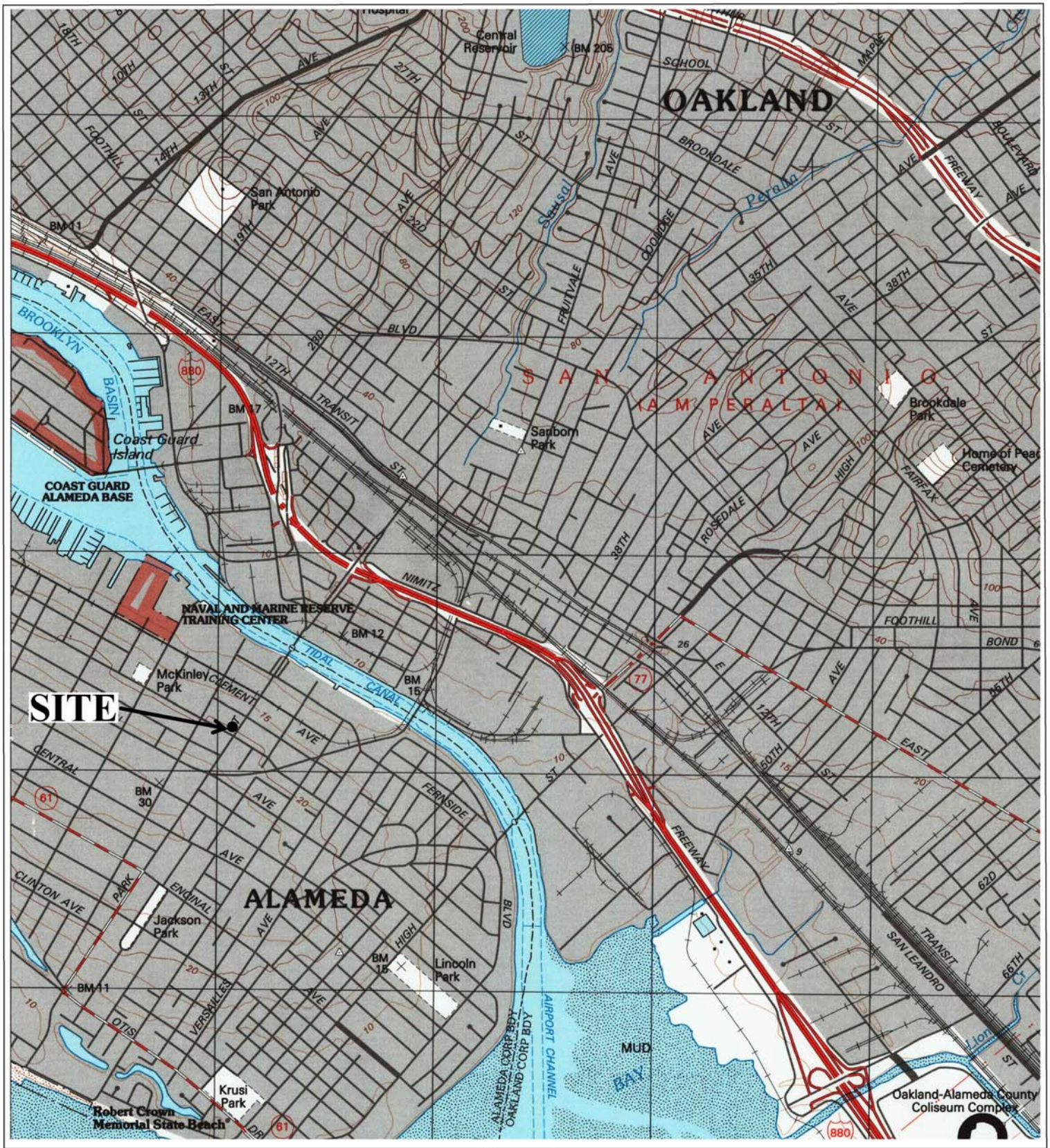


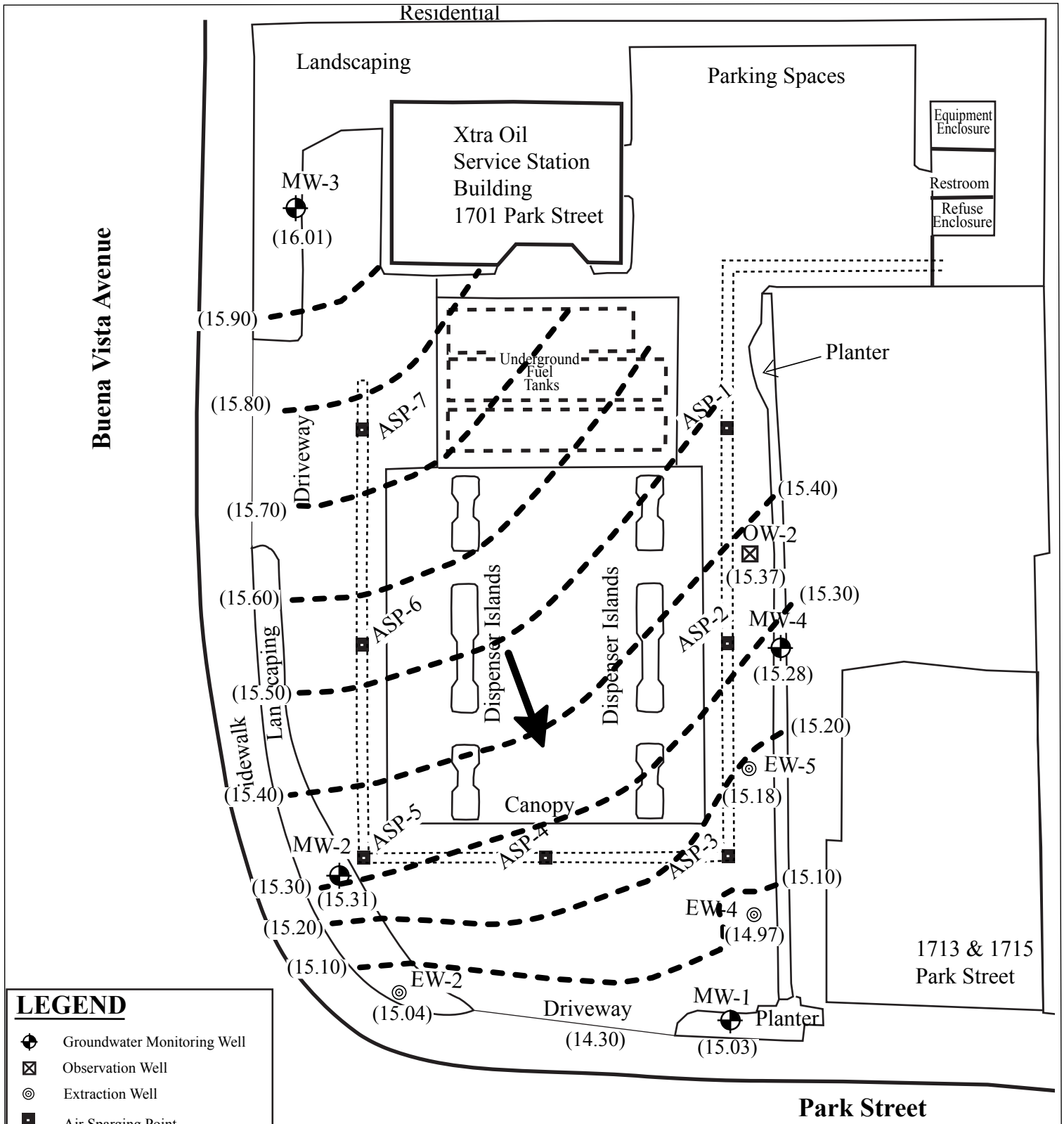
Figure 1
Site Location Map
Xtra Oil Company
1701 Park Street
Alameda, California

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

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

0 1,000 2,000
Approximate Scale in Feet

N



LEGEND

- Groundwater Monitoring Well
- Observation Well
- Extraction Well
- Air Sparging Point
- Horizontal Vapor Extraction Trenching
- (16.01) Groundwater Surface Elevation in Feet on 6/19/2014
- Groundwater Flow Direction
- Groundwater Surface Contour

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

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

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

0 12.5 25
Approximate Scale in Feet

N

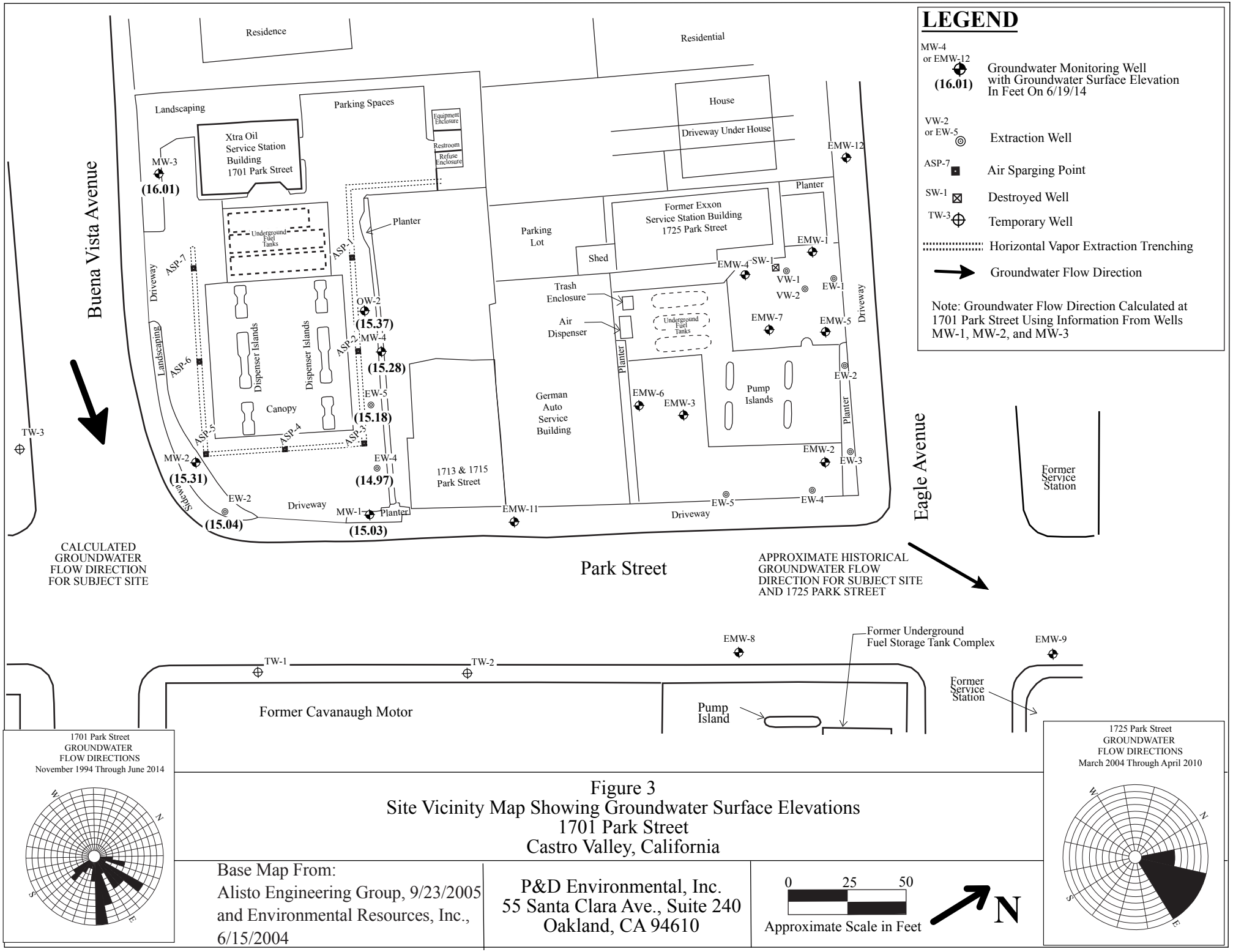


Figure 3
Site Vicinity Map Showing Groundwater Surface Elevations
1701 Park Street
Castro Valley, California

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

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

APPENDIX A

HISTORICAL WATER LEVEL AND WATER QUALITY DATA FOR THE SUBJECT SITE

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

ALISTO PROJECT NO. 10-210

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	OTHER SVOCs (ug/l)	NAPTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB
MW-1	11/04/94	19.60	8.8	---	10.96	60000	6400	13000	4900	1300	5500	---	---	---	---	---	MCC
QC-1 (c)	11/04/94	---	---	---	---	54000	---	12000	4500	1200	5200	---	---	---	---	---	MCC
MW-1	01/11/95	19.60	6.10	---	13.50	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	02/24/95	19.60	6.57	---	13.03	56000	4400	13000	7000	1400	5100	---	---	---	---	---	MCC
QC-1 (c)	02/24/95	---	---	---	---	43000	---	8900	4600	970	3300	---	---	---	---	---	MCC
MW-1	05/25/95	19.60	6.54	---	13.06	53000	4700	11000	5700	1200	4000	---	---	---	---	4.3	MCC
QC-1 (c)	05/25/95	---	---	---	---	48000	---	11000	5300	1200	3800	---	---	---	---	---	MCC
MW-1	08/30/95	19.60	8.15	---	11.45	14000	3700	5000	1100	3900	103	---	---	---	---	2.8	MCC
QC-1 (c)	08/30/95	---	---	---	---	57000	---	17000	7000	1500	5200	---	---	---	---	---	MCC
MW-1	11/16/95	19.60	8.79	---	10.81	100000	5900	22000	17000	2100	8500	---	---	---	---	---	MCC
QC-1 (c)	11/16/95	---	---	---	---	95000	---	20000	15000	1800	7800	---	---	---	---	---	MCC
MW-1	03/20/96	19.60	6.45	---	13.15	46000	3300	10000	6200	1100	3200	---	---	---	---	---	MCC
QC-1 (c)	03/20/96	---	---	---	---	42000	---	9800	5800	970	3000	---	---	---	---	---	MCC
MW-1	06/13/96	19.60	7.14	---	12.46	44000	5400	9500	5500	1100	4000	19000	---	---	---	---	MCC
QC-1 (c)	06/13/96	---	---	---	---	48000	---	9300	5600	1000	3800	17000	---	---	---	---	MCC
MW-1	09/23/96	19.60	7.56	---	12.04	76000	14000	14000	11000	1600	7100	17000	---	---	---	6.1	MCC
MW-1	12/19/96	19.60	7.08	---	12.52	46000	---	12000	5500	1200	4100	---	---	---	---	---	MCC
MW-1	05/09/97	19.60	7.39	---	12.21	80000	7500	14000	12000	1700	7600	14000	ND	280	ND<2	2.7	MCC/CHR
MW-1	09/11/97	19.60	7.50	---	12.10	100000	7700	19000	19000	2400	11000	ND<2100	---	---	---	7.2	MCC
MW-1	12/15/97	19.60	7.61	---	11.99	45000	3500	11000	5300	1500	5200	13000	---	---	---	6.8	MCC
QC-1 (c)	12/15/97	---	---	---	---	45000	---	11000	5400	1400	5100	14000	---	---	---	---	MCC
MW-1	03/11/98	19.60	5.35	---	14.25	40000	3600	5900	3900	1300	4900	8700	---	---	---	6	MCC
QC-1 (c)	03/11/98	---	---	---	---	43000	---	7200	5000	1400	5300	14000	---	---	---	---	MCC
MW-1	06/23/98	19.60	6.63	---	12.97	44000	3700	5900	6200	1800	6200	870	---	---	---	6.2	MCC
QC-1 (c)	06/23/98	---	---	---	---	47000	---	6000	6400	1800	6300	1000	---	---	---	---	MCC
MW-1	12/01/98	19.60	6.48	---	13.12	57000	---	7400	12000	2100	8200	7200	---	---	---	2.4	MCC
QC-1 (c)	12/01/98	---	---	---	---	57000	---	6800	11000	1900	7500	8300	---	---	---	---	MCC
MW-1	03/30/99	19.60	5.74	---	13.86	67000	6500	5700	9400	2500	9400	3200	---	---	---	2.1	MCC
QC-1 (c)	03/30/99	---	---	---	---	64000	6400	5500	9000	2400	9100	3100	---	---	---	---	MCC
MW-1	08/16/99	19.60	7.02	---	12.58	63000	---	3800	9100	2800	11000	ND<1700	---	---	---	1.3	MCC
QC-1 (c)	08/16/99	---	---	---	---	64000	---	3700	8800	2800	11000	ND<1400	---	---	---	---	MCC
MW-1	12/31/99	19.60	7.45	---	12.15	62000	5100	2900	9400	2700	11000	ND<100	---	---	---	8.3	MCC
QC-1 (c)	12/31/99	---	---	---	---	67000	4900	2900	9700	2800	12000	ND<100	---	---	---	---	MCC
MW-1	03/31/00	19.60	5.85	---	13.75	48000	490	3200	5500	2000	6700	520	---	---	---	7.9	MCC
QC-1 (c)	03/31/00	---	---	---	---	54000	3300	3500	6000	2300	7300	730	---	---	---	---	MCC
MW-1	07/14/00	19.60	7.00	---	12.60	78000	5700	5600	14000	2300	9500	ND<200	---	---	---	3.2	MCC
QC-1 (c)	07/14/00	---	---	---	---	72000	---	4900	14000	2100	9200	ND<200	---	---	---	---	MCC
MW-1	10/04/00	19.60	7.60	---	12.00	65000	2900	3800	11000	2400	8200	ND<100	---	---	---	1.4	MCC
QC-1 (c)	10/04/00	---	---	---	---	68000	---	3900	13000	2400	9300	ND<100	---	---	---	---	MCC
MW-1	12/21/00	19.60	6.91	---	12.69	74000	2500	3800	17000	3400	15000	ND<200	---	---	---	1.3	MCC
QC-1 (c)	12/21/00	---	---	---	---	69000	---	2700	12000	2400	11000	ND<550	---	---	---	---	MCC
MW-1	04/13/01	19.60	6.06	---	13.54	55000	2400	2900	7800	2400	9400	ND<900	---	---	---	0.8	MCC
QC-1 (c)	04/13/01	---	---	---	---	51000	---	2300	6100	2000	7900	ND<350	---	---	---	---	MCC
MW-1	06/27/01	19.60	6.54	---	13.06	80000	3600	2800	13000	2300	10000	ND<250	---	---	---	1.1	MCC
QC-1 (c)	06/27/01	---	---	---	---	76000	---	3100	13000	2300	10000	ND<250	---	---	---	---	MCC
MW-1	09/20/01	19.60	7.08	---	12.52	74000	6600	1600	7700	2500	10000	ND<200	---	---	---	0.8	MCC
QC-1 (c)	09/20/01	---	---	---	---	67000	---	1600	7800	2600	10000	ND<200	---	---	---	---	MCC
MW-1	12/21/01	19.60	5.71	---	13.89	58000	5500	2100	11000	2400	10000	ND<720	---	---	---	1.4	MCC
QC-1 (c)	12/21/01	---	---	---	---	56000	---	2100	11000	2300	10000	ND<620	---	---	---	---	MCC
MW-1	02/04/02	19.60	5.01	---	14.59	6500	1800	74	100	230	1500	140	---	---	---	4.1	MCC
QC-1 (c)	02/04/02	---	---	---	---	8000	---	90	130	270	1800	ND<500	---	---	---	---	MCC
MW-1	05/07/02	19.60	6.10	---	13.50	41000	7900	1300	5200	1700	6300	ND<1000	---	---	---	4.3	MCC
QC-1 (c)	05/07/02	---	---	---	---	40000	---	1300	5200	1700	6400	ND<500	---	---	---	---	MCC
MW-1	08/22/02	19.60	6.91	---	12.69	42000	4800	1100	6300	1900	7900	ND<500	---	---	---	4.9	MCC
QC-1 (c)	08/22/02	---	---	---	---	40000	---	1000	6100	1800	7500	ND<500	---	---	---	---	MCC
MW-1	11/08/02	19.60	6.46	---	13.14	38000	6800	770	4600	1600	6600	ND<1000	---	---	---	---	MCC
QC-1 (c)	11/08/02	---	---	---	---	49000	---	880	4800	1800	6700	ND<1700	---	---	---	---	MCC
MW-1	02/07/03	19.60	5.80	---	13.80	43000	3700	1600	6100	2100	9700	ND<500	---	---	---	1.1	MCC
MW-1	05/02/03	19.60	5.60	---	14.00	48000	4600	1100	5900	1800	7300	ND<1000	---	---	---	---	MCC
QC-1 (c)	05/02/03	---	---	---	---	---	---	1200	5800	1800	7100	ND<500	---	---	---	---	MCC
MW-1	08/14/03	19.60	6.81	---	12.79	42000	3800	1000	4700	2000	8100	ND<500	---	---	---	1.3	MCC
QC-1 (c)	08/14/03	---	---	---	---	43000	---	1000	4600	2000	7900	ND<500	---	---	---	---	MCC
MW-1	11/14/03	19.60	6.71	---	12.89	40000	3000	610	4900	1900	7600	ND<500	---	---	---	0.8	MCC
MW-1	03/01/04	19.60	5.22	---	14.38	20000	3000	540	2500	720	2900	ND<50	---	---	---	0.01	MCC
MW-1	06/30/04 (e)	19.60	6.38	---	13.22	39000	3000	570	2900	2100	9200	ND<500	---	---	---	---	MCC
QC-1 (c)	06/30/04	---	---	---	---	---	6800	550	3200	2100	9100	ND<500	---	---	---	---	MCC
MW-1	10/26/04	19.60	6.00	---	13.60	35000	4400	510	2900	1600	5700	ND<150	---	---	---	2.7	MCC
QC-1 (c)	10/26/04	---	---	---	---	---	---	450	2700	1600	5500	ND<150	---	---	---	---	MCC
MW-1	03/24/05	19.60	5.04	---	14.56	29000	3300	1300	5500	1200	4900	ND<500	---	---	---	2.7	MCC
QC-1 (c)	03/24/05	---	---	---	---	31000	---	830	3800	1000	4500	ND<210	---	---	---	---	MCC
MW-1	06/14/05	19.60	5.45	---	14.15	23000	4300	1300	2700	810	2700	ND<500	---	---	---	2.9	MCC
QC-1 (c)	06/14/05	---	---	---	---	---	---	1400	3100	810	2900	ND<250	---	---	---	---	MCC
MW-1	09/12/05	19.60	7.89	---	11.71	60000	4600	4900	8200	1900	7300	2300	---	---	---	2.6	MCC
QC-1 (c)	09/12/05	---	---	---	---	58000	---	5000	8500	1900	7300	2200	---	---	---	---	MCC
MW-1	01/04/06 (g)	19.60	6.09	---	13.51	54000	2900	8800	3500	970	3700	5400	---	---	---	---	MCC
QC-1 (c)	01/04/06 (g)	---	---	---	---	46000	---	8500	3500	970	3700	5200	---	---	---	---	MCC
MW-1	04/04/06 (h)	19.60	5.71	<0.01	13.89	31000	2500	6700	2800	980	2800	5400	---	---	---	---	MCC
QC-1 (c)	04/04/06 (h)	---	---	---	---	31000	---	6900	2900	1000	2800	5800	---	---	---	---	MCC
MW-1	06/12/06	19.60	6.66	sheen	12.94	31000	3100	4800	2200	910	2600	3900	---	---	---	---	MCC
QC-1 (c)	06/12/06	---	---	---	---	31000	---	5700	2300	850	2400	4900	---	---	---	---	MCC
MW-1	**09/08/06**	**19.60**	**7.78**	**sheen**	**11.82**	**34000**	**3000**	**7900**	**1800**	**760**	**2300**	**6200**	**---**	**---**	**---**	**---**	**MCC**
QC-1 (c)	**09/08/06**	**---**	**---**	**---**	**---**	**39000**	**---**	**6300**	**1600**	**680**	**2000**	**5200**	**---**	**---**	**---**	**---**	**MCC**

