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June 30, 2016

RECEIVED

By Alameda County Environmental Health 9:24 am, Jul 01, 2016

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

SUBJECT: SEMIANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT

CERTIFICATION
County Case # RO 191
Xtra Oil Company
1701 Park Street
Alameda, CA

Dear Ms. Detterman:

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

• Semiannual Groundwater Monitoring and Sampling Report (July through December 2015) dated June 30, 2016 (document 0058.R30).

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

P&D ENVIRONMENTAL, INC.

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

June 30, 2016 Report 0058.R30

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

SUBJECT: SEMI-ANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT

(JULY THROUGH DECEMBER 2015)

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), the four wells installed in 2011 for proposed site remediation (EW-2, EW-4, EW-5, and OW-2), and the most recently installed ozone sparging well (IW1), which was installed on September 9, 2015. The semi-annual monitoring and sampling was performed on December 10, 2015 for the reporting period of July through December 2015.

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

BACKGROUND

The site is currently used as a retail gasoline station. In a letter from the Alameda County Department of Environmental Health (ACDEH) dated July 24, 2009 P&D was asked to review historical monitoring and sampling results, determine during which quarters contaminant concentrations were at their highest, and conduct 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 is provided in P&D's Remedial Action Work Plan (RAWP) dated October 24,

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

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

On November 3, 2014 P&D personnel purged and sampled groundwater well MW-2 at the subject site to evaluate rebound of petroleum hydrocarbon and associated Volatile Organic Compound (VOC) groundwater concentrations and also the presence of dissolved hexavalent chromium in groundwater following completion of the groundwater remediation pilot test. Based on the detected petroleum hydrocarbon concentrations and the absence of dissolved hexavalent chromium, P&D recommended that one additional sparging well be installed at the site next to ASP-4 and that ozone sparging be resumed at wells MW-2, EW-2 and a proposed new well (designated as IW1) located next to ASP-4.

In an e-mail dated June 2, 2015 from the ACDEH an ISCO Feasibility Test Work Plan Addendum was requested. In response to the e-mail P&D provided a Well Installation and Ozone Sparging Work Plan dated July 6, 2015 (document 0058.W7) for installation of one additional sparging well at the site adjacent to ASP-4 and that ozone sparging be resumed at wells MW-2, EW-2 and the proposed new well (IW1) located adjacent to ASP-4. Documentation of the sampling and sample results are provided in P&D's Post-Ozone Sparging Pilot Test Rebound Evaluation Report dated November 13, 2014 (document 0058.R27) and documentation of the installation of ozone sparging well IW1 is provided in P&D's Ozone Injection Well Installation Report dated June 29, 2016 (document 0058.R29).

FIELD ACTIVITIES

Water levels were measured on December 10, 2015 to the nearest 0.01 foot using an electric water level indicator in monitoring wells MW-1 through MW-4, and in wells EW-2, EW-4, EW-5,

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OW-2, and IW-1 for the semi-annual well monitoring and sampling event. Air sparge points ASP-2 through ASP-6 were not monitored and sampled on December 10, 2015.

The water level monitoring data for the wells and air sparge points are summarized in Table 1. Historical monitoring and sampling data obtained by others for the subject site are attached with this report as Appendix A.

Prior to sampling, wells MW-1 through MW-4, EW-2, EW-4, EW-5, OW-2, and IW-1 were purged using low flow purge procedures in accordance with U.S. EPA 1996 guidelines. Purging was performed with a peristaltic pump and new or dedicated polyethylene tubing for a minimum of fifteen minutes at each sampling location or until dewatered conditions were encountered (well MW-4 dewatered during purging). New silicone tubing was used in the pump rollers at each well. The bottom of the tubing was set at a depth of approximately three to five feet above the bottom of each well, with the exception of MW-4, where it was set near the bottom of the well because the well has historically dewatered during purging.

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

During the December 10, 2015 monitoring and sampling event petroleum hydrocarbon sheen was detected on the purge water from well MW-1. In addition, strong petroleum hydrocarbon odors were detected on the purge water from well MW-1 and slight petroleum hydrocarbon odors were detected on the purge water from wells MW-2, MW-4, EW-4. No petroleum hydrocarbon odors were detected on the purge water from wells MW-3, EW-2, EW-5, OW-2 or IW-1.

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

HYDROGEOLOGY

The measured depth to water on December 10, 2015 for groundwater monitoring wells MW-1 through MW-4 ranged from 8.36 to 9.23 feet, and the measured depth to groundwater in wells EW-2, EW-4, EW-5, OW-2, and IW-1 was 8.00, 7.00, 7.15, 7.42, and 8.07 feet, respectively. Groundwater level data collected during the monitoring period are presented in Table 1.

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

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

During the groundwater ozone sparging pilot test system installation, approximately 2.4 feet of PVC pipe was added to the top of the well pipe at well MW-2. For this reason the elevation of the top of well MW-2 is not presently known to an accuracy of 0.01 feet, and a groundwater surface elevation is not provided in Table 1 for well MW-2. Additionally, the most recently installed ozone injection well IW-1 has not been surveyed. The groundwater surface elevations for all of the other wells are shown in Figure 2, along with groundwater surface contours that are based on the December 10, 2015 groundwater surface elevations. Based on the groundwater surface contours, the groundwater flow direction on December 10, 2015 was southeasterly, consistent with historical calculated groundwater flow directions at the site.

The calculated groundwater flow direction on December 10, 2015 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 December 10, 2015 well water levels with available June 17 and 18, 2015 well water levels shows that the water levels were higher on June 17 and 18, 2015 in all of the wells (except MW-2 due to modified top of casing) and IW-1 (installed on September 22, 2015) by amounts ranging from 0.63 to 0.91 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 at the subject site were analyzed at McCampbell Analytical Inc. of Pittsburg, California. All of the samples were analyzed for Total Petroleum Hydrocarbons as Diesel (TPH-D) and Total Petroleum Hydrocarbons as Motor Oil (TPH-MO) using EPA Method 3510C in conjunction with EPA Method 8015B; Total Petroleum Hydrocarbons as Gasoline (TPH-G), Methyl tertiary-Butyl Ether (MTBE), and benzene, toluene, ethylbenzene, total xylenes (BTEX)using EPA Method 5030B in conjunction with modified EPA Method 8015B and EPA Method 8021B; and for fuel oxygenates (including MTBE) and lead scavengers by EPA Method 5030B in conjunction with EPA Method 8260B.

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

DISCUSSION AND RECOMMENDATIONS

The four historical groundwater monitoring wells at the subject site (MW-1 through MW-4), the four wells related to historically proposed site remediation (EW-2, EW-4, EW-5, and OW-2), and the most recently installed ozone injection well IW-1 were monitored and sampled on December 10, 2015. Air sparge points ASP-2 through ASP-6 were not monitored and sampled on December 10, 2015. Monitoring and sampling historically was performed at the subject site in conjunction with the monitoring and sampling event performed by ERI for the Exxon/Valero facility located at 1725 Park Street. However the case for the Exxon/Valero facility located at 1725 Park Street was closed October 25, 2012.

Review of Table 3 shows the following site groundwater quality conditions associated with the December 10, 2015 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-2, EW-4, EW-5, OW-2, and IW-1 at concentrations of 2,400, 3,300, 1,200, 1,100, 1,800, 1,300, 330, and 500 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, OW-2, and IW-1 at concentrations of 18,000, 1,400, 4,100, 3,600, 15,000, 11,000, 1,000, and 2,200 ug/L, respectively;
- Benzene was detected in wells MW-1, MW-2, MW-4, EW-2, EW-4, EW-5, OW-2, and IW-1 at concentrations of 5,600, 25, 560, 650, 4,400, 2,000, 2.8, and 57 ug/L, respectively.
- The remaining BTEX compounds were detected at concentrations ranging from 1.6 to 630 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, OW-2, and IW-1 at concentrations of 580, 6.1, 36, 30, 480, 340, 5.7, and 5.7 ug/L, respectively.
- Tert-Butyl Alcohol (TBA) was detected in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-5, OW-2, and IW-1 at concentrations of 2,100, 16, 92, 81, 760, 500, 20, and 53 ug/L, respectively.

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Review of the laboratory analytical report shows that the laboratory described the detected TPH-D results for the samples from wells MW-1, MW-4, EW-2, EW-4, EW-5, and OW-2 as consisting of gasoline-range compounds, the sample from well MW-2 as consisting of gasoline-range compounds and aged diesel-range compounds, and the sample from well IW-1 as consisting of gasoline-range and Stoddard solvent/mineral spirit-range compounds.

Comparison of the December 2015 sample results with detected concentrations from the previous sampling event on June 17 and 18, 2015 shows that all analyte concentrations in well MW-3 have remained not detected, and that all analyte concentrations in wells MW-1, MW-4, EW-2, EW-4, EW-5, and OW-2 remained not detected or increased with the following exceptions:

- MW-1: TPH-G and MTBE by EPA Method 8021B decreased,
- MW-4: TPH-G, toluene and total xylenes decreased,
- EW-5: TBA decreased.

In well MW-2 all of the analyte concentrations have decreased with the exception of TPH-D, TPH-MO, and MTBE by EPA Method 8260B which increased.

Based on the sample results, P&D recommends that groundwater remediation be resumed at the site to move the case to closure. 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.

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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.

PAUL H. KING No. 5901

Sincerely,

P&D Environmental, Inc.

Paul H. King

Professional Geologist #5901

Expires 12/31/17

Attachments:

Table 1 - Summary of Well Water Level Monitoring Data

Table 2 - Summary of Well Water Quality Field Parameters

Table 3 - Summary of Well Groundwater Sample Laboratory Analytical Results

Figure 1 - Site Location Map

Figure 2 - Site Plan Showing Well Locations and Groundwater Surface Elevations

Figure 3 - Site Vicinity Map Showing Groundwater Surface Elevations

Appendix A - Historical Water Level and Water Quality Data for the Subject Site

Appendix B - Groundwater Monitoring/Well Purging Data Sheets

Appendix C - Laboratory Analytical Reports and Chain of Custody Documentation

PHK/sjc 0058.R30

TABLES

Table 1 Summary of Well Water Level Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
MW/ 1	12/10/2015	22.26*	9.26	14.00
MW-1	12/10/2015	22.36*	8.36	14.00
	6/18/2015		7.58	14.78
	11/3/2014			nonitored
	10/3/2014		8.14	14.22
	8/21/2014		8.01	14.35
	6/19/2014		7.33	15.03
	11/19/2013		8.06	14.30
	5/16/2013		6.95	15.41
	12/11/2012		6.30	16.06
	6/21/2012		6.66	15.70
	11/28/2011		7.11	15.25
	6/16/2011		6.41	15.95
	5/26/2011		5.86	16.50
	5/24/2011		6.43	15.93
	11/18/2010	19.60**	7.78	11.82
	4/28/2010		6.35	13.25
	12/3/2009		7.84	11.76
	2/25/2009		6.07	13.53
	11/25/2008		7.91	11.69
	8/27/2008		8.03	11.57
	5/28/2008		7.28	12.32
	2/27/2008		6.15	13.45
	11/29/2007		7.82	11.78
	8/29/2007		8.29	11.31
	5/30/2007		7.44	12.16
	3/12/2007		6.34	13.26
	11/6/2006		7.99	11.61
	2000			
10010	10/10/2015	TT 1	0.22	1 < 0.00
MW-2	12/10/2015	Unknown	9.23	16.27
	6/18/2015	Unknown	8.60	16.90
	11/3/2014			nonitored
	10/3/2014		9.04	16.46
	8/21/2014	23.10*	8.51	16.99
	6/19/2014		7.79	15.31
	11/19/2013		8.35	14.75
	5/16/2013		7.42	15.68
	12/11/2012		6.83	16.27
	6/21/2012		7.18	15.92
	11/28/2011		7.61	15.49
	6/16/2011		6.89	16.21
	5/26/2011		6.90	16.20
	5/24/2011		6.90	16.20
	11/18/2010	20.31**	8.17	12.14
	4/28/2010		6.76	13.55
	12/3/2009		8.23	12.08
	2/25/2009		6.37	13.94
	11/25/2008		8.21	12.10
	8/27/2008		8.40	11.91
	5/28/2008		7.72	12.59
	2/27/2008		6.49	13.82
	11/29/2007		8.15	12.16
	8/29/2007		8.55	11.76
	5/30/2007		7.79	12.52
	3/12/2007		6.82	13.49
	11/6/2006		8.25	12.06
MW-3	12/10/2015	23.35*	8.69	14.66
	6/18/2015		7.82	15.53
	11/3/2014			nonitored
	10/3/2014			nonitored
	8/20/2014		8.39	14.96
	6/19/2014		7.34	16.01
	11/19/2013		8.06	15.29
	5/16/2013		6.72	16.63
	12/11/2012		6.03	17.32
	6/21/2012		6.42	16.93
	11/28/2011		7.19	16.16
	6/16/2011			17.18
			6.17	
	5/26/2011		6.19	17.16
	5/24/2011	20.57**	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
			8.31 7.26	12.26 13.31
	8/29/2007			

Table 1 Summary of Well Water Level Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
MW-4	12/10/2015	22.48*	8.42	14.06
	6/18/2015 11/3/2014		7.53	14.95 monitored
	10/3/2014			monitored
	8/20/2014		8.03	14.45
	6/19/2014		7.20	15.28
	11/19/2013		8.03	14.45
	5/16/2013		6.77	15.71
	12/11/2012		5.86	16.62
	6/21/2012		6.00	16.48
	11/28/2011		6.62	15.86
	6/16/2011 5/26/2011		5.79 6.41	16.69 16.07
	5/24/2011		5.82	16.66
	11/18/2010	19.69**	7.69	12.00
	4/28/2010	15.05	5.82	13.87
	12/3/2009		7.60	12.09
	2/25/2009		5.32	14.37
	11/25/2008		7.61	12.08
	8/27/2008		7.91	11.78
	5/28/2008		6.97	12.72
	2/27/2008		5.38	14.31
	11/29/2007		7.57	12.12
+	8/29/2007		8.07	11.62
	5/30/2007		7.38	12.31 14.39
+	3/12/2007 11/6/2006		5.30 7.60	14.39
	11/0/2000		7.00	12.09
EW-2	12/10/2015	22.13*	8.00	14.13
	6/18/2015		7.35	14.78
	11/3/2014 10/3/2014		7.79	monitored 14.34
	8/21/2014		7.79	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	12/10/2015	20.95*	7.00	13.95
	6/18/2015		6.24	14.71
	11/3/2014 10/3/2014			monitored 14.16
	8/21/2014		6.79 6.67	14.16
+	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 6	12/10/2015	21 20*	7.15	14.07
EW-5	12/10/2015 6/18/2015	21.20*	7.15 6.28	14.05 14.92
	11/3/2014			monitored
	10/3/2014		6.94	14.26
	8/20/2014		6.77	14.43
	6/19/2014		6.02	15.18
	11/19/2013		6.82	14.38
	5/16/2013		5.61	15.59
	12/11/2012		4.75	16.45
	6/21/2012		4.91	16.29
	11/28/2011		5.49	15.71
	6/16/2011		4.71	16.49
	5/26/2011		4.88	16.32
	5/24/2011***		4.74	16.46

Table 1 Summary of Well Water Level Monitoring Data

	<u>.</u>	well water Level Mo		
Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
OW-2	12/10/2015	21.55*	7.42	14.13
	6/18/2015		6.51	15.04
	11/3/2014		Not i	monitored
	10/3/2014		Not i	monitored
	8/20/2014		7.08	14.47
	6/19/2014		6.18	15.37
	11/19/2013		7.01	14.54
	5/16/2013		5.69	15.86
	12/11/2012		4.82	16.73
	6/21/2012		5.15	16.40
	11/28/2011		5.80	15.75
	6/16/2011		4.80	16.75
	5/26/2011		4.82	16.73
	5/24/2011***		4.79	16.76
IW1	12/10/2015	Unknown	8.07	Unknown
	10/23/2015***	Unknown	7.76	Unknown
Abbreviations and No	ites:			
	Wright on June 9, 2011.			
	reas Deak in April 1997.			
*** = Prior to well dev				
t-MSL = feet above m				
t = feet				