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

ALISTO PROJECT NO. 10-210

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

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

ALISTO PROJECT NO. 10-210

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

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

NOTES:

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

APPENDIX B

GROUNDWATER MONITORING/ WELL PURGING DATA SHEETS

June 19, 20, and 23, 2014

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

Site Name Xtra Oil Company - Park Street
Well No. MW1
Job Number 0058
Date 6/19/14
TOC to Water (ft.) 7.33
Sheen none
Well Depth (ft.) 19.2
Free Product Thickness N/A
Well Diameter 2"
Sample Collection Method peristaltic pump + dedic
Flow Rate (mL/minute) 225
Start Purge Time 1354

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)
1355	225	7.46	6.58	855	25.6	2.75	-799.2	0.00
1358	900	7.54	6.56	796	21.5	2.30	-753.3	0.00
1401	1575	7.61	6.56	790	21.4	2.01	-754.3	0.00
1404	2250	7.64	6.57	790	21.6	1.86	-755.0	0.00
1407	2925	7.66	6.56	789	21.6	1.84	-755.9	0.00
1410	3600	7.68	6.56	789	21.6	1.80	-755.2	0.00

NOTES

no Sheen. Strong phc odor
Sample collected @ 1415

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

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

Site Name Xtra Oil Company. Park Street
Well No. MW2
Job Number 0058
Date 6/19/14
TOC to Water (ft.) 7.79
Sheen Yes
Well Depth (ft.) 13.4
Free Product Thickness N/A
Well Diameter 2"
Sample Collection Method peristaltic pump + dedicated PE tubing
Flow Rate (mL/minute) 225
Start Purge Time 1125

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)
1126	225	7.89	6.37	510	22.6	4.34	-91.7	0.00
1129	900	8.03	6.45	692	22.0	3.62	-132.1	0.00
1132	1575	8.14	6.44	744	22.2	2.71	-147.8	0.00
1135	2250	8.22	6.43	750	22.2	2.51	-150.9	0.00
1138	2925	8.25	6.45	777	22.2	2.37	-154.2	0.00
1141	3600	8.29	6.46	791	22.3	2.13	-160.9	0.00

NOTES

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

moderate to strong odor and sheen observed.
MW2 Sample collected @ 1150

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

Site Name Xtra Oil Company - Park Street
Job Number 0058
TOC to Water (ft.) ~~6.50~~ HD 7.34
Well Depth (ft.) 19.3
Well Diameter 2"
Flow Rate (mL/minute) 225
Start Purge Time 10:11

Well No. MW3
Date June 18, 2014
Sheen none
Free Product Thickness None
Sample Collection Method peristaltic pump + dedicated PE tubing

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV) -66.8	Turbidity (NTU)
1012	225	7.55	5.99	445.4	20.6	3.88	~~448.8~~	0.00
1015	900	7.66	6.04	390.1	20.6	3.41	-50.4	0.00
1018	1575	7.87	6.07	361.5	20.5	2.92	-46.1	0.00
1021	2250	7.87	6.08	357.2	20.6	2.87	-47.7	0.00
1024	2925	7.95	6.10	343.7	20.7	2.76	-31.1	0.00
1027	3600	8.05	6.10	342.8	20.7	2.76	-23.7	0.00

NOTES

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

no sheen/no odor
MW3 sample collected @ 1035

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

Site Name Xtra Oil Company
Job Number 0058
TOC to Water (ft.) 7.20
Well Depth (ft.) 10.9
Well Diameter 2"
Flow Rate (mL/minute) 225
Start Purge Time 1643

Well No. MW4
Date 6/19/14
Sheen none
Free Product Thickness Ø
Sample Collection Method peristaltic pump + dedicated PE tubing

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)
1644	225	7.88	6.56	503	19.9	2.29	-84.3	0.00
1647	900	8.48	6.55	508	19.9	1.96	-87.8	0.00
1650	1575	9.16	6.55	492.4	20.1	1.80	-93.7	0.00
1653	2250	9.81	6.56	508	20.0	1.76	-97.9	0.00
1656	2925	10.31	6.56	516	19.9	1.79	-100.2	0.00
1659	3600	10.82	6.56	523	19.8	1.77	-103.1	0.00

NOTES

Moderate odor, no sheen
MW4 Sample collected @ 1705

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

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

Site Name Xtra Oil Company - Park Street
Well No. EW2
Job Number 0058
Date 6/19/14
TOC to Water (ft.) 7.09
Sheen none
Well Depth (ft.) 23.6
Free Product Thickness none
Well Diameter 4"
Sample Collection Method peristaltic pump + new/unused PE tubing.
Flow Rate (mL/minute) 225
Start Purge Time 1310

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)
1311	225	7.09	7.05	777	23.1	3.52	-35.1	0.00
1314	900	7.18	7.12	761	21.1	2.81	-141.3	0.00
1317	1575	7.27	7.12	797	21.0	2.74	-143.9	0.00
1320	2250	7.35	7.12	793	21.0	2.63	-153.9	0.00
1323	2925	7.36	7.13	791	21.1	2.50	-149.9	0.00
1326	3600	7.37	7.13	790	21.1	2.48	-148.1	0.00

NOTES

no sheen and no odor
EW2 Sampled @ 1335

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

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

Site Name Xtra Oil Company- Park Street
Job Number 0058
TOC to Water (ft.) 5.98
Well Depth (ft.) 21.8
Well Diameter 4"
Flow Rate (mL/minute) 225
Start Purge Time 1440

Well No. EW4
Date 6/19/14
Sheen yes
Free Product Thickness Ø
Sample Collection Method peristaltic pump + new/unused PE tubing

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)
1441	225	6.01	6.66	682	21.7	3.02	-101.6	0.00
1444	900	6.05	6.64	677	21.6	2.58	-106.3	0.00
1447	1575	6.16	6.65	676	21.5	2.13	-117.1	0.00
1450	2250	6.21	6.66	675	21.5	2.11	-117.7	0.00
1453	2925	6.25	6.66	676	21.5	2.03	-119.6	0.00
1456	3600	6.29	6.66	675	21.5	1.94	-122.5	0.00

NOTES

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

Sheen detected, moderate to strong odor.
Sample EW4 collected @ 1500

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

Site Name Xtra Oil Company - Park Street
Well No. EW5
Job Number 0058
Date 6/19/14
TOC to Water (ft.) 6.02
Sheen none
Well Depth (ft.) 23.7
Free Product Thickness Ø
Well Diameter 4"
Sample Collection Method peristaltic pump & new/unused PE tubing
Flow Rate (mL/minute) 225
Start Purge Time 1601

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)
1602	225	6.11	6.56	669	19.6	3.00	-128.3	0.00
1605	900	6.16	6.56	668	19.5	2.80	-129.9	0.00
1608	1575	6.21	6.56	667	19.5	2.71	-133.9	0.00
1611	2250	6.26	6.56	668	19.5	2.47	-137.5	0.00
1614	2925	6.31	6.57	668	19.5	2.33	-141.6	0.00
1617	3600	6.35	6.58	668	19.4	2.29	-142.8	0.00

NOTES

no sheen, Strong odor
EW5 collected @ 1625

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

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

Site Name XTRA OIL COMPANY
Job Number 0058
TOC to Water (ft.) ~~6.21~~ 6.18
Well Depth (ft.) 18.7
Well Diameter 4"
Flow Rate (mL/minute) 225
Start Purge Time 0814

Well No. OW2
Date 6/20/14 (sampled) 6/19/14 monitored
Sheen NONE
Free Product Thickness Ø
Sample Collection Method PERISTALTIC PUMP AND NEW UNUSED PE TUBING

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)
0815	~~225~~	6.26	5.97	459.8	18.8	2.75	151.8	0.00
0818	900	6.35	6.17	452.4	18.9	2.65	120.0	0.00
0821	1575	6.38	6.22	455.3	18.9	2.58	93.2	0.00
0824	2250	6.42	6.24	458.6	18.9	2.56	77.2	0.00
0827	2925	6.45	6.29	465.8	18.9	2.57	43.9	0.00
0830	3600	6.48	6.32	469.0	18.9	2.52	31.1	0.00

NOTES

SLIGHT ODOR; NO SHEEN
OW2 SAMPLE COLLECTED AT 0835

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

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

Site Name Xtra Oil Company-Park Street
Job Number 0058
TOC to Water (ft.) 6.56
Well Depth (ft.) 24.8
Well Diameter 1"
Flow Rate (mL/minute) 225
Start Purge Time 0908

Well No. ASP-2
Date 6/23/14
Sheen none
Free Product Thickness Ø
Sample Collection Method peristaltic pump + new, unused PE tubing.

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)
0909	225	10.63	6.48	822	19.0	4.83	73.9	0.00
0912	900	15.70	6.82	783	18.9	5.57	54.9	0.00
0915	1575	17.87	6.85	762	18.9	5.59	48.7	0.00
0918	2250	20.51	687	756	18.9	5.60	41.5	0.00
0921	2925	21.97	6.89	716	18.9	5.23	88.6	0.00
0924	3600	23.52	6.88	719	18.8	4.91	104.5	0.00

NOTES

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

Sample collected @ 0930
No sheen, no odor

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

Site Name Xtra Oil Company - Park Street
Well No. ASP-3
Job Number 0058
Date June 23, 2014
TOC to Water (ft.) 6.73
Sheen none
Well Depth (ft.) 29.5
Free Product Thickness Ø
Well Diameter 1"
Sample Collection Method peristaltic pump + new/unused PE tubing.
Flow Rate (mL/minute) 225
Start Purge Time 1238

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)
1239	225	8.33	7.13	648	22.0	3.16	140.6	0.00
1242	900	12.95	7.10	633	21.9	2.76	142.1	0.00
1245	1575	18.02	7.10	628	21.7	2.72	136.1	0.00
1248	2250	20.62	7.26	626	21.6	2.70	114.6	0.00
1251	2925	22.40	7.37	624	21.6	2.62	89.7	0.00
1254	3600	24.20	7.38	627	21.5	2.62	89.9	0.00

NOTES

Sample collected @ 1300
no sheen, no odor

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

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

Site Name Xtra Oil Company - Park Street
Well No. ASP-4
Job Number 0058
Date 6/23/14
TOC to Water (ft.) 6.70
Sheen None
Well Depth (ft.) 24.85
Free Product Thickness ø
Well Diameter 1"
Sample Collection Method peristaltic pump + new/unused PE tubing
Flow Rate (mL/minute) 225
Start Purge Time ~~24.85~~ HD 1015

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)
1016	225	8.20	6.74	643	23.6	4.27	113.3	0.00
1019	900	11.38	6.43	621	22.3	4.04	97.3	0.00
1022	1575	15.34	6.35	620	22.3	4.03	95.6	0.00
1025	2250	20.59	6.59	630	22.9	7.31	86.9	0.00
1028		well dewatered, wait to recharge						
~~1031~~								

NOTES

ASP-4 Sample collected @ 1205
No sheen, no odor

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

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

Site Name Xtra Oil Company - Park Street
Well No. ASP-5
Job Number 0058
Date 6/23/2014
TOC to Water (ft.) 6.52
Sheen none
Well Depth (ft.) 29.2
Free Product Thickness Ø
Well Diameter 1"
Sample Collection Method peristaltic pump + new/unused PE tubing.
Flow Rate (mL/minute) 225
Start Purge Time 1335

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)
1336	225	10.52	7.17	275.9	24.3	4.77	53.2	0.00
1339	900	14.23	6.86	250.4	23.3	3.99	57.6	0.00
1342	1575	20.43	6.98	249.9	23.1	4.98	73.4	0.00
1345	2250	23.98	7.22	378.9	23.2	4.59	60.1	0.00
1348		well Dewatered, waited for recharge to Sample well						

NOTES

ASP-5 sample collected @ 1355
no sheen & no odor.

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

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

Site Name Xtra Oil Company - Park Street
Well No. ASP-6
Job Number 0058
Date 6/23/14
TOC to Water (ft.) 6.68
Sheen none
Well Depth (ft.) 27.9
Free Product Thickness Ø
Well Diameter 1"
Sample Collection Method peristaltic pump + new/unused PE tubing.
Flow Rate (mL/minute) 225
Start Purge Time 1427

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)
1428	225	11.69	7.33	654	23.6	3.73	129.6	0.00
1431	900	15.60	7.35	649	22.8	2.80	103.0	0.00
1434	1575	17.88	7.44	651	22.6	2.22	-35.9	0.00
1437	2250	20.98	7.77	679	23.5	1.89	-136.6	0.00
1440	2925	23.42	7.65	662	22.3	1.92	-141.5	0.00
1443	3600	27.8	7.71	673	22.6	4.85	-97.4	0.00

NOTES

ASP-6 sample collected @ 1450
no sheen & no odor

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

August 20 and 21, 2014

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

Site Name: Xtra Oil - Park St., Alameda
Job Number: 0058
TOC to Water (ft.): 8.01
Well Depth (ft.): 19.2
Well Diameter: 2"
Flow Rate (mL/minute): ~200
Start Purge Time: 1116

Well No.: MW1
Date: 8/21/14
Sheen: None
Free Product Thickness: Ø
Sample Collection Method: Peristaltic pump dedicated PE tubing

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)
1117	200	8.14	6.77	922	23.8	0.68	-127.4	0
1120	800	8.25	6.74	925	22.8	0.89	-151.4	0
1123	1,400	8.29	6.75	917	22.8	0.66	-155.7	0
1126	2,000	8.31	6.75	913	23.0	0.56	-157.4	0
1129	2,600	8.32	6.75	912	23.1	0.49	-158.1	0
1132	3,200	8.33	6.75	911	23.3	0.46	-157.9	0

NOTES

MW1 collected @ 1135hrs.

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

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

Site Name: Xtra Oil - Park St., Alameda
Well No.: MW2
Job Number: 0058
Date: 8/21/14
TOC to Water (ft.): 8.51
Sheen: yes
Well Depth (ft.): 13.4
Free Product Thickness: 0
Well Diameter: 2"
Sample Collection Method: Peristaltic pump + dedicated PE tubing
Flow Rate (mL/minute): ~200
Start Purge Time: 1431

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)
1432	200	8.67	6.70	877	24.4	3.91	-141.4	0
1435	800	8.80	6.66	873	24.2	0.93	-152.6	0
1438	1,400	8.85	6.64	856	24.3	0.69	-152.0	0
1441	2,000	8.88	6.62	827	24.3	0.48	-148.8	0
1444	2,600	8.89	6.61	839	24.3	0.41	-148.7	0
1447	3,200	8.91	6.61	853	24.3	0.36	-149.5	0

NOTES

MW2 collected @ 1450hrs.

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

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

Site Name: Xtra Oil/Park St., Alameda
Well No.: MW3
Job Number: 0058
Date: 8/20/14
TOC to Water (ft.): 8.39
Sheen: None
Well Depth (ft.): 19.3
Free Product Thickness: Ø
Well Diameter: 2"
Sample Collection Method: Peristaltic pump & dedicated PE tubing
Flow Rate (mL/minute): ~200
Start Purge Time: 1307

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)
1308	~~200~~ SIC	8.71	6.18	~~754~~ SIC 314	21.5	0.98	-107.3	0
1311	stop	purge – issues w/ dedicated tubing; replaced PE + silicon tubing						~~0~~ SIC
1317	~~1314~~ start	purge	6.24	427.5	21.2	1.10	-116.8	~~0~~ SIC
1320	1317	200	8.81	↓	↓	↓	↓	0
1323 SIC	~~800~~	800	8.84	6.22	410.2	21.1	0.97	-109.2	0
1326	~~1323~~	1,400	8.89	6.21	390.9	21.1	0.83	-99.3	0
1329		2,000	8.93	6.21	381.3	21.2	0.72	-92.9	0
1332		2,600	8.96	6.21	378.6	21.2	0.66	-89.9	0
1334		3,200	8.99	6.21	373.8	21.2	0.63	-88.7	0

NOTES

MW3 collected @ 1335 hrs

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

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

Site Name Xtra Oil/Park St., Alameda
Job Number 0058
TOC to Water (ft.) 8.03
Well Depth (ft.) 10.9
Well Diameter 2"
Flow Rate (mL/minute) ~200
Start Purge Time 1348

Well No. MW4
Date 8/20/14
Sheen yes
Free Product Thickness ∅
Sample Collection Method Peristaltic pump + dedicated PE tubing

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)
1349	200	8.48	6.65	595	21.8	1.82	-91.5	0
1352	800	9.23	6.63	526.7	21.7	0.79	-110.8	0
1355	1,400	9.87	6.66	535	21.6	0.68	-115.7	0
1358	2,000	10.56	6.66	572	21.6	0.61	-120.0	0
1401	2,600	10.86	6.67	640	21.5	0.56	-125.9	
1404	3,200	well dewatered						

NOTES

MW4 collected @ 1410

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

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

Site Name Xtra Oil - Park St., Alameda
Job Number 0058
TOC to Water (ft.) 7.71
Well Depth (ft.) 23.6
Well Diameter 4"
Flow Rate (mL/minute) ~700
Start Purge Time 1507

Well No. EW2
Date 8/21/14
Sheen ~~Yes~~ Slt None
Free Product Thickness 0
Sample Collection Method Peristaltic pump + new unused PE tubing

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)
1508	200	7.77	7.18	894	23.5	2.84	-111.1	0
1511	800	7.83	7.20	896	23.1	0.78	-136.1	0
1514	1,400	7.88	7.20	895	23.0	0.55	-138.5	0
1517	2,000	7.94	7.13	883	23.0	0.42	-135.0	0
1520	2,600	7.96	7.08	873	23.2	0.37	-132.7	0
1523	3,000	7.98	7.03	869	23.1	0.35	-131.4	0

NOTES

EW2 collected @ 1530hrs

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

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

Site Name Xtra Oil - Park St., Alameda
Well No. EW4
Job Number 0058
Date 8/21/14
TOC to Water (ft.) 6.67
Sheen Yes
Well Depth (ft.) 21.8
Free Product Thickness Ø
Well Diameter 4"
Sample Collection Method Peristaltic
Flow Rate (mL/minute) ~200
Purge new unused PE tubing
Start Purge Time 1145

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)
1146	200	6.75	6.73	873	23.1	3.41	-130.6	0
1149	800	6.82	6.68	871	22.6	1.06	-153.3	0
1152	1,400	6.89	6.77	872	22.6	0.62	-158.8	0
1155	2,000	6.92	6.70	872	22.6	0.53	-161.4	0
1158	2,600	6.96	6.70	872	22.6	0.49	-163.1	0
1201	3,200	6.98	6.70	873	22.7	0.45	-164.4	0

NOTES

EW4 collected @ 1205 hrs

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

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

Site Name Xtra Oil, Park St., Alameda
Job Number 0058
TOC to Water (ft.) 6.77
Well Depth (ft.) 23.7
Well Diameter 4"
Flow Rate (mL/minute) ~200
Start Purge Time 1528

Well No. EW5
Date 8/20/14
Sheen ~~None~~ Yes No
Free Product Thickness Ø
Sample Collection Method Peristaltic pump + new unused PE tubing

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)
1529	200	6.85	6.74	792	21.4	1.73	-138.1	0
1532	800	6.92	6.72	790	21.1	0.93	-160.0	0
1535	1,400	6.96	6.72	789	21.1	0.66	-166.0	0
1538	2,000	6.99	6.72	788	21.1	0.53	-169.1	0
1541	2,600	7.02	6.72	787	21.1	0.46	-170.8	0
1544	3,200	7.03	6.72	786	21.1	0.42	-171.9	0

NOTES

EW5 collected @ 1545

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

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

Site Name Xtra Oil - Park St., Alameda
Well No. OW2
Job Number 0058
Date 8/20/14
TOC to Water (ft.) 7.08
Sheen ~~Yes~~ Slt None
Well Depth (ft.) 18.7
Free Product Thickness Ø
Well Diameter 4"
Sample Collection Method Peristaltic pump + new unused PE tubing
Flow Rate (mL/minute) ~200
Start Purge Time 1423

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)
1424	200	7.11	6.62	562	21.6	4.54	-124.8	0
1427	800	7.19	6.55	560	21.4	1.00	-148.3	0
1430	1,400	7.25	6.58	566	21.3	0.59	-160.0	0
1433	2,000	7.25	6.59	570	21.2	0.53	-162.7	0
1436	2,600	7.28	6.62	575	21.2	0.46	-166.0	0
1439	3,200	7.29	6.65	588	21.1	0.41	-167.8	0

NOTES

OW2 collected @ 1440hrs

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

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

Site Name Xtra Oil - Park St., Alameda
Job Number 0058
TOC to Water (ft.) 7.13
Well Depth (ft.) 24.8
Well Diameter 1"
Flow Rate (mL/minute) ~200
Start Purge Time 1502

Well No. ASP2
Date 8/20/14
Sheen None
Free Product Thickness Ø
Sample Collection Method Peristaltic pump + new unused PE tubing

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)
		↓ casing too small to continuously monitor						
1503	200	~	7.53	808	21.1	6.64	-47.5	0
~~1506~~ 1505		~	well dewatered					
~~1509~~		~						
~~1512~~		~						
1515 (sic)		~						
~~1518~~		~						

NOTES

ASP2 collected @ 1510hrs

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

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

Site Name Xtra Oil - Park St., Alameda
Job Number 0058
TOC to Water (ft.) 7.23
Well Depth (ft.) 29.5
Well Diameter 1"
Flow Rate (mL/minute) ~200
Start Purge Time 1610

Well No. ASP3
Date 8/20/14
Sheen ~~None~~ Slc ~~Yes~~ No
Free Product Thickness Ø
Sample Collection Method Peristaltic pump + new unused PE tubing

C casing too narrow for continuous monitoring

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)
1611	200	—	7.61	694	22.3	3.34	-47.4	0
1614	800	—	7.46	688	21.5	0.94	-44.5	0
1617	1,400	—	7.50	688	21.4	0.80	-47.8	0
1620	2,000	—	7.52	688	21.2	0.76	-51.9	0
1623 sa ~~147~~	2,600	—	7.51	688	21.0	0.78	-53.7	0
1626	3,200	—	7.55	688	21.0	0.70	-58.7	0

NOTES

ASP3 collected @ 1630hrs

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

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

Site Name: Xtra Oil - Park St., Alameda
Well No.: ASP4
Job Number: 0058
Date: 8/21/14
TOC to Water (ft.): 7.45
Sheen: None
Well Depth (ft.): 24.9
Free Product Thickness: 0
Well Diameter: 1"
Sample Collection Method: Peristaltic pump + new unused PE tubing
Flow Rate (mL/minute): ~200
Start Purge Time: 1229

casing too narrow for continuous monitoring

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)
1230	200	—	7.08	692	24.0	2.93	-68.6	0
1233	800	—	6.95	664	24.1	2.55	-21.7	0
1234	~~1236~~	Well dewatered						
	~~1239~~							
	1240							
si	~~1245~~							

NOTES

ASP4 collected @ 1240

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

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

Site Name: Xtra Oil - Park St., Alameda
Well No.: ASP5
Job Number: 0058
Date: 8/21/14
TOC to Water (ft.): 7.13
Sheen: None
Well Depth (ft.): 29.2
Free Product Thickness: ∅
Well Diameter: 1"
Sample Collection Method: Peristaltic pump + new rinsed PE tubing
Flow Rate (mL/minute): ~200
Start Purge Time: 1403

Casing too narrow to continuously monitor

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)	
1404	200	—	7.70	674	24.7	2.02	31.1	0	
1407	800	—	7.51	663	23.6	1.27	26.4	0	
1410	1,400	—	7.52	663	23.5	1.84	23.5	0	
1413	2,000	—	7.53	664	23.9	3.47	-60.0	0	bubbles
1415	Well Dewatered								

NOTES

ASP5 collected @ 1420hrs

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

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

Site Name: Xtra Oil - Park St., Alameda
Well No.: ASP6
Job Number: 0058
Date: 8/21/14
TOC to Water (ft.): 7.46
Sheen: None
Well Depth (ft.): 27.9
Free Product Thickness: Ø
Well Diameter: 1"
Sample Collection Method: Peristaltic pump + new unused PE tubing
Flow Rate (mL/minute): ~200
Start Purge Time: 1313

casing too narrow to monitor continuously

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)
1314	200	—	7.71	725	24.1	1.27	24.3	D
1317	800	—	7.63	719	23.6	0.80	20.1	0
1320	1,400	—	7.67	722	23.3	1.11	23.4	0
1323	2000	—	7.72	727	23.3	1.27	-111.1	6
1324 ~~1326~~	Well Dewatered							
~~1329~~								
Sic								

NOTES

ASP6 collected @ 1330 hrs

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

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

- **McCampbell Work Order #1406759: MW-1 through MW-4, EW-2, EW-4, and EW-5 Groundwater Sample Results - TPH, MBTEX, inorganic ions, total and dissolved iron, alkalinity, and dissolved gases**
- **McCampbell Work Order #1406808: OW-2 Groundwater Sample Results TPH, MBTEX, inorganic ions, total and dissolved iron, alkalinity, and dissolved gases**
- **McCampbell Work Order #1406837: ASP-1 through ASP-6 Groundwater Sample Results TPH, MBTEX, inorganic ions, total and dissolved iron, alkalinity, and dissolved gases**
- **McCampbell Work Order #1408834: : MW-1 through MW-4, EW-2, EW-4, EW-5, and OW-2 Groundwater Sample Results - Dissolved Hexavalent Chromium**
- **McCampbell Work Order #1408836: : ASP-2 through ASP-6 Groundwater Sample Results - Dissolved Hexavalent Chromium**

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1406759

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 Company, 1701 Park Street, Alameda, CA
Project Received: 06/20/2014

Analytical Report reviewed & approved for release on 06/27/2014 by:

Question about your data?

Click here to email McCampbell

Angela Rydelius,
Laboratory Manager

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3

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Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0058; Xtra Oil Company, 1701 Park Street, Alameda, CA
WorkOrder: 1406759

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
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
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
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
TEQ	Toxicity Equivalence

Analytical Qualifiers

S	spike recovery outside accepted recovery limits
c4	surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d1	weakly modified or unmodified gasoline is significant
d6	one to a few isolated non-target peaks present in the TPH(g) chromatogram
e2	diesel range compounds are significant; no recognizable pattern
e4	gasoline range compounds are significant.

McCampbell Analytical, Inc.
"When Quality Counts"

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	E300.1
Date Received:	6/20/14 9:18	**Analytical Method:**	E300.1
Date Prepared:	6/20/14-6/21/14	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001E**	**Water**	**06/19/2014 14:15**	**IC3**	**91856**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/20/2014 11:44
Nitrate as NO_3^-	ND	0.45	1	06/20/2014 11:44
Sulfate	**0.31**	0.10	1	06/20/2014 11:44
Surrogates	REC (%)	Limits		
Formate	104	90-115		06/20/2014 11:44

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-2	**1406759-002E**	**Water**	**06/19/2014 11:50**	**IC3**	**91856**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/20/2014 12:26
Nitrate as NO_3^-	ND	0.45	1	06/20/2014 12:26
Sulfate	**0.92**	0.10	1	06/20/2014 12:26
Surrogates	REC (%)	Limits		
Formate	102	90-115		06/20/2014 12:26

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-3	**1406759-003E**	**Water**	**06/19/2014 10:35**	**IC3**	**91856**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/20/2014 13:07
Nitrate as NO_3^-	ND	0.45	1	06/20/2014 13:07
Sulfate	**28**	1.0	10	06/21/2014 02:16
Surrogates	REC (%)	Limits		
Formate	102	90-115		06/20/2014 13:07

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004E**	**Water**	**06/19/2014 17:05**	**IC3**	**91856**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**0.36**	0.10	1	06/20/2014 13:48
Nitrate as NO_3^-	**1.6**	0.45	1	06/20/2014 13:48
Sulfate	**0.36**	0.10	1	06/20/2014 13:48
Surrogates	REC (%)	Limits		
Formate	101	90-115		06/20/2014 13:48

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	E300.1
Date Received:	6/20/14 9:18	**Analytical Method:**	E300.1
Date Prepared:	6/20/14-6/21/14	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005E**	**Water**	**06/19/2014**	**IC3**	**91856**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/20/2014 14:30
Nitrate as NO_3^-	ND	0.45	1	06/20/2014 14:30
Sulfate	**110**	10	100	06/21/2014 02:58
Surrogates	REC (%)	Limits		
Formate	101	90-115		06/20/2014 14:30

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-4	**1406759-006E**	**Water**	**06/19/2014 15:00**	**IC3**	**91856**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/20/2014 15:11
Nitrate as NO_3^-	ND	0.45	1	06/20/2014 15:11
Sulfate	**39**	2.0	20	06/21/2014 03:39
Surrogates	REC (%)	Limits		
Formate	101	90-115		06/20/2014 15:11

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007E**	**Water**	**06/19/2014 16:25**	**IC3**	**91856**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/20/2014 15:53
Nitrate as NO_3^-	ND	0.45	1	06/20/2014 15:53
Sulfate	**0.64**	0.10	1	06/20/2014 15:53
Surrogates	REC (%)	Limits		
Formate	103	90-115		06/20/2014 15:53

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SM2320B
Date Received:	6/20/14 9:18	**Analytical Method:**	SM2320B
Date Prepared:	6/27/14	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001H**	**Water**	**06/19/2014 14:15**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**438**	1.00	1	06/27/2014 09:51
Carbonate	ND	1.00	1	06/27/2014 09:51
Bicarbonate	**438**	1.00	1	06/27/2014 09:51
Hydroxide	ND	1.00	1	06/27/2014 09:51

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-2	**1406759-002H**	**Water**	**06/19/2014 11:50**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**455**	1.00	1	06/27/2014 10:03
Carbonate	ND	1.00	1	06/27/2014 10:03
Bicarbonate	**455**	1.00	1	06/27/2014 10:03
Hydroxide	ND	1.00	1	06/27/2014 10:03

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-3	**1406759-003H**	**Water**	**06/19/2014 10:35**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**134**	1.00	1	06/27/2014 10:12
Carbonate	ND	1.00	1	06/27/2014 10:12
Bicarbonate	**134**	1.00	1	06/27/2014 10:12
Hydroxide	ND	1.00	1	06/27/2014 10:12

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SM2320B
Date Received:	6/20/14 9:18	**Analytical Method:**	SM2320B
Date Prepared:	6/27/14	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004H**	**Water**	**06/19/2014 17:05**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**366**	1.00	1	06/27/2014 10:18
Carbonate	ND	1.00	1	06/27/2014 10:18
Bicarbonate	**366**	1.00	1	06/27/2014 10:18
Hydroxide	ND	1.00	1	06/27/2014 10:18

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005H**	**Water**	**06/19/2014**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**186**	1.00	1	06/27/2014 10:26
Carbonate	ND	1.00	1	06/27/2014 10:26
Bicarbonate	**186**	1.00	1	06/27/2014 10:26
Hydroxide	ND	1.00	1	06/27/2014 10:26

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-4	**1406759-006H**	**Water**	**06/19/2014 15:00**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**284**	1.00	1	06/27/2014 10:31
Carbonate	ND	1.00	1	06/27/2014 10:31
Bicarbonate	**284**	1.00	1	06/27/2014 10:31
Hydroxide	ND	1.00	1	06/27/2014 10:31

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SM2320B
Date Received:	6/20/14 9:18	**Analytical Method:**	SM2320B
Date Prepared:	6/27/14	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007H**	**Water**	**06/19/2014 16:25**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**372**	1.00	1	06/27/2014 10:38
Carbonate	ND	1.00	1	06/27/2014 10:38
Bicarbonate	**372**	1.00	1	06/27/2014 10:38
Hydroxide	ND	1.00	1	06/27/2014 10:38

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW5030B
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	6/21/14-6/24/14	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001A**	**Water**	**06/19/2014 14:15**	**GC3**	**91908**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**15,000**	1000	20	06/21/2014 07:28
MTBE	**---**	750	20	06/21/2014 07:28
Benzene	**3100**	10	20	06/21/2014 07:28
Toluene	**230**	10	20	06/21/2014 07:28
Ethylbenzene	**500**	10	20	06/21/2014 07:28
Xylenes	**1300**	10	20	06/21/2014 07:28

Surrogates	REC (%)	Limits	Analytical Comments: d1	
aaa-TFT	112	70-130		06/21/2014 07:28

MW-2	1406759-002A	Water	06/19/2014 11:50	GC3	91970

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**4700**	170	3.3	06/24/2014 19:00
MTBE	**---**	40	3.3	06/24/2014 19:00
Benzene	**210**	1.7	3.3	06/24/2014 19:00
Toluene	**13**	1.7	3.3	06/24/2014 19:00
Ethylbenzene	**18**	1.7	3.3	06/24/2014 19:00
Xylenes	**12**	1.7	3.3	06/24/2014 19:00

Surrogates	REC (%)	Qualifiers	Limits	Analytical Comments: d1,c4	
aaa-TFT	171	S	70-130		06/24/2014 19:00

MW-3	1406759-003A	Water	06/19/2014 10:35	GC3	91908

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/21/2014 09:27
MTBE	**---**	5.0	1	06/21/2014 09:27
Benzene	ND	0.50	1	06/21/2014 09:27
Toluene	ND	0.50	1	06/21/2014 09:27
Ethylbenzene	ND	0.50	1	06/21/2014 09:27
Xylenes	ND	0.50	1	06/21/2014 09:27

Surrogates	REC (%)	Limits	
aaa-TFT	102	70-130	06/21/2014 09:27

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW5030B
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	6/21/14-6/24/14	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004A**	**Water**	**06/19/2014 17:05**	**GC3**	**91970**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**6000**	500	10	06/24/2014 19:31
MTBE	**---**	150	10	06/24/2014 19:31
Benzene	**940**	5.0	10	06/24/2014 19:31
Toluene	**22**	5.0	10	06/24/2014 19:31
Ethylbenzene	**95**	5.0	10	06/24/2014 19:31
Xylenes	**200**	5.0	10	06/24/2014 19:31

Surrogates	REC (%)	Limits	Analytical Comments: d1	
aaa-TFT	108	70-130		06/24/2014 19:31

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005A**	**Water**	**06/19/2014**	**GC3**	**91908**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**650**	50	1	06/21/2014 10:27
MTBE	**---**	15	1	06/21/2014 10:27
Benzene	**47**	0.50	1	06/21/2014 10:27
Toluene	**0.87**	0.50	1	06/21/2014 10:27
Ethylbenzene	**1.1**	0.50	1	06/21/2014 10:27
Xylenes	ND	0.50	1	06/21/2014 10:27

Surrogates	REC (%)	Qualifiers	Limits	Analytical Comments: d1,d6,c4	
aaa-TFT	1073	S	70-130		06/21/2014 10:27

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-4	**1406759-006A**	**Water**	**06/19/2014 15:00**	**GC3**	**91970**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**4800**	250	5	06/24/2014 17:26
MTBE	**---**	25	5	06/24/2014 17:26
Benzene	**1200**	25	50	06/23/2014 18:06
Toluene	**12**	2.5	5	06/24/2014 17:26
Ethylbenzene	**110**	2.5	5	06/24/2014 17:26
Xylenes	**21**	2.5	5	06/24/2014 17:26

Surrogates	REC (%)	Limits	Analytical Comments: d1	
aaa-TFT	124	70-130		06/24/2014 17:26

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW5030B
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	6/21/14-6/24/14	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007A**	**Water**	**06/19/2014 16:25**	**GC3**	**91970**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**16,000**	2500	50	06/23/2014 18:38
MTBE	**---**	600	50	06/23/2014 18:38
Benzene	**1200**	25	50	06/23/2014 18:38
Toluene	**140**	25	50	06/23/2014 18:38
Ethylbenzene	**950**	25	50	06/23/2014 18:38
Xylenes	**1100**	25	50	06/23/2014 18:38

Surrogates	REC (%)	Limits	Analytical Comments: d1	
aaa-TFT	105	70-130		06/23/2014 18:38

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW5030B
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8260B
Date Prepared:	6/27/14	**Unit:**	µg/L

Oxygenates, MBTEX & Lead Scavengers by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001B**	**Water**	**06/19/2014 14:15**	**GC18**	**92152**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	100	200	06/27/2014 10:44
Benzene	**3100**	100	200	06/27/2014 10:44
t-Butyl alcohol (TBA)	ND	400	200	06/27/2014 10:44
1,2-Dibromoethane (EDB)	ND	100	200	06/27/2014 10:44
1,2-Dichloroethane (1,2-DCA)	ND	100	200	06/27/2014 10:44
Diisopropyl ether (DIPE)	ND	100	200	06/27/2014 10:44
Ethylbenzene	**490**	100	200	06/27/2014 10:44
Ethyl tert-butyl ether (ETBE)	ND	100	200	06/27/2014 10:44
Methyl-t-butyl ether (MTBE)	**350**	100	200	06/27/2014 10:44
Toluene	**220**	100	200	06/27/2014 10:44
Xylenes, Total	**1200**	100	200	06/27/2014 10:44

Surrogates	REC (%)	Limits	
Dibromofluoromethane	96	70-130	06/27/2014 10:44
Toluene-d8	101	70-130	06/27/2014 10:44
4-BFB	88	70-130	06/27/2014 10:44

MW-2	1406759-002B	Water	06/19/2014 11:50	GC18	92152

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	5.0	10	06/27/2014 11:22
Benzene	**200**	5.0	10	06/27/2014 11:22
t-Butyl alcohol (TBA)	ND	20	10	06/27/2014 11:22
1,2-Dibromoethane (EDB)	ND	5.0	10	06/27/2014 11:22
1,2-Dichloroethane (1,2-DCA)	ND	5.0	10	06/27/2014 11:22
Diisopropyl ether (DIPE)	ND	5.0	10	06/27/2014 11:22
Ethylbenzene	**20**	5.0	10	06/27/2014 11:22
Ethyl tert-butyl ether (ETBE)	ND	5.0	10	06/27/2014 11:22
Methyl-t-butyl ether (MTBE)	**24**	5.0	10	06/27/2014 11:22
Toluene	**9.0**	5.0	10	06/27/2014 11:22
Xylenes, Total	**12**	5.0	10	06/27/2014 11:22

Surrogates	REC (%)	Limits	
Dibromofluoromethane	99	70-130	06/27/2014 11:22
Toluene-d8	106	70-130	06/27/2014 11:22
4-BFB	90	70-130	06/27/2014 11:22

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW5030B
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8260B
Date Prepared:	6/27/14	**Unit:**	µg/L

Oxygenates, MBTEX & Lead Scavengers by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-3	**1406759-003B**	**Water**	**06/19/2014 10:35**	**GC18**	**92152**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/27/2014 14:07
Benzene	ND	0.50	1	06/27/2014 14:07
t-Butyl alcohol (TBA)	ND	2.0	1	06/27/2014 14:07
1,2-Dibromoethane (EDB)	ND	0.50	1	06/27/2014 14:07
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/27/2014 14:07
Diisopropyl ether (DIPE)	ND	0.50	1	06/27/2014 14:07
Ethylbenzene	ND	0.50	1	06/27/2014 14:07
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/27/2014 14:07
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/27/2014 14:07
Toluene	ND	0.50	1	06/27/2014 14:07
Xylenes, Total	ND	0.50	1	06/27/2014 14:07

Surrogates	REC (%)	Limits	
Dibromofluoromethane	107	70-130	06/27/2014 14:07
Toluene-d8	101	70-130	06/27/2014 14:07
4-BFB	86	70-130	06/27/2014 14:07

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004B**	**Water**	**06/19/2014 17:05**	**GC18**	**92152**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	25	50	06/27/2014 14:46
Benzene	**910**	25	50	06/27/2014 14:46
t-Butyl alcohol (TBA)	ND	100	50	06/27/2014 14:46
1,2-Dibromoethane (EDB)	ND	25	50	06/27/2014 14:46
1,2-Dichloroethane (1,2-DCA)	ND	25	50	06/27/2014 14:46
Diisopropyl ether (DIPE)	ND	25	50	06/27/2014 14:46
Ethylbenzene	**91**	25	50	06/27/2014 14:46
Ethyl tert-butyl ether (ETBE)	ND	25	50	06/27/2014 14:46
Methyl-t-butyl ether (MTBE)	**70**	25	50	06/27/2014 14:46
Toluene	ND	25	50	06/27/2014 14:46
Xylenes, Total	**180**	25	50	06/27/2014 14:46

Surrogates	REC (%)	Limits	
Dibromofluoromethane	101	70-130	06/27/2014 14:46
Toluene-d8	104	70-130	06/27/2014 14:46
4-BFB	88	70-130	06/27/2014 14:46

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW5030B
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8260B
Date Prepared:	6/27/14	**Unit:**	µg/L