Table 2	
Summary of Well Water Quality Field	Parameters

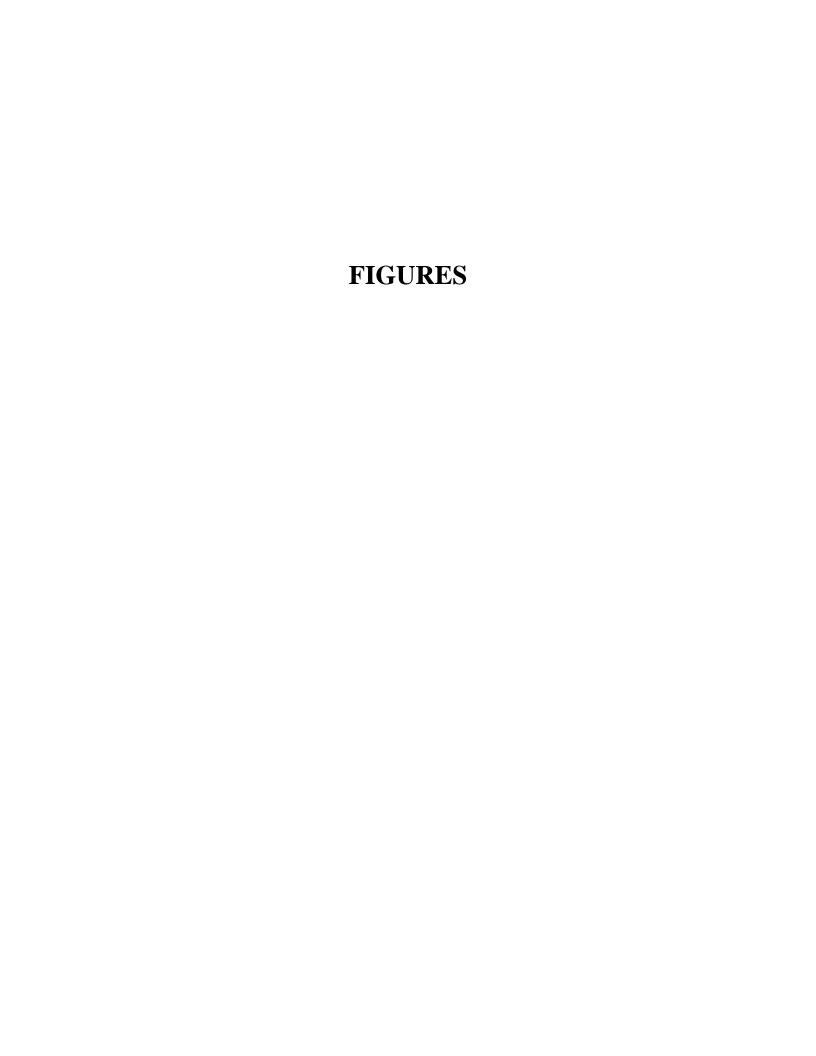
Camal III	C1 D :		nary of Well Water			Т	TL.: 11: OTT
Sample ID	Sample Date	D.O. (mg/L)	O.R.P. (mV)	pН	Electrical Conductivity (µS/cm)	Temperature (C°)	Turbidity (NT
MW-1	12/10/2015	0.71	176.2	6.93	1 142	22.2	0.00
IVI VV - 1	6/18/2015	0.71	-176.3 -161.2	6.83	1,143 1,000	22.3 21.7	1.12
	11/3/2014	0.11	-101.2		t Monitored	21.7	1.12
	10/3/2014	0.08	-157.8	6.65	1,003	23.9	0.00
	8/21/2014	0.46	-157.9	6.75	911	23.3	0.00
	6/19/2014	1.80*	-755.2	6.56	789	21.6	0.00
	11/19/2013	0.88	-103.7	6.79	635	21.6	0.00
	5/16/2013	0.18	-103.6	6.67	983	20.2	0.00
	12/11/2012	0.19	-139.3	6.16	777.0	20.6	2.89
	6/21/2012	0.18	-110.6	6.78	664	21.0	0.00
	11/29/2011			6.51	702	20.2	
	5/26/2011			6.82	678	20.5	0.00
	11/18/2010			6.69	1,206	22.0	
	4/28/2010			6.63	998	19.2	
	12/3/2009			6.42	953	21.2	
	2/25/2009			6.56	997	17.9	
	11/25/2008			6.60	1,143	21.9	
	8/27/2008			6.57	980	23.6	
	5/28/2008			6.84	903	20.6	
	2/27/2008			7.02	1,036	17.0	
	11/29/2007			5.73	10,350	14.8	
	8/29/2007 5/20/2001			6.16	17,410	30.7	
	5/30/2001 3/12/2007			7.12	>20,000	17.3	
				6.79	177	29.2	
	11/6/2006			6.69	66.9	27.2	
MW-2	12/10/2015	0.83	-187.4	6.76	1,040	21.9	0.10
111 11 -7	6/18/2015	0.83	-176.2	6.76	972	22.2	0.00
	11/3/2014	0.17	-46.1	7.53	1,206	24.6	0.00
	10/3/2014	1.03	-8.5	7.53	758	26.0	0.00
	8/21/2014	0.36	-149.5	6.61	853	24.3	0.00
	6/19/2014	2.13*	-160.9	6.46	791	22.3	0.00
	11/19/2013	0.61	-97.7	6.53	427.3	22.0	0.00
	5/16/2013	0.19	-101.3	6.50	813	20.6	0.00
	12/11/2012	0.18	-120.3	5.90	962	21.1	11.61
	6/21/2012	0.23	-89.2	6.58	644	21.3	14.05
	11/29/2011			6.24	629	20.6	
	5/26/2011			6.47	763	20.2	0.00
	11/18/2010			6.48	815	22.5	
	4/28/2010			6.53	823	19.2	
	12/3/2009			6.24	739	21.8	
	2/25/2009			6.21	832	18.2	
	11/25/2008			6.39	740	21.9	
	8/27/2008			6.34	840	23.7	
	5/28/2008			6.70	880	20.4	
	2/27/2008			6.88	821	17.5	
	11/29/2007			5.51	>20,000	16.6	
	8/29/2007			6.10	2,270	27.6	
	5/30/2001			6.50	>20,000	18.2	
	3/12/2007			6.57	228	26.8	
	11/6/2006			6.44	7.43	25.7	
MW-3	12/10/2015	1.74	-20.1	6.41	284.4	21.4	9.81
	6/18/2015	0.34	-30.8	6.41	451	19.9	5.60
	11/3/2014				Monitored		
	10/3/2014				Monitored		
	8/20/2014	0.63	-88.7	6.21	373.8	21.2	0.00
	6/19/2014	2.76*	-23.7	6.10	342.8	20.7	0.00
	11/19/2013	1.09	40.9	6.22	318.3	20.7	0.00
	5/16/2013	1.45	152.8	6.12	792	19.2	0.00
	12/11/2012	1.74	170.4	5.43	753	20.1	0.00
	6/21/2012	2.13	187.1	6.17	187	19.0	0.19
	11/28/2011			6.61	316	19.5	0.00
	5/26/2011			5.30	327	19.2	0.00
	11/18/2010 4/28/2010			5.74	401	21.3	
	12/3/2009			6.32	367 227	18.4	
	2/25/2009			5.71	402	20.4	
	11/25/2009			5.40		17.2	
	8/27/2008			5.93	392	20.8	
	5/28/2008			5.85	268	21.0	
	2/27/2008			6.25	233 240	18.8	
	11/29/2007			5.33		16.6	
	8/29/2007			5.33	>20,000	21.4	
II.	6/29/2007			5.77	2,210	30.1	
	E/20/2001						
	5/30/2001			6.61	>20,000	18.2	
	5/30/2001 3/12/2007 11/6/2006	 		6.61 6.37 6.46	>20,000 209 5.35	22.7 26.3	

EW-2	12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/20/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 6/21/2012 11/18/2010 12/3/2009 2/25/2009 2/25/2009 2/25/2009 11/25/2008 8/27/2008 8/27/2008 8/27/2008 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2008 11/29/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	1.48 0.28 0.56 1.77* 1.10 0.50 0.20 0.29	-89.4 -113.5 -125.9 -103.1 -76.7 -611.8 -92.3	Not 6.67 6.56 6.79 6.93 6.23 6.84 6.70 7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56	(μS/cm) 662 618 Monitored 640 523 330.7 510.2 302.2 159.5 232 466 5355 672 478 348 227 255 148 194 >20,000 4,490 20,000 46.2 42.9 902 896 Monitored 920 869 790 567	18.7 19.7 21.5 19.8 18.5 17.9 17.4 19.2 17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.4 21.4 21.4 23.1 21.4 23.4 23.1 21.4 21.4 23.4 23.1 21.4 21.4 23.4 23.4 23.1 24.4 24.4 25.2 27.9 26.2 27.9	0.66 5.64 0.00 0.00 0.00 0.00 10.57 0.00
EW-2	6/18/2015 11/3/2014 8/20/2014 6/19/2014 8/20/2014 6/19/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 6/21/2012 11/18/2010 12/3/2009 2/25/2009 2/25/2009 11/25/2008 8/27/2008 8/27/2008 8/27/2008 8/27/2008 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2008 11/29/2007 11/25/2008 11/29/2007 11/25/2008 11/29/2007 11/25/2008 11/29/2007 11/29/2007 11/29/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	0.28 0.56 1.77* 1.10 0.50 0.20 0.29	-113.5 -125.9 -103.1 -75.9 -68.7 -110.8 -92.3	6.83 Not Not Not Not 6.67 6.56 6.79 6.93 6.23 6.84 6.70 7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.75 7.03 7.13 6.71 6.94	618 Monitored Monitored 640 523 330.7 510.2 302.2 159.5 232 466 5335 672 478 348 227 255 148 194 >20,000 46.2 42.9 902 896 Monitored 920 869 790	19.7 21.5 19.8 18.5 17.9 17.4 19.2 17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	5.64 0.00 0.00 0.00 10.57 0.00
EW-4	11/3/2014 10/3/2014 10/3/2014 6/19/2014 6/19/2014 11/19/2013 12/11/2012 6/21/2012 11/28/2011 11/18/2010 4/28/2011 11/18/2010 4/28/2010 12/3/2009 2/25/2009 11/25/2008 8/27/2008 8/27/2008 8/27/2008 8/27/2008 11/29/2007 5/30/2001 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	0.56 1.77* 1.10 0.50 0.20 0.29	-125.9 -103.1 -75.9 -68.7 -110.8 -92.3	Not Not Not Control Not Not Not Not Not Not Not Control Not	Monitored Monitored 640 523 330.7 510.2 302.2 159.5 232 466 535 672 478 348 227 255 148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	21.5 19.8 18.5 17.9 17.4 19.2 17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.4 23.1 21.1 21.4	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
EW-4	10/3/2014 8/20/2014 8/20/2014 11/19/2013 5/16/2013 12/11/2012 11/28/2011 11/28/2011 11/28/2011 12/3/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2008 8/27/2008 8/27/2008 11/29/2007 8/29/2007 8/29/2007 11/25/2008 11/29/2007 11/25/2008 11/29/2007 11/25/2008 11/29/2007 11/25/2008 11/29/2007 11/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	1.77* 1.10 0.50 0.20 0.29	-103.1 -75.9 -68.7 -110.8 -92.3	Not 6.67 6.56 6.79 6.93 6.23 6.84 6.70 7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.70 7.03 7.13 6.71 6.94	Monitored 640 523 330.7 510.2 302.2 159.5 232 466 535 672 478 348 227 255 148 194 >20,000 46.2 42.9 902 896 Monitored 920 869 790	19.8 18.5 17.9 17.4 19.2 17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	0.00 0.00 10.57 0.00
EW-4	8/20/2014 6/19/2014 6/19/2014 6/19/2014 6/19/2013 5/16/2013 12/11/2012 11/28/2011 5/26/2011 11/18/2010 4/28/2010 12/3/2009 2/25/2009 11/25/2008 8/27/2008 8/27/2008 8/27/2008 8/27/2008 11/25/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2008 8/27/2008 11/29/2007 8/29/2007 8/29/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 8/21/2014 6/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	1.77* 1.10 0.50 0.20 0.29	-103.1 -75.9 -68.7 -110.8 -92.3	6.67 6.56 6.79 6.93 6.23 6.84 6.70 7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56	640 523 330.7 510.2 302.2 159.5 232 466 535 672 478 348 227 255 148 194 >20,000 46.2 42.9 902 896 Monitored 920 869 790	19.8 18.5 17.9 17.4 19.2 17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	0.00 0.00 10.57 0.00
EW-4	11/19/2013 5/16/2013 5/16/2013 11/28/2011 11/28/2011 11/28/2011 11/28/2010 12/3/2009 12/3/2009 11/25/2008 8/27/2008 8/27/2008 8/27/2008 11/29/2007 8/29/2007 8/29/2007 11/6/2006 11/25/2008 11/29/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	1.77* 1.10 0.50 0.20 0.29	-103.1 -75.9 -68.7 -110.8 -92.3	6.79 6.93 6.23 6.84 6.70 7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56	330.7 510.2 302.2 159.5 232 466 535 672 478 348 227 255 148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	18.5 17.9 17.4 19.2 17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 21.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.4 23.1 21.1 21.4	0.00 0.00 10.57 0.00
EW-4	5/16/2013 12/11/2012 11/28/2011 5/26/2011 11/28/2010 11/28/2010 11/28/2010 12/3/2009 2/25/2009 11/25/2008 8/27/2008 5/28/2008 8/27/2008 8/27/2008 11/25/2008 8/27/2008 11/25/2007 8/29/2007 8/29/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 6/19/2014 8/21/2014 6/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	0.50 0.20 0.29	-68.7 -110.8 -92.3	6.93 6.23 6.84 6.70 7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.75 7.03 7.13 6.71 6.94	510.2 302.2 159.5 232 466 535 672 478 348 227 255 148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	17.9 17.4 19.2 17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	0.00 10.57 0.00 0.00
EW-4	12/11/2012 6/21/2012 11/28/2011 5/26/2011 11/18/2010 4/28/2010 12/3/2009 2/25/2009 11/25/2008 8/27/2008 8/27/2008 5/28/2008 5/28/2008 5/28/2008 5/28/2008 11/29/2007 5/30/2001 3/12/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	0.20 0.29	-110.8 -92.3	6.23 6.84 6.70 7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not	302.2 159.5 232 466 535 672 478 348 227 255 148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	17.4 19.2 17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	10.57 0.00 0.00 -
EW-4	11/28/2011 5/26/2011 11/18/2010 4/28/2010 12/3/2009 11/25/2008 8/27/2008 8/27/2008 8/27/2008 5/28/2008 5/28/2008 11/29/2007 8/29/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011	0.29	-92.3	6.70 7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.75 7.03 7.13 6.71 6.94	232 466 535 672 478 348 227 255 148 194 >20,000 46.2 42.9 902 896 Monitored 920 869 790	17.1 20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	5/26/2011 11/18/2010 12/3/2009 2/25/2009 2/25/2009 2/25/2009 11/25/2008 8/27/2008 8/27/2008 11/25/2008 8/27/2008 11/25/2007 8/29/2007 5/30/2001 3/12/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011			7.10 6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.75 7.03 7.13 6.71 6.94	466 535 672 478 348 227 255 148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	20.7 18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	11/18/2010 4/28/2010 4/28/2010 12/3/2009 2/25/2009 11/25/2008 5/28/2008 5/28/2008 5/28/2008 5/28/2008 5/28/2007 5/30/2001 11/29/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 6/19/2014 6/19/2013 12/10/2013 12/10/2013 11/29/2011 5/26/2011 12/10/2015			6.06 6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.91 7.28 Not 7.03 7.13 6.94	535 672 478 348 227 255 148 194 >20,000 4,490 >20,000 46,2 42,9 902 896 Monitored 920 869 790	18.8 16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	4/28/2010 12/3/2009 11/25/2009 11/25/2009 11/25/2009 11/25/2008 8/27/2008 8/27/2008 2/27/2008 11/29/2007 8/29/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011			6.65 6.31 6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.75 7.03 7.13 6.71 6.94	672 478 348 227 255 148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	16.6 18.1 15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	2/25/2009 11/25/2008 8/27/2008 5/28/2008 5/28/2008 5/28/2008 5/28/2008 11/29/2007 8/29/2007 5/30/2001 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011			6.28 6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.91 7.28 Not 6.75 7.03 7.13 6.94	348 227 255 148 194 >20,000 4,490 >20,000 46,2 42,9 902 896 Monitored 920 869 790	15.3 18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	11/25/2008 8/27/2008 8/27/2008 2/27/2008 11/29/2007 8/29/2007 8/29/2007 13/12/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011 12/10/2015			6.25 6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 7.28 Not 6.75 7.03 7.13 6.71 6.94	227 255 148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	18.4 21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	8/27/2008 5/28/2008 5/28/2008 11/29/2007 8/29/2007 8/29/2007 11/6/2001 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011 12/10/2015			6.42 6.73 7.11 5.57 6.24 6.70 6.98 6.56 Not 6.75 7.03 7.13 6.71 6.94	255 148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	21.4 17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	5/28/2008 2/27/2008 2/27/2008 8/29/2007 5/30/2001 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011	0.77 0.17 0.14 0.35 2.48* 1.16 0.15		6.73 7.11 5.57 6.24 6.70 6.98 6.56 6.91 7.28 Not 6.75 7.03 7.13 6.71 6.94	148 194 >20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	17.9 14.4 13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	11/29/2007 8/29/2007 8/29/2007 5/30/2001 3/12/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2014 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011 12/10/2015	0.77 0.17 0.14 0.35 2.48* 1.16 0.15 0.16		5.57 6.24 6.70 6.98 6.56 6.91 7.28 Not 6.75 7.03 7.13 6.71 6.94	>20,000 4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	13.4 26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	
EW-4	8/29/2007 5/30/2001 5/30/2001 11/6/2006 12/10/2015 6/18/2015 11/3/2014 8/21/2014 6/19/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011	0.77 0.17 0.14 0.15 0.15 0.16 0.15		6.24 6.70 6.98 6.56 7.28 Not 6.75 7.03 7.13 6.71 6.94	4,490 >20,000 46.2 42.9 902 896 Monitored 920 869 790	26.3 17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	0.00 2.72 0.00 0.00 0.00 0.00
EW-4	5/30/2001 3/12/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 8/21/2014 11/19/2013 5/16/2013 12/11/2012 11/29/2011 5/26/2011 12/10/2015	0.77 0.17 0.14 0.35 2.48* 1.16 0.15 0.16	-172.3 -133.5 -134.9 -131.4 -148.1 -114.6 -118.3 -134.8 -134.8	6.70 6.98 6.56 6.91 7.28 Not 6.75 7.03 7.13 6.71 6.94	>20,000 46.2 42.9 902 896 Monitored 920 869 790	17.5 25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	0.00 2.72 0.00 0.00 0.00 0.00
EW-4	3/12/2007 11/6/2006 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011	0.77 0.17 0.14 0.35 2.48* 1.16 0.15 0.16	-172.3 -172.3 -133.5 -134.9 -131.4 -148.1 -114.6 -118.3 -134.8 -134.8	6.98 6.56 6.91 7.28 Not 6.75 7.03 7.13 6.71 6.94	46.2 42.9 902 896 Monitored 920 869 790	25.2 27.9 21.9 21.3 23.4 23.1 21.1 21.4	0.00 2.72 0.00 0.00 0.00 0.00
EW-4	11/6/2006 12/10/2015 6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2014 6/19/2014 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011 12/10/2015	0.77 0.17 0.14 0.35 2.48* 1.16 0.15 0.16 0.15	-172.3 -133.5 -154.9 -131.4 -148.1 -114.6 -118.3 -134.8 -134.8	6.56 6.91 7.28 Not 6.75 7.03 7.13 6.71 6.94	42.9 902 896 Monitored 920 869 790	27.9 21.9 21.3 23.4 23.1 21.1 21.4	0.00 2.72 0.00 0.00 0.00 0.00
EW-4	6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2014 6/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011 12/10/2015	0.17 0.14 0.35 2.48* 1.16 0.15 0.16 0.15	-133.5 -154.9 -131.4 -148.1 -114.6 -118.3 -134.8 -134.8	7.28 Not 6.75 7.03 7.13 6.71 6.94	896 Monitored 920 869 790	21.3 23.4 23.1 21.1 21.4	2.72 0.00 0.00 0.00 0.00 0.00
EW-4	6/18/2015 11/3/2014 10/3/2014 8/21/2014 6/19/2014 6/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011 12/10/2015	0.17 0.14 0.35 2.48* 1.16 0.15 0.16 0.15	-133.5 -154.9 -131.4 -148.1 -114.6 -118.3 -134.8 -134.8	7.28 Not 6.75 7.03 7.13 6.71 6.94	896 Monitored 920 869 790	21.3 23.4 23.1 21.1 21.4	2.72 0.00 0.00 0.00 0.00 0.00
	11/3/2014 10/3/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 5/16/2012 12/11/2012 11/29/2011 5/26/2011	0.14 0.35 2.48* 1.16 0.15 0.16 0.15	-154.9 -131.4 -148.1 -114.6 -118.3 -134.8 -134.8	Not 6.75 7.03 7.13 6.71 6.94	Monitored 920 869 790	23.4 23.1 21.1 21.4	0.00 0.00 0.00 0.00
	10/3/2014 8/21/2014 6/19/2014 11/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011 12/10/2015	0.35 2.48* 1.16 0.15 0.16 0.15	-131.4 -148.1 -114.6 -118.3 -134.8 -134.8	6.75 7.03 7.13 6.71 6.94	920 869 790	23.1 21.1 21.4	0.00 0.00 0.00
	6/19/2014 11/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011	2.48* 1.16 0.15 0.16 0.15	-148.1 -114.6 -118.3 -134.8 -134.8	7.13 6.71 6.94	790	21.1 21.4	0.00
	11/19/2013 5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011	1.16 0.15 0.16 0.15	-114.6 -118.3 -134.8 -134.8	6.71 6.94		21.4	0.00
	5/16/2013 12/11/2012 6/21/2012 11/29/2011 5/26/2011 12/10/2015	0.15 0.16 0.15	-118.3 -134.8 -134.8	6.94	307		
	12/11/2012 6/21/2012 11/29/2011 5/26/2011 12/10/2015	0.16 0.15	-134.8 -134.8		908		0.00
	6/21/2012 11/29/2011 5/26/2011 12/10/2015	0.15	-134.8	0.40	916	20.9	4.76
	5/26/2011 12/10/2015			6.97	829	19.9	0.00
	12/10/2015			6.59 6.87	733	20.8 19.5	0.00
				0.8/	888	19.5	0.00
		0.74	-175.2	6.87	930	22.0	0.91
	6/18/2015	0.15	-137.7	7.16	645	21.9	0.91
	11/3/2014	0.15	140.2		Monitored	22.0	0.00
	10/3/2014 8/21/2014	0.16	-140.2 -169.4	6.57 6.70	892 873	22.9 22.7	0.00
	6/19/2014	1.94*	-109.4	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 6/21/2012	0.13	-140.3 -111.2	6.23 6.82	624 318.8	20.5	2.16 0.00
	11/28/2011	0.17	-111.2	6.48	420	21.0	0.00
	5/26/2011			7.15	585	20.3	2.32
				- 00			
EW-5	12/10/2015 6/18/2015	0.77	-172.1 -153.9	6.89	804 787	20.4	0.00
	11/3/2014	0.16	-133.9		Monitored	20.0	0.00
	10/3/2014	0.17	-152.1	6.66	786	20.6	0.00
	8/20/2014	0.42	-171.9	6.72	786	21.1	0.00
	6/19/2014	2.29*	-142.8	6.58	668	19.4	0.00
	11/19/2013 5/16/2013	0.70	-111.6 -102.9	6.79 6.80	442.8 485.3	19.7 18.5	0.00
	12/11/2012	0.17	-102.9	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	12/10/2015	0.75	-143.0	6.99	655	19.2	1.55
	6/18/2015	0.19	-137.0	6.83	661	18.9	6.10
	11/3/2014				Monitored		
	10/3/2014 8/20/2014	0.41	-167.8	6.65	Monitored 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 6/21/2012	0.33	77.4	5.55 6.70	480.1 609	17.9 17.8	0.33
	6/21/2012	0.13	-87.0	6.70	609 478	17.8	0.00
	5/26/2011			6.56	652	17.5	1.73
IW1	12/10/2015	1.76	-78.4	9.01	478.4	22.5	14.01
NOTES							
O. = Dissolved O							
R.P = Oxidation- /L = milligrams p	Reduction Potenti	al					
	per Liter						
 degrees celsius U = nephelometr 	nens per centimeter	r	1				-