Oxygenates, MBTEX & Lead Scavengers by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005B**	**Water**	**06/19/2014**	**GC18**	**92152**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	1.0	2	06/27/2014 15:26
Benzene	**41**	1.0	2	06/27/2014 15:26
t-Butyl alcohol (TBA)	**8.6**	4.0	2	06/27/2014 15:26
1,2-Dibromoethane (EDB)	ND	1.0	2	06/27/2014 15:26
1,2-Dichloroethane (1,2-DCA)	ND	1.0	2	06/27/2014 15:26
Diisopropyl ether (DIPE)	ND	1.0	2	06/27/2014 15:26
Ethylbenzene	**1.1**	1.0	2	06/27/2014 15:26
Ethyl tert-butyl ether (ETBE)	ND	1.0	2	06/27/2014 15:26
Methyl-t-butyl ether (MTBE)	**6.0**	1.0	2	06/27/2014 15:26
Toluene	ND	1.0	2	06/27/2014 15:26
Xylenes, Total	ND	1.0	2	06/27/2014 15:26

Surrogates	REC (%)	Limits	
Dibromofluoromethane	107	70-130	06/27/2014 15:26
Toluene-d8	104	70-130	06/27/2014 15:26
4-BFB	89	70-130	06/27/2014 15:26

EW-4	1406759-006B	Water	06/19/2014 15:00	GC18	92152

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	25	50	06/27/2014 16:05
Benzene	**1100**	25	50	06/27/2014 16:05
t-Butyl alcohol (TBA)	**290**	100	50	06/27/2014 16:05
1,2-Dibromoethane (EDB)	ND	25	50	06/27/2014 16:05
1,2-Dichloroethane (1,2-DCA)	ND	25	50	06/27/2014 16:05
Diisopropyl ether (DIPE)	ND	25	50	06/27/2014 16:05
Ethylbenzene	**120**	25	50	06/27/2014 16:05
Ethyl tert-butyl ether (ETBE)	ND	25	50	06/27/2014 16:05
Methyl-t-butyl ether (MTBE)	**190**	25	50	06/27/2014 16:05
Toluene	ND	25	50	06/27/2014 16:05
Xylenes, Total	ND	25	50	06/27/2014 16:05

Surrogates	REC (%)	Limits	
Dibromofluoromethane	100	70-130	06/27/2014 16:05
Toluene-d8	101	70-130	06/27/2014 16:05
4-BFB	94	70-130	06/27/2014 16:05

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW5030B
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8260B
Date Prepared:	6/27/14	**Unit:**	µg/L

Oxygenates, MBTEX & Lead Scavengers by GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007B**	**Water**	**06/19/2014 16:25**	**GC18**	**92152**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	25	50	06/27/2014 16:45
Benzene	**1100**	25	50	06/27/2014 16:45
t-Butyl alcohol (TBA)	**310**	100	50	06/27/2014 16:45
1,2-Dibromoethane (EDB)	ND	25	50	06/27/2014 16:45
1,2-Dichloroethane (1,2-DCA)	ND	25	50	06/27/2014 16:45
Diisopropyl ether (DIPE)	ND	25	50	06/27/2014 16:45
Ethylbenzene	**850**	25	50	06/27/2014 16:45
Ethyl tert-butyl ether (ETBE)	ND	25	50	06/27/2014 16:45
Methyl-t-butyl ether (MTBE)	**230**	25	50	06/27/2014 16:45
Toluene	**120**	25	50	06/27/2014 16:45
Xylenes, Total	**1000**	25	50	06/27/2014 16:45

Surrogates	REC (%)	Limits	
Dibromofluoromethane	100	70-130	06/27/2014 16:45
Toluene-d8	103	70-130	06/27/2014 16:45
4-BFB	90	70-130	06/27/2014 16:45

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	E200.8
Date Received:	6/20/14 9:18	**Analytical Method:**	E200.8
Date Prepared:	6/20/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001F**	**Water/DISS.**	**06/19/2014 14:15**	**ICP-MS1**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**19,000**	200	10	06/23/2014 17:30

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-2	**1406759-002F**	**Water/DISS.**	**06/19/2014 11:50**	**ICP-MS1**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**20,000**	200	10	06/23/2014 17:37

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-3	**1406759-003F**	**Water/DISS.**	**06/19/2014 10:35**	**ICP-MS2**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**1600**	20	1	06/21/2014 01:22

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004F**	**Water/DISS.**	**06/19/2014 17:05**	**ICP-MS1**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**15,000**	200	10	06/23/2014 17:55

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005F**	**Water/DISS.**	**06/19/2014**	**ICP-MS2**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**840**	20	1	06/21/2014 01:33

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	E200.8
Date Received:	6/20/14 9:18	**Analytical Method:**	E200.8
Date Prepared:	6/20/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-4	**1406759-006F**	**Water/DISS.**	**06/19/2014 15:00**	**ICP-MS1**	**91852**

Analytes	Result	RL	DF	Date Analyzed
Iron	**11,000**	200	10	06/23/2014 18:02

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007F**	**Water/DISS.**	**06/19/2014 16:25**	**ICP-MS1**	**91852**

Analytes	Result	RL	DF	Date Analyzed
Iron	**24,000**	200	10	06/23/2014 18:08

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	E200.8
Date Received:	6/20/14 9:18	**Analytical Method:**	E200.8
Date Prepared:	6/20/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001G**	**Water/TOTAL**	**06/19/2014 14:15**	**ICP-MS2**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**370,000**	2000	100	06/23/2014 19:09

Surrogates	REC (%)	Limits	
Tb 350.917	106	70-130	06/23/2014 19:09

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-2	**1406759-002G**	**Water/TOTAL**	**06/19/2014 11:50**	**ICP-MS2**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**23,000**	200	10	06/24/2014 21:29

Surrogates	REC (%)	Limits	
Tb 350.917	103	70-130	06/24/2014 21:29

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-3	**1406759-003G**	**Water/TOTAL**	**06/19/2014 10:35**	**ICP-MS2**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**2800**	20	1	06/23/2014 18:47

Surrogates	REC (%)	Limits	
Tb 350.917	104	70-130	06/23/2014 18:47

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004G**	**Water/TOTAL**	**06/19/2014 17:05**	**ICP-MS2**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**15,000**	200	10	06/24/2014 21:37

Surrogates	REC (%)	Limits	
Tb 350.917	101	70-130	06/24/2014 21:37

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005G**	**Water/TOTAL**	**06/19/2014**	**ICP-MS2**	**91834**

Analytes	Result	RL	DF	Date Analyzed
Iron	**1000**	20	1	06/23/2014 18:58

Surrogates	REC (%)	Limits	
Tb 350.917	104	70-130	06/23/2014 18:58

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	E200.8
Date Received:	6/20/14 9:18	**Analytical Method:**	E200.8
Date Prepared:	6/20/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-4	**1406759-006G**	**Water/TOTAL**	**06/19/2014 15:00**	**ICP-MS2**	**91852**

Analytes	Result	RL	DF	Date Analyzed
Iron	**11,000**	200	10	06/24/2014 21:43

Surrogates	REC (%)	Limits	
Tb 350.917	96	70-130	06/24/2014 21:43

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007G**	**Water/TOTAL**	**06/19/2014 16:25**	**ICP-MS2**	**91852**

Analytes	Result	RL	DF	Date Analyzed
Iron	**26,000**	200	10	06/26/2014 12:29

Surrogates	REC (%)	Limits	
Tb 350.917	98	70-130	06/26/2014 12:29

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	RSK175
Date Received:	6/20/14 9:18	**Analytical Method:**	RSK175
Date Prepared:	6/20/14	**Unit:**	µg/L

Carbon Dioxide

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001D**	**Water/DISS.**	**06/19/2014 14:15**	**GC26**	**91939**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**69,000**	2500	50	06/20/2014 12:51

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-2	**1406759-002D**	**Water/DISS.**	**06/19/2014 11:50**	**GC26**	**91939**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**77,000**	2500	50	06/20/2014 13:08

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-3	**1406759-003D**	**Water/DISS.**	**06/19/2014 10:35**	**GC26**	**91939**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**59,000**	2500	50	06/20/2014 13:33

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004D**	**Water/DISS.**	**06/19/2014 17:05**	**GC26**	**91939**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**63,000**	2500	50	06/20/2014 13:46

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005D**	**Water/DISS.**	**06/19/2014**	**GC26**	**91939**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**11,000**	1000	20	06/20/2014 13:58

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	RSK175
Date Received:	6/20/14 9:18	**Analytical Method:**	RSK175
Date Prepared:	6/20/14	**Unit:**	µg/L

Carbon Dioxide

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-4	**1406759-006D**	**Water/DISS.**	**06/19/2014 15:00**	**GC26**	**91939**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**47,000**	2500	50	06/20/2014 14:12

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007D**	**Water/DISS.**	**06/19/2014 16:25**	**GC26**	**91939**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**67,000**	2500	50	06/20/2014 14:23

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	RSK175
Date Received:	6/20/14 9:18	**Analytical Method:**	RSK175
Date Prepared:	6/20/14-6/24/14	**Unit:**	µg/L

Light Gases

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001C**	**Water/DISS.**	**06/19/2014 14:15**	**GC26**	**91942**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/20/2014 15:10
Ethylene	**1.3**	0.20	1	06/20/2014 15:10
Methane	**3100**	5.0	50	06/20/2014 14:52

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-2	**1406759-002C**	**Water/DISS.**	**06/19/2014 11:50**	**GC26**	**91942**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/20/2014 15:21
Ethylene	**0.85**	0.20	1	06/20/2014 15:21
Methane	**2700**	5.0	50	06/20/2014 15:45

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-3	**1406759-003C**	**Water/DISS.**	**06/19/2014 10:35**	**GC26**	**91942**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/20/2014 15:59
Ethylene	ND	0.20	1	06/20/2014 15:59
Methane	**2.5**	0.10	1	06/20/2014 15:59

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004C**	**Water/DISS.**	**06/19/2014 17:05**	**GC26**	**91942**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/20/2014 16:12
Ethylene	**0.59**	0.20	1	06/20/2014 16:12
Methane	**2500**	5.0	50	06/20/2014 16:29

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	RSK175
Date Received:	6/20/14 9:18	**Analytical Method:**	RSK175
Date Prepared:	6/20/14-6/24/14	**Unit:**	µg/L

Light Gases

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005C**	**Water/DISS.**	**06/19/2014**	**GC26**	**92039**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/24/2014 14:21
Ethylene	ND	0.20	1	06/24/2014 14:21
Methane	**160**	0.20	2	06/24/2014 14:47

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-4	**1406759-006C**	**Water/DISS.**	**06/19/2014 15:00**	**GC26**	**92039**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/24/2014 14:58
Ethylene	**1.6**	0.20	1	06/24/2014 14:58
Methane	**3200**	5.0	50	06/24/2014 15:19

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007C**	**Water/DISS.**	**06/19/2014 16:25**	**GC26**	**92039**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/24/2014 15:53
Ethylene	**2.6**	0.20	1	06/24/2014 15:53
Methane	**7000**	10	100	06/24/2014 16:25

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW3510C
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8015B
Date Prepared:	6/20/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-1	**1406759-001A**	**Water**	**06/19/2014 14:15**	**GC6A**	**91851**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**4200**	50	1	06/21/2014 22:25
TPH-Motor Oil (C18-C36)	ND	250	1	06/21/2014 22:25

Surrogates	REC (%)	Limits	Analytical Comments: e4,e2	
C9	91	70-130		06/21/2014 22:25

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-2	**1406759-002A**	**Water**	**06/19/2014 11:50**	**GC6A**	**91851**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2700**	50	1	06/21/2014 23:36
TPH-Motor Oil (C18-C36)	**350**	250	1	06/21/2014 23:36

Surrogates	REC (%)	Limits	Analytical Comments: e4,e2	
C9	88	70-130		06/21/2014 23:36

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-3	**1406759-003A**	**Water**	**06/19/2014 10:35**	**GC6A**	**91851**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/21/2014 16:18
TPH-Motor Oil (C18-C36)	ND	250	1	06/21/2014 16:18

Surrogates	REC (%)	Limits		
C9	96	70-130		06/21/2014 16:18

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW-4	**1406759-004A**	**Water**	**06/19/2014 17:05**	**GC6B**	**91851**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1400**	50	1	06/27/2014 10:46
TPH-Motor Oil (C18-C36)	ND	250	1	06/27/2014 10:46

Surrogates	REC (%)	Limits	Analytical Comments: e4	
C9	108	70-130		06/27/2014 10:46

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alamed	**Extraction Method:**	SW3510C
Date Received:	6/20/14 9:18	**Analytical Method:**	SW8015B
Date Prepared:	6/20/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-2	**1406759-005A**	**Water**	**06/19/2014**	**GC6A**	**91851**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/21/2014 21:13
TPH-Motor Oil (C18-C36)	ND	250	1	06/21/2014 21:13
Surrogates	REC (%)	Limits		
C9	91	70-130		06/21/2014 21:13

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-4	**1406759-006A**	**Water**	**06/19/2014 15:00**	**GC6B**	**91851**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**940**	50	1	06/27/2014 11:58
TPH-Motor Oil (C18-C36)	ND	250	1	06/27/2014 11:58
Surrogates	REC (%)	Limits	Analytical Comments: e4	
C9	105	70-130		06/27/2014 11:58

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW-5	**1406759-007A**	**Water**	**06/19/2014 16:25**	**GC6A**	**91851**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2200**	50	1	06/27/2014 11:58
TPH-Motor Oil (C18-C36)	ND	250	1	06/27/2014 11:58
Surrogates	REC (%)	Limits	Analytical Comments: e4	
C9	95	70-130		06/27/2014 11:58

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/20/14	**BatchID:**	91856
Date Analyzed:	6/20/14	**Extraction Method:**	E300.1
Instrument:	IC3	**Analytical Method:**	E300.1
Matrix:	Water	**Unit:**	mg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-91856 1406759-001EMS/MSD

QC Summary Report for E300.1

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Nitrate as N	ND	1.00	0.10	1	-	100	85-115
Nitrate as $NO3^{-}$	ND	4.43	0.45	4.4	-	101	85-115
Sulfate	ND	0.978	0.10	1	-	97.8	85-115
Surrogate Recovery							
Formate	0.109	0.103		0.10	109	103	90-115

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Nitrate as N	1.00	1.00	1	ND	100	100	85-115	0	15
Nitrate as $NO3^{-}$	4.43	4.44	4.4	ND	101	101	85-115	0	15
Sulfate	1.37	1.38	1	0.3141	106	107	85-115	0.795	15
Surrogate Recovery									
Formate	0.106	0.105	0.10		105	105	90-115	0	10

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/27/14	**BatchID:**	92120
Date Analyzed:	6/27/14	**Extraction Method:**	SM2320B
Instrument:	Titrino	**Analytical Method:**	SM2320B
Matrix:	Water	**Test Method:**	SM2320B (Alkalinity)
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA		

QC Summary Report for Alkalinity

Lab ID	Analyte	Reporting Units	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	RPD	Acceptance Criteria (%)
1406759-001H	Total	mg $CaCO_3$/L	438	1	438	1	0.0753	<20
1406759-002H	Total	mg $CaCO_3$/L	455	1	446	1	1.98	<20
1406759-003H	Total	mg $CaCO_3$/L	134	1	134	1	0.0524	<20
1406759-004H	Total	mg $CaCO_3$/L	366	1	365	1	0.0739	<20
1406759-005H	Total	mg $CaCO_3$/L	186	1	186	1	0.215	<20
1406759-006H	Total	mg $CaCO_3$/L	284	1	283	1	0.54	<20
1406759-007H	Total	mg $CaCO_3$/L	372	1	373	1	0.215	<20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/21/14	**BatchID:**	91908
Date Analyzed:	6/20/14	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-91908 1406802-001AMS/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	61.2	40	60	-	102	70-130
MTBE	ND	12.1	5.0	10	-	121	70-130
Benzene	ND	10.3	0.50	10	-	103	70-130
Toluene	ND	10.2	0.50	10	-	102	70-130
Ethylbenzene	ND	10.4	0.50	10	-	103	70-130
Xylenes	ND	31.4	0.50	30	-	105	70-130
Surrogate Recovery							
aaa-TFT	9.57	9.49		10	96	95	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	61.1	67.3	60	ND	102	112	70-130	9.69	20
MTBE	10.7	10.4	10	ND	107	104	70-130	3.05	20
Benzene	10.4	10.5	10	ND	104	105	70-130	0.749	20
Toluene	10.4	10.6	10	ND	104	106	70-130	1.27	20
Ethylbenzene	10.6	10.7	10	ND	106	107	70-130	0.676	20
Xylenes	32.1	32.3	30	ND	107	108	70-130	0.651	20
Surrogate Recovery									
aaa-TFT	9.52	9.72	10		95	97	70-130	2.11	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/24/14	**BatchID:**	91970
Date Analyzed:	6/23/14	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-91970 1406766-002AMS/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	59.7	40	60	-	99.5	70-130
MTBE	ND	10.8	5.0	10	-	108	70-130
Benzene	ND	10.0	0.50	10	-	101	70-130
Toluene	ND	9.98	0.50	10	-	99.8	70-130
Ethylbenzene	ND	10.1	0.50	10	-	101	70-130
Xylenes	ND	30.5	0.50	30	-	102	70-130
Surrogate Recovery							
aaa-TFT	9.47	9.63		10	95	96	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	66.0	66.9	60	ND	110	112	70-130	1.31	20
MTBE	11.1	11.2	10	ND	111	111	70-130	0	20
Benzene	10.3	9.71	10	ND	103	97.1	70-130	5.58	20
Toluene	10.5	10.0	10	ND	105	100	70-130	4.98	20
Ethylbenzene	10.5	10.0	10	ND	105	100	70-130	4.44	20
Xylenes	31.8	30.8	30	ND	106	103	70-130	3.22	20
Surrogate Recovery									
aaa-TFT	10.1	9.65	10		101	96	70-130	4.51	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/27/14	**BatchID:**	92152
Date Analyzed:	6/27/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-92152 1406759-003BMS/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	19.9	0.50	20	-	99.7	70-130
Benzene	ND	17.2	0.50	20	-	86	70-130
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	66.6	2.0	80	-	83.3	70-130
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	-	0.50	-	-	-	-
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	19.8	0.50	20	-	99.2	70-130
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	17.6	0.50	20	-	87.7	70-130
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/27/14	**BatchID:**	92152
Date Analyzed:	6/27/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-92152 1406759-003BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	18.9	0.50	20	-	94.7	70-130
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	18.8	0.50	20	-	94.2	70-130
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	18.1	0.50	20	-	90.7	70-130
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	17.7	0.50	20	-	88.4	70-130
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	-	0.50	-	-	-	-
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	25.2	43.7		45	101	97	70-130
Toluene-d8	25.8	41.2		45	103	92	70-130
4-BFB	2.23	4.15		4.5	89	92	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/27/14	**BatchID:**	92152
Date Analyzed:	6/27/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-92152 1406759-003BMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	24.4	24.7	20	ND	122	124	70-130	1.41	20
Benzene	18.6	18.6	20	ND	93.1	92.8	70-130	0.321	20
t-Butyl alcohol (TBA)	93.9	100	80	ND	117	125	70-130	6.63	20
1,2-Dibromoethane (EDB)	22.2	23.4	20	ND	111	117	70-130	5.08	20
1,2-Dichloroethane (1,2-DCA)	20.4	20.6	20	ND	102	103	70-130	0.845	20
Diisopropyl ether (DIPE)	22.1	23.1	20	ND	110	115	70-130	4.45	20
Ethyl tert-butyl ether (ETBE)	22.9	24.0	20	ND	114	120	70-130	4.79	20
Methyl-t-butyl ether (MTBE)	22.6	23.6	20	ND	113	118	70-130	4.31	20
Toluene	18.0	18.6	20	ND	89.9	92.8	70-130	3.15	20
Surrogate Recovery									
Dibromofluoromethane	47.7	48.8	45		106	108	70-130	2.13	20
Toluene-d8	40.8	41.2	45		91	92	70-130	1.05	20
4-BFB	4.22	4.25	4.5		94	94	70-130	0	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/19/14	**BatchID:**	91834
Date Analyzed:	6/20/14 - 6/26/14	**Extraction Method:**	E200.8
Instrument:	ICP-MS2	**Analytical Method:**	E200.8
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-91834 1406733-004AMS/MSD

QC Summary Report for E200.8

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Iron	ND	561	20	500	-	112	85-115
Surrogate Recovery							
Tb 350.917	713	736		750	95	98	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Iron	NR	NR	500	1174	NR	NR	70-130	NR	20
Surrogate Recovery									
Tb 350.917	761	764	750		101	102	70-130	0.328	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/20/14	**BatchID:**	91852
Date Analyzed:	6/23/14	**Extraction Method:**	E200.8
Instrument:	ICP-MS2	**Analytical Method:**	E200.8
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-91852 1406759-007GMS/MSD

QC Summary Report for E200.8

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Iron	ND	538	20	500	-	108	85-115
Surrogate Recovery							
Tb 350.917	738	769		750	98	103	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Iron	NR	NR	0	26000	NR	NR	-	NR	
Surrogate Recovery									
Tb 350.917	NR	NR	0		NR	NR	-	NR	

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/23/14	**BatchID:**	91939
Date Analyzed:	6/20/14	**Extraction Method:**	RSK175
Instrument:	GC26	**Analytical Method:**	RSK175
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-91939

QC Summary Report for RSK174/175

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Carbon Dioxide	ND	161	50	187.2	-	86	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/23/14	**BatchID:**	91942
Date Analyzed:	6/20/14	**Extraction Method:**	RSK175
Instrument:	GC26	**Analytical Method:**	RSK175
Matrix:	Air	**Unit:**	µL/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-91942

QC Summary Report for RSK175

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetylene	ND	7.84	0.50	10	-	78.4	70-130
Ethane	ND	7.38	0.50	10	-	73.8	70-130
Ethylene	ND	10.0	0.50	10	-	100	70-130
Methane	ND	9.11	0.50	10	-	91.1	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/25/14	**BatchID:**	92039
Date Analyzed:	6/24/14	**Extraction Method:**	RSK175
Instrument:	GC26	**Analytical Method:**	RSK175
Matrix:	Air	**Unit:**	µL/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-92039

QC Summary Report for RSK175

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetylene	ND	7.23	0.50	10	-	72.3	70-130
Ethane	ND	7.16	0.50	10	-	71.6	70-130
Ethylene	ND	10.1	0.50	10	-	101	70-130
Methane	ND	9.45	0.50	10	-	94.5	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406759
Date Prepared:	6/20/14	**BatchID:**	91851
Date Analyzed:	6/22/14	**Extraction Method:**	SW3510C
Instrument:	GC11A	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA	**Sample ID:**	MB/LCS-91851

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	802	50	1000	-	80.2	70-130
Surrogate Recovery							
C9	622	614		625	99	98	70-130

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1406759 **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
cc/3rd Party:
PO:
ProjectNo: #0058; Xtra Oil Company, 1701 Park Street, Alameda, CA

Bill to:
Accounts Payable
Xtra Oil Company
2307 Pacific Avenue
Alameda, CA 94507
xtraoil@sbcglobal.net

Requested TAT: 5 days

Date Received: **06/20/2014**
Date Printed: **06/23/2014**

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
1406759-001	MW-1	Water	6/19/2014 14:15	☐	E	H	A	B	F	G	D	C				
1406759-002	MW-2	Water	6/19/2014 11:50	☐	E	H	A	B	F	G	D	C				
1406759-003	MW-3	Water	6/19/2014 10:35	☐	E	H	A	B	F	G	D	C				
1406759-004	MW-4	Water	6/19/2014 17:05	☐	E	H	A	B	F	G	D	C				
1406759-005	EW-2	Water	6/19/2014	☐	E	H	A	B	F	G	D	C				
1406759-006	EW-4	Water	6/19/2014 15:00	☐	E	H	A	B	F	G	D	C				
1406759-007	EW-5	Water	6/19/2014 16:25	☐	E	H	A	B	F	G	D	C				

Test Legend:

1	300_1_W	2	Alka(spe)_W	3	G-MBTEX_W	4	MBTEXOXYPBSCV-8260B_W	5	METALSMS_FF_DISS
6	METALSMS_W	7	RSK175_CO2_W	8	RSK175_W	9		10	
11		12							

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

Prepared by: Maria Venegas

Comments:

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

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

WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
QC Level: LEVEL 2
Work Order: 1406759
Project: #0058; Xtra Oil Company, 1701 Park Street, Alameda, CA
Client Contact: Michael Deschenes
Date Received: 6/20/2014
Comments:
Contact's Email: lab@pdenviro.com

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406759-001A	MW-1	Water	Multi-Range TPH(g,d,mo)	3	VOA w/ HCl	☐	6/19/2014 14:15	5 days	Present	☐	
1406759-001B	MW-1	Water	SW8260B (Oxygenates, MBTEX & Lead Scav.)	3	VOA w/ HCl	☐	6/19/2014 14:15	5 days	Present	☐	
				2	VOA w/ HCl w/1.6ml	☐			Present	☐	
1406759-001C	MW-1	Water	RSK175	2	aVOA w/ H2SO4	☐	6/19/2014 14:15	5 days	Present	☐	
1406759-001D	MW-1	Water	RSK175 (CO2)	2	VOA	☐	6/19/2014 14:15	5 days	Present	☐	
1406759-001E	MW-1	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/19/2014 14:15	5 days	Present	☐	
1406759-001F	MW-1	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 14:15	5 days	Present	☐	
1406759-001G	MW-1	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 14:15	5 days	Present	☐	
1406759-001H	MW-1	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/19/2014 14:15	5 days	Present	☐	
1406759-002A	MW-2	Water	Multi-Range TPH(g,d,mo)	3	VOA w/ HCl	☐	6/19/2014 11:50	5 days	Present	☐	
1406759-002B	MW-2	Water	SW8260B (Oxygenates, MBTEX & Lead Scav.)	3	VOA w/ HCl	☐	6/19/2014 11:50	5 days	Present	☐	
				2	VOA w/ HCl w/1.6ml	☐			Present	☐	
1406759-002C	MW-2	Water	RSK175	2	aVOA w/ H2SO4	☐	6/19/2014 11:50	5 days	Present	☐	
1406759-002D	MW-2	Water	RSK175 (CO2)	2	VOA	☐	6/19/2014 11:50	5 days	Present	☐	
1406759-002E	MW-2	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/19/2014 11:50	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3
500mL HDPE, unprsv. = 500mL HDPE Bottle, Unpreserved
aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0058; Xtra Oil Company, 1701 Park Street, Alameda, CA
Comments:

QC Level: LEVEL 2
Client Contact: Michael Deschenes
Contact's Email: lab@pdenviro.com

Work Order: 1406759
Date Received: 6/20/2014

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406759-002F	MW-2	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 11:50	5 days	Present	☐	
1406759-002G	MW-2	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 11:50	5 days	Present	☐	
1406759-002H	MW-2	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/19/2014 11:50	5 days	Present	☐	
1406759-003A	MW-3	Water	Multi-Range TPH(g,d,mo)	3	VOA w/ HCl	☐	6/19/2014 10:35	5 days	Present	☐	
1406759-003B	MW-3	Water	SW8260B (Oxygenates, MBTEX & Lead Scav.)	3	VOA w/ HCl	☐	6/19/2014 10:35	5 days	Present	☐	
				2	VOA w/ HCl w/1.6ml	☐			Present	☐	
1406759-003C	MW-3	Water	RSK175	2	aVOA w/ H2SO4	☐	6/19/2014 10:35	5 days	Present	☐	
1406759-003D	MW-3	Water	RSK175 (CO2)	2	VOA	☐	6/19/2014 10:35	5 days	Present	☐	
1406759-003E	MW-3	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^-$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/19/2014 10:35	5 days	Present	☐	
1406759-003F	MW-3	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 10:35	5 days	Present	☐	
1406759-003G	MW-3	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 10:35	5 days	Present	☐	
1406759-003H	MW-3	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/19/2014 10:35	5 days	Present	☐	
1406759-004A	MW-4	Water	Multi-Range TPH(g,d,mo)	3	VOA w/ HCl	☐	6/19/2014 17:05	5 days	Present	☐	
1406759-004B	MW-4	Water	SW8260B (Oxygenates, MBTEX & Lead Scav.)	3	VOA w/ HCl	☐	6/19/2014 17:05	5 days	Present	☐	
				2	VOA w/ HCl w/1.6ml	☐			Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3
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aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
QC Level: LEVEL 2
Work Order: 1406759
Project: #0058; Xtra Oil Company, 1701 Park Street, Alameda, CA
Client Contact: Michael Deschenes
Date Received: 6/20/2014
Comments:
Contact's Email: lab@pdenviro.com

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406759-004C	MW-4	Water	RSK175	2	aVOA w/ H2SO4	☐	6/19/2014 17:05	5 days	Present	☐	
1406759-004D	MW-4	Water	RSK175 (CO2)	2	VOA	☐	6/19/2014 17:05	5 days	Present	☐	
1406759-004E	MW-4	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^-$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/19/2014 17:05	5 days	Present	☐	
1406759-004F	MW-4	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 17:05	5 days	Present	☐	
1406759-004G	MW-4	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 17:05	5 days	Present	☐	
1406759-004H	MW-4	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/19/2014 17:05	5 days	Present	☐	
1406759-005A	EW-2	Water	Multi-Range TPH(g,d,mo)	3	VOA w/ HCl	☐	6/19/2014	5 days	Present	☐	
1406759-005B	EW-2	Water	SW8260B (Oxygenates, MBTEX & Lead Scav.)	3	VOA w/ HCl	☐	6/19/2014	5 days	Present	☐	
				2	VOA w/ HCl w/1.6ml	☐			Present	☐	
1406759-005C	EW-2	Water	RSK175	2	aVOA w/ H2SO4	☐	6/19/2014	5 days	Present	☐	
1406759-005D	EW-2	Water	RSK175 (CO2)	2	VOA	☐	6/19/2014	5 days	Present	☐	
1406759-005E	EW-2	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^-$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/19/2014	5 days	Present	☐	
1406759-005F	EW-2	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014	5 days	Present	☐	
1406759-005G	EW-2	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014	5 days	Present	☐	
1406759-005H	EW-2	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/19/2014	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3
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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL **QC Level:** LEVEL 2 **Work Order:** 1406759
Project: #0058; Xtra Oil Company, 1701 Park Street, Alameda, CA **Client Contact:** Michael Deschenes **Date Received:** 6/20/2014
Comments: **Contact's Email:** lab@pdenviro.com

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406759-006A	EW-4	Water	Multi-Range TPH(g,d,mo)	3	VOA w/ HCl	☐	6/19/2014 15:00	5 days	Present	☐	
1406759-006B	EW-4	Water	SW8260B (Oxygenates, MBTEX & Lead Scav.)	3	VOA w/ HCl	☐	6/19/2014 15:00	5 days	Present	☐	
				2	VOA w/ HCl w/1.6ml	☐			Present	☐	
1406759-006C	EW-4	Water	RSK175	2	aVOA w/ H2SO4	☐	6/19/2014 15:00	5 days	Present	☐	
1406759-006D	EW-4	Water	RSK175 (CO2)	2	VOA	☐	6/19/2014 15:00	5 days	Present	☐	
1406759-006E	EW-4	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/19/2014 15:00	5 days	Present	☐	
1406759-006F	EW-4	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 15:00	5 days	Present	☐	
1406759-006G	EW-4	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 15:00	5 days	Present	☐	
1406759-006H	EW-4	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/19/2014 15:00	5 days	Present	☐	
1406759-007A	EW-5	Water	Multi-Range TPH(g,d,mo)	3	VOA w/ HCl	☐	6/19/2014 16:25	5 days	Present	☐	
1406759-007B	EW-5	Water	SW8260B (Oxygenates, MBTEX & Lead Scav.)	3	VOA w/ HCl	☐	6/19/2014 16:25	5 days	Present	☐	
				2	VOA w/ HCl w/1.6ml	☐			Present	☐	
1406759-007C	EW-5	Water	RSK175	1	aVOA w/ H2SO4	☐	6/19/2014 16:25	5 days	Present	☐	
1406759-007D	EW-5	Water	RSK175 (CO2)	2	VOA	☐	6/19/2014 16:25	5 days	Present	☐	
1406759-007E	EW-5	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/19/2014 16:25	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

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aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
QC Level: LEVEL 2
Work Order: 1406759
Project: #0058; Xtra Oil Company, 1701 Park Street, Alameda, CA
Client Contact: Michael Deschenes
Date Received: 6/20/2014
Comments:
Contact's Email: lab@pdenviro.com

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406759-007F	EW-5	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 16:25	5 days	Present	☐	
1406759-007G	EW-5	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/19/2014 16:25	5 days	Present	☐	
1406759-007H	EW-5	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/19/2014 16:25	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3
500mL HDPE, unprsv. = 500mL HDPE Bottle, Unpreserved
aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

1406759

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

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

PROJECT NUMBER: 0058

PROJECT NAME: Xtra Oil Company 1701 Park Street, Alameda, CA

SAMPLED BY: (PRINTED & SIGNATURE)
MICHAEL BASS-DESCHENES
Heena Khawan

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-G, D, MO	BTEX	Fuel Oxygenates, Lead Scavengers, Nitrate as Nitrogen & Sulfate	Nitrate as Nitrogen, TRE, TBA	Total & Dissolved Iron	Alkalinity as CaCO3	Dissolved Methane, Ethane, Ethene	PRESERVATIVE	REMARKS
MW-1	6/19/14		H_2O		16	X	X	X	X	X	X	X	ICE	Normal TAT
MW-2					16	X	X	X	X	X	X	X		
MW-3					16	X	X	X	X	X	X	X		
MW-4					16	X	X	X	X	X	X	X		
EW-2					16	X	X	X	X	X	X	X		
EW-4					16	X	X	X	X	X	X	X		
EW-5					16	X	X	X	X	X	X	X		
~~DW-2~~	~~6/20/14~~													

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	Total No. of Samples (This Shipment)	7	LABORATORY: McCampbell Analytical, Inc
	6/20/14	7:00	EDD.	Total No. of Containers (This Shipment)	112	
RELINQUISHED BY: (SIGNATURE) FEDEX	DATE 6/20/14	TIME 7:40	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT: Angela Rydelius		LABORATORY PHONE NUMBER: (877) 252-9262
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	SAMPLE ANALYSIS REQUEST SHEET ATTACHED: (X) YES ( ) NO Please See Attached		

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

REMARKS: FOR EACH SAMPLE: 6 HCl VOAs w/ 0.25 mL HCl, 2 HCl VOAs w/ 1.6 mL HCl, ~~1 H~~ 1 HNO_3 field preserved poly, 1 HNO_3 poly, 1-500 mL unpreserved poly, 1-125 mL unpreserved poly, 2-unpreserved VOAs, 2 H_2SO_4 preserved VOAs

SAMPLE REQUEST SHEET

P&D Environmental, Inc.
Project Number: 0058
Xtra Oil Company
1701 Park Street,
Alameda, California
06/20/2014

- Total Petroleum Hydrocarbons as Diesel (TPH-D) and Total Petroleum Hydrocarbons as Motor Oil (TPH-MO) using EPA Method 3510C and EPA Method 3630C in conjunction with EPA Method 8015B,
- Total Petroleum Hydrocarbons as Gasoline (TPH-G) and benzene, toluene, ethylbenzene, total xylenes (BTEX), fuel oxygenates and lead scavengers including methyl tertiary-butyl ether (MTBE) and TBA using EPA Method 5030B in conjunction with modified EPA Method 8015B and EPA Method 8260B,

Electron Acceptors

- Inorganic anions nitrate as nitrogen and sulfate using EPA Method E300.1,
- Total and dissolved iron using EPA Method 200.8,
- Alkalinity as calcium carbonate using Standard Method 2320B.

Metabolic Products

- Dissolved gases methane, ethane, ethene, and carbon dioxide using method RSK 175.

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

Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **6/20/2014 9:18:31 AM**

Project Name: **#0058; Xtra Oil Company, 1701 Park Street, Alameda, CA** LogIn Reviewed by: Maria Venegas

WorkOrder №: **1406759** Matrix: Water Carrier: Courier

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 6.5°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: pH<2; 522: pH<4)?	Yes ☑	No ☐	NA ☐
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: OTHERS)

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1406808

Report Created for: P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

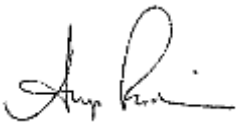
Project Contact: Paul King
Project P.O.:
Project Name: #0058; Xtra Oil Company

Project Received: 06/20/2014

Analytical Report reviewed & approved for release on 06/27/2014 by:

Question about your data?

Click here to email McCampbell



Angela Rydelius,
Laboratory Manager

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Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0058; Xtra Oil Company
WorkOrder: 1406808

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
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
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
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
TEQ	Toxicity Equivalence

Analytical Qualifiers

d1	weakly modified or unmodified gasoline is significant
e4	gasoline range compounds are significant.

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	E300.1
Date Received:	6/20/14 19:04	**Analytical Method:**	E300.1
Date Prepared:	6/21/14	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001C**	**Water**	**06/20/2014 08:35**	**IC3**	**91856**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**0.35**	0.10	1	06/21/2014 04:21
Nitrate as $NO3^{-}$	**1.5**	0.45	1	06/21/2014 04:21
Sulfate	**28**	1.0	10	06/21/2014 06:25
Surrogates	**REC (%)**	**Limits**		
Formate	102	90-115		06/21/2014 04:21

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/20/14 19:04	**Analytical Method:**	SW8260B
Date Prepared:	6/23/14	**Unit:**	µg/L

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001D**	**Water**	**06/20/2014 08:35**	**GC16**	**91969**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/23/2014 14:01
t-Butyl alcohol (TBA)	**2.4**	2.0	1	06/23/2014 14:01
1,2-Dibromoethane (EDB)	ND	0.50	1	06/23/2014 14:01
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/23/2014 14:01
Diisopropyl ether (DIPE)	ND	0.50	1	06/23/2014 14:01
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/23/2014 14:01
Methyl-t-butyl ether (MTBE)	**1.5**	0.50	1	06/23/2014 14:01

Surrogates	REC (%)	Limits	
Dibromofluoromethane	100	70-130	06/23/2014 14:01

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SM2320B
Date Received:	6/20/14 19:04	**Analytical Method:**	SM2320B
Date Prepared:	6/27/14	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001G**	**Water**	**06/20/2014 08:35**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**262**	1.00	1	06/27/2014 10:45
Carbonate	ND	1.00	1	06/27/2014 10:45
Bicarbonate	**262**	1.00	1	06/27/2014 10:45
Hydroxide	ND	1.00	1	06/27/2014 10:45

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/20/14 19:04	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	6/21/14	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001A**	**Water**	**06/20/2014 08:35**	**GC3**	**91908**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	**200**	50	1	06/21/2014 08:57
MTBE	**---**	5.0	1	06/21/2014 08:57
Benzene	**0.62**	0.50	1	06/21/2014 08:57
Toluene	**0.70**	0.50	1	06/21/2014 08:57
Ethylbenzene	**6.7**	0.50	1	06/21/2014 08:57
Xylenes	**6.8**	0.50	1	06/21/2014 08:57

Surrogates	REC (%)	Limits	Analytical Comments: d1	
aaa-TFT	112	70-130		06/21/2014 08:57

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	E200.8
Date Received:	6/20/14 19:04	**Analytical Method:**	E200.8
Date Prepared:	6/20/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001F**	**Water/DISS.**	**06/20/2014 08:35**	**ICP-MS1**	**91887**

Analytes	Result	RL	DF	Date Analyzed
Iron	**1500**	20	1	06/23/2014 21:22

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	E200.8
Date Received:	6/20/14 19:04	**Analytical Method:**	E200.8
Date Prepared:	6/20/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001E**	**Water/TOTAL**	**06/20/2014 08:35**	**ICP-MS1**	**91887**

Analytes	Result	RL	DF	Date Analyzed
Iron	**2000**	20	1	06/24/2014 17:09

Surrogates	REC (%)	Limits	
Tb 350.917	108	70-130	06/24/2014 17:09

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	RSK175
Date Received:	6/20/14 19:04	**Analytical Method:**	RSK175
Date Prepared:	6/25/14	**Unit:**	µg/L

Carbon Dioxide

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001I**	**Water/DISS.**	**06/20/2014 08:35**	**GC26**	**92040**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**36,000**	2500	50	06/25/2014 12:46

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	RSK175
Date Received:	6/20/14 19:04	**Analytical Method:**	RSK175
Date Prepared:	6/25/14	**Unit:**	µg/L

Light Gases

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001H**	**Water/DISS.**	**06/20/2014 08:35**	**GC26**	**92041**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/25/2014 14:47
Ethene	ND	0.20	1	06/25/2014 14:47
Methane	**17**	0.10	1	06/25/2014 14:47

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW3510C
Date Received:	6/20/14 19:04	**Analytical Method:**	SW8015B
Date Prepared:	6/20/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
0W2	**1406808-001B**	**Water**	**06/20/2014 08:35**	**GC6A**	**91898**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**150**	50	1	06/23/2014 21:09
TPH-Motor Oil (C18-C36)	ND	250	1	06/23/2014 21:09

Surrogates	REC (%)	Limits	Analytical Comments: e4	
C9	98	70-130		06/23/2014 21:09

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/20/14	**BatchID:**	91856
Date Analyzed:	6/20/14	**Extraction Method:**	E300.1
Instrument:	IC3	**Analytical Method:**	E300.1
Matrix:	Water	**Unit:**	mg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91856 1406759-001EMS/MSD

QC Summary Report for E300.1

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Nitrate as N	ND	1.00	0.10	1	-	100	85-115
Nitrate as $NO3^{-}$	ND	4.43	0.45	4.4	-	101	85-115
Sulfate	ND	0.978	0.10	1	-	97.8	85-115
Surrogate Recovery							
Formate	0.109	0.103		0.10	109	103	90-115

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Nitrate as N	1.00	1.00	1	ND	100	100	85-115	0	15
Nitrate as $NO3^{-}$	4.43	4.44	4.4	ND	101	101	85-115	0	15
Sulfate	1.37	1.38	1	0.3141	106	107	85-115	0.795	15
Surrogate Recovery									
Formate	0.106	0.105	0.10		105	105	90-115	0	10

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/24/14	**BatchID:**	91969
Date Analyzed:	6/23/14	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91969 1406731-001AMS/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	17.6	0.50	20	-	88.3	70-130
Benzene	ND	18.1	0.50	20	-	90.4	70-130
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	63.5	2.0	80	-	79.3	70-130
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	18.4	0.50	20	-	92	70-130
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	18.5	0.50	20	-	92.5	70-130
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	17.9	0.50	20	-	89.4	70-130
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

(Cont.)

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/24/14	**BatchID:**	91969
Date Analyzed:	6/23/14	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91969 1406731-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	17.4	0.50	20	-	86.9	70-130
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	17.6	0.50	20	-	88.1	70-130
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	16.9	0.50	20	-	84.4	70-130
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	19.2	0.50	20	-	95.9	70-130
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	18.2	0.50	20	-	91.3	70-130
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	24.5	43.3		45	98	96	70-130
Toluene-d8	23.3	39.7		45	93	88	70-130
4-BFB	2.51	4.51		4.5	100	100	70-130

(Cont.)