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers	Other VOCs by EPA Method 8.
MW-1	12/10/2015	18,000	2,400, c	ND<250	ND<1,000	5,600	110	400	630	ND, except TBA=2,100,	All ND
	6/18/2015, e	19,000	2,000, c	ND<250	430	4,100	ND<100	280	570	MTBE = 580 ND, except	ND, except
	6 18/2015, e	19,000	2,000, c	ND<230	430	4,100	ND<100	280	370	TBA = 1,100	Isopropylbenzene = 110, n-Propyl benzene = 130, 1,2,4-Trimethylbenzene = 100
	11/3/2014 10/3/2014, e	22,000	2,600, c	ND<250	600	4,500	Not Sample 150	ed. 620	1,200	ND, except	ND, except
										TBA = 880	Naphthalene = 150, n-Propyl benzene = 160, 1,2,4-Trimethylbenzene = 210
	8/21/2014 6/19/2014	15,000	4,200, b,c	ND<250		Samples only analy 3,100	zed for Dissolve 230	ed Hexavalent Chromiun 500	n. 1,300	ND, except	-
	11/19/2013	25,000	3,300, b,c	ND<250	ND<1,500	5.800	210	630	1.400	MTBE = 350 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	-
	6/21/2012	17,000	2,100, c	ND<250	ND<500	1,800	420	500	1,500	MTBE = 100 ND, except TBA = 110	-
	11/29/2011	18,000	2,600, c	ND<250	ND<600	2,600	410	410	1,200	MTBE = 49 ND, except TBA = 460,	-
	5/26/2011	15,000	2,400, b,c	ND<250	ND<500	2,000	430	400	1,300	MTBE = 210 ND, except TBA = 570,	
	11/18/2010	21,000	1,900, b,c	ND<250	1,700	6,300	340	340	860	MTBE = 120 ND, except	-
	4/28/2010	19,000	2,800, b,c	260, b,c	840	3,400	680	500	1,600	TBA = 3,300, MTBE = 1,500 ND, except	
	12/3/2009	19,000	1,900, b, c	ND<250	1,500	4,500	670	400	1,300	TBA = 3,200, MTBE = 750 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,	
	8/27/2008	46,000	5,200, c	ND<250	1,300	4,600	1,800	2,000	5,200	MTBE = 1,600	-
	5/28/2008 2/27/2008	40,000 45,000	6,100, c 4,900, c	290 310	1,600 2,600	4,200 6,200	2,600 3,100	1,700 1,300	5,900 5,100	-	-
	2/27/2008 11/29/2007	45,000 27,000	4,900, c 3,100, b,c	310 ND<250	2,600	6,200 4,700	3,100 930	1,300 770	5,100 2,600	-	
	8/29/2007	26,000	3,900, b,c	470	3,200	5,400	1,400	810	3,000	-	-
	5/30/2007 3/12/2007	22,000	3300, c	ND<250 300	ND<750	400	380 2,900	1,100	3,600	-	-
	11/6/2006	38,000 44,000,a	3,500, b,c 3,400, a,c	360	3,500 3,900	5,400 5,600	2,300	1,300 920	5,100 3,000	-	-
MW-2	12/10/2015	1,400	3,300, c,f	1,800, c,f	ND<10	25	4.6	5.8	4.2	ND, except TBA = 16, MTBE = 6.1	All ND
	6/18/2015, e	2,700	3,100, b,c.j	1,600, b,c.j	27	140	ND<5.0	8.6	19	ND, except TBA = 180	ND, except Naphthalene = 13, n-butyl benzene = 6.5, Isopropylbenzene = 12, n-Propyl benzene = 23
	11/3/2014, e	480	2,500, c,f,i	1,300, c,f,i	ND<0.50	1.0	ND<0.50	1.4	0.96	ND, except TBA = 28	ND, except Acetone = 190, MEK = 56, Chloroform = 0.96, MBK = 12, MIBK = 8.8, n-butyl benzene = 3.1, sec-Butyl benzene = 1.2, Isopropylbenzene = 4.0, n-Propyl benzene = 10
	10/3/2014, e	97, g	370, h	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND, except TBA = 42	ND, except Bromomethane = 1.2, Chloroform = 3.2, MIBK = 1.2, MBK = 0.87
	8/21/2014 6/19/2014	4,700	2,700, b,c	350, b,c		Samples only analy 210	zed for Dissolve	ed Hexavalent Chromiun 18	n. 12	ND, except	
										MTBE = 24	
	11/19/2013 5/16/2013	6,600 4,700	3,000, b,c 2,300, c,e,f	ND<250 470, c,e,f	ND<17 ND<180	160 360	9.6	36 31	10	ND ND, except TBA = 200,	-
	12/11/2012	3,900	2,700, c,d	590	110	290	15	27	16	MTBE = 62 ND, except TBA = 190,	-
	6/21/2012	4,900	1,600, b,c	ND<250	180	560	14	36	12	MTBE = 99 ND, except TBA = 340,	
	11/29/2011	4,900	2,900, c,d	420, c,d	ND<50	400	11	39	7.7	MTBE = 160 ND, except TBA = 72.	-
		6,600	1,900, b,c	ND<250	ND<350	1,000	39	36	97	MTBE = 29 ND, except TBA = 480,	-
	5/26/2011	0,000									1
	5/26/2011	7,700, a	11,000, a,c,d	3,500, a,c,d	ND<35	640	16	74	14	MTBE = 210 ND, except TBA = 19.	-
				3,500, a,c,d	ND<35	640	16	74	14 29	ND, except TBA = 19, MTBE = 22 ND, except	
	11/18/2010	7,700, a	11,000, a,c,d							ND, except TBA = 19, MTBE = 22 ND, except TBA = 300, MTBE = 100 ND, except	-
	11/18/2010	7,700, a 9,400, a	11,000, a,c,d	9,100, a,c,d	ND<250	1,200	35	40	29	ND, except TBA = 19, MTBE = 22 ND, except TBA = 300, MTBE = 100 ND, except TBA = 200, MTBE = 61 ND, except TBA = 38,	-
	11/18/2010 4/28/2010 12/3/2009	7,700, a 9,400, a 7,700, a	11,000, a,c,d 23,000, a,c,d 6,900, a, b,c	9,100, a.c.d 2,000, a, b, c	ND<250	1,200	35	40	29 28	ND. except TBA = 19, MTBE = 22 ND. except TBA = 300, MTBE = 100 ND. except TBA = 200, MTBE = 100 ND. except TBA = 27, MTBE = 31, 1,2,DCA = 27 ND. except TBA = 211,	-
	11/18/2010 4/28/2010 12/3/2009 2/25/2009	7,700, a 9,400, a 7,700, a 7,600, a 8,700, a	11,000, a.c.d 23,000, a.c.d 6,900, a, b.c 21,000, a.c.d 23,000, a.c.d	9,100, a.c.d 2,000, a. b. c 6,200	ND<250 ND<250 ND<160	1,200 840 810	35 29 18	40 34 46 90	29 28 24	ND. except TBA = 19, MTBE = 22 ND. except TBA = 300, MTBE = 100 ND. except TBA = 200, MTBE = 61 ND. except TBA = 88, MTBE = 31, 1,2-DCA = 2,7 ND. except	-
	11/18/2010 4/28/2010 12/3/2009 2/25/2009 11/25/2008 8/27/2008 5/28/2008	7,700, a 9,400, a 7,700, a 7,600, a 8,700, a 13,000, a	11,000, a.c.d 23,000, a.c.d 6,900, a. b.c 21,000, a.c.d 23,000, a.c.d 23,000, a.c.d	9,100, a.c.d 2,000, a. b. c 6,200 6,400 2,200 7,200	ND<250 ND<250 ND<160 14,e ND<200 ND<210	1,200 840 810 740 990 2,000	35 29 18 15 14 77	40 34 46 90 93 77	29 28 24 27 27 19 90	ND. except TBA = 19, MTBE = 22 ND. except TBA = 300, MTBE = 100 ND. except TBA = 200, MTBE = 61 ND. except TBA = 38, MTBE = 31, 1,2-DCA = 2.7 ND. except TBA = 11, MTBE = 14	
	11/18/2010 4/28/2010 12/3/2009 2/25/2009 11/25/2008	7,700, a 9,400, a 7,700, a 7,600, a 8,700, a 13,000, a 12,000, a 11,000, a	11,000, acd 23,000, acd 6,900, a, bc 21,000, acd 23,000, acd 23,000, acd 25,000 acd 21,000, acd	9,100, a,c,d 2,000, a, b, c 6,200 6,400 2,200	ND<250 ND<250 ND<160 14,e ND<200	1,200 840 810 740	35 29 18 15	40 34 46 90 93	29 28 24 27	ND, except TBA = 19, MTBE = 22 ND, except TBA = 300, MTBE = 100 ND, except TBA = 200, MTBE = 01 ND, except TBA = 200, MTBE = 01 ND, except TBA = 200, MTBE = 11, MTBE = 31, 1,2-DCA = 27 ND, except TBA = 11, MTBE = 14	-
	11/18/2010 4/28/2010 12/3/2009 2/25/2009 11/25/2008 8/27/2008 5/28/2008 11/29/2007 8/29/2007	7,700, a 9,400, a 7,700, a 7,700, a 7,600, a 8,700, a 13,000, a 11,000, a 11,000, a 8,600, a	11,000, acd 23,000, acd 6,900, a, bc 21,000, acd 23,000, acd 23,000, acd 25,000, acd 32,000, acd 32,000, acd 32,000, acd 32,000, acd 32,000, acd	9,100, a.c.d 2,000, a. b. c 6,200 6,400 2,200 7,200 6,800 11,000 2,600	ND<250 ND<250 ND<160 14,e ND>200 ND>210 ND>210 ND>150 ND>10 ND>	1,200 840 810 740 990 2,000 940 1,000 1,300	29 18 15 15 14 77 36 28 36	40 34 46 90 93 77 ND<10 120 48	29 28 24 27 27 19 90 22 21 31 48	ND, except TBa = 19, MFBE = 22 ND, except TBa = 300, MFBE = 100 ND, except TBa = 300, MFBE = 100 ND, except TBa = 20, MFBE = 10, ND, except TBa = 20, MFBE = 11, ND, except TBa = 11, MFBE = 14	
	11/18/2010 4/28/2010 12/3/2009 2/25/2009 11/25/2008 8/27/2008 5/28/2008 11/29/2007	7,700, a 9,400, a 7,700, a 7,600, a 8,700, a 13,000, a 11,000, a 11,000, a	11,000, a.c.d 23,000, a.c.d 6,900, a, b.c 21,000, a.c.d 23,000, a.c.d 25,000 a.c.d 21,000, a.c.d 32,000, a.c.d	9,100, a.c.d 2,000, a. b. c 6,200 6,400 2,200 7,200 6,800 11,000	ND<250 ND<250 ND<260 ND<160 I4.e ND<200 ND<210 ND<150 ND<50	1,200 840 810 740 990 2,000 940 1,000	35 29 18 15 14 77 36 28	40 34 46 46 90 93 77 ND<10 120	29 28 24 27 27 19 90 22 31	ND, except TBA = 19, MTBE = 22 ND, except TBA = 300, MTBE = 100 ND, except TBA = 200, MTBE = 61 ND, except TBA = 38, ND, except TBA = 88, MTBE = 31, 1,2-DCA = 2.7 ND, except TBA = 11, ———————————————————————————————————	

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead	Other VOCs by EPA Method 8260
										Scavengers	
MW-3	12/10/2015 6/18/2015, e	ND<50 ND<50	ND<50 ND<50	ND<250 ND<250	ND<5.0 ND<5.0	ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND ND	All ND All ND
	11/3/2014	MDCJU	I ND-30	I ND<230	ND-0.0	ND<0.50	Not Sample		ND<0.30	I ND	ALIND
	10/3/2014 8/20/2014					Samples only ana	Not Sample	d. d Hexavalent Chromius	n		
	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 5/16/2013	ND<50 ND<50	ND<50 ND<50	ND<250 ND<250	ND<5.0 ND<5.0	ND<0.50 ND<0.5	ND<0.50 ND<0.5	ND<0.50 ND<0.5	ND<0.50 ND<0.5	ND 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 11/28/2011	ND<50 ND<50	ND<50 ND<50	ND<250 ND<250	ND<5.0 ND<5.0	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND 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 4/28/2010	ND<50 ND<50	ND<50 ND<50	ND<250 ND<250	ND<5.0 ND<5.0	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND 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 11/25/2008	ND<50 ND<50	ND<50 ND<50	ND<250 ND<250	ND<5.0 ND<5.0	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND ND	-
	8/27/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5		-
	5/28/2008 2/27/2008	ND<50 ND<50	ND<50 ND<50	ND<250 ND<250	ND<5.0	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	-	
	11/29/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-
	8/29/2007 5/30/2007	ND<50 ND<50	ND<50 ND<50	ND<250 ND< 250	ND<5.0 ND< 5.0	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5		
	3/12/2007	ND< 50	ND< 50	ND< 250	ND< 5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	
	11/6/2006	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	
MW-4	12/10/2015	4,100	1,200, c	ND<250	ND<150	560	6	39	87	ND, except TBA = 92, MTBE = 36	All ND
	6/18/2015	5,400	1,000, c	ND<250	32	340	12	34	120	ND, except TBA = 61	ND, except Naphthalene = 33, n-butyl benzene = 12, Isopropylbenzene = 34, n-Propyl benzene = 88, 1,2,4-Trimethylbenzene = 41, 1,3,5-Trimethylbenzene = 14
-	11/3/2014 10/3/2014						Not Sample Not Sample	d.			
	8/20/2014	2000	1.60	L vm ····		Samples only ana	lyzed for Dissolve	d Hexavalent Chromius	n.	L	
	6/19/2014	6,000	1,400, c	ND<250		940	22	95	200	ND, except MTBE = 70	-
	11/19/2013	9,400	2,100, c	ND<250	ND<150	1,100	24	210	610	ND, except TBA = 82, MTBE = 83	-
	5/16/2013	6,700	1,500, c	ND<250	ND<60	310	42	220	560	ND, except TBA = 43,	-
	12/11/2012	17,000	2,700, c	ND<250	ND<170	88	120	670	2,100	MTBE = 21 ND, except TBA = 12	-
	6/21/2012 11/28/2011	12,000 6,000	2,700, c 2,200, c	ND<250 ND<250	ND<90 ND<50	49 86	83 63	540 350	1,700 1,200	ND 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,	-
	2/25/2009	11,000	2,200, c	ND<250	ND<300	350	120	490	1,400	MTBE = 390 ND, except TBA = 160,	-
	11/25/2008	10,000	1,900, c	ND<250	270	630	130	390	1,500	MTBE = 130 ND, except TBA = 190,	-
	8/27/2008	9,300	830, c	ND<250	ND<250	260	05	370	1,300	MTBE = 250	
	5/28/2008	2,200	1,400, c	ND<250	ND<30	16	85 38	100	320	-	-
	2/27/2008 11/29/2007	8,000 12,000	1,900, c 2,800, c	ND<250 ND<250	ND<50 ND<180	47 260	110 230	270 580	1,300 2,500		
	8/29/2007	12,000 a	560, c	ND<250	660	910	200	750	2,200	-	-
	5/30/2007 3/12/2007	43,000 19,000	4,500, c 3.100, c	610 ND< 250	3,600	5,800	3,700	1,400	5,400 4,400	-	
	11/6/2006	23,000	3,100, c 4,300,c	ND< 250 850	370 ND<900	560 680	450 250	930	3,100	-	
EW-2	12/10/2015	3,600	1,100, c	ND<250	ND<120	650	9.2	47	ND<7.5	ND, except TBA = 81,	All ND
	6/18/2015	510, g	ND<50	ND<250	ND<25	ND<25	ND<25	ND<25	ND<25	MTBE = 30 ND<25	ND, except PCE = 1,000,
<u> </u>	11/3/2014		<u> </u>			<u> </u>	Not Sample	d.		I	TCE = 150
	10/3/2014	3,500	540, c	ND<250	31	670	ND<17	21	ND<17	ND	ND, except PCE = 350, TCE = 570, cis-1,2-DCE = 52, Isopropylbenzene = 19, n-Propyl benzene = 60
	8/21/2014 6/19/2014	650, g	ND<50	ND<250		Samples only ana 47	0.87	d Hexavalent Chromius 1.1	n. ND<0.50	ND, except TBA = 8.6,	-
	11/19/2013	11,000	1,400, c	ND<250	ND<350	3,300	19	96	76	MTBE = 6.0 ND, except TBA = 190,	-
	5/16/2013	2,000	210, c	ND<250	83	580	4.9	32	7.3	MTBE = 89 ND, except TBA = 55,	-
	12/11/2012	2,500	160, c	ND<250	ND<120	470	3.6	31	5.1	MTBE = 63 ND, except TBA = 74,	
	6/21/2012	3,700	280, c	ND< 250	180	960	9.5	20	16	MTBE = 66 ND, except TBA = 140,	
	11/29/2011	4,600	960, c	ND< 250	260	1,600	15	62	38	MTBE = 120 ND, except TBA = 270,	-
	5/26/2011	2,700	560, b,c	ND< 250	ND<150	580	7.9	10	80	MTBE = 270 ND, except	-
										TBA = 290, MTBE = 97	