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/24/14	**BatchID:**	91969
Date Analyzed:	6/23/14	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91969 1406731-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	17.7	18.6	20	ND	88.6	93.1	70-130	4.95	20
Benzene	17.6	17.7	20	ND	87.9	88.4	70-130	0.570	20
t-Butyl alcohol (TBA)	70.6	83.5	80	ND	88.2	104	70-130	16.8	20
Chlorobenzene	17.9	17.9	20	ND	89.5	89.7	70-130	0.216	20
1,2-Dibromoethane (EDB)	19.7	20.0	20	ND	98.5	100	70-130	1.50	20
1,2-Dichloroethane (1,2-DCA)	18.3	18.4	20	ND	91.7	91.8	70-130	0.156	20
Diisopropyl ether (DIPE)	17.0	17.5	20	ND	84.9	87.6	70-130	3.07	20
Ethyl tert-butyl ether (ETBE)	17.5	18.2	20	ND	87.6	90.9	70-130	3.78	20
Methyl-t-butyl ether (MTBE)	17.3	18.1	20	ND	86.5	90.5	70-130	4.47	20
Toluene	18.4	18.4	20	ND	92.1	91.9	70-130	0.292	20
Trichloroethene	18.1	17.7	20	ND	90.4	88.7	70-130	1.94	20
Surrogate Recovery									
Dibromofluoromethane	43.9	43.0	45		98	96	70-130	1.93	20
Toluene-d8	39.4	39.1	45		88	87	70-130	0.832	20
4-BFB	4.16	4.40	4.5		92	98	70-130	5.72	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/27/14	**BatchID:**	92120
Date Analyzed:	6/27/14	**Extraction Method:**	SM2320B
Instrument:	Titrino	**Analytical Method:**	SM2320B
Matrix:	Water	**Test Method:**	SM2320B (Alkalinity)
Project:	#0058; Xtra Oil Company		

QC Summary Report for Alkalinity

Lab ID	Analyte	Reporting Units	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	RPD	Acceptance Criteria (%)
1406808-001G	Total	mg $CaCO_3$/L	262	1	263	1	0.103	<20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/21/14	**BatchID:**	91908
Date Analyzed:	6/20/14	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91908 1406802-001AMS/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	61.2	40	60	-	102	70-130
MTBE	ND	12.1	5.0	10	-	121	70-130
Benzene	ND	10.3	0.50	10	-	103	70-130
Toluene	ND	10.2	0.50	10	-	102	70-130
Ethylbenzene	ND	10.4	0.50	10	-	103	70-130
Xylenes	ND	31.4	0.50	30	-	105	70-130
Surrogate Recovery							
aaa-TFT	9.57	9.49		10	96	95	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	61.1	67.3	60	ND	102	112	70-130	9.69	20
MTBE	10.7	10.4	10	ND	107	104	70-130	3.05	20
Benzene	10.4	10.5	10	ND	104	105	70-130	0.749	20
Toluene	10.4	10.6	10	ND	104	106	70-130	1.27	20
Ethylbenzene	10.6	10.7	10	ND	106	107	70-130	0.676	20
Xylenes	32.1	32.3	30	ND	107	108	70-130	0.651	20
Surrogate Recovery									
aaa-TFT	9.52	9.72	10		95	97	70-130	2.11	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/20/14	**BatchID:**	91887
Date Analyzed:	6/23/14	**Extraction Method:**	E200.8
Instrument:	ICP-MS2	**Analytical Method:**	E200.8
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91887 1406792-001DMS/MSD

QC Summary Report for E200.8

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Iron	ND	535	20	500	-	107	85-115
Surrogate Recovery							
Tb 350.917	747	768		750	100	102	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Iron	N/A	-	0	N/A	N/A	N/A	-	N/A	
Surrogate Recovery									
Tb 350.917	NR	NR	0		NR	NR	-	NR	

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/20/14	**BatchID:**	91887
Date Analyzed:	6/23/14	**Extraction Method:**	E200.8
Instrument:	ICP-MS2	**Analytical Method:**	E200.8
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91887

QC Summary Report for E200.8

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Iron	ND	535	20	500	-	107	85-115
Surrogate Recovery							
Tb 350.917	747	768		750	100	102	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/25/14	**BatchID:**	92040
Date Analyzed:	6/25/14	**Extraction Method:**	RSK175
Instrument:	GC26	**Analytical Method:**	RSK175
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92040

QC Summary Report for RSK174/175

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Carbon Dioxide	ND	133	50	187.2	-	71.1	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/25/14	**BatchID:**	92041
Date Analyzed:	6/25/14	**Extraction Method:**	RSK175
Instrument:	GC26	**Analytical Method:**	RSK175
Matrix:	Air	**Unit:**	µL/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92041

QC Summary Report for RSK175

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Ethane	ND	9.30	0.50	10	-	93	70-130
Ethylene	ND	12.7	0.50	10	-	127	70-130
Methane	ND	11.2	0.50	10	-	113	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406808
Date Prepared:	6/20/14	**BatchID:**	91898
Date Analyzed:	6/22/14	**Extraction Method:**	SW3510C
Instrument:	GC11B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91898

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1040	50	1000	-	104	70-130
Surrogate Recovery							
C9	702	675		625	112	108	70-130

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(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1406808 **ClientCode: PDEO**

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

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

Email: lab@pdenviro.com
cc/3rd Party:
PO:
ProjectNo: #0058; Xtra Oil Company

Bill to:
Accounts Payable
Xtra Oil Company
2307 Pacific Avenue
Alameda, CA 94507
xtraoil@sbcglobal.net

Requested TAT: 5 days

Date Received: **06/20/2014**
Date Printed: **06/23/2014**

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
1406808-001	0W2	Water	6/20/2014 8:35	☐	C	D	G	A	F	E	I	H	B			

Test Legend:

1	300_1_W	2	5-OXYS+PBSCV_W	3	Alka(spe)_W	4	G-MBTEX_W	5	METALSMS_FF_DISS
6	METALSMS_W	7	RSK175_CO2_W	8	RSK175_W	9	TPH(DMO)_W	10	
11		12							

Prepared by: Jena Alfaro

Comments:

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

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0058; Xtra Oil Company
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1406808
Date Received: 6/20/2014

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406808-001A	0W2	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	6/20/2014 8:35	5 days	Trace	☐	
1406808-001B	0W2	Water	SW8015B (Diesel & Motor Oil)	3	VOA w/ HCl	☐	6/20/2014 8:35	5 days	Trace	☐	
1406808-001C	0W2	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/20/2014 8:35	5 days	Trace	☐	
1406808-001D	0W2	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl	☐	6/20/2014 8:35	5 days	Trace	☐	
1406808-001E	0W2	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/20/2014 8:35	5 days	Trace	☐	
1406808-001F	0W2	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/20/2014 8:35	5 days	Trace	☐	
1406808-001G	0W2	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/20/2014 8:35	5 days	Trace	☐	
1406808-001H	0W2	Water	RSK175 <Ethane_4, Ethene_4, Methane_4>	2	aVOA w/ H2SO4	☐	6/20/2014 8:35	5 days	Trace	☐	
1406808-001I	0W2	Water	RSK175 (CO2)	2	VOA	☐	6/20/2014 8:35	5 days	Trace	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3
500mL HDPE, unprsv. = 500mL HDPE Bottle, Unpreserved
aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

CHAIN OF CUSTODY RECORD

1406808 PAGE 1 OF 2

P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave., Suite 240
Oakland, CA 94610
(510) 658-6916

PROJECT NUMBER: 0058

PROJECT NAME: XTRA OIL COMPANY 1701 PARK STREET ALAMEDA, CA

SAMPLED BY: (PRINTED & SIGNATURE) MICHAEL BASS-DESCHENES

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-(G,D,MO)	BTEX	FUEL OXYGENATES MTBE AND TRA	LEAD SCAVENGERS	NITRATE AS NITROGEN	TOTAL & DISSOLVED IRON	ALKALINITY AS CaCO3	DISSOLVED GASES: METHANE, ETHANE, ETHENE, CO2		PRESERVATIVE	REMARKS
OW2	6/20/14	0835	H2O		16	X	X	X	X	X	X	X	X		ICE	NORMAL TAT

RELINQUISHED BY: (SIGNATURE) Michael Bass-Deschenes	DATE 6/20/14	TIME 1625	RECEIVED BY: (SIGNATURE)	Total No. of Samples (This Shipment)	1	LABORATORY: McCAMPBELL ANALYTICAL, INC.
RELINQUISHED BY: (SIGNATURE)	DATE 6/20/14	TIME 1800	RECEIVED BY: (SIGNATURE)	Total No. of Containers (This Shipment)	16	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	LABORATORY CONTACT: ANGELA RYDELNIK		LABORATORY PHONE NUMBER: (877) 252-9262
				SAMPLE ANALYSIS REQUEST SHEET ATTACHED: (X) YES ( ) NO		PLEASE SEE ATTACHED

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

2.0°C

REMARKS: FOR EACH SAMPLE: 6 HCL VOAs W/ 0.25mL HCL, 2 VOAs UNPRESERVED 2 VOAs W/ H_2SO_4, 2 VOAs WITH 1.6mL HCL, 1 HNO_3 POLY, 1 HNO_3 POLY FILTERED IN FIELD, 1-500mL POLY UNPRESERVED, 1-125mL POLY UNPRESERVED.

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Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **6/20/2014 7:04:34 PM**

Project Name: **#0058; Xtra Oil Company** LogIn Reviewed by: Jena Alfaro

WorkOrder №: **1406808** Matrix: Water Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 2°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: pH<2; 522: pH<4)?	Yes ☑	No ☐	NA ☐
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Comments: Only one VOA for RSK175 received Filled.

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1406837

Report Created for: P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

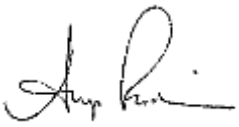
Project Contact: Paul King
Project P.O.:
Project Name: #0058; Xtra Oil Company

Project Received: 06/23/2014

Analytical Report reviewed & approved for release on 07/03/2014 by:

Question about your data?

Click here to email McCampbell



Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
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Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0058; Xtra Oil Company
WorkOrder: 1406837

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
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
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
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
TEQ	Toxicity Equivalence

Analytical Qualifiers

b1	aqueous sample that contains greater than ~1 vol. % sediment
e3	aged diesel is significant

Quality Control Qualifiers

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

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	E300.1
Date Received:	6/23/14 16:48	**Analytical Method:**	E300.1
Date Prepared:	6/24/14-6/25/14	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001C**	**Water**	**06/23/2014**	**IC1**	**91967**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/24/2014 13:12
Nitrate as NO_3^-	ND	0.45	1	06/24/2014 13:12
Sulfate	**87**	10	100	06/25/2014 13:02
Surrogates	REC (%)	Limits		
Formate	99	90-115		06/24/2014 13:12

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-3	**1406837-002C**	**Water**	**06/23/2014**	**IC1**	**91967**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/24/2014 14:56
Nitrate as NO_3^-	ND	0.45	1	06/24/2014 14:56
Sulfate	**88**	10	100	06/25/2014 13:37
Surrogates	REC (%)	Limits		
Formate	98	90-115		06/24/2014 14:56

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003C**	**Water**	**06/23/2014**	**IC1**	**91967**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/24/2014 15:31
Nitrate as NO_3^-	ND	0.45	1	06/24/2014 15:31
Sulfate	**90**	10	100	06/25/2014 14:12
Surrogates	REC (%)	Limits		
Formate	98	90-115		06/24/2014 15:31

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004C**	**Water**	**06/23/2014**	**IC1**	**91967**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	ND	0.10	1	06/24/2014 16:06
Nitrate as NO_3^-	ND	0.45	1	06/24/2014 16:06
Sulfate	**87**	10	100	06/25/2014 14:47
Surrogates	REC (%)	Limits		
Formate	97	90-115		06/24/2014 16:06

(Cont.)

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	E300.1
Date Received:	6/23/14 16:48	**Analytical Method:**	E300.1
Date Prepared:	6/24/14-6/25/14	**Unit:**	mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005C**	**Water**	**06/23/2014**	**IC1**	**91967**

Analytes	Result	RL	DF	Date Analyzed
Nitrate as N	**0.17**	0.10	1	06/24/2014 16:40
Nitrate as $NO3^{-}$	**0.76**	0.45	1	06/24/2014 16:40
Sulfate	**92**	10	100	06/25/2014 15:21
Surrogates	**REC (%)**	**Limits**		
Formate	98	90-115		06/24/2014 16:40

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8260B
Date Prepared:	6/28/14-7/1/14	**Unit:**	µg/L

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001D**	**Water**	**06/23/2014**	**GC18**	**92317**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	25	50	07/01/2014 22:56
Benzene	ND	25	50	07/01/2014 22:56
t-Butyl alcohol (TBA)	**3700**	100	50	07/01/2014 22:56
1,2-Dibromoethane (EDB)	ND	25	50	07/01/2014 22:56
1,2-Dichloroethane (1,2-DCA)	ND	25	50	07/01/2014 22:56
Diisopropyl ether (DIPE)	ND	25	50	07/01/2014 22:56
Ethylbenzene	ND	25	50	07/01/2014 22:56
Ethyl tert-butyl ether (ETBE)	ND	25	50	07/01/2014 22:56
Methyl-t-butyl ether (MTBE)	ND	25	50	07/01/2014 22:56
Toluene	ND	25	50	07/01/2014 22:56
Xylenes, Total	ND	25	50	07/01/2014 22:56

Surrogates	REC (%)	Limits	Analytical Comments: b1	
Dibromofluoromethane	103	70-130		07/01/2014 22:56

ASP-3	1406837-002D	Water	06/23/2014	GC18	92204

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/28/2014 11:38
Benzene	ND	0.50	1	06/28/2014 11:38
t-Butyl alcohol (TBA)	ND	2.0	1	06/28/2014 11:38
1,2-Dibromoethane (EDB)	ND	0.50	1	06/28/2014 11:38
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/28/2014 11:38
Diisopropyl ether (DIPE)	ND	0.50	1	06/28/2014 11:38
Ethylbenzene	ND	0.50	1	06/28/2014 11:38
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/28/2014 11:38
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/28/2014 11:38
Toluene	ND	0.50	1	06/28/2014 11:38
Xylenes, Total	ND	0.50	1	06/28/2014 11:38

Surrogates	REC (%)	Limits	Analytical Comments: b1	
Dibromofluoromethane	104	70-130		06/28/2014 11:38

(Cont.)

CDPH ELAP 1644 ♦ NELAP 4033ORELAP GM Analyst's Initial Angela Rydelius, Lab Manager

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8260B
Date Prepared:	6/28/14-7/1/14	**Unit:**	µg/L

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003D**	**Water**	**06/23/2014**	**GC18**	**92204**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/28/2014 12:17
Benzene	ND	0.50	1	06/28/2014 12:17
t-Butyl alcohol (TBA)	**5.7**	2.0	1	06/28/2014 12:17
1,2-Dibromoethane (EDB)	ND	0.50	1	06/28/2014 12:17
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/28/2014 12:17
Diisopropyl ether (DIPE)	ND	0.50	1	06/28/2014 12:17
Ethylbenzene	ND	0.50	1	06/28/2014 12:17
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/28/2014 12:17
Methyl-t-butyl ether (MTBE)	**0.78**	0.50	1	06/28/2014 12:17
Toluene	ND	0.50	1	06/28/2014 12:17
Xylenes, Total	ND	0.50	1	06/28/2014 12:17

Surrogates	REC (%)	Limits	Analytical Comments: b1	
Dibromofluoromethane	108	70-130		06/28/2014 12:17

ASP-5	1406837-004D	Water	06/23/2014	GC28	92220

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/28/2014 10:50
Benzene	ND	0.50	1	06/28/2014 10:50
t-Butyl alcohol (TBA)	ND	2.0	1	06/28/2014 10:50
1,2-Dibromoethane (EDB)	ND	0.50	1	06/28/2014 10:50
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/28/2014 10:50
Diisopropyl ether (DIPE)	ND	0.50	1	06/28/2014 10:50
Ethylbenzene	ND	0.50	1	06/28/2014 10:50
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/28/2014 10:50
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/28/2014 10:50
Toluene	ND	0.50	1	06/28/2014 10:50
Xylenes, Total	ND	0.50	1	06/28/2014 10:50

Surrogates	REC (%)	Limits	Analytical Comments: b1	
Dibromofluoromethane	92	70-130		06/28/2014 10:50

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8260B
Date Prepared:	6/28/14-7/1/14	**Unit:**	µg/L

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005D**	**Water**	**06/23/2014**	**GC18**	**92204**

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/28/2014 10:59
Benzene	ND	0.50	1	06/28/2014 10:59
t-Butyl alcohol (TBA)	ND	2.0	1	06/28/2014 10:59
1,2-Dibromoethane (EDB)	ND	0.50	1	06/28/2014 10:59
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/28/2014 10:59
Diisopropyl ether (DIPE)	ND	0.50	1	06/28/2014 10:59
Ethylbenzene	ND	0.50	1	06/28/2014 10:59
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/28/2014 10:59
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/28/2014 10:59
Toluene	ND	0.50	1	06/28/2014 10:59
Xylenes, Total	ND	0.50	1	06/28/2014 10:59
Surrogates	REC (%)	Limits	Analytical Comments: b1	
Dibromofluoromethane	103	70-130		06/28/2014 10:59

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SM2320B
Date Received:	6/23/14 16:48	**Analytical Method:**	SM2320B
Date Prepared:	6/27/14	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001G**	**Water**	**06/23/2014**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**269**	1.00	1	06/27/2014 10:58
Carbonate	ND	1.00	1	06/27/2014 10:58
Bicarbonate	**269**	1.00	1	06/27/2014 10:58
Hydroxide	ND	1.00	1	06/27/2014 10:58

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-3	**1406837-002G**	**Water**	**06/23/2014**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**172**	1.00	1	06/27/2014 11:04
Carbonate	ND	1.00	1	06/27/2014 11:04
Bicarbonate	**172**	1.00	1	06/27/2014 11:04
Hydroxide	ND	1.00	1	06/27/2014 11:04

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003G**	**Water**	**06/23/2014**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**150**	1.00	1	06/27/2014 11:11
Carbonate	ND	1.00	1	06/27/2014 11:11
Bicarbonate	**150**	1.00	1	06/27/2014 11:11
Hydroxide	ND	1.00	1	06/27/2014 11:11

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SM2320B
Date Received:	6/23/14 16:48	**Analytical Method:**	SM2320B
Date Prepared:	6/27/14	**Unit:**	mg $CaCO_3$/L

Total & Speciated Alkalinity as Calcium Carbonate

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004G**	**Water**	**06/23/2014**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**151**	1.00	1	06/27/2014 11:43
Carbonate	ND	1.00	1	06/27/2014 11:43
Bicarbonate	**151**	1.00	1	06/27/2014 11:43
Hydroxide	ND	1.00	1	06/27/2014 11:43

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005G**	**Water**	**06/23/2014**	**Titrino**	**92120**

Analytes	Result	RL	DF	Date Analyzed
Total	**191**	1.00	1	06/27/2014 11:47
Carbonate	ND	1.00	1	06/27/2014 11:47
Bicarbonate	**191**	1.00	1	06/27/2014 11:47
Hydroxide	ND	1.00	1	06/27/2014 11:47

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	6/24/14-6/27/14	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001A**	**Water**	**06/23/2014**	**GC3**	**92025**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/24/2014 15:19
MTBE	ND	5.0	1	06/24/2014 15:19
Benzene	ND	0.50	1	06/24/2014 15:19
Toluene	ND	0.50	1	06/24/2014 15:19
Ethylbenzene	ND	0.50	1	06/24/2014 15:19
Xylenes	ND	0.50	1	06/24/2014 15:19

Surrogates	REC (%)	Limits	
aaa-TFT	101	70-130	06/24/2014 15:19

ASP-3	1406837-002A	Water	06/23/2014	GC3	92072

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/25/2014 22:36
MTBE	ND	5.0	1	06/25/2014 22:36
Benzene	ND	0.50	1	06/25/2014 22:36
Toluene	ND	0.50	1	06/25/2014 22:36
Ethylbenzene	ND	0.50	1	06/25/2014 22:36
Xylenes	ND	0.50	1	06/25/2014 22:36

Surrogates	REC (%)	Limits	
aaa-TFT	102	70-130	06/25/2014 22:36

ASP-4	1406837-003A	Water	06/23/2014	GC3	92025

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/24/2014 22:03
MTBE	ND	5.0	1	06/24/2014 22:03
Benzene	ND	0.50	1	06/24/2014 22:03
Toluene	ND	0.50	1	06/24/2014 22:03
Ethylbenzene	ND	0.50	1	06/24/2014 22:03
Xylenes	ND	0.50	1	06/24/2014 22:03

Surrogates	REC (%)	Limits	
aaa-TFT	103	70-130	06/24/2014 22:03

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	6/24/14-6/27/14	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004A**	**Water**	**06/23/2014**	**GC3**	**92025**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/25/2014 01:04
MTBE	ND	5.0	1	06/25/2014 01:04
Benzene	ND	0.50	1	06/25/2014 01:04
Toluene	ND	0.50	1	06/25/2014 01:04
Ethylbenzene	ND	0.50	1	06/25/2014 01:04
Xylenes	ND	0.50	1	06/25/2014 01:04
Surrogates	REC (%)	Limits		
aaa-TFT	103	70-130		06/25/2014 01:04

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005A**	**Water**	**06/23/2014**	**GC3**	**92025**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/27/2014 18:54
MTBE	ND	5.0	1	06/27/2014 18:54
Benzene	ND	0.50	1	06/27/2014 18:54
Toluene	ND	0.50	1	06/27/2014 18:54
Ethylbenzene	ND	0.50	1	06/27/2014 18:54
Xylenes	ND	0.50	1	06/27/2014 18:54
Surrogates	REC (%)	Limits		
aaa-TFT	97	70-130		06/27/2014 18:54

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	6/24/14-6/27/14	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001A**	**Water**	**06/23/2014**	**GC3**	**92025**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/24/2014 15:19
MTBE	---	5.0	1	06/24/2014 15:19
Benzene	---	0.50	1	06/24/2014 15:19
Toluene	---	0.50	1	06/24/2014 15:19
Ethylbenzene	---	0.50	1	06/24/2014 15:19
Xylenes	---	0.50	1	06/24/2014 15:19
Surrogates	REC (%)	Limits		
aaa-TFT	101	70-130		06/24/2014 15:19

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-3	**1406837-002A**	**Water**	**06/23/2014**	**GC3**	**92072**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/25/2014 22:36
MTBE	---	5.0	1	06/25/2014 22:36
Benzene	---	0.50	1	06/25/2014 22:36
Toluene	---	0.50	1	06/25/2014 22:36
Ethylbenzene	---	0.50	1	06/25/2014 22:36
Xylenes	---	0.50	1	06/25/2014 22:36
Surrogates	REC (%)	Limits		
aaa-TFT	102	70-130		06/25/2014 22:36

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003A**	**Water**	**06/23/2014**	**GC3**	**92025**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/24/2014 22:03
MTBE	---	5.0	1	06/24/2014 22:03
Benzene	---	0.50	1	06/24/2014 22:03
Toluene	---	0.50	1	06/24/2014 22:03
Ethylbenzene	---	0.50	1	06/24/2014 22:03
Xylenes	---	0.50	1	06/24/2014 22:03
Surrogates	REC (%)	Limits		
aaa-TFT	103	70-130		06/24/2014 22:03

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW5030B
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8021B/8015Bm
Date Prepared:	6/24/14-6/27/14	**Unit:**	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004A**	**Water**	**06/23/2014**	**GC3**	**92025**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/25/2014 01:04
MTBE	---	5.0	1	06/25/2014 01:04
Benzene	---	0.50	1	06/25/2014 01:04
Toluene	---	0.50	1	06/25/2014 01:04
Ethylbenzene	---	0.50	1	06/25/2014 01:04
Xylenes	---	0.50	1	06/25/2014 01:04
Surrogates	REC (%)	Limits		
aaa-TFT	103	70-130		06/25/2014 01:04

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005A**	**Water**	**06/23/2014**	**GC3**	**92025**

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	06/27/2014 18:54
MTBE	---	5.0	1	06/27/2014 18:54
Benzene	---	0.50	1	06/27/2014 18:54
Toluene	---	0.50	1	06/27/2014 18:54
Ethylbenzene	---	0.50	1	06/27/2014 18:54
Xylenes	---	0.50	1	06/27/2014 18:54
Surrogates	REC (%)	Limits		
aaa-TFT	97	70-130		06/27/2014 18:54

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	E200.8
Date Received:	6/23/14 16:48	**Analytical Method:**	E200.8
Date Prepared:	6/23/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001F**	**Water/DISS.**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**810**	20	1	06/23/2014 20:38

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-3	**1406837-002F**	**Water/DISS.**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	ND	20	1	06/23/2014 20:44

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003F**	**Water/DISS.**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**520**	20	1	06/23/2014 20:50

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004F**	**Water/DISS.**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**99**	20	1	06/23/2014 20:57

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005F**	**Water/DISS.**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**72**	20	1	06/23/2014 21:15

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	E200.8
Date Received:	6/23/14 16:48	**Analytical Method:**	E200.8
Date Prepared:	6/23/14	**Unit:**	µg/L

Metals

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001E**	**Water/TOTAL**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**770**	20	1	06/25/2014 08:22

Surrogates	REC (%)	Limits	
Tb 350.917	101	70-130	06/25/2014 08:22

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-3	**1406837-002E**	**Water/TOTAL**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**520**	20	1	06/25/2014 08:28

Surrogates	REC (%)	Limits	
Tb 350.917	99	70-130	06/25/2014 08:28

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003E**	**Water/TOTAL**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**3200**	20	1	06/25/2014 08:35

Surrogates	REC (%)	Limits	
Tb 350.917	95	70-130	06/25/2014 08:35

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004E**	**Water/TOTAL**	**06/23/2014**	**ICP-MS1**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**760**	20	1	06/25/2014 08:41

Surrogates	REC (%)	Limits	
Tb 350.917	98	70-130	06/25/2014 08:41

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005E**	**Water/TOTAL**	**06/23/2014**	**ICP-MS2**	**91922**

Analytes	Result	RL	DF	Date Analyzed
Iron	**22,000**	200	10	06/26/2014 13:20

Surrogates	REC (%)	Limits	
Tb 350.917	86	70-130	06/26/2014 13:20

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	RSK175
Date Received:	6/23/14 16:48	**Analytical Method:**	RSK175
Date Prepared:	6/25/14	**Unit:**	µg/L

Carbon Dioxide

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001I**	**Water/DISS.**	**06/23/2014**	**GC26**	**92040**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**12,000**	2500	50	06/25/2014 10:50

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-3	**1406837-002I**	**Water/DISS.**	**06/23/2014**	**GC26**	**92040**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**2800**	2500	50	06/25/2014 11:07

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003I**	**Water/DISS.**	**06/23/2014**	**GC26**	**92040**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**4800**	2500	50	06/25/2014 11:19

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004I**	**Water/DISS.**	**06/23/2014**	**GC26**	**92040**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**3200**	1000	20	06/25/2014 11:50

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005I**	**Water/DISS.**	**06/23/2014**	**GC26**	**92040**

Analytes	Result	RL	DF	Date Analyzed
Carbon Dioxide	**240**	50	1	06/25/2014 12:16

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	RSK175
Date Received:	6/23/14 16:48	**Analytical Method:**	RSK175
Date Prepared:	6/25/14	**Unit:**	µg/L

Light Gases

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001H**	**Water/DISS.**	**06/23/2014**	**GC26**	**92041**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/25/2014 15:18
Ethene	ND	0.20	1	06/25/2014 15:18
Methane	**1.9**	0.10	1	06/25/2014 15:18

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-3	**1406837-002H**	**Water/DISS.**	**06/23/2014**	**GC26**	**92041**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/25/2014 15:44
Ethene	ND	0.20	1	06/25/2014 15:44
Methane	**0.13**	0.10	1	06/25/2014 15:44

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003H**	**Water/DISS.**	**06/23/2014**	**GC26**	**92041**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/25/2014 15:57
Ethene	ND	0.20	1	06/25/2014 15:57
Methane	ND	0.10	1	06/25/2014 15:57

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004H**	**Water/DISS.**	**06/23/2014**	**GC26**	**92041**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/25/2014 16:08
Ethene	ND	0.20	1	06/25/2014 16:08
Methane	ND	0.10	1	06/25/2014 16:08

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	RSK175
Date Received:	6/23/14 16:48	**Analytical Method:**	RSK175
Date Prepared:	6/25/14	**Unit:**	µg/L

Light Gases

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005H**	**Water/DISS.**	**06/23/2014**	**GC26**	**92041**

Analytes	Result	RL	DF	Date Analyzed
Ethane	ND	0.20	1	06/25/2014 16:20
Ethene	ND	0.20	1	06/25/2014 16:20
Methane	ND	0.10	1	06/25/2014 16:20

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW3510C
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8015B
Date Prepared:	6/23/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-2	**1406837-001B**	**Water**	**06/23/2014**	**GC6A**	**91929**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/27/2014 09:33
TPH-Motor Oil (C18-C36)	ND	250	1	06/27/2014 09:33
Surrogates	REC (%)	Limits		
C9	102	70-130		06/27/2014 09:33

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-3	**1406837-002B**	**Water**	**06/23/2014**	**GC2B**	**91929**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/30/2014 13:03
TPH-Motor Oil (C18-C36)	ND	250	1	06/30/2014 13:03
Surrogates	REC (%)	Limits		
C9	111	70-130		06/30/2014 13:03

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-4	**1406837-003B**	**Water**	**06/23/2014**	**GC6A**	**91929**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**220**	50	1	06/27/2014 07:59
TPH-Motor Oil (C18-C36)	ND	250	1	06/27/2014 07:59
Surrogates	REC (%)	Limits	Analytical Comments: e3	
C9	92	70-130		06/27/2014 07:59

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-5	**1406837-004B**	**Water**	**06/23/2014**	**GC6B**	**91929**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/28/2014 06:11
TPH-Motor Oil (C18-C36)	ND	250	1	06/28/2014 06:11
Surrogates	REC (%)	Limits		
C9	104	70-130		06/28/2014 06:11

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Project:	#0058; Xtra Oil Company	**Extraction Method:**	SW3510C
Date Received:	6/23/14 16:48	**Analytical Method:**	SW8015B
Date Prepared:	6/23/14	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP-6	**1406837-005B**	**Water**	**06/23/2014**	**GC6B**	**91929**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/27/2014 07:59
TPH-Motor Oil (C18-C36)	ND	250	1	06/27/2014 07:59
Surrogates	**REC (%)**	**Limits**		
C9	102	70-130		06/27/2014 07:59

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/23/14	**BatchID:**	91967
Date Analyzed:	6/24/14	**Extraction Method:**	E300.1
Instrument:	IC1	**Analytical Method:**	E300.1
Matrix:	Water	**Unit:**	mg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91967 1406837-001CMS/MSD

QC Summary Report for E300.1

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Nitrate as N	ND	0.940	0.10	1	-	94	85-115
Nitrate as $NO3^{-}$	ND	4.16	0.45	4.4	-	94.6	85-115
Sulfate	ND	0.985	0.10	1	-	98.5	85-115
Surrogate Recovery							
Formate	0.0941	0.0913		0.10	94	91	90-115

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Nitrate as N	0.958	0.972	1	ND	95.8	97.2	85-115	1.44	15
Nitrate as $NO3^{-}$	4.24	4.30	4.4	ND	96.3	97.7	85-115	1.44	15
Sulfate	NR	NR	1	87.40	NR	NR	85-115	NR	15
Surrogate Recovery									
Formate	0.0951	0.0944	0.10		95	94	90-115	0.707	10

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/30/14	**BatchID:**	92204
Date Analyzed:	6/28/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92204 1406857-003AMS/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	23.5	0.50	20	-	118	70-130
Benzene	ND	19.1	0.50	20	-	95.5	70-130
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	85.4	2.0	80	-	107	70-130
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	20.7	0.50	20	-	103	70-130
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	23.4	0.50	20	-	117	70-130
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	21.4	0.50	20	-	107	70-130
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/30/14	**BatchID:**	92204
Date Analyzed:	6/28/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92204 1406857-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	22.2	0.50	20	-	111	70-130
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	22.1	0.50	20	-	111	70-130
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	21.6	0.50	20	-	108	70-130
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	19.2	0.50	20	-	96.1	70-130
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	21.3	0.50	20	-	107	70-130
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	26.3	47.8		45	105	106	70-130
Toluene-d8	25.7	42.9		45	103	95	70-130
4-BFB	2.20	4.41		4.5	88	98	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/30/14	**BatchID:**	92204
Date Analyzed:	6/28/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92204 1406857-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	25.1	24.6	20	ND	125	123	70-130	1.76	20
Benzene	18.0	17.9	20	ND	89.9	89.3	70-130	0.679	20
t-Butyl alcohol (TBA)	99.4	97.0	80	ND	124	121	70-130	2.50	20
Chlorobenzene	19.1	18.9	20	ND	95.4	94.7	70-130	0.742	20
1,2-Dibromoethane (EDB)	23.0	23.0	20	ND	115	115	70-130	0	20
1,2-Dichloroethane (1,2-DCA)	21.4	21.0	20	ND	107	105	70-130	2.01	20
Diisopropyl ether (DIPE)	22.3	22.3	20	ND	112	112	70-130	0	20
Ethyl tert-butyl ether (ETBE)	23.2	22.9	20	ND	116	114	70-130	1.22	20
Methyl-t-butyl ether (MTBE)	23.4	23.2	20	ND	117	116	70-130	0.958	20
Toluene	17.4	17.4	20	ND	86.9	87.1	70-130	0.227	20
Trichloroethene	19.5	19.8	20	ND	97.5	99.1	70-130	1.62	20
Surrogate Recovery									
Dibromofluoromethane	48.1	47.9	45		107	106	70-130	0.469	20
Toluene-d8	40.6	40.3	45		90	90	70-130	0	20
4-BFB	4.23	4.26	4.5		94	95	70-130	0.736	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/30/14	**BatchID:**	92220
Date Analyzed:	6/28/14	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92220 1406837-004DMS/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	19.6	0.50	20	-	97.9	70-130
Benzene	ND	21.5	0.50	20	-	108	70-130
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	74.3	2.0	80	-	92.9	70-130
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	22.7	0.50	20	-	114	70-130
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	22.1	0.50	20	-	110	70-130
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	19.6	0.50	20	-	98	70-130
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/30/14	**BatchID:**	92220
Date Analyzed:	6/28/14	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92220 1406837-004DMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	20.6	0.50	20	-	103	70-130
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	20.2	0.50	20	-	101	70-130
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	19.4	0.50	20	-	97.2	70-130
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	20.9	0.50	20	-	104	70-130
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	24.9	0.50	20	-	125	70-130
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	23.9	44.9		45	96	100	70-130
Toluene-d8	24.2	44.6		45	97	99	70-130
4-BFB	2.41	4.39		4.5	96	98	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/30/14	**BatchID:**	92220
Date Analyzed:	6/28/14	**Extraction Method:**	SW5030B
Instrument:	GC28	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92220 1406837-004DMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	21.3	20.4	20	ND	106	102	70-130	3.98	20
Benzene	20.2	20.0	20	ND	101	100	70-130	0.978	20
t-Butyl alcohol (TBA)	88.1	83.2	80	ND	110	104	70-130	5.76	20
Chlorobenzene	21.2	20.6	20	ND	106	103	70-130	2.71	20
1,2-Dibromoethane (EDB)	22.8	21.9	20	ND	114	109	70-130	4.19	20
1,2-Dichloroethane (1,2-DCA)	20.0	19.5	20	ND	100	97.6	70-130	2.48	20
Diisopropyl ether (DIPE)	21.0	20.2	20	ND	105	101	70-130	3.42	20
Ethyl tert-butyl ether (ETBE)	21.4	20.8	20	ND	107	104	70-130	3.24	20
Methyl-t-butyl ether (MTBE)	21.0	20.4	20	ND	105	102	70-130	2.95	20
Toluene	19.5	19.3	20	ND	97.6	96.4	70-130	1.25	20
Trichloroethene	23.8	23.1	20	ND	119	116	70-130	2.93	20
Surrogate Recovery									
Dibromofluoromethane	45.0	44.2	45		100	98	70-130	1.83	20
Toluene-d8	43.0	42.5	45		95	95	70-130	0	20
4-BFB	4.15	4.13	4.5		92	92	70-130	0	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	7/2/14	**BatchID:**	92317
Date Analyzed:	7/1/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92317 1406948-001BMS/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	18.3	0.50	20	-	91.6	70-130
Benzene	ND	18.9	0.50	20	-	94.6	70-130
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	68.8	2.0	80	-	86	70-130
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	19.1	0.50	20	-	95.7	70-130
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	18.6	0.50	20	-	92.8	70-130
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	18.7	0.50	20	-	93.3	70-130
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	7/2/14	**BatchID:**	92317
Date Analyzed:	7/1/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92317 1406948-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	19.0	0.50	20	-	94.8	70-130
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	19.2	0.50	20	-	95.8	70-130
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	19.6	0.50	20	-	97.9	70-130
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	19.8	0.50	20	-	98.8	70-130
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	16.9	0.50	20	-	84.3	70-130
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-
Surrogate Recovery							
Dibromofluoromethane	25.7	43.5		45	103	97	70-130
Toluene-d8	24.5	38.8		45	98	86	70-130
4-BFB	2.48	4.21		4.5	99	94	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	7/2/14	**BatchID:**	92317
Date Analyzed:	7/1/14	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92317 1406948-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	18.1	20.6	20	ND	90.5	103	70-130	12.7	20
Benzene	19.4	19.3	20	ND	97.1	96.3	70-130	0.811	20
t-Butyl alcohol (TBA)	73.7	92.0	80	ND	92.1	115	70-130	22.1,F1	20
Chlorobenzene	19.5	19.3	20	ND	97.3	96.3	70-130	1.01	20
1,2-Dibromoethane (EDB)	19.3	21.2	20	ND	96.7	106	70-130	8.97	20
1,2-Dichloroethane (1,2-DCA)	19.3	20.2	20	ND	96.6	101	70-130	4.45	20
Diisopropyl ether (DIPE)	18.7	20.0	20	ND	93.5	100	70-130	6.74	20
Ethyl tert-butyl ether (ETBE)	18.9	20.9	20	ND	94.5	105	70-130	10.2	20
Methyl-t-butyl ether (MTBE)	19.4	22.0	20	ND	97.1	110	70-130	12.3	20
Toluene	20.2	19.7	20	ND	101	98.4	70-130	2.63	20
Trichloroethene	17.4	17.0	20	ND	87.1	84.9	70-130	2.52	20
Surrogate Recovery									
Dibromofluoromethane	43.9	44.8	45		98	99	70-130	1.90	20
Toluene-d8	39.2	38.3	45		87	85	70-130	2.32	20
4-BFB	4.21	4.17	4.5		94	93	70-130	0.983	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/27/14	**BatchID:**	92120
Date Analyzed:	6/27/14	**Extraction Method:**	SM2320B
Instrument:	Titrino	**Analytical Method:**	SM2320B
Matrix:	Water	**Test Method:**	SM2320B (Alkalinity)
Project:	#0058; Xtra Oil Company		

QC Summary Report for Alkalinity

Lab ID	Analyte	Reporting Units	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	RPD	Acceptance Criteria (%)
1406837-001G	Total	mg $CaCO_3$/L	269	1	266	1	0.849	<20
1406837-002G	Total	mg $CaCO_3$/L	172	1	174	1	0.734	<20
1406837-003G	Total	mg $CaCO_3$/L	150	1	146	1	2.44	<20
1406837-004G	Total	mg $CaCO_3$/L	151	1	149	1	1.33	<20
1406837-005G	Total	mg $CaCO_3$/L	191	1	189	1	1.16	<20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/25/14	**BatchID:**	92025
Date Analyzed:	6/24/14	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92025 1406837-001AMS/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	62.6	40	60	-	104	70-130
MTBE	ND	11.2	5.0	10	-	112	70-130
Benzene	ND	10.3	0.50	10	-	103	70-130
Toluene	ND	10.3	0.50	10	-	103	70-130
Ethylbenzene	ND	10.4	0.50	10	-	104	70-130
Xylenes	ND	31.6	0.50	30	-	105	70-130
Surrogate Recovery							
aaa-TFT	9.82	9.64		10	98	96	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	62.0	62.2	60	ND	103	104	70-130	0.333	20
MTBE	12.0	11.4	10	ND	120	114	70-130	5.16	20
Benzene	10.1	10.4	10	ND	101	104	70-130	3.20	20
Toluene	9.97	10.2	10	ND	99.7	102	70-130	2.71	20
Ethylbenzene	10.1	10.2	10	ND	101	102	70-130	1.20	20
Xylenes	30.5	30.6	30	ND	102	102	70-130	0	20
Surrogate Recovery									
aaa-TFT	9.57	9.92	10		96	99	70-130	3.58	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/26/14	**BatchID:**	92072
Date Analyzed:	6/25/14	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92072 1406917-005AMS/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	59.4	40	60	-	99	70-130
MTBE	ND	9.88	5.0	10	-	98.9	70-130
Benzene	ND	9.70	0.50	10	-	97	70-130
Toluene	ND	9.70	0.50	10	-	97	70-130
Ethylbenzene	ND	9.76	0.50	10	-	97.6	70-130
Xylenes	ND	29.5	0.50	30	-	98.2	70-130
Surrogate Recovery							
aaa-TFT	9.79	9.60		10	98	96	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	63.4	60.5	60	ND	106	101	70-130	4.53	20
MTBE	9.95	9.45	10	ND	99.5	94.5	70-130	5.17	20
Benzene	10.9	10.1	10	ND	109	101	70-130	6.87	20
Toluene	10.9	10.2	10	ND	109	102	70-130	7.15	20
Ethylbenzene	10.9	10.3	10	ND	109	103	70-130	5.32	20
Xylenes	33.0	31.3	30	ND	110	104	70-130	5.46	20
Surrogate Recovery									
aaa-TFT	10.0	9.70	10		100	97	70-130	3.51	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/23/14	**BatchID:**	91922
Date Analyzed:	6/24/14 - 6/25/14	**Extraction Method:**	E200.8
Instrument:	ICP-MS1, ICP-MS2	**Analytical Method:**	E200.8
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91922 1406822-001AMS/MSD

QC Summary Report for E200.8

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Iron	ND	543	20	500	-	109	85-115
Surrogate Recovery							
Tb 350.917	708	727		750	94	97	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Iron	1280	1270	500	880	79.5	77.3	70-130	0.864	20
Surrogate Recovery									
Tb 350.917	702	734	750		94	98	70-130	4.41	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/25/14	**BatchID:**	92040
Date Analyzed:	6/25/14	**Extraction Method:**	RSK175
Instrument:	GC26	**Analytical Method:**	RSK175
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92040

QC Summary Report for RSK174/175

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Carbon Dioxide	ND	133	50	187.2	-	71.1	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/25/14	**BatchID:**	92041
Date Analyzed:	6/25/14	**Extraction Method:**	RSK175
Instrument:	GC26	**Analytical Method:**	RSK175
Matrix:	Air	**Unit:**	µL/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-92041

QC Summary Report for RSK175

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Ethane	ND	9.30	0.50	10	-	93	70-130
Ethene	ND	12.7	0.50	10	-	127	70-130
Methane	ND	11.2	0.50	10	-	113	70-130

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1406837
Date Prepared:	6/23/14	**BatchID:**	91929
Date Analyzed:	6/25/14	**Extraction Method:**	SW3510C
Instrument:	GC11B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company	**Sample ID:**	MB/LCS-91929

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1020	50	1000	-	102	70-130
Surrogate Recovery							
C9	676	658		625	108	105	70-130

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1406837 **ClientCode: PDEO**

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

Email: lab@pdenviro.com
cc/3rd Party:
PO:
ProjectNo: #0058; Xtra Oil Company

Bill to:
Accounts Payable
Xtra Oil Company
2307 Pacific Avenue
Alameda, CA 94507
xtraoil@sbcglobal.net

Requested TAT: 5 days

Date Received: **06/23/2014**
Date Printed: **07/03/2014**

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
1406837-001	ASP-2	Water	6/23/2014	☐	C	D	G	F	E	I	H	B				
1406837-002	ASP-3	Water	6/23/2014	☐	C	D	G	F	E	I	H	B				
1406837-003	ASP-4	Water	6/23/2014	☐	C	D	G	F	E	I	H	B				
1406837-004	ASP-5	Water	6/23/2014	☐	C	D	G	F	E	I	H	B				
1406837-005	ASP-6	Water	6/23/2014	☐	C	D	G	F	E	I	H	B				

Test Legend:

1	300_1_W	2	5-OXYS+PBSCV_W	3	Alka(spe)_W	4	METALSMS_FF_DISS	5	METALSMS_W
6	RSK175_CO2_W	7	RSK175_W	8	TPH(DMO)_W	9		10	
11		12							

Prepared by: Shana Carter

Comments:

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.