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Analytical Results Ethylbenzene	Total Xylenes	Fuel Ovvoerstee & Lead	Other VOCs by EPA Method 8260
										Scavengers	,
EW-4	12/10/2015	15,000	1,800, c	ND<250	710	4,400	41	250	ND<75	ND, except	All ND
	6/18/2015	87, g	ND<50	ND<250	7.7	ND<5.0	ND<5.0	ND<5.0	ND<5.0	TBA = 760, MTBE = 480	ND, except
		87, g	ND-30	ND<230	1.1	NDG.0			NDO.0	AIND	PCE = 86, TCE = 11
	11/3/2014 10/3/2014	15,000	2,300, c	ND<250	360	4,000	Not Sample ND<100	170	ND<100	ND, except TBA = 450	ND, except Naphthalene = 280, n-Propyl benzene = 200
	8/21/2014 6/19/2014	4,800	940, c	ND<250	-	Samples only analy 1,200	yzed for Dissolve 12	d Hexavalent Chromiur 110	n. 21	ND, except	-
	11/19/2013	18.000	3,000. c	ND<250	ND<700	4200	79	480	120	TBA = 290, MTBE = 190	
			.,,							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,	
	6/21/2012	9,600	2,200, c	ND< 250	ND<75	270	22	340	290	MTBE = 20 ND, except TBA = 18	-
	11/28/2011	8,300	2,000, c	ND< 250	ND<150	520	40	510	530	MTBE = 6.7 ND, except	-
	5/26/2011	2,800	500, b.c	ND< 250	ND<150	99	9.9	20	300	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	12/10/2015	11,000	1,300, c	ND<250	480	2,000	50	430	220	ND, except	All ND
c-w.a					480	2,000		430		TBA = 500, MTBE = 340	
	6/18/2015	940	290, c	ND< 250	30	89	ND<5.0	30	ND<5.0	ND, except TBA = 760	ND, except Naphthalene = 5.5, Isopropylbenzene = 12, n-Propyl benzene = 25
	11/3/2014 10/3/2014	11,000	1,600, c	ND< 250	310	1,800	Not Sample	ed. 790	700	ND, except	ND, except
	10.3.2014	11,000	1,000,0	115 20	310	1,500	100	1,20	700	TBA = 380	Naphthalene = 190, n-Propyl benzene = 120, 1,2,4-Trimethylbenzene = 200
	8/20/2014 6/19/2014	16,000	2,200, c	ND< 250		Samples only analy 1,200	yzed for Dissolve	ed Hexavalent Chromiur 950	n. 1,100	ND, except	-
	11/19/2013	17,000	2,600, c	ND< 250	ND<800	2,400	110	1,100	1,700	TBA = 310, MTBE = 230 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,	-
	6/21/2012	44,000	4,900, c	ND< 250	ND<1,000	710	2,400	2,300	8,800	MTBE = 8.6 ND, except TBA = 57,	-
	11/28/2011	48,000	3,500, b,c	ND< 250	ND<400	930	3,400	2,400	9,000	MTBE = 6.5 ND, except TBA = 110,	-
	5/26/2011	35,000	3,600, b,c	ND< 250	ND<450	1,000	2,700	850	11,000	MTBE = 48 ND, except	
										TBA = 250, MTBE = 86	
OW-2	12/10/2015	1,000	330, c	ND<250	ND<10	2.8	1.6	37	58	ND, except TBA = 20,	All ND
	6/18/2015	260, i	90, k	ND<250	0.76	ND<0.50	ND<0.50	0.70	0.57	MTBE = 5.7 ND, except TBA = 2.4	ND, except Carbon Disulfide = 1.2,
											Isopropyl benzene = 0.77, n-Propyl benzene = 0.76
	11/3/2014 10/3/2014					Clll	Not Sample Not Sample	ed.			
	8/20/2014 6/20/2014	200	150, c	ND<250		0.62	0.70	ed Hexavalent Chromiur 6.7	n. 6.8	ND, except TBA = 2.4,	
	11/19/2013	610	370. c	ND<250	ND<5.0	2.2	1.5	8.8	14	MTBE = 1.5 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,	
	6/21/2012	4,600	840, c	ND< 250	ND<45	110	46	160	590	MTBE = 3.1 ND, except TBA = 60,	-
	11/28/2011	5,300	1,100, b,c	ND< 250	ND<130	350	170	24	790	MTBE = 5.4 ND, except TBA = 210.	
	5/26/2011	450	430, b.c	ND< 250	ND<5.0	0.87	0.71	ND<0.5	7.7	MTBE = 50 ND, except	
										TBA = 350, MTBE = 3.6	
IW1	12/10/2015	2,200	500, c, 1	ND<250	ND<15	57	4.3	64	140	ND, except TBA = 53, MTBE = 5.7	All ND
	Petroleum Hydroc		93								
TPH-G = Total Pe	etroleum Hydrocar etroleum Hydrocar	bons as Gasoline									
MTBE = Methyl t $\Gamma BA = tert-Butyl$	ertiary-butyl ether alcohol										
1,2-DCA = 1,2-Di PCE = Tetrachlor	chloroethane oethene										
TCE = Trichloroet cis-1,2-DCE = cis	-1,2-Dichloroethen	e									
MIBK = Methyl I MBK = Methyl B	so-butyl Ketone (4 utyl Ketone (2-hex	-Methyl-2-pentano	ne).								
ND = Not Detecti = Not Analyzed	ed. L										
a = Laboratory No	ote: lighter than wa		en/ product is present ficant; no recognizable	pattern							
c = Laboratory No	ote: gasoline range	compounds are sig	nificant esel range compounds								
e = Analysis by El	PA 8260B. All oth	ner results for MTE	BE and all results for E	TEX are by EPA 80	21B.						
g = Laboratory No		olated non-target p	eaks present in the TI								
i = Laboratory No	te: strongly aged g	asoline or diesel rai	ficant; no recognizable nge compounds are sig	pattern; and/or keros mificant in the TPH-0	ene/kerosene range/ i chromatogram.	jet fuel range.					
j = Laboratory No	te: oil range compo ote: kerosene/keros	ounds are significan	M.								
l = Laboratory No	te: Stoddard solver rograms per liter (µ	nt/mineral spirit (?)									
use in tille	Service ber mer ()	way, was as outfill	W								



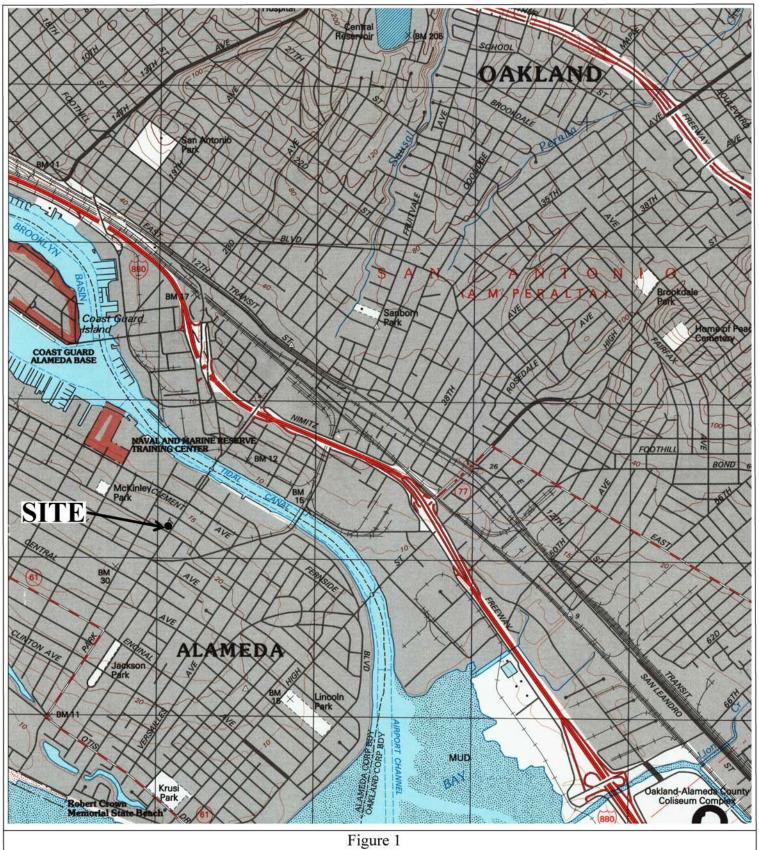
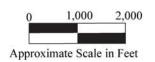


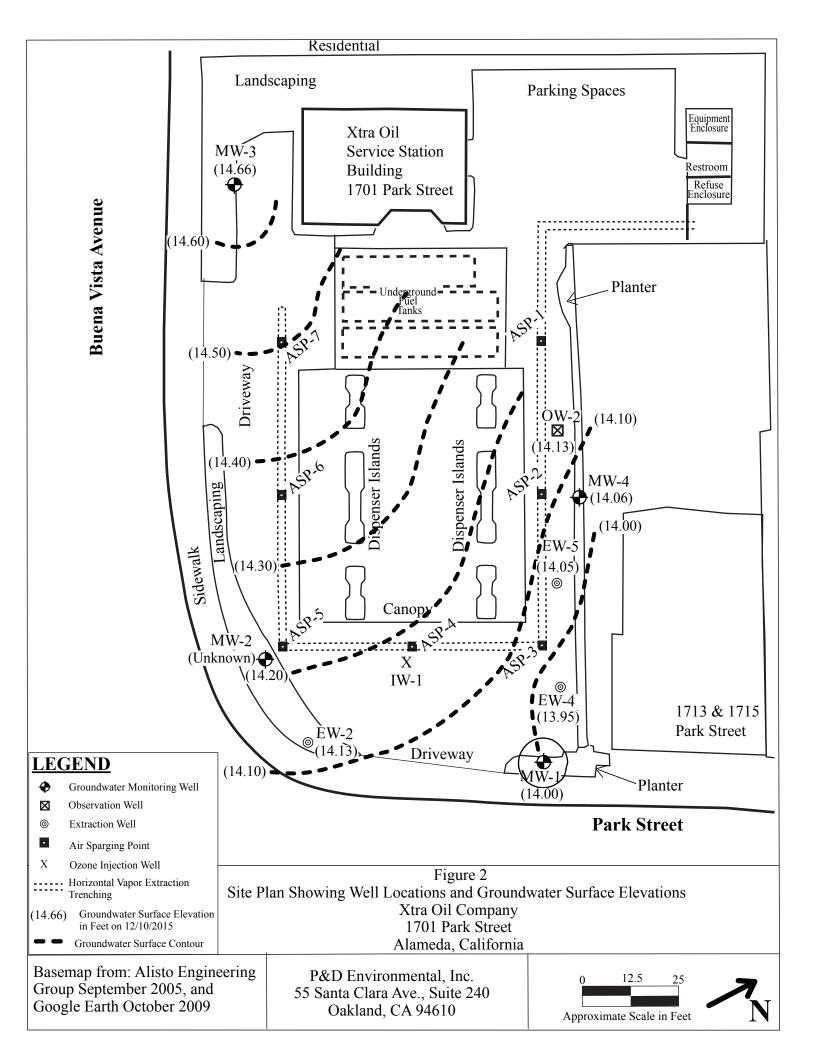
Figure 1 Site Location Map Xtra Oil Company 1701 Park Street Alameda, California

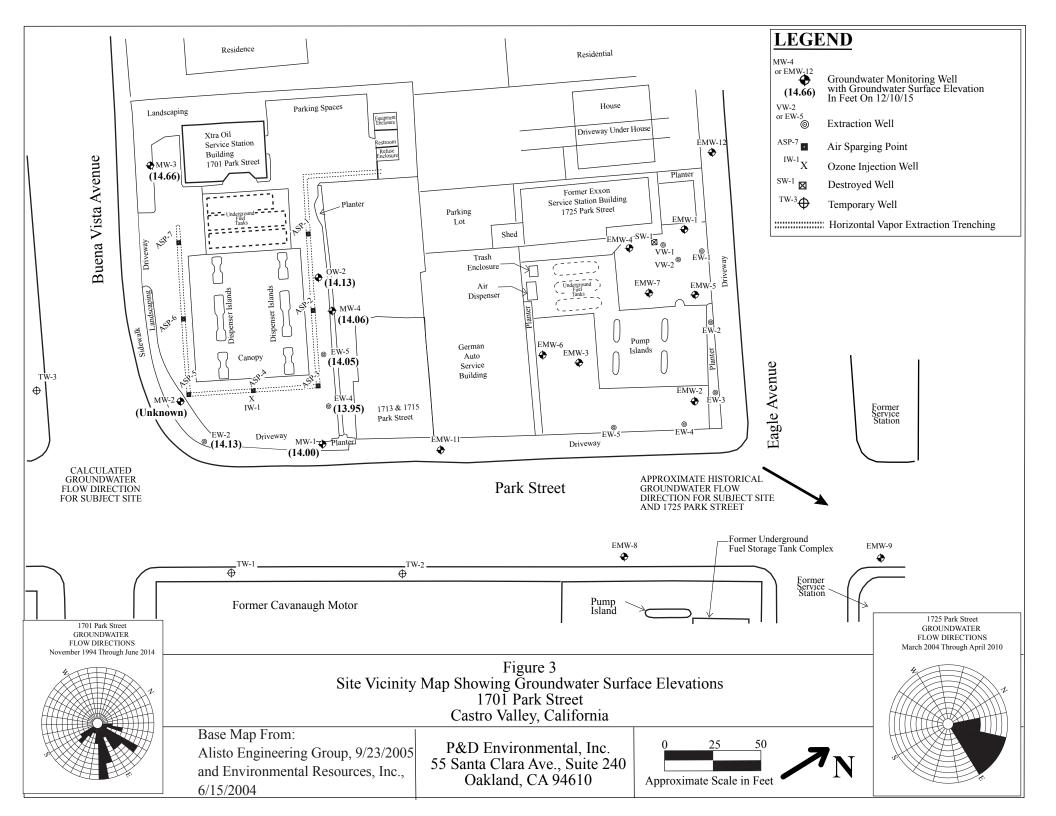
Basemap from: U.S. Geological Survey Oakland East, California 7.5-Minute Quadrangle, Map edited 1996

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









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	MON	NATE OF NITORING/	CASING ELEVATION	DEPTH TO (a) WATER	PRODUCT THICKNESS	GROUNDWATER ELEVATION (b)	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	NAPTHALENE (ug/l)	PYRENE	DO (ppm)	LAB
		AMPLING	(Feet)	(Feet)	(Feet)	(Feet)	. 67-7							(ug/l)		(ug/l)		
MVV-1	1	11/04/94	19.60	8.6		10.96	60000	6400	13000	4900	1300	5500		_		_		MCC
QC-1 (c		11/04/94		_	_	13.50	54000	_	12000	4500	1200	5200	_		=	_	_	MCC
MVV-1 MVV-1		01/11/95 02/24/95	19.60 19.60	6,10 6.57	Ξ	13.03	56000	4400	13000	7000	1400	5100	=	_	=	_	_	MCC
QC-1 (d	c) C	02/24/95	_	_		_	43000	_	8900	4600	970	3300	****	***	_	***	_	MCC
MVV-1		05/25/95 05/25/95	19.60	6,54	_	13.06	53000 48000	4700	11000	5700 5300	1200 1200	4000 3800	_	_	_	_	4.3	MCC MCC
QC-1 (c MVV-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 MCC
MVV-1 QC-1 (c		11/16/95 11/16/95	19.60	8.79	=	10.81	100000 95000	5900	22000 20000	17000 15000	2100 1800	8500 7800	_	_	_	_	_	MCC
QC-1 (c MW-1		03/20/96	19.60	6.45	_	13.15	46000	3300	10000	6200	1100	3200	_	_	_		_	MCC
QC-1 (c	c) C	03/20/96	_	_	_	_	42000		9800	5800	970	3000		_	_	_	_	MCC MCC
MVV-1 QC-1 (c		06/13/96 06/13/96	19.60	7.14	_	12.46	44000 48000	5400	9500 9300	5500 5600	1100 1000	4000 3800	19000 17000	_	_	_	_	MCC
MVV-1		09/23/96	19,60	7.56		12.04	76000	14000	14000	11000	1600	7100	17000	_	_	_	6.1	MCC
MVV-1		12/19/96	19.60	7.08	_	12,52	46000		12000	5500	1200 1700	4100 7600	14000	ND	— 280	ND<2	2.7	MCC/CHF
MVV-1 MVV-1		05/09/97 09/11/97	19.60 19.60	7.39 7.50	=	12.21 12.10	80000 100000	7500 7700	14000 19000	12000 19000	2400	11000	ND<2100	IND	200	NU-2	7.2	MCC
MVV-1		12/15/97	19.60	7.61	-	11,99	45000	3500	11000	5300	1500	5200	13000	_	_	_	6.8	MCC
QC-1 (c) 1	12/15/97	_	_	_		45000	_	11000	5400	1400	5100	14000	_	_	_	6	MCC MCC
MVV-1 QC-1 (i		03/11/98 03/11/98	19.60	5.35		14.25	40000 43000	3600	5900 7200	3900 5000	1300 1400	4900 5300	8700 14000	_	_	_	-	MCC
MW-1		06/23/98	19.60	6.63	_	12,97	44000	3700	5900	6200	1800	6200	870		_		6.2	MCC
		06/23/98	_		_	_	47000	-	6000	6400	1800	6300	1000	_	_		2.4	MCC MCC
MW-1 QC-1 6		12/01/98 12/01/98	19.60	6.48	=	13,12	57000 57000	-	7400 6800	12000 11000	2100 1900	8200 7500	7200 8300	_	=	_	2.4	MCC
MVV-1		03/30/99	19.60	5.74		13.86	67000	6500	5700	9400	2500	9400	3200	_		_	2.1	MCC
	c) (03/30/99	-	-	_		64000	6400	5500 3800	9000	2400 2800	9100 11000	3100 ND<1700		_	-	1.3	MCC MCC
MW-1 QC-1 (08/16/99 08/16/99	19.60	7.02	_	12.58	63000 64000	_	3700	9100 8800	2800	11000	ND<1700	_	_	_	-	MCC
MVV-1		12/31/99	19.60	7.45	_	12.15	62000	5100	2900	9400	2700	11000	ND<100	_	_	-	8.3	MCC
		12/31/99			_		67000	4900 490	2900 3200	9700 5500	2800 2000	12000 6700	ND<100 520	=	_	_	7.9	MCC MCC
MW-1 0C-1 (03/31/00	19,60	5,85	-	13.75	48000 54000	490 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 (07/14/00	 19.60	7.60	_	 12,00	72000 65000	2900	4900 3800	14000 11000	2100 2400	9200 8200	ND<200 ND<100	_	_	_	1.4	MCC MCC
		10/04/00	19.60	7.60	=	12,00	68000	2900	3900	13000	2400	9300	ND<100	_	=	_		MCC
MVV-1		12/21/00	19.60	6.91	_	12.69	74000	2500	3800	17000	3400	15000	ND<200	_	_	_	1.3	MCC
		12/21/00	19.60	6.06	_	13.54	69000 55000	2400	2700 2900	12000 7800	2400 2400	11000 9400	ND<550 ND<900		_		0.8	MCC MCC
MVV-1 QC-1 (04/13/01 04/13/01	19,60	-		13.54	51000	_	2300	6100	2000	7900	ND<350	_	-	_		MCC
MVV-1		06/27/01	19.60	6,54	_	13.06	80000	3600	2800	13000	2300	10000	ND<250	_	-	_	1,1	MCC
QC-1 (06/27/01 09/20/01	19.60	7.08	_	12.52	76000 74000	6600	3100 1600	13000 7700	2300 2500	10000 10000	ND<250 ND<200	-	=		0.8	MCC MCC
		09/20/01	13.60	7.00		-	67000	_	1600	7800	2600	10000	ND<200	_		_		MCC
MVV-1		12/21/01	19.60	5.71	_	13.89	58000	5500	2100	11000	2400 2300	10000	ND<720 ND<620	_	=		1,4	MCC MCC
QC-1 (12/21/01	19.60	5.01	_	14.59	56000 6500	1800	2100 74	11000 100	2300	1500	140	_	=	-	4.1	MCC
	(c)	02/04/02			_	_	8000	_	90	130	270	1800	ND<500	_	_	_	_	MCC
MVV-1		05/07/02	19.60	6,10	_	13.50	41000 40000	7900	1300 1300	5200 5200	1700 1700	6300 6400	ND<1000 ND<500	_	_	_	4.3	MCC MCC
QC-1 (05/07/02 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 49000	6800	770 880	4600 4800	1600 1800	6600 6700	ND<1000 ND<1700	=		=		MCC
QC-1 (11/08/02 02/07/03	19.60	5.80	_	13.80	43000	3700	1600	6100	2100	9700	ND<500	***	_		1.1	MCC
MVV-1		05/02/03	19.60	5,60	_	14.00	48000	4600	1100	5900	1800	7300	ND<1000	_	_	_	_	MCC MCC
QC-1 (05/02/03	19.60	6.81	_	12.79	42000	3800	1200 1000	5800 4700	1800 2000	7100 8100	ND<500 ND<500	_	_	_	1.3	MCC
		08/14/03	- 13.50	_	_	_	43000	_	1000	4600	2000	7900	ND<500	_	_	_	_	MCC
MVV-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 6.38		14.38 13.22	20000 39000	3000 3000	540 570	2500 2900	720 2100	2900 9200	ND<50 ND<500	_	_	_	0.01	MCC MCC
MW-1 QC-1		06/30/04 06/30/04	(e) 19,60 —	6.38	_	13,22	_	6800	550	3200	2100	9100	ND<500	_	=	_	_	MCC
MVV-1		10/26/04	19.60	6.00	_	13.60	35000	4400	510	2900	1600	5700	ND<150	-	_	_	2.7	MCC MCC
		10/26/04	19.60	5.04	_	14.56	29000	3300	450 1300	2700 5500	1600 1200	5500 4900	ND<150 ND<500	_	_	_	2.7	MCC
MVV-1 QC-1		03/24/05	19,60	5.04	_	.4.30	31000		830	3800	1000	4500	ND<210	_	_	-	_	MCC
MVV-1		06/14/05	19.60	5,45		14.15	23000	4300	1300	2700	810	2700	ND<500	_		_	2.9	MCC
QC-1 MVV-1		06/14/05 09/12/05	19.60	7.89	_	11.71	60000	4600	1400 4900	3100 8200	810 1900	2900 7300	ND<250 2300	=	_	_	2,6	MCC
		09/12/05	-	7,09	_	_	58000	_	5000	8500	1900	7300	2200	_		_		MCC
MVV-1			(g) 19.60	6.09	_	13.51	54000	2900	8800	3500	970 970	3700 3700	5400	-	_		_	MCC MCC
QC-1 MW-1			(g) — (h) 19,60	5.71	<0.01	13.89	46000 31000	2500	8500 6700	3500 2800	970 980	3700 2800	5200 5400	=	=	_	_	MCC
			(h) —	_	-0.01		31000	-	6900	2900	1000	2800	5800	_	_	_	_	MCC
MVV-1	,	06/12/06	19.60	6.66	sheen	12.94	31000	3100	4800 5700	2200 2300	910 850	2600 2400	3900 4900	_	_		_	MCC MCC
QC-1 MW-1		06/12/06	19.60	7.78	sheen	 11,82	31000 34000	3000	5700 7900	2300 1800	760	2300	6200	_	_	_	_	MCC
		09/08/06	, 5.55				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

					xumpo-		ALIST	O PROJECT					MTAG	OTHER	NADTUAL CAP	BEN:70	DO	LAR
WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATIO (Feet)		DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	(Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/t)	E (ug/l)	X (ug/l)	MTBE (ug/l)	OTHER SVOCs (ug/l)	NAPTHALENÉ (ug/l)	PYRENE (ug/l)		
MW-2	11/04/94	20.31		9.12	0.16	11,31	_	=	=	_		_	_	_	=	_	_	_
MVV-2 MVV-2	01/11/95 02/24/95	20.31 20.31		6.75 7.11	0.18	13.56 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 6.79	0.01 0.01	11.25 13.53		_	_	_	_	_	_	_	_	_	_	_
MVV-2 MVV-2	03/20/96 06/13/96	20.31		6.79 7.41	0.01	13.53	_	_	=	=			_	_	_	_	_	
MVV-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				-	_		33000		4700	170	1600	3900 5400	2400	(d)	420	ND<10	_	MCC
MVV-2 QC-1 (c	12/19/96 12/19/96	20.31		7.37	0.01	12.95	29000 29000	_	1800 580	240 210	1300	5100	_	(a)	420	_	_	MCC
QC-1 (c MW-2	05/09/97	20.31		6.11	0.21	14.36	34000	6700000	4600	260	1500	4300	1600	_	_	_	3.7	MCC
MVV-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				 7.87	0.03	12,46	47000 32000	1100000 68000	4000 4600	420 130	2700 2200	8300 5400	920 ND<470	_	_	_	6	MCC MCC
MVV-2 MVV-2	12/15/97 03/11/98	20,31 20,31		7,87 5,61	0.03	14.84	44000	3800	5200	220	2000	5000	1100	_	-	_	6.2	MCC
MVV-2	06/23/98	20.31		6.74	0.02	13.59	75000	570000	5900	390	3100	8300	8400	_	_	_	6.3	MCC
MVV-2	12/01/98	20.31		7,30	_	13.01	36000	.	3800	73	1500	3900	2000	_	_	_	1.9 1.7	MCC MCC
MVV-2	03/30/99	20,31		6.51	0.13	13,90	23000 30000	23000	5000 5200	100 67	610 1100	870 1800	21000 6000	_	=	_	2.6	MCC
MW-2 MW-2	08/16/99 12/31/99	20.31		8.04 8.20	0.21	12.43 12.12	43000	340000	7600	97	1400	2500	4300		_		9.0	MCC
MVV-2	03/31/00	20.31		6.29	0.01	14.03	26000	200000	4000	58	1100	1500	13000	_	_	***	8.1	MCC
MVV-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 12.61	22000 23000	67000 16000	4700 7500	97 65	1300 770	1000 490	1900 8600	_	220	ND<10	1.8	MCC
MW-2 MW-2	12/21/00	20.31		7.70 7.05	_	13.26	25000	21000	6400	79	790	670	8300	_		_	1.1	MCC
MVV-2	06/27/01	20.31		7.50		12.81	34000	10000	5400	100	520	370	6800	_	_		0.7	MCC
MVV-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 13,56	30000 17000	18000 35000	3000 3600	52 ND<50	1700 960	970 500	ND<100 1200	_	=	_	1.3	MCC
MW-2 MW-2	02/04/02 05/07/02	20.31 20.31		6.75 7.20	_	13.56	16000	59000	3500	43	520	220	3100		_		1.0	MCC
MVV-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 77	ND<250 1900	_	_		0.7	MCC MCC
MW-2	02/07/03	20.31		6.52	_	13.79 13.91	11000 16000	79000	4400 1800	24 23	ND<12 860	210	1900 ND<350	_	Ξ	_	U.7	MCC
MW-2 MW-2	05/02/03 08/14/03	20,31 20,31		6.40 7.77	_	12.54	13000	4300	1600	21	450	80	ND<400	_	_		0.9	MCC
MVV-2	11/14/03	20.31		7.85		12.46	12000	13000	1700	29	600	100	ND<600	_	_		0.7	MCC
MVV-2	03/01/04	20.31		6.10	_	14.21	17000	43000	3900	100	670	430	1800	_	_	_	0.42	MCC MCC
MVV-2 MVV-2	06/30/04 10/26/04	(e) 20.31 20.31		7.61 7.12	-	12.70 13.19	14000	12000 7900	3800 3700	33 47	390 300	72 100	1900 1700	=	=	-	-	MCC
MVV-2 MVV-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 MCC
MVV-2	09/12/05	20.31		8.25	0.01	12.06 13.86	10000 7300	11000	2600 1500	30 18	200 180	ND<10 47	660 ND<250		_	_	2.6	MCC
MW-2 MW-2	01/04/06 04/04/06	(g) 20.31 (h) 20.31		6.45 6.14	<0.01	14.17	9500	130000	2200	35	170	52	ND<250	_	_		_	MCC
MVV-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
MVV-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
MVV-3 MVV-3	01/11/95 02/24/95	20,57 20,57		5,67 6.11	_	14.90 14.46	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	=	_	=	_	-	MCC
MW43	05/25/95	20.57		6.24	_	14.33	91	ND<50	28.0	12.0	2.1	6.5	_	_		_	_	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		_	_	_	4.6	MCC MCC
MW-3	11/16/95 03/20/96	20,57 20,57		8.82 5.44	_	11.75 15.13	ND<50 ND<50	ND<50 ND<50	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5	_	_		_		MCC
MVV-3 MVV-3	03/20/96 06/13/96	20.57 20.57		5.44 6.17	_	14,40	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	_	_		_	MCC
MVV-3	09/23/96	20,57		6.57		14,00	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	NO<0.5	ND<5.0	_		_	4.9	MCC
MVV-3	12/19/96	20.57		6.59	-	13.98	ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5	— ND≤5.0	_	_	_	3.3	MCC MCC
MVV-3 MVV-3	05/09/97 09/11/97	20.57 20.57		7.00 6.92	_	13.57 13.65	ND<50 ND<50	59 82	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<5.0 ND<5.0	_	Ξ	_	7	MCC
MVV-3 MVV-3	09/11/9/ 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
MVV-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
MVV-3	06/23/98	20.57		6.33	_	14.24	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5 ND<0.5	ND<5.0 ND<5.0	=	_	_	5.7 4	MCC
MVV-3	12/01/98 03/30/99	20.57		6,74 5.68	_	13.83 14.89	ND<50 ND<50	ND<50	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<5.0 ND<5.0	_		=	4.6	MCC
MVV-3 MVV-3	03/30/99 08/16/99	20.5		5.66 7.67	_	12.90	ND<50	- 00	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	_	_		2.7	MCC
MVV-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
MVV-3	03/31/00	20.5		5.59	_	14.98	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5 9.5	ND<5.0 ND<5.0	_	_	_	2.8	MCC MCC
MW-3 MW-3	07/14/00 10/04/00	20.57		7.64 8.34	_	12.93 12.23	68 NO<50	ND<50 ND<50	0.89 ND<0.5	1.7 ND<0.5	2.1 ND<0,5	9.5 ND<0.5	ND<5.0	_	_	_	2.0	MCC
MVV-3 MVV-3	10/04/00	20.5		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
MVV-3	04/13/01	20.5		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
MVV-3	06/27/01	20.5	7	7.37	_	13.20	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5 ND<0.5	ND<5.0 ND<5.0	_	_	=	1.9 2.1	MCC
MVV-3	09/20/01	20,5		8.25	***	12.32 14.85	ND<50 ND<50	ND<50 ND<50	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5	ND<0.5 ND<0.5	ND<5.0 ND<5.0	_		_	2.1	MCC
MVV+3 MVV+3	12/21/01 02/04/02	20.5° 20.5°		5,72 5.85	_	14,85	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	=	=	_	4.1	MCC
MVV-3	05/07/02	20.5		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
MVV-3	08/22/02	20.5	7	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 MCC
MW-3	11/08/02	20.5	7	7.67	-	12.90	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	_	_	_	_	MCC

10-210 Q3 06 GW

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

ALISTO PROJECT NO. 10-210

WELL	DATE OF		CASING		DEPTH TO		GROUNDWATER	TPH-G	TPH-D	В	T	E	X	MTBE	OTHER	NAPTHALENE	BENZO- PYRENE	DO	LAB
ID	MONITORING/ SAMPLING		ELEVATION (Feet)	(a)	WATER (Feet)	THICKNESS (Feet)	ELEVATION (b) (Feet)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	SVOCs (ug/l)	(ug/l)	(ug/l)	(ppm)	
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
MVV-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
MVV-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 0.92	MCC MCC
MVV-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 ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<5.0			_	0.92	MCC
MVV-3	06/30/04 (6) }	20.57		7.48 5.47	_	13.09 14.10	ND<50 ND<50	ND<50 ND<50	ND<0.5	ND<0.5 ND<0.5	ND<0.5 ND<0.5	ND<0.5	ND<5.0 ND<5.0	_	_	_	3.0	MCC
MVV-3 MVV-3	10/26/04 03/24/05		20.57 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
MVV-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
MVV-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 (9	2)	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 (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
MV4-3	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
MVV-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
MVV-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
MVV-4	09/11/97		19.69		7.71	_	11.98	40000	6500	2000	3100	1700	7700	3400	_	_	-	6.4	MCC
MVV-4	12/15/97		19.69		7.87	_	11.82	14000	2100	910	690	390	2700	1700	_	_	_	6 5.5	MCC
MW-4	03/11/98		19,69		3.51	_	16.18	2800	780	68	94	72 720	430 2700	140 370		_		5.4	MCC
MVV-4	06/23/98		19.69 19.69		5.21 6.45	_	14.48 13.24	15000 21000	2800	240 580	630 1000	720 530	3600	1700		_	_	4.4	MCC
MVV-4 MVV-4	12/01/98 03/30/99		19,69		5,41	=	13.24	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
MVV-4	12/31/99		19.69		7.71	_	11.98	14000	2000	510	630	600	3100	3500	_	_	_	10.1	MCC
MVV-4	03/31/00		19.69		5.22	_	14.47	14000	1400	470	480	580	2200	2000		_		6.8	MCC
MVV-4	07/14/00		19.69		7.31	_	12.38	37000	4300	770	1500	1800	7200	1700	_	_	_	3,3	MCC
MVV-4	10/04/00		19.69		7.11	_	12.58	47000	3200	870	2000	2600	9800	ND<1500		_		1.7	MCC
MVV-4	12/21/00		19,69		6.86	_	12.83	13000	1800	370	410	460	2300	1500	_	88	ND<10	0.6	MCC MCC
MVV-4	04/13/01		19.69		6.02		13,67	20000	2800	710	640	620	2900	2300	_	_	_	1.0 1.0	MCC
MVV-4	06/27/01		19.69		6,72	_	12.97	23000 36000	2100	510 460	1100 1300	1100 1700	4300 6700	1400 1000	_	_	_	2.0	MCC
MVV-4	09/20/01		19.69 19.69		7.30 4,55	_	12.39 15.14	11000	4400 5600	130	250	480	2400	ND<320	_	-		1.6	MCC
MVV-4 MVV-4	12/21/01 02/04/02		19,69		5,82	_	13.87	50000	12000	3000	8100	1900	7600	ND<500	_	_		2.0	MCC
MVV-4	05/07/02		19.69		6.08	_	13.61	17000	3200	270	820	870	3700	ND<500		_		2.6	MCC
MVV-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
MVV-4	02/07/03		19.69		4.86	_	14.83	13000		520	1300	ND<25	3600	420	_	_	_	2.1	MCC
QC-1 (c)			***		_	_	_	13000	_	510	1200	83	3100	420	_	_	-	_	MCC
MVV-4	05/02/03		19,69		5,45	_	14.24	19000	3600	280	550	810	3600	470	_	_	_	1.2	MCC MCC
MVV-4	08/14/03		19,69		7.20	_	12.49	31000 18000	4100 3300	720 400	810 320	1300 1000	6400 4500	1100 ND<1000	_	_	=	0.7	MCC
MVV-4 QC-1 (c)	11/14/03 11/14/03		19.69		6.92	_	12.77	18000	3300	440	310	1100	4500	ND<1000	_	=	_	-	MCC
QC-1 (c) MVV-4	03/01/04		19.69		5,10	_	14.59	15000	2500	110	210	580	2700	240		_		0.61	MCC
QC-1 (c)			15.05		-		-	15000	_	110	220	610	2800	250	_		_	-	MCC
MW-4		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
MVV-4	03/24/05		19,69		4,23	_	15.46	6600	1900	62	29	190	960	ND<120		_	_	2.0	MCC
MVV-4	06/14/05		19.69		5.58	_	14.11	23000	5600	160	510	1200	4000	ND<500	_	_		2.1 2.2	MCC
MVV-4	09/12/05		19.69		7.84		11.85	24000 20000	4000 2800	1400 740	640 350	1400 930	3900 2900	1400 1100	_		_	2.2	MCC
MVV-4 MVV-4		g)	19,69 19,69		4.65 4.62	_	15.04 15.07	8100	2000	300	64	490	1200	530	_	_	_	_	MCC
MVV-4	06/12/06	h)	19.69		6.07	sheen	13.62	24000	4500	270	390	1300	3600	340	-	_	_	_	MCC
MW-4		[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)			=		_	=		ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5		_	_		_	MCC
QC-2 (f)					_	_	_	ND<50	_	ND<0.5	ND<0.5	ND<0.5	ND<0.5	_	_		_	_	MCC
QC-2 (f)			_		-	-	_	ND<50		ND<0.5	ND<0.5	ND<0.5	ND<0.5		_	-	_		MCC
QC-2 (f)			_		_		_	ND<50	_	ND<0.5	ND<0.5	ND<0.5	ND<0.5		_		_		MCC
QC-2 (f)					_	_		ND<50	-	ND<0.5	ND<0.5	ND<0.5	ND<0.5	_	_	_	_	_	MCC MCC
QC-2 (f)	06/13/96		_		_		-	ND<50	_	ND<0.5	ND<0.5	ND<0.5	ND<0.5		_	-	_	-	MCC
ABBREVIA	TIONS:	-					***************************************		NOTES:								10/201		

Total petroleum hydrocarbons as gasoline using EPA Methods 5030/8015 Total petroleum hydrocarbons as diesel using EPA Methods 3510/8015 Benzene using EPA Methods 5030/8020 Totulene using EPA Methods 5030/8020 Totulene using EPA Methods 5030/8020 Total xylenes using EPA Methods 5030/8020 Methyl tert burlyl ether using EPA Methods 5030/8020 Semivolable organic compounds using EPA Methods 5270 Dissolved oxygen Micrograms per liter Parts per million Not analyzed/applicable/measurable Not detected above reported detection limt McCampbell Analytical, Inc. Chromalab, Inc. TPH-G TPH-D

X MTBE SVOCs DO ug/I ppm

Top of casing surveyed relative to mean sea level.

Groundwater elevations expressed in feet above mean sea level, and adjusted assuming a specific gravity of 0.75 for free product.

adjusted assuming a specific gravity of U.75 for free pr Blind duplicate. Other SVOCs detected at concentrations of 200 ug/l 2-methylnapthalene and 14 ug/l phenanthrene. Wells monitored 6/15/04 (c) (d)

veels montored or 1504.
Travel blank.
4th Quarter 2005 sampling
1st Quarter 2006 sampling
Well recharge was exceedingl slow; not to be used in preparing contours

APPENDIX B

GROUNDWATER MONITORING/ WELL PURGING DATA SHEETS

Site Name	TRA OI	V 1701 PAR	K ST ALE	HUEDA	W	Vell No. ML	UI	
	605		4- 21,714		D	Date 12/10/	15	
	er (ft.) _ 8.					heen YES		5.
Well Depth		,2				ree Product Thickne	-0	-
Well Diame		2"					lethod PERISTA	LIV FILM
	mL/minute)						ATED PE TI	
		52			2	NO PLANCE	ALLD IL II	327100
Start Purge	lime / [50					A 11 1	
	Vol. Purged	Depth to	11	Electrical Conductivity	Temperature	Dissolved	Oxidation/ Reduction Potential	Turbidity
Time	(mL)	Water (ft.)	рН	(μS/cm)	(C°)	Oxygen (mg/L)	(mV)	(NTU) 19.1
1153	200	8,52	7.00	1164	22.1	2.39	-154.8	
1156	800	8.59	6.93	1168	22.3	1.71	-166.6	3.79
1159	1,400	8,65	6.93	1138	<i>a</i> 2.3	1,04	-170.6	2.01
1202	2,000	8.68	6,94	1134	22.3	0.85	-173.1	0.30
1205	2,600	8.68	6.93	1137	22.3	0.76	-174.8	0.43
1208	3,200	8.69	6.93	1143	22,3	0.71	-176.3	
			400000000000000000000000000000000000000				1	-
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NOTES		5000	OPTA -	AMN OH	EGNONS	ALM DIE.		
Stability Par						and Four		
p.H. = +/- 0. Sp. Conduct Turbidity = D.O. = +/- 1	tivity = +/-3% +/- 10%	- MW L	courte	EDAT I	au			

Site Name	TRADIL	11701 AR	KSt., ALAME	DA		Well No	WZ	
	0058					Date 12/10/	15	_
	er (ft.)					Sheen Nod	-	
		Cwith add	deoupling)			Free Product Thickn	ess	
Well Diamet		2"	, 0			Sample Collection N	Method PERISTA	LTIC PUMP
	nL/minute)						SED PETU	
	Time 09							
							Oxidation/	
	Vol. Purged	Depth to		<u>Electrical</u> <u>Conductivity</u>	Temperature	Dissolved	Reduction Potential	Turbidity
Time	(mL)	Water (ft.)	pH 3	(µS/cm)	(C°)	Oxygen (mg/L)	(mV)	(NTU)
0950	200	9,40	6,53	1031	21.9	2.18	-148.4	1.3/
0953	800	9,47	6,67	1050	21.9	1.43	-169.8	0.75
0956	1,400	9.50	6.71	1056	21.9	1.14	-178.6	0,62
0959	2,000	9,51	6.75	1054	21,9	manufacture of the second	-183.7	0,42
1002		9.53	6.76	1049	22.0		-185.5	0,24
1005	3,200	9,55	6.76	1040	21.9	0.83	-187.4	0.10
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NOTES		Sized	TOTOR;	NOSHER	EN ON S	AMPIF.		
Stability Par p.H. = +/- 0. Sp. Conduct Turbidity = D.O. = +/- 1	1 tivity = +/-3% +/- 10%		COLLECT		-			

189	un3	Vell No.	v	EDA.	KST, ALAME	/1701 AR	TRADIL	Site Name
	15	Date 12/10		3.77) FLACE			Job Number
	SE	heen NOL				69	-	TOC to Wat
_	ess Ø	ree Product Thickne				9.1		Well Depth
ALTIC PLIM	ethod RERIST					? "		Well Diame
UBING.	TED PET	ND DEDICA				The second secon	nL/minute)	
			-				Time 09	
	Oxidation/						· mie	Jun 1 uige
Turbidity	Reduction Potential	Dissolved	Temperature	Electrical Conductivity		Depth to	Vol. Purged	
(NTU)	(mV)	Oxygen (mg/L)	(C°)	(µS/cm)	рН	Water (ft.)	(mL)	Time
121	-61.7	2.80	20.6	458.6	6.85	8.83	200	0906
10.57	-40.1	2.16	20,8	326.4	6.59	8.95	800	0909
17.98	-20.4	1.86	20.9	285.0	6.44	9.11	1,400	0912
48.51	- 23.0	1.77	2/1	285.1	6.43	9.15	2,000	0915
10,44	- 23,0	1.71	21.4	284.5	6.42	9.25	2,600	0918
9.81	-20.1	1.74	21,4	284.4	6.41	9.30	3,200	0921
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	<u> </u>	E 092	SAUPL	SHEENON	DOR OR	100 0		NOTES
				TED AT			1 ivity = +/-3% +/- 10%	Stability Par p.H. = +/- 0. Sp. Conduct Turbidity = D.O. = +/- 1

Site Name	TRAOIL	1701 PA	RK St, ALA	HEDA	•	Well No	04	
Job Number		_				Date 12/10/1	5	
	r(ft.) 8,					Sheen UO1	VE	-
Well Depth (f	ft.) 10	.8				Free Product Thickness	s_Ø	
Well Diamete	er2"		8			Sample Collection Me	thod PERIST	ALTIC PUMP
Flow Rate (m	L/minute)	200				AND DEDIC		
Start Purge T	ime 14	18						
	Vol. Purged	Depth to		Electrical Conductivity	Temperature	Dissolved	Oxidation/ Reduction Potential	Turbidity
Time	(mL)	Water (ft.)	pH -	(µS/cm)	(C°)	Oxygen (mg/L)	(mV)	(NTU)
1419	200	9.81	6,77	648	18.4	2.36	-98.9	8.54
1422	800	9.48	6.79	649	18,5	1.85	-104.2	2.06
1425	1,400	10.08	6.81	656	18.7	1,47	-91.5	1.12
1428	2,000	10.42	6,81	662	18.7	1.48	-89,4	0.66
14 30	2,600	WELL :	DEWATER	ED				3
1434	3200				-			
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NOTES		SLIGHT	ODOR; N	JOSHEEN	ONSA	MPLE		
Stability Para p.H. = +/- 0. Sp. Conducti Turbidity = D.O. = +/- 10	1 vity = +/-3% +/- 10%			CTED AT	The state of the s			

Site Name	TRA OI	4 1701 BRI	KSI.ALAM	EDA		Well No.	w2	
	005	į.	,			Date 12/10/	15	-
TOC to Water	1/22	.00				Sheen NON	E	2 20
Well Depth	(ft.) 33	3,5				Free Product Thickness	ss	
Well Diamet		4"				Sample Collection Me	ethod PERIST	ALTIC PUMP
Flow Rate (r	mL/minute)	200				AND NEW	LINUSED	HE TUBING.
Start Purge	Time 10	35						
Time	Vol. Purged (mL)	Depth to Water (ft.)	рН	Electrical Conductivity (µS/cm)	Temperature (C°)	<u>Dissolved</u> Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
1036	200	8.13	6,89	887	21.5	2,02	-140.5	1.71
1039	800	8.16	6.94	901	21.7	1.40	-156.4	0
1042	1,400	8.18	6,92	902	21.8	0,97	-167,9	
1045	2,000	8.20	6,91	901	21,8	0,89	-170.9	0
1048	2,600	8.21	6,93	902	21.9	0.79	-175.5	_0_
1051	3,200	8,22	6,91	902	21.9	0.77	-172,3	0
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NOTES		NO ODOR	OR SHE	en on s	MPLE.			
Stability Par p.H. = +/- 0. Sp. Conduct Turbidity = D.O. = +/- 1	1 tivity = +/-3% +/- 10%	EW2	COLLECT	ED AT I	055	No obas	OR SHEE	N

Site Name	TRACIL	/1701 ARK	St., ALAI	HEDA	V	Vell No. E	N4	
	0058	(,		D	Date 12/10)	15	
TOC to Water		,00			S	heen No	DNE	
Well Depth	(ft.) 21	. 8			F	ree Product Thickne	essØ	
Well Diamet	4	33			S	ample Collection M	lethod PERISTA	LTIC
	mL/minute)	200			E	SMP4 NE	N LINUSED !	ETUBING
	Time 12					•		
							Oxidation/	
	Vol. Purged	Depth to		Electrical Conductivity	Temperature	Dissolved	Reduction Potential	Turbidity
Time	(mL)	Water (ft.)	pH	(μS/cm)	(C°)	Oxygen (mg/L)	(mV)	(NTU)
1231	200	7.09	6.73	931	22.0	4.56	-136.8	1.35
1234	800	7,15	6.84	930	22.0	1.67	-153.6	0.59
1237	1,400	7,20	6,85	930	22.0	1.10	-162.3	0.21
12 40	2,000	7,25	6.86	930	22.0	0.90	-167.7	0.22
1243	/	7,28	6,87	930	22.0	0.80	-171.7	0.88
1246	3,200	7.30	6.87	930	22.0	0.74	-175,2	0.91
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NOTES		SLIGHT	made	SHEEN	ON SAMP	LE		
Stability Pa	2.22			CTED AT				
	tivity = +/-3% = +/- 10%			14-11				

Site Name	KTRA OU	L/1701 BA	RK ST, ALA	MEDA		Well No. EW	5	2	
	0058					Date 12/10/	15	_	
TOC to Wate	er (ft.)	15				Sheen NON	E	_	
Well Depth ((ft.) 23	1.7				Free Product Thickne	ssØ	_	
Well Diamet		ir				Sample Collection Me	ethod PERIST,	ALTIC PUN	uP
Flow Rate (n	•	200				AND NEW			
Start Purge T		45							
							Oxidation/		
Time	Vol. Purged (mL)	Depth to Water (ft.)	pН	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Reduction Potential (mV)	Turbidity (NTU)	
1346	200	7,25	6.87	802	20,4	2.32	-145.6	1.58	
1349	800	7,32	6,86	803	20.4	1.49	-155.2	1.38	
1352	1,400	7.35	6,86	803	20,4	1.14	-160.5	0.79	
1355	2,000	7.38	6.87	803	20.3	0.95	-165.3	2.24	
1358	2,600	7.40	6.88	803	20.4	0.80	-170.7	1.48	
1401	3,200		6.89	804	20.4	0.77	-172.1	1.21	
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NOTES		NOODOR	OR SHE	EN ON:	SAMPLE				
Stability Par p.H. = +/- 0. Sp. Conduct Turbidity = D.O. = +/- 1	1 ivity = +/-3% +/- 10%			TED AT					

Site Name X	TRA OIL	-11701 PA	RIC St., A	LAMEDA	,	Well No.	W2	
Job Number			X-1		1			
	er (ft.)					Date 13/10/1 Sheen NON		-
	(ft.) 18				j	Free Product Thickne	essØ	
Well Diamet	1 - 44					Sample Collection M	ethod PERISTA	ALTIC PUR
Flow Rate (n	mL/minute)	200				AND NEW L	INUSED PE	TUBING
Start Purge T	Time 14	53						
							Oxidation/	
	Vol. Purged	Depth to		Electrical Conductivity	Temperature	Dissolved	Reduction Potential	Turbidity
Time	(mL)	Water (ft.)	<u>pH</u>	(μS/cm)	(C°)	Oxygen (mg/L)	(mV)	(NTU)
1454	200	7.52	6.91	648	19.1	2,60	-1244	2.54
457	800	7.61	6.95	655	19,1	1.41	-126.0	2,28
1500	1,400	7.65	6.99	654	19.1	1.04	-133.6	1.23
1503	2,000	7.68	6.99	655	19.1	0.89	-137.9	1,22
1506	2,600	7,69	6.99	655	19.1	0,82	-140.3	1.08
1509	3,200	7,70	6,99	655	19.2	0.75	-143,0	1.55
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NOTES		1000	ne Ae	CHEFIN	ON SAMY	out.		
Stability Par p.H. = +/- 0. Sp. Conduct Turbidity = D.O. = +/- 1	1 tivity = +/-3% +/- 10%			TED AT	The second secon			

Site Name	KTRA OI	L/1701 F	ARKST, AL	MEDA		Well No. TW	1	_
	0058					Date 12/10/1	5	
	er (ft.) 2,					Sheen NOA		_
	(ft.) 23,					Free Product Thickness	_	=
Well Diame	à i					Sample Collection Me	ethod PRIST	ALTIC PUMP
	mL/minute)							E TUBING.
	Time [}			
		-					Oxidation/	
Time	Vol. Purged (mL)	Depth to Water (ft.)	pН	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Potential (mV)	Turbidity (NTU)
1117	200	8,61	10.08	389.8	22.4	7.59	-87,6	28.17
1120	800	8.82	10.28	397.8	22.4	7,55	-83.2	26-09
1123	1,400	9,41	10.18	398.3	22.5	6.71	-74.6	26.19
1126	2,000	9.65	9.58	416.5	22.5	4.15	- 65,7	24.18
1129	2,600	9,81	9,28	447,2	22,4	2.75	-67.4	20:82
1132	3,200	9.97	9.08	467.2	22.5	1.98	-73.2	16.34
1135	3,800	10.08	9.01	478.4	22.5	1.76	-78,4	14.01
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APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION



"When Quality Counts"

Analytical Report

WorkOrder: 1512553 **Amended:** 01/08/2016

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 Park St. Alameda, CA

Project Received: 12/11/2015

Analytical Report reviewed & approved for release on 12/21/2015 by:

Angela Rydelius, Laboratory Manager

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



Glossary of Terms & Qualifier Definitions

Client: P & D Environmental

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA

WorkOrder: 1512553

Glossary Abbreviation

95% Interval 95% Confident Interval

DF Dilution Factor

DI WET (DISTLC) Waste Extraction Test using DI water

DISS Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)

DLT Dilution Test
DUP Duplicate

EDL Estimated Detection Limit

ITEF International Toxicity Equivalence Factor

LCS Laboratory Control Sample

MB Method Blank

MB % Rec % Recovery of Surrogate in Method Blank, if applicable

MDL Method Detection Limit

ML Minimum Level of Quantitation

MS Matrix Spike

MSD Matrix Spike Duplicate

N/A Not Applicable

ND Not detected at or above the indicated MDL or RL

NR Data Not Reported due to matrix interference or insufficient sample amount.

PDS Post Digestion Spike

PDSD Post Digestion Spike Duplicate

PF Prep Factor

RD Relative Difference

RL Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)

RPD Relative Percent Deviation
RRT Relative Retention Time

SPK Val Spike Value

SPKRef Val Spike Reference Value

SPLP Synthetic Precipitation Leachate Procedure
TCLP Toxicity Characteristic Leachate Procedure

TEQ Toxicity Equivalents

WET (STLC) Waste Extraction Test (Soluble Threshold Limit Concentration)

Glossary of Terms & Qualifier Definitions

Client: P & D Environmental

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA

stoddard solvent/mineral spirit (?)

WorkOrder: 1512553

Analytical Qualifiers

e11

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
d17	Reporting limit for MTBE raised due to co-elution with non-target peaks.
e3	aged diesel is significant
e4	gasoline range compounds are significant.



Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030BDate Prepared:12/15/15-12/18/15Analytical Method:SW8260B

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
MW1	1512553-001B Water 12/10/2015 12:10 GC28		114224		
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		25	50	12/17/2015 01:53
t-Butyl alcohol (TBA)	2100		100	50	12/17/2015 01:53
1,2-Dibromoethane (EDB)	ND		25	50	12/17/2015 01:53
1,2-Dichloroethane (1,2-DCA)	ND		25	50	12/17/2015 01:53
Diisopropyl ether (DIPE)	ND		25	50	12/17/2015 01:53
Ethyl tert-butyl ether (ETBE)	ND		25	50	12/17/2015 01:53
Methyl-t-butyl ether (MTBE)	580		25	50	12/17/2015 01:53
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
Dibromofluoromethane	110		70-130		12/17/2015 01:53
Toluene-d8	111		70-130		12/17/2015 01:53
Analyst(s): KF					

Analyst(s): KF

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
MW2	1512553-002B	Water	12/10/20	015 10:10 GC10	114224
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		1.0	2	12/18/2015 12:32
t-Butyl alcohol (TBA)	16		4.0	2	12/18/2015 12:32
1,2-Dibromoethane (EDB)	ND		1.0	2	12/18/2015 12:32
1,2-Dichloroethane (1,2-DCA)	ND		1.0	2	12/18/2015 12:32
Diisopropyl ether (DIPE)	ND		1.0	2	12/18/2015 12:32
Ethyl tert-butyl ether (ETBE)	ND		1.0	2	12/18/2015 12:32
Methyl-t-butyl ether (MTBE)	6.1		1.0	2	12/18/2015 12:32
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	110		70-130		12/18/2015 12:32
Toluene-d8	89		70-130		12/18/2015 12:32
Analyst(s): KF					



Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030BDate Prepared:12/15/15-12/18/15Analytical Method:SW8260B

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
MW3	1512553-003B Water		12/10/20	114224	
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.50	1	12/15/2015 14:44
t-Butyl alcohol (TBA)	ND		2.0	1	12/15/2015 14:44
1,2-Dibromoethane (EDB)	ND		0.50	1	12/15/2015 14:44
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	12/15/2015 14:44
Diisopropyl ether (DIPE)	ND		0.50	1	12/15/2015 14:44
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	12/15/2015 14:44
Methyl-t-butyl ether (MTBE)	ND		0.50	1	12/15/2015 14:44
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	109		70-130		12/15/2015 14:44
Toluene-d8	98		70-130		12/15/2015 14:44
Analyst(s): KF					

Lab ID **Client ID** Matrix **Date Collected Instrument Batch ID** MW4 1512553-004B Water 12/10/2015 14:40 GC10 114224 <u>DF</u> **Analytes** Result <u>RL</u> **Date Analyzed** ND tert-Amyl methyl ether (TAME) 0.50 1 12/15/2015 23:20 t-Butyl alcohol (TBA) 92 2.0 1 12/15/2015 23:20 ND 1,2-Dibromoethane (EDB) 0.50 1 12/15/2015 23:20 1,2-Dichloroethane (1,2-DCA) ND 0.50 1 12/15/2015 23:20 ND 12/15/2015 23:20 Diisopropyl ether (DIPE) 0.50 1 Ethyl tert-butyl ether (ETBE) ND 0.50 12/15/2015 23:20 Methyl-t-butyl ether (MTBE) 36 12/15/2015 23:20 0.50 1 Surrogates **REC (%) Limits** Dibromofluoromethane 90 70-130 12/15/2015 23:20 Toluene-d8 70-130 12/15/2015 23:20 Analyst(s):



Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030BDate Prepared:12/15/15-12/18/15Analytical Method:SW8260B

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
EW2	1512553-005B	Water	12/10/20	015 10:55 GC10	114224
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		1.0	2	12/16/2015 00:00
t-Butyl alcohol (TBA)	81		4.0	2	12/16/2015 00:00
1,2-Dibromoethane (EDB)	ND		1.0	2	12/16/2015 00:00
1,2-Dichloroethane (1,2-DCA)	ND		1.0	2	12/16/2015 00:00
Diisopropyl ether (DIPE)	ND		1.0	2	12/16/2015 00:00
Ethyl tert-butyl ether (ETBE)	ND		1.0	2	12/16/2015 00:00
Methyl-t-butyl ether (MTBE)	30		1.0	2	12/16/2015 00:00
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	86		70-130		12/16/2015 00:00
Toluene-d8	96		70-130		12/16/2015 00:00
Analyst(s): KF					

Lab ID **Client ID** Matrix **Date Collected Instrument Batch ID** EW4 1512553-006B Water 12/10/2015 12:50 GC28 114224 <u>DF</u> **Analytes** Result <u>RL</u> **Date Analyzed** ND 10 20 tert-Amyl methyl ether (TAME) 12/17/2015 00:37 t-Butyl alcohol (TBA) 760 40 20 12/17/2015 00:37 ND 1,2-Dibromoethane (EDB) 10 20 12/17/2015 00:37 1,2-Dichloroethane (1,2-DCA) ND 10 20 12/17/2015 00:37 Diisopropyl ether (DIPE) ND 10 20 12/17/2015 00:37 Ethyl tert-butyl ether (ETBE) ND 10 20 12/17/2015 00:37 Methyl-t-butyl ether (MTBE) 10 12/17/2015 00:37 480 Surrogates **REC (%) Limits** Dibromofluoromethane 108 70-130 12/17/2015 00:37 Toluene-d8 112 70-130 12/17/2015 00:37

Analyst(s):



Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030BDate Prepared:12/15/15-12/18/15Analytical Method:SW8260B

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date (Collected Instrument	Batch ID
EW5	1512553-007B	Water	12/10/2	015 14:05 GC28	114224
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		12	25	12/17/2015 01:15
t-Butyl alcohol (TBA)	500		50	25	12/17/2015 01:15
1,2-Dibromoethane (EDB)	ND		12	25	12/17/2015 01:15
1,2-Dichloroethane (1,2-DCA)	ND		12	25	12/17/2015 01:15
Diisopropyl ether (DIPE)	ND		12	25	12/17/2015 01:15
Ethyl tert-butyl ether (ETBE)	ND		12	25	12/17/2015 01:15
Methyl-t-butyl ether (MTBE)	340		12	25	12/17/2015 01:15
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
Dibromofluoromethane	112		70-130		12/17/2015 01:15
Toluene-d8	111		70-130		12/17/2015 01:15
Analyst(s): KF					

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Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
OW2	1512553-008B	Water	12/10/20	015 15:15 GC10	114224
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		1.0	2	12/16/2015 02:01
t-Butyl alcohol (TBA)	20		4.0	2	12/16/2015 02:01
1,2-Dibromoethane (EDB)	ND		1.0	2	12/16/2015 02:01
1,2-Dichloroethane (1,2-DCA)	ND		1.0	2	12/16/2015 02:01
Diisopropyl ether (DIPE)	ND		1.0	2	12/16/2015 02:01
Ethyl tert-butyl ether (ETBE)	ND		1.0	2	12/16/2015 02:01
Methyl-t-butyl ether (MTBE)	5.7		1.0	2	12/16/2015 02:01
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
Dibromofluoromethane	100		70-130		12/16/2015 02:01
Toluene-d8	97		70-130		12/16/2015 02:01
Analyst(s): KF					

Analytical Report

Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030BDate Prepared:12/15/15-12/18/15Analytical Method:SW8260B

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
IW1	1512553-009B Water		12/10/20	015 11:38 GC10	114224
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
tert-Amyl methyl ether (TAME)	ND		0.50	1	12/16/2015 02:41
t-Butyl alcohol (TBA)	53		2.0	1	12/16/2015 02:41
1,2-Dibromoethane (EDB)	ND		0.50	1	12/16/2015 02:41
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	12/16/2015 02:41
Diisopropyl ether (DIPE)	ND		0.50	1	12/16/2015 02:41
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	12/16/2015 02:41
Methyl-t-butyl ether (MTBE)	5.7		0.50	1	12/16/2015 02:41
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	93		70-130		12/16/2015 02:41
Toluene-d8	98		70-130		12/16/2015 02:41

Analytical Report

Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030B

Date Prepared: 12/12/15-12/18/15 **Analytical Method:** SW8021B/8015Bm

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
MW1	1512553-001A	Water	12/10/20	15 12:10 GC3	114149
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g)	18,000		500	10	12/12/2015 23:18
MTBE	ND		1000	10	12/12/2015 23:18
Benzene	5600		50	100	12/15/2015 05:31
Toluene	110		5.0	10	12/12/2015 23:18
Ethylbenzene	400		5.0	10	12/12/2015 23:18
Xylenes	630		15	10	12/12/2015 23:18
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	201	S	70-130		12/12/2015 23:18
Analyst(s): IA			Analytical Com	ments: d1,d1,d17,c4	

Client ID Lab ID Matrix Date Collected Instrument Batch ID

Lab ID Matrix	Dute 0	oncerea monument	Daten ID	
1512553-002A Water	12/10/2015 10:10 GC3		114351	
Result	<u>RL</u>	<u>DF</u>	Date Analyzed	
1400	100	2	12/18/2015 20:25	
ND	10	2	12/18/2015 20:25	
25	1.0	2	12/18/2015 20:25	
4.6	1.0	2	12/18/2015 20:25	
5.8	1.0	2	12/18/2015 20:25	
4.2	3.0	2	12/18/2015 20:25	
<u>REC (%)</u>	<u>Limits</u>			
127	70-130		12/18/2015 20:25	
	Analytical Com	ments: d1		
	1512553-002A Water Result 1400 ND 25 4.6 5.8 4.2 REC (%)	Result RL 1400 100 ND 10 25 1.0 4.6 1.0 5.8 1.0 4.2 3.0 REC (%) Limits 127 70-130	Result RL DF 1400 100 2 ND 10 2 25 1.0 2 4.6 1.0 2 5.8 1.0 2 4.2 3.0 2 REC (%) Limits	

Analytical Report

Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030B

Date Prepared: 12/12/15-12/18/15 **Analytical Method:** SW8021B/8015Bm

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID Matrix	Date Collected Instrument	Batch ID
MW3	1512553-003A Water	12/10/2015 09:25 GC3	114149
<u>Analytes</u>	Result	<u>RL</u> <u>DF</u>	Date Analyzed
TPH(g)	ND	50 1	12/13/2015 01:17
MTBE	ND	5.0 1	12/13/2015 01:17
Benzene	ND	0.50 1	12/13/2015 01:17
Toluene	ND	0.50 1	12/13/2015 01:17
Ethylbenzene	ND	0.50 1	12/13/2015 01:17
Xylenes	ND	1.5 1	12/13/2015 01:17
<u>Surrogates</u>	REC (%)	<u>Limits</u>	
aaa-TFT	85	70-130	12/13/2015 01:17
Analyst(s): IA			

Client ID Lab ID Matrix Date Collected Instrument Batch ID

MW4	1512553-004A Water	12/10/2015 14:40 GC7	114243	
Analytes	<u>Result</u>	<u>RL</u> <u>DF</u>	Date Analyzed	
TPH(g)	4100	500 10	12/15/2015 21:49	
MTBE	ND	150 10	12/15/2015 21:49	
Benzene	560	5.0 10	12/15/2015 21:49	
Toluene	6.1	5.0 10	12/15/2015 21:49	
Ethylbenzene	39	5.0 10	12/15/2015 21:49	
Xylenes	87	15 10	12/15/2015 21:49	
<u>Surrogates</u>	REC (%)	<u>Limits</u>		
aaa-TFT	111	70-130	12/15/2015 21:49	
Analyst(s): IA		Analytical Comments: d1,d17		

Analytical Report

Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030B

Date Prepared: 12/12/15-12/18/15 **Analytical Method:** SW8021B/8015Bm

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
EW2	1512553-005	A Water	12/10/20	015 10:55 GC3	114351
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g)	3600		250	5	12/18/2015 17:56
MTBE	ND		120	5	12/18/2015 17:56
Benzene	650		2.5	5	12/18/2015 17:56
Toluene	9.2		2.5	5	12/18/2015 17:56
Ethylbenzene	47		2.5	5	12/18/2015 17:56
Xylenes	ND		7.5	5	12/18/2015 17:56
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	217	S	70-130		12/18/2015 17:56
Analyst(s): IA			Analytical Com	nments: d1,d17,c4	

EWA	4540550 0004	Watan	40/40/0045 40 50 000	444054
Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID

EW4	1512553-006A Water	12/10/2015 12:50 GC3	114351
<u>Analytes</u>	Result	<u>RL</u> <u>DF</u>	Date Analyzed
TPH(g)	15,000	2500 50	12/16/2015 19:52
MTBE	710	250 50	12/16/2015 19:52
Benzene	4400	25 50	12/16/2015 19:52
Toluene	41	25 50	12/16/2015 19:52
Ethylbenzene	250	25 50	12/16/2015 19:52
Xylenes	ND	75 50	12/16/2015 19:52
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	
aaa-TFT	100	70-130	12/16/2015 19:52
Analyst(s): IA		Analytical Comments: d1	

Analytical Report

Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030B

Date Prepared: 12/12/15-12/18/15 **Analytical Method:** SW8021B/8015Bm

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
EW5	1512553-007A	Water	12/10/20	15 14:05 GC7	114243
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g)	11,000		1000	20	12/16/2015 00:19
MTBE	480		100	20	12/16/2015 00:19
Benzene	2000		10	20	12/16/2015 00:19
Toluene	50		10	20	12/16/2015 00:19
Ethylbenzene	430		10	20	12/16/2015 00:19
Xylenes	220		30	20	12/16/2015 00:19
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	128		70-130		12/16/2015 00:19
Analyst(s): IA			Analytical Comr	ments: d1 c4	

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

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
OW2	1512553-008A	Water	12/10/2015 15:15 GC3		114351
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g)	1000		100	2	12/18/2015 18:56
MTBE	ND		10	2	12/18/2015 18:56
Benzene	2.8		1.0	2	12/18/2015 18:56
Toluene	1.6		1.0	2	12/18/2015 18:56
Ethylbenzene	37		1.0	2	12/18/2015 18:56
Xylenes	58		3.0	2	12/18/2015 18:56
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	106		70-130		12/18/2015 18:56
Analyst(s): IA			Analytical Com	nments: d1	

Analytical Report

Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW5030B

Date Prepared: 12/12/15-12/18/15 **Analytical Method:** SW8021B/8015Bm

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

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

Client ID	Lab ID	Matrix	Date C	follected Instrument	Batch ID	
IW1	1512553-009	A Water	12/10/20	015 11:38 GC3	114149	
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed	
TPH(g)	2200		50	1	12/13/2015 01:47	
MTBE	ND		15	1	12/13/2015 01:47	
Benzene	57		0.50	1	12/13/2015 01:47	
Toluene	4.3		0.50	1	12/13/2015 01:47	
Ethylbenzene	64		0.50	1	12/13/2015 01:47	
Xylenes	140		1.5	1	12/13/2015 01:47	
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>			
aaa-TFT	590	S	70-130		12/13/2015 01:47	
Analyst(s): IA	Analytical Comments: d1,d17,c4					



P & D Environmental **Client:** WorkOrder: 1512553 **Date Received:** 12/11/15 20:46 **Extraction Method: SW3510C Date Prepared:** 12/11/15 **Analytical Method: SW8015B**

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit:

Total Extractable	Petroleum	Hydrocarbons	w/out SG	Clean-Un
I Ottal Linki actualic	I cu oicuiii	II I GI OCGI DOIID	m/out DO	Cicuii Cp

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID	
MW1	1512553-001A Water		12/10/20	015 12:10 GC11B	114125	
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed	
TPH-Diesel (C10-C23)	2400		50	1	12/14/2015 17:55	
TPH-Motor Oil (C18-C36)	ND		250	1	12/14/2015 17:55	
Surrogates	REC (%)		<u>Limits</u>			
C9	114		70-130		12/14/2015 17:55	
Analyet(e): TK			Analytical Com	ments: e4		

Analyst(s): Analytical Comments: e4

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID	
MW2	1512553-002A	Water	er 12/10/2015 10:10 GC11B		114125	
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed	
TPH-Diesel (C10-C23)	3300		50	1	12/14/2015 19:03	
TPH-Motor Oil (C18-C36)	1800		250	1	12/14/2015 19:03	
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
C9	116		70-130		12/14/2015 19:03	
Analyst(s): TK			Analytical Com	ments: e3 e4		

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
MW3	1512553-003A	Water	12/10/2	015 09:25 GC11B	114125
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	ND		50	1	12/14/2015 23:37
TPH-Motor Oil (C18-C36)	ND		250	1	12/14/2015 23:37
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
C9	114		70-130		12/14/2015 23:37
Analyst(s): TK					



P & D Environmental **Client:** WorkOrder: 1512553 **Date Received:** 12/11/15 20:46 **Extraction Method: SW3510C Date Prepared:** 12/11/15 **Analytical Method:** SW8015B

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit:

Total Extractable	Petroleum	Hydrocarbons	w/out SG	Clean-Un
I Ottal Linki actualic	I cu oicuiii	II I GI OCGI DOIID	m/out DO	Cicuii Cp

Client ID	Lab ID	Matrix	Date C	Collected Instrument	Batch ID
MW4	1512553-004A	Water	12/10/20	015 14:40 GC11B	114125
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	1200		50	1	12/15/2015 01:54
TPH-Motor Oil (C18-C36)	ND		250	1	12/15/2015 01:54
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
C9	119		70-130		12/15/2015 01:54
Analyst(s): TK			Analytical Com	ments: e4	

Analyst(s): Analytical Comments: e4

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
EW2	1512553-005A	Water	12/10/20	015 10:55 GC11B	114125
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	1100		50	1	12/15/2015 04:11
TPH-Motor Oil (C18-C36)	ND		250	1	12/15/2015 04:11
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
C9	114		70-130		12/15/2015 04:11
Analyst(s): TK			Analytical Com	ments: e4	

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID	
EW4	1512553-006A	Water	12/10/2015 12:50 GC11B		114125	
<u>Analytes</u>	Result		<u>RL</u>	<u>DF</u>	Date Analyzed	
TPH-Diesel (C10-C23)	1800		50	1	12/15/2015 06:28	
TPH-Motor Oil (C18-C36)	ND		250	1	12/15/2015 06:28	
<u>Surrogates</u>	REC (%)		<u>Limits</u>			
C9	120		70-130		12/15/2015 06:28	
Analyst(s): TK			Analytical Com	ments: e4		

Client ID

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

Analytical Report

Client:P & D EnvironmentalWorkOrder:1512553Date Received:12/11/15 20:46Extraction Method:SW3510CDate Prepared:12/11/15Analytical Method:SW8015B

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Unit: μg/L

Total Exti	ractable Peti	roleum Hydro	ocarbons w/out SG Clean-Up
	Lah ID	Matrix	Date Collected Instrument

EW5	1512553-007A Water	12/10/2015 14:05 GC11A	114125
Analytes	Result	<u>RL</u> <u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	1300	50 1	12/15/2015 04:11
TPH-Motor Oil (C18-C36)	ND	250 1	12/15/2015 04:11
Surrogates	<u>REC (%)</u>	<u>Limits</u>	
C9	103	70-130	12/15/2015 04:11

Analyst(s): TK Analytical Comments: e4

Client ID	Lab ID	Matrix	Date Collected Instrument	Batch ID
OW2	1512553-008A	Water	12/10/2015 15:15 GC11A	114125
Analytes	Result		RL DF	Date Analyzed

<u>r triary to o</u>	rtoodit	<u>132</u>	<u> </u>	<u>Dato / mary zoa</u>
TPH-Diesel (C10-C23)	330	50	1	12/15/2015 06:28
TPH-Motor Oil (C18-C36)	ND	250	1	12/15/2015 06:28

 Surrogates
 REC (%)
 Limits

 C9
 106
 70-130
 12/15/2015 06:28

Analyst(s): TK Analytical Comments: e4

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
IW1	1512553-009A	Water	12/10/20	015 11:38 GC11B	114125
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
TPH-Diesel (C10-C23)	500		50	1	12/14/2015 20:12
TPH-Motor Oil (C18-C36)	ND		250	1	12/14/2015 20:12
<u>Surrogates</u>	REC (%)		<u>Limits</u>		
C9	116		70-130		12/14/2015 20:12
Analyst(s): TK			Analytical Com	ments: e11,e4	

Batch ID

Quality Control Report

Client:P & D EnvironmentalWorkOrder:1512553Date Prepared:12/15/15BatchID:114224Date Analyzed:12/15/15Extraction Method:SW5030BInstrument:GC10Analytical Method:SW8260B

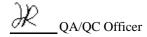
Matrix: Water Unit: μg/L

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Sample ID: MB/LCS-114224

1512553-003BMS/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	11.2	0.50	10	-	112	54-140
Benzene	ND	-	0.50	-	-	-	-
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	=	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	=	-	-	-
2-Butanone (MEK)	ND	-	2.0	=	-	-	-
t-Butyl alcohol (TBA)	ND	40.2	2.0	40	-	101	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	-	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	10.6	0.50	10	-	106	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	10.3	0.50	10	-	103	66-125
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	-	_	-	-



Quality Control Report

Client:P & D EnvironmentalWorkOrder:1512553Date Prepared:12/15/15BatchID:114224Date Analyzed:12/15/15Extraction Method:SW5030BInstrument:GC10Analytical Method:SW8260B

Matrix: Water Unit: μg/L

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Sample ID: MB/LCS-114224

1512553-003BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	=	-	-	-
Diisopropyl ether (DIPE)	ND	11.4	0.50	10	-	114	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.7	0.50	10	-	107	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	10.7	0.50	10	-	107	53-139
Methylene chloride	ND	-	0.50	=	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	-	0.50	-	-	-	-
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	=	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	-	0.50	-	-	-	-
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	a .	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	a .	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	ē.	-	-	-
Vinyl Chloride	ND	-	0.50	ē.	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	_

Quality Control Report

Client:P & D EnvironmentalWorkOrder:1512553Date Prepared:12/15/15BatchID:114224Date Analyzed:12/15/15Extraction Method:SW5030BInstrument:GC10Analytical Method:SW8260B

Matrix: Water Unit: μg/L

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Sample ID: MB/LCS-114224

1512553-003BMS/MSD

QC Summary Report for SW8260B

		v i					
Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	24.8	27.7		25	99	111	70-130
Toluene-d8	25.1	24.7		25	100	99	70-130
4-BFB	2.46	=		2.5	98	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	12.3	12.3	10	ND	123	123	69-139	0	20
t-Butyl alcohol (TBA)	44.2	48.3	40	ND	110	121	41-152	9.00	20
1,2-Dibromoethane (EDB)	11.9	11.7	10	ND	119	117	76-135	1.55	20
1,2-Dichloroethane (1,2-DCA)	11.3	11.2	10	ND	113	112	73-139	0.705	20
Diisopropyl ether (DIPE)	12.1	12.1	10	ND	121	121	72-140	0	20
Ethyl tert-butyl ether (ETBE)	11.7	11.7	10	ND	117	117	71-140	0	20
Methyl-t-butyl ether (MTBE)	12.0	12.0	10	ND	120	120	73-139	0	20
Surrogate Recovery									
Dibromofluoromethane	27.4	28.0	25		110	112	70-130	1.96	20
Toluene-d8	24.6	24.4	25		98	98	70-130	0	20

Quality Control Report

 Client:
 P & D Environmental
 WorkOrder:
 1512553

 Date Prepared:
 12/12/15
 BatchID:
 114149

 Date Analyzed:
 12/12/15
 Extraction Method:
 SW5030B

Instrument: GC3 Analytical Method: SW8021B/8015Bm

 $\textbf{Matrix:} \qquad \text{Water} \qquad \qquad \textbf{Unit:} \qquad \qquad \mu g/L$

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Sample ID: MB/LCS-114149

1512532-001AMS/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	56.8	40	60	-	95	70-130
MTBE	ND	9.26	5.0	10	-	93	70-130
Benzene	ND	10.4	0.50	10	-	104	70-130
Toluene	ND	10.6	0.50	10	-	106	70-130
Ethylbenzene	ND	10.8	0.50	10	-	108	70-130
Xylenes	ND	32.6	1.5	30	-	109	70-130

Surrogate Recovery

aaa-TFT 8.92 8.28 10 89 83 70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	61.0	58.6	60	ND	102	98	70-130	4.17	20
MTBE	9.14	9.09	10	ND	91	91	70-130	0	20
Benzene	10.6	10.2	10	ND	106	102	70-130	3.70	20
Toluene	10.8	10.4	10	ND	105	101	70-130	3.87	20
Ethylbenzene	10.9	10.2	10	ND	109	102	70-130	7.19	20
Xylenes	33.0	31.7	30	ND	109	105	70-130	4.09	20
Surrogate Recovery									
aaa-TFT	8.86	8.81	10		89	88	70-130	0.499	20

Quality Control Report

 Client:
 P & D Environmental
 WorkOrder:
 1512553

 Date Prepared:
 12/14/15
 BatchID:
 114243

 Date Analyzed:
 12/14/15
 Extraction Method:
 SW5030B

Instrument: GC7 **Analytical Method:** SW8021B/8015Bm

Matrix: Water Unit: μg/L

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Sample ID: MB/LCS-114243

1512313-002AMS/MSD

QC Summary Report for SW8021B/8015Bm												
Analyte	MB Result	LCS Result		RL	SPK Val	MB %R		С	LCS Limits			
TPH(btex)	ND	50.4		40	60	-	84		70-130			
MTBE	ND	11.7		5.0	10	-	117		70-130			
Benzene	ND	10.7		0.50	10	-	107		70-130			
Toluene	ND	11.2		0.50	10	-	112		70-130			
Ethylbenzene	ND	10.6		0.50	10	-	106		70-130			
Xylenes	ND	32.8		1.5	30	-	109		70-130			
Surrogate Recovery												
aaa-TFT	8.29	8.78			10	83	88		70-130			
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit			

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		75000	NR	NR	-	NR	
MTBE	NR	NR		ND<5000	NR	NR	-	NR	
Benzene	NR	NR		ND<500	NR	NR	-	NR	
Toluene	NR	NR		3500	NR	NR	-	NR	
Ethylbenzene	NR	NR		3600	NR	NR	-	NR	
Xylenes	NR	NR		25000	NR	NR	-	NR	
Surrogate Recovery									
aaa-TFT	NR	NR			NR	NR	-	NR	

Quality Control Report

 Client:
 P & D Environmental
 WorkOrder:
 1512553

 Date Prepared:
 12/16/15
 BatchID:
 114351

 Date Analyzed:
 12/16/15
 Extraction Method:
 SW5030B

Instrument: GC3 **Analytical Method:** SW8021B/8015Bm

Matrix: Water Unit: μg/L

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Sample ID: MB/LCS-114351

1512493-002BMS/MSD

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	59.9	40	60	-	100	70-130
MTBE	ND	8.77	5.0	10	-	88	70-130
Benzene	ND	10.3	0.50	10	-	103	70-130
Toluene	ND	10.5	0.50	10	-	105	70-130
Ethylbenzene	ND	10.6	0.50	10	-	106	70-130
Xylenes	ND	32.3	1.5	30	-	108	70-130
Surrogate Recovery							
aaa-TFT	8.17	8.95		10	82	89	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		13000	NR	NR	-	NR	
MTBE	NR	NR		2800	NR	NR	-	NR	
Benzene	NR	NR		12000	NR	NR	-	NR	
Toluene	NR	NR		190	NR	NR	-	NR	
Ethylbenzene	NR	NR		1100	NR	NR	-	NR	
Xylenes	NR	NR		200	NR	NR	-	NR	
Surrogate Recovery									
aaa-TFT	NR	NR			NR	NR	_	NR	

Quality Control Report

 Client:
 P & D Environmental
 WorkOrder:
 1512553

 Date Prepared:
 12/11/15
 BatchID:
 114125

 Date Analyzed:
 12/12/15 - 12/14/15
 Extraction Method:
 SW3510C

 Instrument:
 GC39B, GC9b
 Analytical Method:
 SW8015B

Matrix: Water Unit: μg/L

Project: 0058; Xtra Oil Company 1701 Park St. Alameda, CA Sample ID: MB/LCS-114125

QC Report for SW8015B w/out SG Clean-Up												
Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits					
TPH-Diesel (C10-C23)	ND	1120	50	1000	-	112	61-157					
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-					
Surrogate Recovery												
C9	652	667		625	104	107	65-122					

1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1512553 ClientCode: PDEO

	WaterTrax	WriteOn	EDF	Excel	EQuIS	✓ Email	HardCopy	ThirdParty	☐J-flag
eport to:		_			Bill to:	_	Requ	uested TAT:	5 days;
Paul King P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610 (510) 658-6916 FAX: 510-834-0152	cc/3rd Party: PO: ProjectNo: (ab@pdenviro.cc 0058; Xtra Oil Co Nameda, CA			Accounts Paya Xtra Oil Compa 2307 Pacific Av Alameda, CA 9 xtraoil@sbcglo	any venue 14501		e Received: e Logged:	12/11/2015 12/11/2015
oh ID Client ID		Matrix	Callagtion Date		2 2	Requested 1	Fests (See legend		0 44 40

					Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1512553-001	MW1	Water	12/10/2015 12:10		В	Α	Α									
1512553-002	MW2	Water	12/10/2015 10:10		В	Α	Α									
1512553-003	MW3	Water	12/10/2015 9:25		В	Α	Α									Ī
1512553-004	MW4	Water	12/10/2015 14:40		В	Α	Α									
1512553-005	EW2	Water	12/10/2015 10:55		В	Α	Α									
1512553-006	EW4	Water	12/10/2015 12:50		В	Α	Α									
1512553-007	EW5	Water	12/10/2015 14:05		В	Α	Α									
1512553-008	OW2	Water	12/10/2015 15:15		В	Α	Α									
1512553-009	IW1	Water	12/10/2015 11:38		В	Α	Α									

Test Legend:

5 7 8 9 10 11 12	1 8260B_5OXYPBSCV_W	2 G-MBTEX_W	3 TPH(DMO)_W	4
9 10 12	5	6	7	8
	9	10	11	12

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

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

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).

Hazardous samples will be returned to client or disposed of at client expense.

Prepared by: Briana Cutino



"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	QC Level: LEVEL 2	Work Order: 1512553
Project:	0058; Xtra Oil Company 1701 Park St. Alameda,	CA Client Contact: Paul King	Date Logged: 12/11/2015

Comments: Always send reports to: lab@pdenviro.com; Contact's Email: lab@pdenviro.com; Paul.King@pdenviro.com;

Paul.King@pdenviro.com; pdking0000@aol.com pdking0000@aol.com

		<u></u> WaterTrax	☐WriteOn ☐EDF	Excel	_Fax _ Email	HardC	opyThirdPart	у 🗀	l-flag	
Lab ID	Client ID	Matrix	Test Name	Containers /Composites		De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOut
1512553-001A	MW1	Water	Multi-Range TPH(g,d,mo)	3	2 VOAs w/HCL + 2-aVOAs (multi-range)		12/10/2015 12:10	5 days	Present	
1512553-001B	MW1	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl		12/10/2015 12:10	5 days	Present	
1512553-002A	MW2	Water	Multi-Range TPH(g,d,mo)	3	2 VOAs w/HCL + 2-aVOAs (multi-range)		12/10/2015 10:10	5 days	Present	
1512553-002B	MW2	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl		12/10/2015 10:10	5 days	Present	
1512553-003A	MW3	Water	Multi-Range TPH(g,d,mo)	3	2 VOAs w/HCL + 2-aVOAs (multi-range)		12/10/2015 9:25	5 days	Present	
1512553-003B	MW3	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl		12/10/2015 9:25	5 days	Present	
1512553-004A	MW4	Water	Multi-Range TPH(g,d,mo)	3	2 VOAs w/HCL + 2-aVOAs (multi-range)		12/10/2015 14:40	5 days	Present	
1512553-004B	MW4	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl		12/10/2015 14:40	5 days	Present	
1512553-005A	EW2	Water	Multi-Range TPH(g,d,mo)	3	2 VOAs w/HCL + 2-aVOAs (multi-range)		12/10/2015 10:55	5 days	Present	
1512553-005B	EW2	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl		12/10/2015 10:55	5 days	Present	
1512553-006A	EW4	Water	Multi-Range TPH(g,d,mo)	3	2 VOAs w/HCL + 2-aVOAs (multi-range)		12/10/2015 12:50	5 days	Present	
1512553-006B	EW4	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl		12/10/2015 12:50	5 days	Present	
1512553-007A	EW5	Water	Multi-Range TPH(g,d,mo)	3	2 VOAs w/HCL + 2-aVOAs (multi-range)		12/10/2015 14:05	5 days	Present	
1512553-007B	EW5	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl		12/10/2015 14:05	5 days	Present	

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

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



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WORK ORDER SUMMARY

Client Name:	: P&DENVIR	ONMENTAL			QC Level: L	EVEL 2			Worl	der:	1512553
Project:	0058; Xtra Oil	Company 1701 Park	St. Alameda, CA	Clier	nt Contact: Pa	aul King			Date	Logged:	12/11/2015
Comments:		orts to: lab@pdenviro.c nviro.com; pdking0000	*	Conta		b@pdenviro.com; Pa lking0000@aol.com	ul.King@pdenv	iro.com;			
		─ WaterTrax	WriteOnED	DF	Excel	_FaxEmail	HardC	opyThirdParty	′ <u></u> J	-flag	
Lab ID	Client ID	Matrix	Test Name		Containers /Composites	Bottle & Preservati	ve De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold SubOut
1512553-008A	OW2	Water	Multi-Range TPH(g,d,m	10)	3	2 VOAs w/HCL + 2-aVC (multi-range))As	12/10/2015 15:15	5 days	Present	
1512553-008B	OW2	Water	SW8260B (5 Oxys+Lead	d Scav.)	2	VOA w/ HCl		12/10/2015 15:15	5 days	Present	
1512553-009A	IW1	Water	Multi-Range TPH(g,d,m	10)	3	2 VOAs w/HCL + 2-aVC (multi-range)	OAs	12/10/2015 11:38	5 days	Present	
1512553-009B	IW1	Water	SW8260B (5 Oxys+Lead	d Scav.)	2	VOA w/ HCl		12/10/2015 11:38	5 days	Present	

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

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

Sample Receipt Checklist

Project Name: WorkOrder №:	P & D Environmental 0058; Xtra Oil Company 1701 Park St. Alameda 1512553 Matrix: Water Pandy Glop (MAL Courier)	ı, CA		Date and Time Received: Date Logged: Received by: Logged by:	12/11/2015 17:25 12/11/2015 Briana Cutino Briana Cutino
Carrier:	Randy Glen (MAI Courier)			,	
				<u>nformation</u>	
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 🗆	
	<u>Sampl</u>	le Rece	eipt Inforr	<u>nation</u>	
Custody seals intact on shipping container/cooler?				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	on and	Hold Tin	ne (HT) Information	
All samples received within holding time?		Yes	✓	No 🗌	
Sample/Temp Blank temperature			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: <2; 522: <4; 218.7: >8)?		Yes		No 🗌	NA 🗸
Samples Received on Ice?		Yes	✓	No 🗌	
	(Ice Type	e: WE	TICE)		
<u>UCMR3 Samples:</u> Total Chlorine tested and acceptable upon receipt for EPA 522?		Yes		No 🗌	NA 🗸
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?		Yes		No 🗌	NA 🗹
* NOTE: If the "N	lo" box is checked, see comments below.				
Comments:					