McCampbell Analytical, Inc.
"When Quality Counts"

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

WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0058; Xtra Oil Company
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1406837
Date Received: 6/23/2014

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406837-001A	ASP-2	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-001B	ASP-2	Water	SW8015B (Diesel & Motor Oil) <TPH-Diesel (C10-C23), TPH-Motor Oil (C18-C36)>	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-001C	ASP-2	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^{-}$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	
1406837-001D	ASP-2	Water	SW8260B (5 Oxys+Lead Scav.) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene	2	VOA w/ HCl	☐	6/23/2014	5 days	5%+	☐	
1406837-001E	ASP-2	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-001F	ASP-2	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-001G	ASP-2	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	
1406837-001H	ASP-2	Water	RSK175 <Ethane_4, Ethene_4, Methane_4>	2	aVOA w/ H2SO4	☐	6/23/2014	5 days	Present	☐	
1406837-001I	ASP-2	Water	RSK175 (CO2) <Carbon Dioxide_2>	2	VOA	☐	6/23/2014	5 days	Present	☐	
1406837-002A	ASP-3	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3
500mL HDPE, unprsv. = 500mL HDPE Bottle, Unpreserved
aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0058; Xtra Oil Company
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1406837
Date Received: 6/23/2014

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406837-002B	ASP-3	Water	SW8015B (Diesel & Motor Oil)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-002C	ASP-3	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^-$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	
1406837-002D	ASP-3	Water	SW8260B (5 Oxys+Lead Scav.) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene	2	VOA w/ HCl	☐	6/23/2014	5 days	5%+	☐	
1406837-002E	ASP-3	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-002F	ASP-3	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-002G	ASP-3	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	
1406837-002H	ASP-3	Water	RSK175 <Ethane_4, Ethene_4, Methane_4>	2	aVOA w/ H2SO4	☐	6/23/2014	5 days	Present	☐	
1406837-002I	ASP-3	Water	RSK175 (CO_2)	2	VOA	☐	6/23/2014	5 days	Present	☐	
1406837-003A	ASP-4	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-003B	ASP-4	Water	SW8015B (Diesel & Motor Oil)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-003C	ASP-4	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as $NO3^-$, Sulfate>	1	125mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

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250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3
500mL HDPE, unprsv. = 500mL HDPE Bottle, Unpreserved
aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0058; Xtra Oil Company
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1406837
Date Received: 6/23/2014

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406837-003D	ASP-4	Water	SW8260B (5 Oxys+Lead Scav.) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene	2	VOA w/ HCl	☐	6/23/2014	5 days	5%+	☐	
1406837-003E	ASP-4	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-003F	ASP-4	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-003G	ASP-4	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	
1406837-003H	ASP-4	Water	RSK175 <Ethane_4, Ethene_4, Methane_4>	2	aVOA w/ H2SO4	☐	6/23/2014	5 days	Present	☐	
1406837-003I	ASP-4	Water	RSK175 (CO2)	2	VOA	☐	6/23/2014	5 days	Present	☐	
1406837-004A	ASP-5	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-004B	ASP-5	Water	SW8015B (Diesel & Motor Oil)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-004C	ASP-5	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as NO_3^-, Sulfate>	1	125mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3
500mL HDPE, unprsv. = 500mL HDPE Bottle, Unpreserved
aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0058; Xtra Oil Company
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1406837
Date Received: 6/23/2014

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406837-004D	ASP-5	Water	SW8260B (5 Oxys+Lead Scav.) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene	2	VOA w/ HCl	☐	6/23/2014	5 days	5%+	☐	
1406837-004E	ASP-5	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-004F	ASP-5	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-004G	ASP-5	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	
1406837-004H	ASP-5	Water	RSK175 <Ethane_4, Ethene_4, Methane_4>	2	aVOA w/ H2SO4	☐	6/23/2014	5 days	Present	☐	
1406837-004I	ASP-5	Water	RSK175 (CO2)	2	VOA	☐	6/23/2014	5 days	Present	☐	
1406837-005A	ASP-6	Water	SW8021B/8015Bm (G/MBTEX)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-005B	ASP-6	Water	SW8015B (Diesel & Motor Oil)	3	VOA w/ HCl	☐	6/23/2014	5 days	Present	☐	
1406837-005C	ASP-6	Water	E300.1 (Inorganic Anions) <Nitrate as N, Nitrate as NO_3^-, Sulfate>	1	125mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

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125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
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aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0058; Xtra Oil Company
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1406837
Date Received: 6/23/2014

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1406837-005D	ASP-6	Water	SW8260B (5 Oxys+Lead Scav.) <1,2-Dibromoethane (EDB), 1,2-Dichloroethane (1,2-DCA), Benzene, Diisopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), Ethylbenzene, Methyl-t-butyl ether (MTBE), t-Butyl alcohol (TBA), tert-Amyl methyl ether (TAME), Toluene	2	VOA w/ HCl	☐	6/23/2014	5 days	5%+	☐	
1406837-005E	ASP-6	Water	E200.8 (Metals) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-005F	ASP-6	Water	E200.8 (Metals) (Dissolved-Field Filtered) <Iron>	1	250mL HDPE w/ HNO3	☐	6/23/2014	5 days	Present	☐	
1406837-005G	ASP-6	Water	SM2320B (Alkalinity)	1	500mL HDPE, unprsv.	☐	6/23/2014	5 days	Present	☐	
1406837-005H	ASP-6	Water	RSK175 <Ethane_4, Ethene_4, Methane_4>	2	aVOA w/ H2SO4	☐	6/23/2014	5 days	Present	☐	
1406837-005I	ASP-6	Water	RSK175 (CO2)	2	VOA	☐	6/23/2014	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE, unprsv. = 125mL HDPE Bottle, Unpreserved
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500mL HDPE, unprsv. = 500mL HDPE Bottle, Unpreserved
aVOA w/ H2SO4 = 43mL Amber VOA w/ Sulfuric acid
VOA = 43mL VOA, Unpreserved
VOA w/ HCl = 43mL VOA w/ HCl

1406837

CHAIN OF CUSTODY RECORD

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 Company 1701 Park Street Alameda, CA

SAMPLED BY: (PRINTED & SIGNATURE) Heena Dhawan [signature]

	SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	TPH G, D, MO	BTEX, MTBE, Fuel Oxygenates,	Pb Scavengers, TBA	Nitrate as Nitrogen & Sulfate	Total and Dissolved Fe	Alkalinity as $CaCO_3$	Dissolved gases- methane,	ethane, ethene, CO_2	PRESERVATIVE	REMARKS
X, +	ASP-2	6/23/14		H_2O		16	X	X		X	X	X	X		ICE	NORMAL TAT
S/O	ASP-3	↓		↓		16	X	X		X	X	X	X		↓	↓
	ASP-4	↓		↓		16	X	X		X	X	X	X		↓	↓
+	ASP-5	↓		↓		16	X	X		X	X	X	X		↓	↓
+	ASP-6	↓		↓		16	X	X		X	X	X	X		↓	↓

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)
Heena Dhawan [signature]	6/23/14	1515	[signature]
[signature]	6/23/14	16:30	Shana Carter
			RECEIVED FOR LABORATORY BY: (SIGNATURE)

Total No. of Samples (This Shipment): 5

Total No. of Containers (This Shipment): 80

LABORATORY: McCampbell Analytical, Inc

LABORATORY CONTACT: Angela Rydelius

LABORATORY PHONE NUMBER: (877) 252-9262

SAMPLE ANALYSIS REQUEST SHEET ATTACHED: (X) YES ( ) NO Please see attached

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

REMARKS: For each sample, 8 HCl preserved VOAs, 2 H_2SO_4 preserved VOAs, 1 HNO_3 preserved poly, 1 HNO_3 field filtered poly, 4 containers w/ no preservative

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Sample Receipt Checklist

Client Name: **P & D Environmental**
Date and Time Received: **6/23/2014 4:48:03 PM**

Project Name: **#0058; Xtra Oil Company**
LogIn Reviewed by: Shana Carter

WorkOrder №: **1406837** Matrix: Water
Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 0.1°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	NA ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: pH<2; 522: pH<4)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1408834

Report Created for: P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

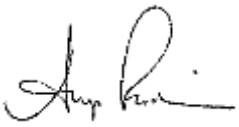
Project Contact: Paul King
Project P.O.:
Project Name: #0058; Xtra Oil Co 1701 Park Street Alameda,CA

Project Received: 08/22/2014

Analytical Report reviewed & approved for release on 08/27/2014 by:

Question about your data?

Click here to email McCampbell



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.

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Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0058; Xtra Oil Co 1701 Park Street Alameda,CA
WorkOrder: 1408834

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
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
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
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
TEQ	Toxicity Equivalence

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1408834
Project:	#0058; Xtra Oil Co 1701 Park Street Alameda,CA	**Extraction Method:**	E218.6
Date Received:	8/22/14 18:42	**Analytical Method:**	E218.6
Date Prepared:	8/25/14	**Unit:**	µg/L

Hexachrome by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW1	**1408834-001A**	**Water**	**08/21/2014 11:35**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 18:20

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW3	**1408834-003A**	**Water**	**08/20/2014 13:35**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 19:37

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
MW4	**1408834-004A**	**Water**	**08/20/2014 14:10**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 19:56

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW2	**1408834-005A**	**Water**	**08/21/2014 15:30**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 20:16

(Cont.)

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1408834
Project:	#0058; Xtra Oil Co 1701 Park Street Alameda,CA	**Extraction Method:**	E218.6
Date Received:	8/22/14 18:42	**Analytical Method:**	E218.6
Date Prepared:	8/25/14	**Unit:**	µg/L

Hexachrome by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW4	**1408834-006A**	**Water**	**08/21/2014 12:05**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 20:35

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
EW5	**1408834-007A**	**Water**	**08/20/2014 15:45**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 20:54

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
OW2	**1408834-008A**	**Water**	**08/20/2014 14:40**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 21:13

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1408834
Date Prepared:	8/22/14	**BatchID:**	94380
Date Analyzed:	8/25/14	**Extraction Method:**	E218.6
Instrument:	IC2	**Analytical Method:**	E218.6
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Co 1701 Park Street Alameda,CA	**Sample ID:**	MB/LCS-94380 1408834-001AMS/MSD

QC Summary Report for E218.6

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Hexachrome	ND	24.0	0.20	25	-	95.8	90-110

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Hexachrome	24.0	24.0	25	ND	96	96	90-110	0	10

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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1408834 **ClientCode: PDEO**

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

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

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

Bill to:
Accounts Payable
Xtra Oil Company
2307 Pacific Avenue
Alameda, CA 94507
xtraoil@sbcglobal.net

Requested TAT: 5 days

Date Received: **08/22/2014**
Date Printed: **08/28/2014**

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
1408834-001	MW1	Water	8/21/2014 11:35	☐	A											
1408834-002	MW2	Water	8/21/2014 14:50	☐	A											
1408834-003	MW3	Water	8/20/2014 13:35	☐	A											
1408834-004	MW4	Water	8/20/2014 14:10	☐	A											
1408834-005	EW2	Water	8/21/2014 15:30	☐	A											
1408834-006	EW4	Water	8/21/2014 12:05	☐	A											
1408834-007	EW5	Water	8/20/2014 15:45	☐	A											
1408834-008	OW2	Water	8/20/2014 14:40	☐	A											

Test Legend:

1	218_6_W	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Shana Carter

Comments:

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

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Project: #0058; Xtra Oil Co 1701 Park Street Alameda,CA
Comments:

QC Level: LEVEL 2
Client Contact: Paul King
Contact's Email: lab@pdenviro.com

Work Order: 1408834
Date Received: 8/22/2014

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1408834-001A	MW1	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/21/2014 11:35	5 days	Present	☐	
1408834-002A	MW2	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/21/2014 14:50	5 days	Present	☐	
1408834-003A	MW3	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/20/2014 13:35	5 days	Trace	☐	
1408834-004A	MW4	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/20/2014 14:10	5 days	Trace	☐	
1408834-005A	EW2	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/21/2014 15:30	5 days	Trace	☐	
1408834-006A	EW4	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/21/2014 12:05	5 days	Present	☐	
1408834-007A	EW5	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/20/2014 15:45	5 days	Present	☐	
1408834-008A	OW2	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/20/2014 14:40	5 days	Present	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE w/ NaB4 / Na2CO3 / KHCO3 = 125mL HDPE Bottle w/ Borate-Hydroxide Buffer

CHAIN OF CUSTODY RECORD

1408834

PAGE 1 OF 1

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

PROJECT NUMBER: 0058

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

SAMPLED BY: (PRINTED & SIGNATURE) Steve Carnack

SAMPLE NUMBER	DATE	~~TIME~~ TYPE (sic)	~~TYPE~~ TIME (sic)	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): Dissolved Hexavalent Chromium	PRESERVATIVE	REMARKS
MW1	8/21/14	H_2O	1135		1	X	ICE	Normal Turnaround Time
MW2	↓	↓	1456		1	X	↓	↓
MW3	8/20/14	↓	1335		1	X	↓	↓
MW4	↓	↓	1410		1	X	↓	↓
EW2	8/21/14	↓	1530		1	X	↓	↓
EW4	↓	↓	1205		1	X	↓	↓
EW5	8/20/14	↓	1545		1	X	↓	↓
OW2	↓	↓	1440		1	X	↓	↓

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	Total No. of Samples (This Shipment)	8	LABORATORY:
	8/22/14	1538		Total No. of Containers (This Shipment)	8	McCampbell Analytical, Inc.
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	LABORATORY CONTACT:		LABORATORY PHONE NUMBER:
	8/22/14	1715	Shana Carter	Angela Rydelius		(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: All samples were field filtered into a 125mL HDPE Bottle w/ Borate-Hydroxide Buffer.

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Sample Receipt Checklist

Client Name: **P & D Environmental**
Date and Time Received: **8/22/2014 6:42:14 PM**

Project Name: **#0058; Xtra Oil Co 1701 Park Street Alameda,CA**
LogIn Reviewed by: Shana Carter

WorkOrder №: **1408834** Matrix: Water
Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 1.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: pH<2; 522: pH<4)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1408836

Report Created for: P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610

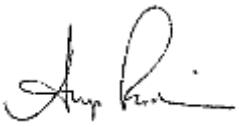
Project Contact: Paul King
Project P.O.:
Project Name: #0058; Xtra Oil Company 1701 Parks St Alameda, CA

Project Received: 08/22/2014

Analytical Report reviewed & approved for release on 08/27/2014 by:

Question about your data?

Click here to email McCampbell



Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
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Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: #0058; Xtra Oil Company 1701 Parks St Alameda, CA
WorkOrder: 1408836

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
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
ND	Not detected at or above the indicated MDL or RL
NR	Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content.
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
TEQ	Toxicity Equivalence

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1408836
Project:	#0058; Xtra Oil Company 1701 Parks St Alameda, C	**Extraction Method:**	E218.6
Date Received:	8/22/14 18:57	**Analytical Method:**	E218.6
Date Prepared:	8/25/14	**Unit:**	µg/L

Hexachrome by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP2	**1408836-001A**	**Water**	**08/20/2014 15:10**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 22:11

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP3	**1408836-002A**	**Water**	**08/20/2014 16:30**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 22:31

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP4	**1408836-003A**	**Water**	**08/21/2014 12:40**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 22:50

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP5	**1408836-004A**	**Water**	**08/21/2014 14:20**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 23:09

(Cont.)

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

Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1408836
Project:	#0058; Xtra Oil Company 1701 Parks St Alameda, C	**Extraction Method:**	E218.6
Date Received:	8/22/14 18:57	**Analytical Method:**	E218.6
Date Prepared:	8/25/14	**Unit:**	µg/L

Hexachrome by IC

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
ASP6	**1408836-005A**	**Water**	**08/21/2014 13:30**	**IC2**	**94380**

Analytes	Result	RL	DF	Date Analyzed
Hexachrome	ND	0.20	1	08/25/2014 23:28

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

Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1408836
Date Prepared:	8/22/14	**BatchID:**	94380
Date Analyzed:	8/25/14	**Extraction Method:**	E218.6
Instrument:	IC2	**Analytical Method:**	E218.6
Matrix:	Water	**Unit:**	µg/L
Project:	#0058; Xtra Oil Company 1701 Parks St Alameda, CA	**Sample ID:**	MB/LCS-94380 1408834-001AMS/MSD

QC Summary Report for E218.6

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Hexachrome	ND	24.0	0.20	25	-	95.8	90-110

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Hexachrome	24.0	24.0	25	ND	96	96	90-110	0	10

McCampbell Analytical, Inc.
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Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1408836 **ClientCode: PDEO**

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

Email: lab@pdenviro.com
cc/3rd Party:
PO:
ProjectNo: #0058; Xtra Oil Company 1701 Parks St Alameda, CA

Bill to:
Accounts Payable
Xtra Oil Company
2307 Pacific Avenue
Alameda, CA 94507
xtraoil@sbcglobal.net

Requested TAT: 5 days

Date Received: **08/22/2014**
Date Printed: **08/28/2014**

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
1408836-001	ASP2	Water	8/20/2014 15:10	☐	A											
1408836-002	ASP3	Water	8/20/2014 16:30	☐	A											
1408836-003	ASP4	Water	8/21/2014 12:40	☐	A											
1408836-004	ASP5	Water	8/21/2014 14:20	☐	A											
1408836-005	ASP6	Water	8/21/2014 13:30	☐	A											

Test Legend:

1	218_6_W	2		3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Shana Carter

Comments:

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

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL **QC Level:** LEVEL 2 **Work Order:** 1408836
Project: #0058; Xtra Oil Company 1701 Parks St Alameda, CA **Client Contact:** Paul King **Date Received:** 8/22/2014
Comments: **Contact's Email:** lab@pdenviro.com

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

Lab ID	Client ID	Matrix	Test Name	Number of Containers	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1408836-001A	ASP2	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/20/2014 15:10	5 days	None	☐	
1408836-002A	ASP3	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/20/2014 16:30	5 days	None	☐	
1408836-003A	ASP4	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/21/2014 12:40	5 days	None	☐	
1408836-004A	ASP5	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/21/2014 14:20	5 days	None	☐	
1408836-005A	ASP6	Water	E218.6 (Hexachrome)	1	125mL HDPE w/ NaB4 / Na2CO3 / KHCO3	☐	8/21/2014 13:30	5 days	None	☐	

*** NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

Bottle Legend:

125mL HDPE w/ NaB4 / Na2CO3 / KHCO3 = 125mL HDPE Bottle w/ Borate-Hydroxide Buffer

CHAIN OF CUSTODY RECORD

1408836

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 Company 1701 Park St. Alameda, CA

SAMPLED BY: (PRINTED & SIGNATURE) Steve Carmack

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): Dissolved Hexavalent Chromium	PRESERVATIVE	REMARKS
ASP2	8/20/14	1510	H_2O		1	X	ICE	Normal Turnaround Time
ASP3	↓	1630	↓		1	X	↓	↓
ASP4	8/21/14	1240	↓		1	X	↓	↓
ASP5	↓	1420	↓		1	X	↓	↓
ASP6	↓	1330	↓		1	X	↓	↓

RELINQUISHED BY: (SIGNATURE)	DATE 8/22/14	TIME 1530	RECEIVED BY: (SIGNATURE)	Total No. of Samples (This Shipment) 5	LABORATORY: McCampbell Analytical, Inc
RELINQUISHED BY: (SIGNATURE)	DATE 8/22/14	TIME 1715	RECEIVED BY: (SIGNATURE) Shana Carter	Total No. of Containers (This Shipment) 5	
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	LABORATORY CONTACT: Angela Rydelius	LABORATORY PHONE NUMBER: (877) 252-9262
				SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( ) YES (X) NO	

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

REMARKS: All samples were field filtered into a 125 mL HDPE Bottle w/ Borate Hydroxide Buffer

McCampbell Analytical, Inc.
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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **8/22/2014 6:57:40 PM**

Project Name: **#0058; Xtra Oil Company 1701 Parks St Alameda, CA** LogIn Reviewed by: Shana Carter

WorkOrder №: **1408836** Matrix: Water Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 1.6°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: pH<2; 522: pH<4)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Comments: