

.....

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# Xtra Oil Company

**RECEIVED**

2:20 pm, Oct 29, 2007

Alameda County  
Environmental Health

October 25, 2007

Mr. Steven Plunkett  
Alameda County Health Agency  
Dept. of Environmental Health  
1131 Harbor Bay Pkwy.  
Alameda, CA 94502

SUBJECT: INTERIM SOURCE AREA REMEDIATION PLAN PROGRESS EVALUATION  
REPORT CERTIFICATION  
County Case # RO 285  
Xtra Oil Company  
3495 Castro Valley Blvd.  
Castro Valley, CA

Dear Mr. Plunkett:

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

- Interim Source Area Remediation Plan Progress Evaluation Report dated October 25, 2007 (document 0014.R67).

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) 865-9503.

Sincerely,



Keith Simas  
Operations Supervisor

0014.L143

.....  
*Retail Fueling Convenience Stores*

# **P&D ENVIRONMENTAL, INC.**

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

October 25, 2007  
Report 0014.R67

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

SUBJECT: INTERIM SOURCE AREA REMEDIATION PLAN  
PROGRESS EVALUATION REPORT  
Xtra Oil Company  
3495 Castro Valley Blvd.  
Castro Valley, California

Gentlemen:

P&D Environmental, Inc. (P&D) is pleased to present this Interim Source Area Remediation Plan (ISARP) Evaluation Report for groundwater pumping and associated hydraulic control of petroleum hydrocarbons in groundwater at the subject site. This work is performed following implementation of the groundwater pumping program set forth in P&D's ISARP dated May 31, 2005 (document 0014.W9). The ISARP was approved in a letter from the Alameda County Department of Environmental Health (ACDEH) in a letter dated

The objective of the ISARP was to evaluate the ability of pumping from extraction well EW1 in the former UST pit and associated dewatering of the former UST pit to create adequate water table drawdown in surrounding subsurface materials to control migration of separate phase diesel-range hydrocarbons that appear to have originated at the former diesel dispenser adjacent to MW4 (see Figure 2). Separate phase diesel-range petroleum hydrocarbons have been detected in observation well OW1 located in the sanitary sewer trench in Redwood Road (see Table 1 and Figure 3).

A Site Location Map is attached as Figure 1, a Site Plan showing existing wells and proposed borehole and extraction well locations is attached as Figure 2, a Site Vicinity Map showing benzene isoconcentration contours in groundwater and proposed offsite borehole and extraction well locations is attached as Figure 3, and a Site Vicinity Map Detail showing proposed offsite borehole and extraction well locations is attached as Figure 4. The benzene isoconcentration contours shown in Figure 4 were created from groundwater grab samples collected between February 1993 and July 2001. Please note that the benzene concentrations and associated isoconcentration contours in Figure 4 are presented in mg/L and not ug/L. In addition, Norbridge School shown on Figure 1 to the south of the subject site has been demolished and replaced with the Castro Valley BART station and associated parking lot.

## BACKGROUND

The site is currently used as a gasoline station. Four 12,000 gallon underground fuel storage tanks are present at the site. Three of the tanks contain gasoline and the fourth tank contains diesel fuel. A 550 gallon waste oil tank was removed from the site in November 1988. The fuel tanks were replaced during August 1992.

Three monitoring wells, designated MW1, MW2 and MW3, were installed at the site on February 14 and 15, 1990 by Western Geo-Engineers. The subsurface materials encountered in the boreholes consisted primarily of silt and clay. The locations of the monitoring wells are shown on Figure 2. Soil samples collected during drilling of the boreholes for the monitoring wells revealed the presence of total petroleum hydrocarbons as gasoline (TPH-G) and total petroleum hydrocarbons as diesel (TPH-D). TPH-G was encountered in borehole MW1 at depths of 5 and 10 feet below grade at concentrations of 40 and 1,400 mg/kg, respectively; in borehole MW2 at depths of 10 and 15 feet below grade at concentrations of 230 and 95 mg/kg, respectively; and in borehole MW3 at depths of 5, 10, and 15 feet at concentrations of 140, 250 and 25 mg/kg, respectively. In addition, 120 mg/kg TPH-D was detected in borehole MW3 at a depth of 5 feet. Soil samples collected at a depth of 20 feet in borehole MW1 and at a depth of 18 feet in boreholes in MW2 and MW3 did not show any detectable concentration of TPH-G or TPH-D. Groundwater was encountered in the boreholes at depths of approximately 15 to 16 feet below grade.

On February 15, 1990 Western Geo-Engineers drilled three exploratory boreholes at the site designated as SB1, SB2 and SB3. The subsurface materials encountered in the boreholes consisted primarily of silt and clay. The approximate locations of the boreholes are shown on Figure 2. It is P&D's understanding that soil samples were collected from the exploratory boreholes at depths of 10 and 12 feet and evaluated in the field using a photoionization detector. In borehole SB1, TPH-G was detected at the depths of 10 and 12 feet at concentrations of 1,700 and 450 mg/kg, respectively. In boreholes SB2 and SB3, TPH-G was detected at the depths of 10 and 12 feet in both boreholes at concentrations of 800 mg/kg and greater than 2,000 mg/kg, respectively.

A groundwater monitoring and sampling program was initiated at the site on February 20, 1990. Historic water level measurements are summarized in Table 1, and historic water quality data is summarized in Table 2.

It is P&D's understanding that during fuel tank replacement activities in August, 1992 soil surrounding the tank pit was removed and disposed of offsite. An extraction well, designated as EW1, was designed and constructed in one corner of the new tank pit by K&B Environmental at the time of installation of the new tanks. The location of EW1 is shown on Figure 2.

On February 7, 1996 well MW2 was destroyed associated with the widening of Redwood Road. The destruction was overseen by ACC Environmental Consultants of Oakland, California.

On August 15, 1997 P&D personnel oversaw the installation of one groundwater monitoring well, designated as MW4, at the subject site. The location of the monitoring well is shown on the attached Site Plan, Figure 2. This work was performed in accordance with P&D's work plan 0014.W4 dated June 27, 1997. The work plan was approved by the Alameda County Department of Environmental

Health (ACDEH) in a telephone conversation with Mr. Scott Seery on August 14, 1997. During the conversation, Mr. Seery indicated that he would record his approval of the work plan in the county file for the site. In accordance with an October 25, 2002 letter from Mr. Seery, groundwater samples are to be analyzed for fuel oxygenates methyl tertiary-butyl ether (MTBE), tertiary amyl methyl ether (TAME), ethyl tertiary-butyl ether (ETBE), diisopropyl ether (DIPE), and tertiary-butyl alcohol (TBA), and lead scavengers ethylene dibromide (EDB), 1,2-dichloroethane (1,2-DCA) using EPA Method 8260; and data for observation wells OW1 and OW2, located in Redwood Road, are to be incorporated into monitoring and sampling reports for the subject site.

On May 31, 2005, P&D submitted an Interim Source Area Remediation Plan (ISARP) to the ACDEH proposing free product removal at the site (document 0014.W9). P&D proposed using existing extraction well EW1 in the existing UST pit to dewater the existing pit and the previous UST pit. Monitoring of existing wells MW1, MW3, and MW4 to evaluate the effectiveness of water table drawdown at the site for plume control and associated free product recovery was also proposed. In January 2007, P&D installed a groundwater extraction system consisting of a pump in well EW1, associated piping for discharge of water from the well, and a carbon filtration system. System operation began March 27, 2007.

In response to a February 6, 2007 letter request from the ACDEH, P&D submitted a Groundwater Monitoring Well Installation Work Plan (MW5 Through MW13) dated March 5, 2007 (document 0014.W10) to the ACDEH proposing the installation of nine offsite groundwater monitoring wells in the vicinity of the subject site designated as MW5 through MW13. The ACDEH conditionally approved the work plan in an April 4, 2007 letter. P&D subsequently submitted a Groundwater Monitoring Well Installation Work Plan Amendment (MW5 Through MW12) dated May 3, 2007 (document 0014.W10A) to the ACDEH proposing the installation of eight offsite groundwater monitoring wells in the vicinity of the subject site designated as MW5 through MW12.

## FIELD ACTIVITIES

Field activities consisted of groundwater treatment system installation, pressure transducer installation, system start up, water level monitoring, and periodic monitoring. The treatment system monitoring included weekly recording of total volume discharged from the groundwater treatment system and monthly groundwater treatment system discharge water quality testing for discharge permit compliance evaluation.

### Treatment System Installation and Start Up

The groundwater extraction system consists of a pump in well EW1, piping to transfer water discharged from the well, and a carbon filtration system that satisfies sanitary sewer discharge permit requirements. The carbon filtration system is located at the western edge of the property in the vicinity of the current UST pit. The piping is in a trench from well EW1 to the western edge of the property. At the western edge of the property the piping is above ground and at the property perimeter until the water treated in a 2,000 pound carbon vessel and then discharged to the sanitary sewer at the southern edge of the property, immediately east of the site building.

Following receipt of the permit to discharge to the sanitary sewer, the UST pit was dewatered beginning on February 23, 2007. The dewatering was temporarily discontinued to re-locate the flow totalizer, and UST pit dewatering resumed on March 27, 2007.

Water levels are monitored in the wells at the site on a quarterly basis using an electric water level indicator. Historic water level measurements are summarized in Table 1. Free product layer thickness is monitored quarterly in each well using a steel tape with water-finding and product-finding paste. Water levels were monitored in the extraction well and surrounding wells MW1, MW3 and MW4 using a pressure transducer and a data logger on an hourly basis to evaluate the effects of the dewatering system. Selected pressure transducer data (one daily value during the first week of dewatering and one reading per week thereafter) is summarized in Table 2. A flow meter is used to quantify the volume of water discharged from the system on a weekly basis in accordance with Castro Valley Sanitation District (CVSD) discharge permit requirements. A summary of the recorded periodic totalizer readings to date is attached with this report as Table 3. Based on the historical average depth to water in well MW1 of approximately eight feet, and the approximate depth of 13.5 feet for extraction well EW1, approximately five feet of drawdown was anticipated in the UST pit.

#### Water Level Measurements

Historic quarterly well monitoring and sampling has been performed since August 1991 in wells MW1, MW3 and MW4, since January 1999 in offsite observation wells OW1 and OW2, and since September 2003 in well EW1. The results of the historic well monitoring are summarized in Table 1. The results are shown graphically in Figures 5 through 8 for wells EW1, MW1, MW3 and MW4, respectively. Water level elevations which incorporate free product correction were used for graph preparation for well MW4.

Pressure transducers were installed in wells EW1, MW1, MW3, and MW4 on November 2, 2006 to obtain baseline pre-pumping water level information. However, the pressure transducers were not properly placed in the wells until March 16, 2007. Pressure transducer results are summarized in Table 2. The pressure transducer results for all of the wells from March 16, 2007 through September 18, 2007 are shown on Figure 9.

Following initial pumping system performance (leak check) evaluation and effluent testing on February 20, 2007 and receipt of approval from the CVSD to discharge to the sanitary sewer, UST pit dewatering from EW1 began on March 27, 2007. A summary of the recorded periodic system discharge totalizer readings to October 16, 2007 is attached with this report as Table 3. The total volume discharged by October 16, 2007 was 332,003.6 gallons.

Historic water levels and UST pit dewatering drawdown up to October 16, 2007 are shown graphically for each of the onsite wells in Figures 5 through 8. Wells MW1, MW3, and MW4 are located horizontally 20, 12, and 22 feet, respectively, from the old UST pit where dewatering was performed. It is P&D's understanding that the current UST pit and the old UST pit are connected with a trench at the southeast corner of the current UST pit. The depth of excavation is unknown. However, as a result of the trench connecting the two UST pits, it is possible that

the current UST pit is also dewatered as a result of pumping at EW1. Well MW1 is located approximately 20 feet from the current UST pit.

Review of Figures 5 through 8 shows that approximately 4.5 to 5.0 feet of drawdown has occurred in extraction well EW1, as much as 0.5 feet of drawdown has occurred in well MW1, and as much as 1.5 feet of drawdown has occurred in well MW3. It is presently unclear if decreases in water levels in well MW4 are the result of seasonal water level fluctuations or the result of dewatering at the former UST pit.

### Water Quality Monitoring

In accordance with Castro Valley Sanitation District (CVSD) discharge permit requirements, water quality samples are collected and analyzed on a monthly basis. The water samples are collected from a sampling port located immediately downstream from the 2000-pound carbon vessel. The water samples are transferred from the sampling port to 40-milliliter glass VOA vials and 1-liter amber glass bottles that are sealed with Teflon-lined screw caps. The VOA vials are overturned and tapped to ensure that no air bubbles were present. The VOA vials and bottles are then transferred to a cooler with ice, until they are transported to McCampbell Analytical, Inc. in Pittsburg, California. McCampbell Analytical, Inc. is a State-certified hazardous waste testing laboratory. Chain of custody documentation accompany the samples to the laboratory.

None of the organic analytes for which analysis has been performed have been detected in any of the compliance monitoring samples. All detected metals concentrations have been within discharge permit requirement limits. Copies of the laboratory analytical reports and chain of custody documentation for samples collected to date are attached with this report.

In addition, quarterly groundwater monitoring and sampling is performed at onsite wells EW1, MW1, MW3 and MW4. The historic water quality data from these wells, including the October 16, 2007 sampling event results, are attached with this report as Table 4.

### DISCUSSION AND RECOMMENDATIONS

Based on limited drawdown (5 feet) at EW1 associated with the shallow depth of EW1 (approximately 13.5 feet), minimal hydraulic control has been observed in surrounding wells. Extraction wells installed to greater depths might have greater hydraulic control. P&D recommends that extraction the effects of drawdown in wells installed to greater depths be evaluated for hydraulic control of separate phase diesel-range petroleum hydrocarbons which appear to be migrating beneath Redwood Road. P&D recommends that the vertical extent of petroleum hydrocarbons be investigated and that alternative remedial methods of combined water table drawdown using deeper wells and soil vapor extraction be evaluated in a remedial investigation and feasibility study.

Review of well EW1 water quality data shows that after UST pit dewatering began, water quality in EW1 changed and became more consistent with water quality encountered in the other wells at the site. It appears that pumping at well EW1 resulted in the flow of groundwater from the subsurface materials surrounding the former UST pit into the UST pit. The elevated petroleum

hydrocarbon concentrations observed in groundwater samples collected from well EW1 after the beginning of pumping are evidence that the pumping is effective in removing subsurface petroleum hydrocarbons dissolved in groundwater at the site.

P&D recommends the continued evaluation of drawdown in the wells at the site to determine if the drawdown observed since the beginning of pumping continues to be observed when seasonal water levels rise in the upcoming wet season. P&D also recommends that pumping continue at EW1 to remove dissolved petroleum hydrocarbons and that drawdown continue to be evaluated for another 6 months to evaluate drawdown during the wet season.

Proposed remedial investigation and feasibility evaluation activities are summarized as follows. Proposed drilling locations are shown in Figures 2, 3 and 4.

- Soil conductivity and Membrane Interface Probe (MIP) drilling at three onsite and two offsite locations to evaluate the vertical extent of petroleum hydrocarbons in groundwater.
- Installation of four onsite and five offsite extraction wells to evaluate hydraulic control with greater drawdown at extraction locations that are deeper than previously evaluated.
- Evaluation of soil vapor extraction feasibility at onsite and offsite extraction well locations.
- Continued groundwater extraction at well EW1 for evaluation of drawdown in onsite wells during the wet season.

### DISTRIBUTION

A copy of this report will be uploaded to the ACDEH website, in accordance with ACDEH requirements. In addition, a copy of this report will be uploaded to the GeoTracker database.

### LIMITATIONS

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

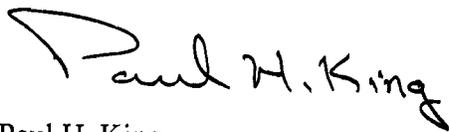
This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the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

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities which is 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, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental, Inc.



Paul H. King  
Professional Geologist #5901  
Expires: 12/31/07



- Attachments:
- Table 1 – Well Monitoring Data
  - Table 2 – Summary of Transducer Data
  - Table 3 – Summary of Totalizer Readings – Groundwater Treatment System
  - Table 4 – Historic Well Water Quality Data
  - Figure 1 - Site Location Map
  - Figure 2 - Site Plan
  - Figure 3 - Site Vicinity Map
  - Figure 4 – Site Vicinity Map Detail
  - Figure 5 – Graph of EW1 Historic Water Level Measurements
  - Figure 6 – Graph of MW1 Historic Water Level Measurements
  - Figure 7 – Graph of MW3 Historic Water Level Measurements
  - Figure 8 – Graph of MW4 Historic Water Level Measurements
  - Figure 9 – Graph of MW1, MW3, MW4 and EW1 Pressure Transducer Water Level Measurements
  - Groundwater Treatment System Monthly Monitoring Laboratory Analytical Reports and Chain of Custody Documentation

PHK/ sjc  
0014.R65

# **TABLES**

TABLE 1  
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW1	10/16/07	77.37*	8.65	168.72
	07/25/07		8.49	168.88
	04/17/07		8.30	169.07
	01/18/07		7.85	169.52
	11/14/06		7.38	169.99
	06/29/06		7.80	169.57
	02/03/06		6.65	170.72
	11/18/05		8.17	169.20
	07/28/05		7.98	169.39
	04/13/05		6.90	170.47
	01/31/05		7.20	170.17
	10/15/04		8.52	168.85
	07/13/04		8.33	169.04
	04/06/04		7.93	169.44
	12/18/03		7.65	169.72
	09/18/03		8.15	169.22
	06/19/03		8.13	169.24
	03/18/03		7.77	169.60
	12/21/02		5.74	171.63
	9/10/02		8.28	169.09
	3/30/02		7.43	169.94
	12/22/01		6.92	170.45
	9/23/01		8.53	168.84
	6/22/01		8.30	169.07
	4/22/01		7.77	169.60
	12/14/00		8.49	168.88
	9/18/00		8.56	168.81
	6/08/00		7.97	169.40
	3/09/00		6.68	170.69
	12/09/99		8.15	169.22
	8/31/99		8.36	169.01
	4/29/99		7.68	169.69

NOTES:

= Surveyed on August 20, 1997

TABLE 1  
 WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW1 (Continued)	1/29/99	177.37*	6.99	170.38
	4/26/98		7.50	169.87
	1/24/98		6.61	170.76
	11/06/97		8.79	168.58
	8/26/97	177.37*	8.51	168.86
	7/24/97		8.71	168.72
	4/25/97		7.98	169.45
	1/20/97		7.12	170.31
	7/26/96		8.39	169.04
	7/09/96		8.16	169.27
	4/23/96		7.47	169.96
	2/07/96		6.09	171.34
	1/29/96		6.17	171.26
	10/26/95		8.45	168.98
	7/28/95		8.27	169.16
	5/02/95		6.96	170.47
	2/23/95		7.72	169.71
	11/18/94		7.14	170.29
	8/22/94		8.67	168.76
	5/19/94	177.43**	8.05	169.38
	2/28/94		7.44	169.99
	11/24/93		8.74	168.69
	8/30/93		8.78	168.65
	5/18/93		8.12	169.31
	2/23/93		7.34	170.09
	11/13/92	200.00***	9.13	190.87
	5/29/92	175.73	8.59	167.14
	1/14/92		8.57	167.16
	12/23/91		9.65	166.08
	11/25/91		9.41	166.32
10/10/91		9.70	166.03	
9/17/91		9.50	166.23	
8/19/91		9.31	166.42	

NOTES:

- \* = Surveyed on August 20, 1997
- \*\* = Surveyed on March 24, 1993
- \*\*\* = Surveyed on December 5, 1992

TABLE 1  
 WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW2	NOT MEASURED (DESTROYED ON FEBRUARY 7, 1996)			
	2/07/96	176.04**	5.70	170.34
	1/29/96		5.16	170.88
	10/26/95		8.21	167.83
	7/28/95		7.99	168.05
	5/02/95		6.79	169.25
	2/23/95		7.51	168.53
	11/18/94		6.92	169.12
	8/22/94		8.59	167.45
	5/19/94		7.70	168.34
	2/28/94		6.99	169.05
	11/24/93		8.47	167.57
	8/30/93		8.64	167.40
	5/18/93		7.73	168.31
	2/23/93		6.39	169.65
	11/13/92	198.61***	8.70	189.91
	5/29/92	175.45	9.31	166.14
	1/14/92		8.97	166.48
	12/23/91		10.39	165.06
	11/25/91		9.81	165.64
	10/10/91		10.39	165.06
	9/17/91		10.23	165.22
	8/19/91		9.60	165.85

NOTES:

- \* = Surveyed on August 20, 1997
- \*\* = Surveyed on March 24, 1993
- \*\*\* = Surveyed on December 5, 1992

TABLE 1  
 WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW3	10/16/07	176.40*	9.43	166.97
	07/25/07		9.35	167.05
	04/17/07		8.88	167.52
	01/18/07		7.32	169.08
	11/14/06		7.53	168.87
	06/29/06		7.58	168.82
	02/03/06		6.10	170.30
	11/18/05		7.63	168.77
	07/28/05		7.58	168.82
	04/13/05		6.35	170.05
	01/31/05		6.79	169.61
	10/15/04		8.28	168.12
	07/13/04		8.11	168.29
	04/06/04		7.41	168.99
	12/18/03		6.99	169.41
	09/18/03		7.91	168.49
	06/19/03		7.60	168.80
	03/18/03		7.35	169.05
	12/21/02		5.43	170.97
	9/10/02		7.97	168.43
	3/30/02		6.97	169.43
	12/22/01		6.44	169.96
	9/23/01		8.17	168.23
	6/22/01		8.06	168.34
	4/22/01		7.50	168.90
	12/14/00		8.13	168.27
	9/18/00		7.83	168.57
	9/26/00		7.77	168.63
	6/08/00		7.50	168.90
	3/09/00		6.08	170.32
12/09/99		7.90	168.50	

NOTES:

- \* = Surveyed on August 20, 1997
- \*\* = Surveyed on March 24, 1993
- \*\*\* = Surveyed on December 5, 1992

TABLE 1  
 WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW3 (Continued)	8/31/99	176.41**	7.95	168.45
	4/29/99		7.09	169.31
	1/29/99		6.42	169.98
	4/26/98		6.85	169.55
	1/24/98		5.90	170.50
	11/06/97		7.80	168.80
	8/26/97		7.67	168.93
	7/24/97	176.41**	7.90	168.51
	4/25/97		7.12	169.29
	1/20/97		6.35	170.06
	7/26/96		7.84	169.57
	7/09/96		7.61	168.80
	4/23/96		6.81	169.60
	2/07/96		5.05	170.36
	1/29/96		5.77	170.64
	10/26/95		7.72	168.69
	7/28/95		7.80	168.61
	5/02/95		6.50	169.91
	2/23/95		7.24	169.17
	11/18/94		6.05	170.36
	8/22/94	190.97***	7.65	168.76
	5/19/94		7.15	169.26
	2/24/94		6.68	169.73
	11/24/93		7.55	168.86
	8/30/93		7.64	168.77
	5/18/93		7.12	169.29
	2/23/93		8.01	168.40
	11/13/92		7.86	191.12
	5/29/92	175.00	8.45	166.55
	1/14/92		8.24	166.55
	12/23/91		9.37	165.63
	11/25/91		9.19	165.81
	10/10/91		9.43	165.57
9/17/91		9.20	165.80	
8/19/91		8.95	166.05	

NOTES:

- \* = Surveyed on August 20, 1997
- \*\* = Surveyed on March 24, 1993
- \*\*\* = Surveyed on December 5, 1992

TABLE 1  
 WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW4				
	10/16/07	176.35*	8.50(0.25)#	168.04
	07/25/07		8.04(0.17)#	168.44
	04/17/07		7.94 (0.19)#	168.55
	11/14/06		7.36 (0.25)#	169.18
	06/29/06		Unknown	Unknown
	02/03/06		5.86	170.49
	11/18/05		7.99 (0.51)#	168.36
	07/28/05		7.59	168.76
	04/13/05		6.78 (0.01)#	169.58
	01/31/05		7.34 (0.19)#	169.15
	10/15/04		8.73 (0.15)#	167.73
	07/13/04		8.44 (0.03)#	167.93
	04/06/04		9.58 (2.83)#	168.89
	02/11/04		9.43 (2.70)#	168.95
	12/18/03		9.75 (1.51)#	167.73
	9/18/03		9.13 (1.80)#	168.57
	6/19/03		8.56 (0.31)#	168.02
	3/18/03		7.49 (0.06)#	168.91
	12/21/02		8.58 (4.39)#	171.06

NOTES:

\* = Surveyed on August 20, 1997

# = Indicates free product thickness in feet. The water table elevation has been corrected for the presence of free product by assuming a free product specific gravity of 0.75.

TABLE 1  
 WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Water Table Elev. (ft.)
MW4 (Continued)				
	9/10/02		9.09 (1.60)#	168.46
	3/30/02		9.86 (2.49)#	168.36
	12/22/01		7.79 (1.75)#	169.87
	9/23/01		8.97 (1.17)#	168.26
	6/22/01		7.79	168.56
	4/22/01		9.07 (2.20)#	168.93
	12/14/00		8.87 (0.72)#	168.02
	9/18/00		8.50 (0.45)#	168.19
	6/08/00		7.34	169.01
	3/09/00		6.61 (0.46)#	170.08
	12/09/99		8.80	167.55
	8/31/99		8.28	168.07
	4/29/99		7.14	169.21
	1/29/99		6.68	169.67
	4/26/98		6.87	169.48
	1/24/98		6.61	169.74
	11/06/97		9.16	167.19
	8/26/97		8.92	167.43
	8/20/97		7.66 (prior to development)	

NOTES:

\* = Surveyed on August 20, 1997

# = Indicates free product thickness in feet. The water table elevation has been corrected for the presence of free product by assuming a free product specific gravity of 0.75.

TABLE 1  
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)
EW1	10/16/07	Not Surveyed	11.95
	07/25/07		11.57
	04/17/07		11.35
	01/18/07		6.60
	11/14/06		6.11
	06/29/06		6.88
	02/03/06		5.23
	11/18/05		6.63
	07/28/05		6.94
	04/13/05		5.23
	01/31/05		6.25
	10/15/04		7.65
	07/13/04		7.51
	04/06/04		6.63
	12/18/03		6.72
09/18/03	7.29		

TABLE 1  
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Total Well Depth (ft.)
OW1	10/16/07	Not Surveyed	No Water	7.41
	07/25/07		No Water	7.41
	04/17/07		No Water	7.41
	01/18/07		No Water	7.41
	11/14/06		No Water (sheen)	7.41
	06/29/06		7.13	7.42
	02/03/06		6.97	7.45
	11/18/05		7.43 (0.13)#	7.50
	07/28/05		7.06 (0.01)#	7.45
	04/13/05		6.99	7.44
	01/31/05		7.03	7.44
	10/15/04		7.19 (0.08)#	7.44
	07/14/04		7.02	7.44
	04/06/04		7.01	7.44
	02/11/04		7.01	7.44
	10/06/03		7.07 (0.01)#	7.44
11/02/00	7.12,+			
12/09/99	7.27			
OW2	07/25/07	Not Surveyed	No Water or Product	7.28
	04/17/07		No Water or Product	7.28
	01/18/07		No Water or Product	7.28
	11/14/06		7.27	7.28
	06/29/06		7.30	7.33
	02/03/06		7.08	7.35
	11/18/05		7.33	7.35
	07/28/05		7.27	7.32
	04/13/05		7.06	7.35
	01/31/05		7.29	7.37
	10/15/04		No Water or Product	7.35
	07/14/04		No Water or Product	7.35
	04/06/04		7.27	7.33
	02/11/04		7.19	7.33
	10/06/03		7.29	7.34
	11/02/00		7.19	
12/09/99	7.17			

**NOTES:**

# = Indicates free product thickness in feet. The water table elevation has been corrected for the presence of free product by assuming a free product specific gravity of 0.75.

+ = Petroleum hydrocarbon odor reported on probe for water level indicator.

TABLE 1  
WELL MONITORING DATA

Well No.	Date Monitored	Top of Casing Elev. (ft.)	Depth to Water (ft.)	Total Well Depth (ft.)
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OW1	01/29/99	Not Surveyed	7.12	
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(continued)

OW2	01/29/99	Not Surveyed	7.19	
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(continued)

**TABLE 2**  
**SUMMARY OF TRANSDUCER DATA: WELL MW1**

Date	Time	LEVEL	TEMPERATURE
11/15/2006	8:44:55	14.3216	21.338
11/22/2006	8:44:55	14.0444	21.377
11/29/2006	8:44:55	14.3262	21.335
12/6/2006	8:44:55	14.0159	21.223
12/13/2006	8:44:55	15.3123	21.019
12/21/2006	8:44:55	14.525	20.848
12/28/2006	8:44:55	14.5795	20.657
1/3/2007	8:44:55	14.3003	20.497
1/10/2007	8:44:55	14.0998	20.29
1/17/2007	8:44:55	14.1437	20.084
1/24/2007	8:44:55	13.9432	19.893
1/31/2007	8:44:55	13.7397	19.698
2/7/2007	8:44:55	13.6291	19.501
2/14/2007	8:44:55	15.4644	19.191
2/21/2007	8:44:55	14.4076	19.1
2/28/2007	8:44:55	14.8488	19.046
3/7/2007	8:44:55	13.9606	18.983
3/14/2007	8:44:55	13.7385	18.882
3/21/2007	8:44:55	13.5815	18.804
3/27/2007	8:44:55	13.8775	18.757
3/28/2007	8:44:55	13.7904	18.76
3/29/2007	8:44:55	13.6584	18.767
3/30/2007	8:44:55	13.5542	18.768
3/31/2007	8:44:55	13.5668	18.762
4/1/2007	8:44:55	13.4124	18.758
4/2/2007	8:44:55	13.4084	18.755
4/4/2007	8:44:55	13.4141	18.75
4/11/2007	8:44:55	13.4106	18.74
4/18/2007	8:44:55	13.6319	18.801
4/25/2007	8:44:55	13.8095	18.781
5/2/2007	8:44:55	13.4324	18.809
5/9/2007	8:44:55	13.3418	18.843
5/16/2007	8:44:55	13.3703	18.897
5/23/2007	8:44:55	13.1707	18.981
5/30/2007	8:44:55	13.2822	19.076
6/6/2007	8:44:55	13.2956	19.167
6/13/2007	8:44:55	13.192	19.265
6/20/2007	8:44:55	13.2471	19.362
6/27/2007	8:44:55	13.2419	19.446
7/4/2007	8:44:55	13.1283	19.527
7/11/2007	8:44:55	13.1712	19.609
7/18/2007	8:44:55	13.1508	19.691
7/25/2007	8:44:55	13.1103	19.783
8/1/2007	8:44:55	13.0385	19.884
8/8/2007	8:44:55	13.1992	19.992
8/15/2007	8:44:55	13.0415	20.103
8/22/2007	8:44:55	12.9172	20.224
8/29/2007	8:44:55	12.9103	20.342
9/5/2007	8:44:55	12.9156	20.466
9/12/2007	8:44:55	13.1224	20.592
9/18/2007	8:44:55	13.0612	20.674

**Notes:**

Level is how much water in feet above the transducer.

**TABLE 2**  
**SUMMARY OF TRANSDUCER DATA: WELL MW3**

Date	Time	LEVEL	TEMPERATURE
11/15/2006	8:48:29	12.9776	20.988
11/22/2006	8:48:29	13.351	20.962
11/29/2006	8:48:29	13.5462	20.929
12/6/2006	8:48:29	13.3401	20.884
12/13/2006	8:48:29	14.2931	20.825
12/20/2006	8:48:29	14.0706	20.754
12/27/2006	8:48:29	13.7796	20.654
1/3/2007	8:48:29	13.7331	20.493
1/10/2007	8:48:29	13.5619	20.219
1/17/2007	8:48:29	13.4594	19.804
1/24/2007	8:48:29	13.3795	19.619
1/31/2007	8:48:29	13.1774	19.391
2/7/2007	8:48:29	13.0326	19.202
2/14/2007	8:48:29	14.8404	18.899
2/21/2007	8:48:29	13.9546	18.803
2/28/2007	8:48:29	12.9216	18.741
3/7/2007	8:48:29	12.1001	18.699
3/14/2007	8:48:29	12.091	18.617
3/21/2007	8:48:29	12.1478	18.549
3/27/2007	8:48:29	12.468	18.504
3/28/2007	8:48:29	12.264	18.51
3/29/2007	8:48:29	11.9463	18.52
3/30/2007	8:48:29	11.8655	18.527
3/31/2007	8:48:29	11.802	18.524
4/1/2007	8:48:29	11.7131	18.53
4/2/2007	8:48:29	11.6773	18.532
4/4/2007	8:48:29	11.6414	18.53
4/11/2007	8:48:29	11.5661	18.552
4/18/2007	9:48:29	11.5523	18.599
4/25/2007	8:48:29	12.0367	18.627
5/2/2007	8:48:29	11.6826	18.691
5/9/2007	8:48:29	11.6409	18.747
5/16/2007	8:48:29	11.6475	18.819
5/23/2007	8:48:29	11.4651	18.889
5/30/2007	8:48:29	11.484	18.967
6/6/2007	8:48:29	11.4365	19.035
6/13/2007	8:48:29	11.3866	19.105
6/20/2007	8:48:29	11.3749	19.177
6/27/2007	8:48:29	11.2982	19.248
7/4/2007	8:48:29	11.1847	19.328
7/11/2007	8:48:29	11.2295	19.415
7/18/2007	8:48:29	11.2146	19.51
7/25/2007	8:48:29	11.1225	19.612
8/1/2007	8:48:29	10.8577	19.717
8/8/2007	8:48:29	10.9924	19.829
8/15/2007	8:48:29	10.953	19.942
8/22/2007	8:48:29	10.873	20.055
8/29/2007	8:48:29	10.8496	20.165
9/5/2007	8:48:29	10.8052	20.272
9/12/2007	8:48:29	11.0361	20.373
9/18/2007	8:48:29	11.0166	20.454

**Notes:**

Level is how much water in feet above the transducer.

**TABLE 2**  
**SUMMARY OF TRANSDUCER DATA: WELL MW4**

Date	Time	LEVEL	TEMPERATURE
11/15/2006	8:54:09	10.487	22.149
11/22/2006	8:54:09	10.2676	22.061
11/29/2006	8:54:09	10.5357	21.951
12/6/2006	8:54:09	10.2795	21.779
12/13/2006	8:54:09	11.4301	21.602
12/20/2006	8:54:09	10.8983	21.314
12/27/2006	8:54:09	10.65	21.078
1/3/2007	8:54:09	10.6081	20.876
1/10/2007	8:54:09	10.4196	20.644
1/17/2007	8:54:09	10.4423	20.387
1/24/2007	8:54:09	10.261	20.156
1/31/2007	8:54:09	10.0052	19.971
2/7/2007	8:54:09	9.8853	19.714
2/14/2007	8:54:09	11.6593	19.554
2/21/2007	8:54:09	10.7419	19.395
2/28/2007	8:54:09	10.969	19.285
3/7/2007	8:54:09	10.1423	19.132
3/14/2007	8:54:09	9.8734	19.025
3/21/2007	8:54:09	9.9637	18.964
3/27/2007	8:54:09	10.205	18.93
3/28/2007	8:54:09	10.2029	18.951
3/29/2007	8:54:09	10.0378	18.924
3/30/2007	8:54:09	9.9261	18.978
3/31/2007	8:54:09	9.8957	18.993
4/1/2007	8:54:09	9.7788	18.939
4/2/2007	8:54:09	9.7657	18.922
4/4/2007	8:54:09	9.7648	18.94
4/11/2007	8:54:09	9.7396	18.988
4/18/2007	8:54:09	10.6889	19.009
4/25/2007	8:54:09	11.0686	19.062
5/2/2007	8:54:09	10.6523	19.122
5/9/2007	8:54:09	10.5756	19.207
5/16/2007	8:54:09	10.5972	19.263
5/23/2007	8:54:09	10.3824	19.348
5/30/2007	8:54:09	10.4763	19.425
6/6/2007	8:54:09	10.5213	19.51
6/13/2007	8:54:09	10.3918	19.609
6/20/2007	8:54:09	10.4418	19.718
6/27/2007	8:54:09	10.4415	19.835
7/4/2007	8:54:09	10.3275	19.964
7/11/2007	8:54:09	10.3676	20.104
7/18/2007	8:54:09	10.3532	20.252
7/25/2007	8:54:09	10.2955	20.414
8/1/2007	8:54:09	10.2136	20.578
8/8/2007	8:54:09	10.419	20.738
8/15/2007	8:54:09	10.237	20.896
8/22/2007	8:54:09	10.0733	21.054
8/29/2007	8:54:09	10.0603	21.2
9/5/2007	8:54:09	10.1553	21.332
9/12/2007	8:54:09	10.2281	21.466
9/18/2007	8:54:09	10.2569	21.572

**Notes:**

Level is how much water in feet above the transducer.

**TABLE 2**  
**SUMMARY OF TRANSDUCER DATA: WELL EW1**

Date	Time	LEVEL	TEMPERATURE
11/15/2006	8:51:47	4.3906	19.876
11/22/2006	8:51:47	4.3986	19.453
11/29/2006	8:51:47	4.6068	18.904
12/6/2006	8:51:47	4.2915	18.366
12/13/2006	8:51:47	5.3883	17.777
12/20/2006	8:51:47	5.1644	17.542
12/27/2006	8:51:47	4.7696	16.757
1/3/2007	8:51:47	4.7313	16.611
1/10/2007	8:51:47	4.3476	16.302
1/17/2007	8:51:47	4.2622	15.939
1/24/2007	8:51:47	4.0258	15.739
1/31/2007	8:51:47	3.6404	15.427
2/7/2007	8:51:47	3.4028	15.435
2/14/2007	8:51:47	5.5618	15.233
2/21/2007	8:51:47	4.7772	15.397
2/28/2007	8:51:47	2.6488	15.398
3/7/2007	8:51:47	2.689	15.917
3/14/2007	8:51:47	2.7474	16.362
3/21/2007	8:51:47	5.1856	16.5
3/27/2007	8:51:47	5.9364	16.742
3/28/2007	8:51:47	3.7795	16.382
3/29/2007	8:51:47	3.7081	16.748
3/30/2007	8:51:47	3.6331	16.731
3/31/2007	8:51:47	3.5831	16.721
4/1/2007	8:51:47	3.4665	16.703
4/2/2007	8:51:47	3.5174	16.558
4/4/2007	8:51:47	3.5453	16.514
4/11/2007	8:51:47	3.4789	16.667
4/18/2007	8:51:47	3.745	17.537
4/25/2007	8:51:47	3.6515	16.997
5/2/2007	8:51:47	3.4527	17.664
5/9/2007	8:51:47	3.3925	18.05
5/16/2007	8:51:47	3.5277	18.055
5/23/2007	8:51:47	3.4086	18.57
5/30/2007	8:51:47	3.5449	18.128
6/6/2007	8:51:47	3.4958	18.418
6/13/2007	8:51:47	3.4739	18.66
6/20/2007	8:51:47	3.4961	18.905
6/27/2007	8:51:47	3.4691	19.19
7/4/2007	8:51:47	3.3046	20.516
7/11/2007	8:51:47	3.4085	19.945
7/18/2007	8:51:47	3.3436	19.851
7/25/2007	8:51:47	3.3286	20.671
8/1/2007	8:51:47	3.3011	20.282
8/8/2007	8:51:47	3.425	20.022
8/15/2007	8:51:47	3.3552	20.22
8/22/2007	8:51:47	3.1976	20.784
8/29/2007	8:51:47	3.2606	20.639
9/5/2007	8:51:47	3.1591	20.877
9/12/2007	8:51:47	3.4377	20.965
9/18/2007	8:51:47	3.3881	20.994

**Notes:**

Level is how much water in feet above the transducer.

**TABLE 3**  
**SUMMARY OF TOTALIZER READINGS**  
**GROUNDWATER TREATMENT SYSTEM**

<b>Date</b>	<b>System Conditions</b>
2/20/07	Monitoring flow rate/ System Modifications 9,998,531.9
2/21/07	Cumulative gallons discharged = 16.6
2/23/07	Cumulative gallons discharged = 554 Official System startup
3/13/07	Cumulative gallons discharged = 44,491
4/5/07	Cumulative gallons discharged = 81,483.1
4/11/07	Cumulative gallons discharged = 99,528.1
4/24/07	Cumulative gallons discharged = 131,043.9
4/27/07	Cumulative gallons discharged = 137,698.1
5/7/07	Cumulative gallons discharged = 155,988.1
5/23/07	Cumulative gallons discharged = 178,878.1
5/29/07	Cumulative gallons discharged = 185,949.1
6/7/07	Cumulative gallons discharged = 196,958.1
6/14/07	Cumulative gallons discharged = 204,908.1
6/18/07	Cumulative gallons discharged = 210,019.6
6/22/07	Cumulative gallons discharged = 214,495.1
6/28/07	Cumulative gallons discharged = 220,731.1
7/16/07	Cumulative gallons discharged = 240,086.1
7/20/07	Cumulative gallons discharged = 244,093.1
7/30/07	Cumulative gallons discharged = 254,209.1
8/2/07	Cumulative gallons discharged = 257,287.1
8/17/2007	Cumulative gallons discharged = 272,488.1
8/24/2007	Cumulative gallons discharged = 279,488.1
8/31/2007	Cumulative gallons discharged = 286,541.1
9/7/07	Cumulative gallons discharged = 293,187.1
9/14/07	Cumulative gallons discharged = 299,912.1

TABLE 3  
SUMMARY OF TOTALIZER READINGS  
GROUNDWATER TREATMENT SYSTEM  
(Continued)

<b>Date</b>	<b>System Conditions</b>
9/21/07	Cumulative gallons discharged = 306,343.1
10/1/07	Cumulative gallons discharged = 315,431.1
10/8/07	Cumulative gallons discharged = 322,426.1
10/12/07	Cumulative gallons discharged = 327,512.1
10/16/07	Cumulative gallons discharged = 332,003.6

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well MW1

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260*
10/16/07	2.5, a, b	23, a	0.13	0.48	0.23	1.1	1.7	ND
07/25/07	3.9, b	15, f	0.13	0.25	0.023	ND<0.01	1.5	ND
04/17/07	6.2, b	23	0.26	0.78	0.32	1.1	2.0	ND<0.025, except TBA ND<0.25
01/18/07	6.4, b	29	ND<1.0	1.8	0.87	1.6	3.3	ND<0.05, except TBA ND<0.5
11/14/06	7.2, b	30	0.44	2.2	0.60	1.8	2.9	ND<0.05, except TBA ND<0.5, Ethanol ND<5.0, Methanol ND<50.0
6/29/06	22,b	45	1.2	3.1	0.94	2.0	3.9	ND<0.05, TBA ND<0.5

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds.

f = Laboratory analytical report note: TPH-G results have no recognizable pattern.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well MW1 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
02/03/06	9.7,c	37	0.62	2.2	1.2	2.0	3.5	ND<0.05, TBA ND<0.5
11/18/05	4.3,b	25	0.14	1.6	0.43	1.8	2.7	ND<0.05, TBA ND<0.5
7/28/05	16,a,b	30,a	0.26,+	2.5	0.76	2.1	4.8	ND<0.05, TBA ND<0.5
4/13/05	9.3,b	30	0.3	1.9	0.6	1.7	3	ND<0.05, TBA ND<0.5
1/31/05	14,b	29	0.27	2.2	1.2	1.9	5.0	ND<0.05, TBA ND<0.5
10/15/04	16,a,b	36,a	ND<0.05	1.5	1.0	2.1	5.1	ND<0.05, TBA ND<0.5
7/13/04	22a,b	34,a	0.053	2.1	0.59	2.1	4.4	ND<0.5, TBA ND<0.5

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
 SUMMARY OF LABORATORY ANALYTICAL RESULTS  
 Well MW1 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
4/6/04	18,a,b	28,a	0.11	2.3	0.8	0.99	4.5	ND<0.1 TBA ND<1
12/18/03	13,b	33	0.038	2.1	0.77	1.8	4.4	ND<0.005 TBA ND<0.05
9/18/03	15,a,b	32	0.052	2.2	0.62	1.8	3.8	ND<0.017 , TBA ND<0.17

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well MW1 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
6/26/03	67,a,b	45	ND<0.05	2.1	0.72	2.3	5.5	ND
3/18/03	7.3,a,b	33	ND<0.05	2.4	0.9	1.6	1.0	ND
12/21/02	11,a,b	32	ND<0.1	2.6	0.98	2.2	5.5	ND
9/10/02	18,c	31	ND<0.25	2.2	0.65	1.7	4.8	--
3/30/02	12,a,b	99	ND	4.1	1.2	2.5	6.4	--
12/22/01	22,a,b	60	ND	3.2	1.9	2	6.2	--
9/23/01	16,a,c	49	ND	4	1.4	2.2	6.2	--
6/22/01	85,a,b	35	ND	3.1	0.75	1.2	4.0	--
4/22/01	16,a	43	ND	3.6	1.2	1.6	5.8	--
12/14/00	11,a,d	49	ND	5.8	1.6	2	6.9	--
9/18/00	15,a,b	86	ND	7.2	2	3.2	13	--
6/8/00	6.5,a,c	50	ND	5.7	1.5	1.8	7	--
3/9/00	7.4,a,b	48	ND	5.3	3.1	1.6	8.1	--
12/9/99	12,a,b	65	ND	9.3	2.9	2.2	8.8	--
8/31/99	22,b	66	0.71	8.7	2.7	2.4	10	--
4/29/99	22,b	48	ND	8.4	2.8	2.0	8.1	--
1/29/99	9.1,b	47	ND	9.0	2.9	1.9	8.0	--
4/26/98	7.8,c	60	ND	9.3	5.7	2.1	9.1	--
1/24/98	24,b	57	ND	6.9	5.5	2.0	8.7	--
11/6/97	17,c	63	ND	7.4	6.7	2.3	9.9	--
7/27/97	28,c	66	1.8	8.6	8.1	2.2	10	--
4/25/97	170,b	77	ND	7.4	7.9	2.1	9.8	--
1/21/97	57,c	80	0.25	7.8	8.3	1.9	8.9	--
7/26/96	11,c	76	ND	11	13	2.4	10	--
4/23/96	5.7,c	73	ND	8.6	12	2.2	9.8	--

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

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a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

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c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
 SUMMARY OF LABORATORY ANALYTICAL RESULTS  
 Well MW1 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
1/29/96	6.6,c	81	0.25	7.6	13	1.9	8.9	--
10/26/95	62,c	89	ND	7.8	12	2.4	11	--
7/28/95	2.0,c	35	--	3.8	8.7	1.1	6.5	--
5/2/95	6.5,c	86	--	8.9	14	2.3	11	--
2/24/95	9.1	90	--	7.5	12	1.5	11	--
11/18/94	10	96	--	9.3	14	2.5	11	--
8/22/94	8.3	100	--	9.0	11	2.1	9.4	--
5/19/94	30	100	--	12	14	3.5	17	--
2/28/94	110	90	--	11	9.6	2.1	9.9	--
11/24/93	8.2	66	--	8.3	8.9	2.0	121	--
8/30/93	9.4	77	--	6.4	11	2.2	12	--
5/18/93	30	92	--	4.0	11	2.5	15	--
2/23/93	14	100	--	4.5	11	2.1	12	--
11/13/92	4.4	120	--	5.8	10	2.1	13	--
5/27/92	11	120	--	8.8	16	2.3	15	--
1/24/92	19	39	--	7.3	8.7	1.3	8.9	--
12/23/91	34	78	--	9.3	7.3	0.54	13	--

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well MW1 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
11/25/91	36	170	--	5.5	5.6	1.6	8.4	--
10/10/91	19	28	--	4.1	4.7	1.0	4.8	--
9/17/91	19	39	--	4.9	4.1	1.2	5.9	--
8/19/91	47	48	--	13	8.4	0.99	29	--
7/20/91	49	100	--	11	14	2.3	17	--
6/20/91	42	76	--	4.7	7.1	1.5	9.8	--
5/17/91	26	72	--	7.7	9.9	ND	11	--
4/15/91	--	56	--	6.5	8.5	0.41	9.9	--
3/21/91	--	36	--	4.5	5.7	0.087	7.3	--
2/15/91	--	120	--	7.4	6.6	ND	13	--
1/15/91	--	33	--	3.9	2.9	0.21	5.3	--
9/27/90	--	28	--	3.7	3.5	0.01	6.5	--
8/23/90	--	40	--	5.1	4.9	0.35	6.0	--
7/20/90	44	--	--	5.1	4.2	ND	9.1	--
3/19/90	--	40	--	3.7	1.1	ND	3.3	--
2/20/90**	--	7.6	--	1.6	ND	ND	1.3	--

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well MW2

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
2/7/96								
1/29/96	4.6,c	38	0.0071	1.9	5.7	1.1	5.9	--
10/26/95	900	74	ND	2.9	5.9	2.0	10	--
7/28/95	2.0,c	15	--	1.4	2.3	0.62	3.2	--
5/2/95	6.6,b	55	--	3.3	10	1.8	10	--
2/24/95	22	67	--	4.9	11	1.8	11	--
11/18/94	5.0	86	--	11	17	1.8	12	--
8/22/94	4.1	91	--	10	13	1.5	9.0	--
5/19/94	5.8	62	--	92	13	1.3	8.4	--
2/28/94	13	91	--	13	16	1.5	9.0	--
11/24/93	79	12	--	13	17	2.5	17	--
8/30/93	110	110	--	11	14	1.8	11	--
5/18/93	44	67	--	9.2	12	1.4	9.3	--
2/23/93	7.0	76	--	12	17	1.6	9.6	--
11/13/92	8.2	79	--	10	13	1.4	8.6	--
5/27/92	130	89	--	18	19	1.7	14	--
1/14/92	1600	59	--	17	14	1.8	15	--
12/23/91	700	2100	--	36	130	79	560	--
11/25/91	130	230	--	11	9.7	1.4	9.7	--
10/10/91	360	85	--	21	25	2.1	14	--
9/17/91	56	74	--	10	11	1.4	8.1	--
8/19/91	19	69	--	26	22	2.1	18	--
7/20/91	100	51	--	9.9	7.7	1.2	7.5	--
6/20/91	69	87	--	8.1	8.4	1.1	8.9	--
5/17/91	33	62	--	5.9	6.3	1.2	9.0	--
4/15/91	--	82	--	5.3	7.4	1.0	9.4	--
3/21/91	--	62	--	9.3	11	0.35	9.7	--
2/15/91	--	200	--	12	12	1.7	14	--
1/14/91	--	78	--	11	8.7	0.58	8.0	--
9/27/90	--	59	--	8.4	12	0.88	9.0	--
8/23/90	--	96	--	8.1	8.4	1.5	8.6	--
7/20/90	86	--	--	9.1	14	0.94	13	--
3/19/90	--	50	--	7.7	8.7	0.075	5.6	--
2/20/90**	--	38	--	7.3	3.1	0.075	6.8	--

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

\*\* Inorganic lead not detected in sample.

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well MW3

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
10/16/07	13, a, b	69, a	13	18	ND<0.5	ND<0.5	5.0	ND, except TBA= 10
07/25/07	6.7, a, e	52, a	12	23	ND<0.25	ND<0.25	6.0	ND, except TBA= 8.6
04/17/07	7.9, a, b	92, a	14	23	ND<0.5	1.5	5.9	ND<0.5, except TBA = 8.0
01/18/07	6.4, b	94	22	29	1.3	2.1	9.6	ND<0.5, except TBA = 12
11/14/06	21, a, b	100, a	23	37	1.0	2.2	11	ND<0.5 except, TBA= 16, Ethanol ND<5.0, Methanol ND<50.0
6/29/06	12,b	36	27	14	ND<0.5	ND<0.5	ND<0.5	ND<0.5, except TBA = 11
02/03/06	22,b	86	24	26	ND<0.5	1.7	6	ND<0.5, except TBA = 11
11/18/05	32,a,b	87,a	22	35	ND<1	2	11	ND<1.0, except TBA ND<10
7/28/05	77,a,b	100,a	32,+	30	1.1	2.3	12	ND<0.5, except TBA = 13
4/13/05	19,a,b	96,a	28	31	4	2.3	12	ND<0.5, except TBA = 12
1/31/05	13,a,b	93,a	31	36	1.5	2.5	11	ND<1, except TBA = 24
10/15/04	13,a,b	76,a	24	28	ND<0.5	1.1	3.6	ND<0.5, except TBA = 18

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds with no recognizable pattern.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well MW3 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
7/13/04	57,a,b	98,a	15	28	2.9	1.7	8.9	ND<0.5, except TBA = 11
4/6/04	32,a,b	81,a	17	34	5.9	1.5	9.9	ND<0.5, except TBA = 8.8
12/18/03	32,a,b	130,a	32	33	5.4	0.72	11	ND<0.5, except TBA = 17
9/18/03	140,a,b	130	23	34	11	2.5	14	ND<0.5, except TBA = 10
6/26/03	27,a,b	96	21	29	5.2	2.0	10	ND, except TBA = 8.9
3/18/03	11,a,b	120	16	36	12	1.8	2.4	ND, except TBA = 5.1
12/21/02	21,a,b	110	33	34	9.3	2.0	13	ND, except TBA = 14
9/10/02	43,b	70	19	21	2.2	1.6	7.6	--
3/30/02	8.5,a,b	170	26	40	17	2.6	16	--
12/22/01	9.2,a,b	140	27	37	20	2.6	15	--
9/23/01	47,a,b	130	26	32	9.1	2.4	12	--
6/22/01	33,a,b	110	25	31	7.2	1.9	11	--
4/22/01	61,a	140	24	25	5.4	1.7	11	--
12/14/00	120,a,b	140	35	37	16	2.4	15	--
9/18/00	43,a,b	130	33	39	91	2.3	14	--
7/26/00	--	--	21	--	--	--	--	ND***, except tert-butanol = 19
6/8/00	74,a,b	130	23	41	16	1.9	13	--
3/9/00	14,a,b	180	24	39	22	2.5	16	--
12/9/99	17,a,b	120	16	35	6.7	2.4	12	--
8/31/99	22,b	120	4.7	35	3.7	2.4	14	--
4/29/99	48,b	100	2.5	33	8.0	2.1	14	--
1/29/99	240,b	84	1.3	31	2.8	1.8	12	--

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

\*\*\*Review of laboratory analytical reports indicate that oxygenated volatile organic compounds (including TAME, DIPE, ETBE, methanol, ethanol, EDB, and 1,2-DCA) were not detected except MTBE at 21 ppm and tert-butanol at 19 ppm.

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
 SUMMARY OF LABORATORY ANALYTICAL RESULTS  
 Well MW3 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
4/26/98	380,b	100	9.7	29	7.1	1.8	14	--
1/24/98	77,b	97	ND	28	7.1	1.8	11	--
11/6/97	120,b	140	ND	37	19	2.4	14	--
7/24/97	91,c	120	1.4	33	17	2.2	12	--
4/25/97	760,b	240	1.6	24	18	4.1	24	--
1/21/97	34,c	150	1.3	40	14	2.6	12	--
7/26/96	24,c	130	0.89	40	22	2.4	12	--
4/23/96	280,c	170	0.72	34	22	2.2	14	--
1/29/96	45,c	150	0.54	32	21	1.9	12	--
10/26/95	33	130	0.69	37	21	0.21	11	--
7/28/95	1.9,b	86	--	1.4	2.3	0.62	3.2	--
5/2/95	9.7,b	170	--	43	30	2.5	14	--
2/24/95	9.2	130	--	31	19	1.8	10	--
11/18/94	23	140	--	38	22	2.0	11	--
7/22/94	5.3	170	--	35	20	1.8	10	--
5/19/94	30	150	--	38	25	2.4	14	--
2/28/94	210	110	--	36	21	1.9	11	--
11/24/93	24	160	--	48	26	2.2	12	--
7/30/93	32	130	--	36	21	1.9	8.2	--
5/18/93	7.2	130	--	36	21	2.1	12	--

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

\*\* Inorganic lead not detected in sample.

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well MW3 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
2/23/93	8.1	110	--	31	18	1.9	11	--
11/13/92	4.7	140	--	38	24	2.0	12	--
5/27/92	27	370	--	91	57	3.0	21	--
7/14/92	270	130	--	76	30	3.4	21	--
12/23/91	540	740	--	30	61	31	180	--
11/25/91	74	150	--	65	31	3.4	18	--
10/10/91	39	140	--	57	31	2.2	14	--
9/17/91	140	180	--	47	25	2.6	15	--
8/19/91	150	170	--	82	31	4.4	22	--
7/20/91	270	450	--	46	29	3.5	21	--
6/20/91	210	920	--	39	49	13	69	--
5/17/91	70	170	--	32	22	2.2	18	--
4/15/91	--	110	--	31	15	0.88	7.4	--
3/21/91	--	87	--	30	14	0.69	5.4	--
2/15/91	--	230	--	44	40	ND	31	--
1/14/91	--	160	--	48	25	1.0	16	--
9/27/90	--	25	--	7.2	6.4	0.42	3.4	--
8/23/90	--	220	--	67	46	27	18	--
7/20/90	86	--	--	9.1	14	0.94	13	--
3/19/90	--	210	--	38	28	1.8	12	--
2/20/90**	--	46	--	20	15	1.8	9.7	--

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

\*\* Inorganic lead not detected in sample.

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
 SUMMARY OF LABORATORY ANALYTICAL RESULTS  
 Well MW4

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*
10/16/07			Not Sampled (Free Product Present in Well)					
07/25/07			Not Sampled (Free Product Present in Well)					
04/17/07			Not Sampled (Free Product Present in Well)					
01/18/07			Not Sampled (Free Product Present in Well)					
11/14/06			Not Sampled (Free Product Present in Well)					
6/29/06	83,a,b	140,a	31	44	13	2.6	19	ND<1.0, except TBA = ND<10
2/3/06	83,a,b	150,a	22	35	12	3.2	14	ND<0.5, except TBA = 7
11/18/05			Not Sampled (Free Product Present in Well)					
7/28/05	94,a,b	130,a	27,+	32	8.9	2.9	14	ND<0.5, except TBA = 8.4

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
 SUMMARY OF LABORATORY ANALYTICAL RESULTS  
 Well MW4 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*	
4/13/05			Not Sampled (Free Product Present in Well)						
1/31/05			Not Sampled (Free Product Present in Well)						
10/15/04			Not Sampled (Free Product Present in Well)						
7/13/04			Not Sampled (Free Product Present in Well)						
2/11/04	Free Product sampled. Laboratory fuel fingerprint notes a pattern resembling diesel, with a less significant gasoline-range pattern.								
12/18/03			Not Sampled (Free Product Present in Well)						
9/18/03			Not Sampled (Free Product Present in Well)						
6/26/03			Not Sampled (Free Product Present in Well)						
3/18/03			Not Sampled (Free Product Present in Well)						
12/21/02			Not Sampled (Free Product Present in Well)						
9/10/02			Not Sampled (Free Product Present in Well)						
3/30/02			Not Sampled (Free Product Present in Well)						
12/22/01			Not Sampled (Free Product Present in Well)						
9/23/01			Not Sampled (Free Product Present in Well)						
6/22/01	440,a,b	140	15	35	19	2.0	10	--	
4/22/01			Not Sampled (Free Product Present in Well)						
12/14/00			Not Sampled (Free Product Present in Well)						
9/18/00			Not Sampled (Free Product Present in Well)						
6/8/00			Not Sampled (Free Product Present in Well)						
3/9/00	2,100,a,b	130	6.9	35	13	2.1	11	--	
12/9/99	9,000,a,b	120	8.1	33	6	2.4	12	--	
8/31/99	9.4,b	190	4.4	46	30	2.8	15	--	
4/29/99	9.4,b	210	3.2	42	35	2.8	15	--	
1/29/99	7.3,b	190	2.4	44	40	3.1	17	--	
4/26/98	13,b	190	ND	49	37	3.2	18	--	
1/24/98	20,b	200	ND	50	40	3.1	17	--	
11/6/97	110,b	160	ND	48	30	2.8	16	--	
8/26/97	5.5,b	210	1.7	48	42	3.4	19	--	
8/15/97				MW4 Installed					

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
 SUMMARY OF LABORATORY ANALYTICAL RESULTS  
 Well EW1

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260*
10/16/07	12, a, b	14, a	8.3	2.6	0.31	0.27	3.0	ND, except TBA = 15
07/25/07	7.7, a, e	11, a	14	3.2	ND<0.025	ND<0.025	2.6	ND, except TBA = 17
04/17/07	5.8, b	21	9.6	3.7	1.4	0.49	1.6	ND<0.1, except TBA = 18
01/18/07	0.93, b	0.93, d	0.60	0.0034	0.0050	ND< 0.0005	0.0041	ND< 0.050, except TBA= 6.8

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

c = Laboratory analytical report note: TPH-D results consist of gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

e = Laboratory analytical report note: TPH-D results consist of oil-, gas, and diesel-range compounds with no recognizable pattern.

+ = Analyzed by EPA Method 8260.

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well EW1 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260*
11/14/06	1.8, b	0.87, d	0.17	ND<0.025	ND<0.025	ND<0.025	ND<0.025	ND<0.025, except TBA= 5.9, Ethanol ND<2.5, Methanol ND<25.0
6/29/06	0.71,b	0.29	0.021	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.01, Except TBA = 2.0
2/3/06	1.2,b	0.79	3.1	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05, Except TBA = 13
11/18/05	1.2,a	0.9	2	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05, Except TBA = 18
7/28/05	1.8,b	1.2	17,+	0.033	0.0051	0.00056	0.0059	ND<0.25, except TBA = 22
4/13/05	2.2,b	0.38	2.7	ND<0.05	ND<0.05	ND<0.05	ND<0.05	ND<0.05, except TBA = 1.6

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

+ = Analyzed by EPA Method 8260.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

e = Laboratory analytical report note: reporting limit raised due to high MTBE content

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well EW1 (Continued)

Date	TPH-D	TPH-G	MTBE	Benzene	Toluene	Ethyl- benzene	Total Xylenes	Other Fuel Additives by 8260*	
1/31/05	3.4,b	1.9	38	ND<1	ND<1	ND<1	ND<1	ND<1, except TBA = 32	
10/15/04	4.1,a,b	ND<5.0,a,e	96	ND<1.7	ND<1.7	ND<1.7	ND<1.7	ND<1.7, except TBA = 97	
7/13/04	3.3,a,b	2.6,a	73	ND<1.2	ND<1.2	ND<1.2	ND<1.2	ND<1.2, except TBA = 40	
4/6/04	3.4,a,b	2.6,a	72	ND<1	ND<1	ND<1	ND<1	ND<1, except TBA = 34	
12/18/03	3.0,b	ND<5.0,e	160	0.22	ND<50	ND<50	0.073	ND<5, except TBA = 64	
9/18/03	8.2,a,b	7.5	220	0.33	ND<0.05	ND<0.05	ND<0.05	ND<2.5, except TBA = 51	
2/23/93	9.6	66	--	14	8.5	1.4	9.8	--	
11/13/92	13	62	--	11	9.2	1.1	9.6	--	
8/92				EW1 Installed					

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

+ = Analyzed by EPA Method 8260.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

e = Laboratory analytical report note: reporting limit raised due to high MTBE content

\* = This column summarizes results for analysis using EPA Method 8260 for non-MTBE fuel oxygenates (TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well OW1

Date	TPH-D	TPH-G	TPH-MO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260, including MTBE**
10/16/07				No sample recovered				
07/25/07				No sample recovered				
04/17/07				No sample recovered				
01/18/07				No sample recovered				
11/14/06				No sample recovered				
6/29/06	290,b	24	--	--	--	--	--	--
2/3/06	710a,g	31,a	210	--	--	--	--	--
11/18/05	820,b	370	--	0.13	ND<0.025	0.4	0.29	ND<0.025 TBA<0.25
7/28/05	230,a,b	10,a	--	1.3	0.03	0.19	0.072	ND<0.05, TBA ND<0.5
4/13/05	590a,b,d	35,a	--	2	ND<0.05	0.46	0.14	ND<0.05, TBA ND<0.5
1/31/05				No sample recovered				
10/15/04				No sample recovered				
7/14/04	240,a,b	66,a	ND<0.05	1.8	ND<0.05	1.8	0.056	ND<0.05, TBA ND<0.5
4/6/04	74,a,b	50,a	--	3.1	ND<0.1	0.21	0.14	ND<0.1, TBA ND<1
2/11/04	450,a,b	15,a	130	2.2	0.031	0.16	0.054	ND<0.025, TBA ND<0.25
11/21/03	1,900,a,b	38,f	570	2.0	0.059	0.19	0.095	ND<0.05, TBA ND<0.5
6/10/98				OW1 Installed				

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

d = Laboratory analytical report note: TPH-D results consist of both oil-range and gasoline-range compounds.

f = Laboratory analytical report note: unmodified or weakly modified gasoline is significant.

g = Fuel oil.

\*\* = This column summarizes results for analysis using EPA Method 8260 for fuel oxygenates (MTBE,

TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicated.

TABLE 4  
SUMMARY OF LABORATORY ANALYTICAL RESULTS  
Well OW2

Date	TPH-D	TPH-G	TPH-MO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Other Fuel Additives by 8260, incl. MTBE**	
10/16/07				No sample recovered					
07/25/07				No sample recovered					
04/17/07				No sample recovered					
01/18/07				No sample recovered					
11/14/06				No sample recovered					
6/29/06				No sample recovered					
2/3/06	0.37,b	0.14,h	ND<0.25	--	--	--	--	--	
11/18/05				No sample recovered					
7/28/05				No sample recovered					
4/13/05	0.22,b	0.065	--	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND<0.0005, except MTBE = 0.0097	
1/31/05				No sample recovered					
10/15/04				No sample recovered					
07/14/04				No sample recovered					
4/6/04	--	0.069,a	--	ND <0.00062	ND <0.00062	ND <0.00062	ND <0.00062	--	
2/11/04	--	0.21	--	ND <0.0005	ND <0.0005	ND <0.0005	ND <0.0005	ND<0.0005, except MTBE = 0.0064 TBA = 0.0070	
11/21/03				No sample recovered.					
6/10/98				OW2 Installed					

**NOTES:**

TPH-G = Total Petroleum Hydrocarbons as Gasoline.

TPH-D = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert-Butyl Ether.

ND = Not Detected.

-- = Not Analyzed.

a = Laboratory analytical report note: lighter than water immiscible sheen present on the sample.

b = Laboratory analytical report note: TPH-D results consist of both diesel-range and gasoline-range compounds.

h = Laboratory analytical report note: heavier gasoline range compounds are significant (aged gasoline?).

\* = This column summarizes results for analysis using EPA Method 8260 for fuel oxygenates (MTBE, TAME, DIPE, ETBE, and TBA) or lead scavengers (EDB, 1,2-DCA/EDC).

Results in milligrams per liter (mg/L), unless otherwise indicate

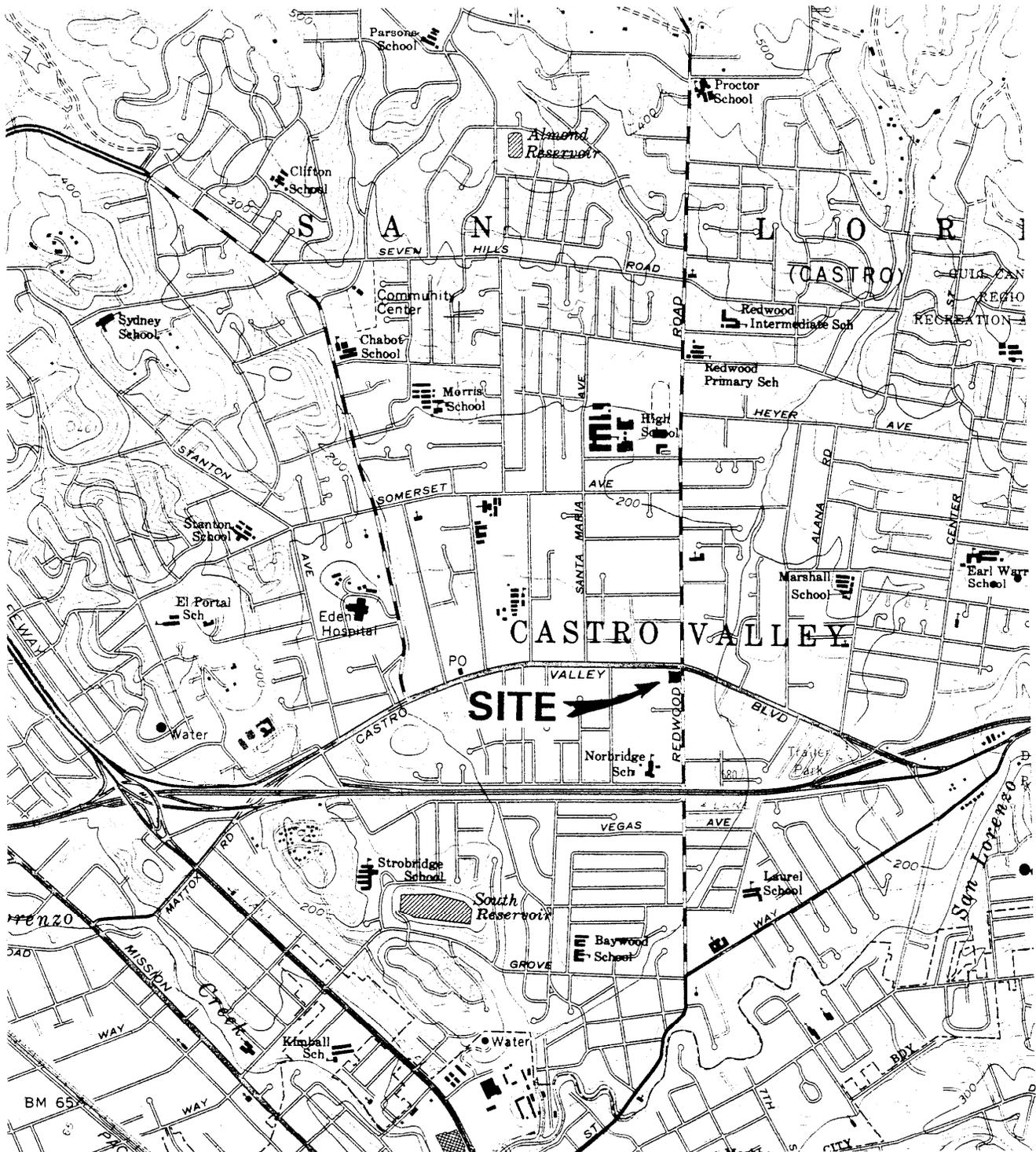
# **FIGURES**

# P&D ENVIRONMENTAL, INC.

55 Santa Clara Avenue, Suite 240

Oakland, CA 94610

(510) 658-6916



Base Map From:  
U.S. Geological Survey  
Hayward, Calif.  
7.5 Minute Quadrangle  
Photorevised 1980

North

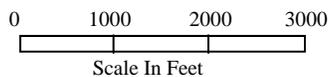


Figure 1  
SITE LOCATION MAP  
Xtra Oil Company  
3495 Castro Valley Blvd.  
Castro Valley, California

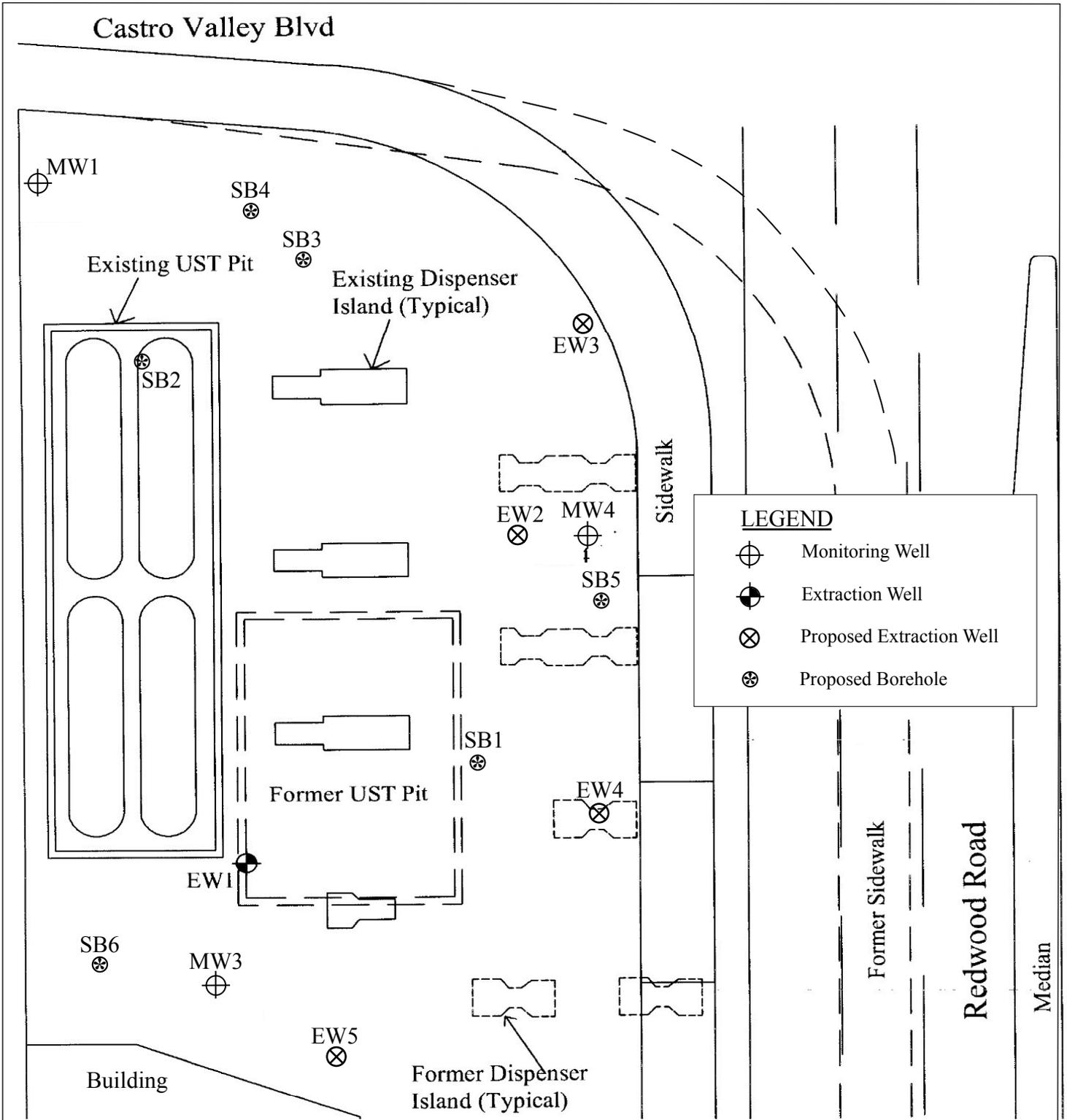
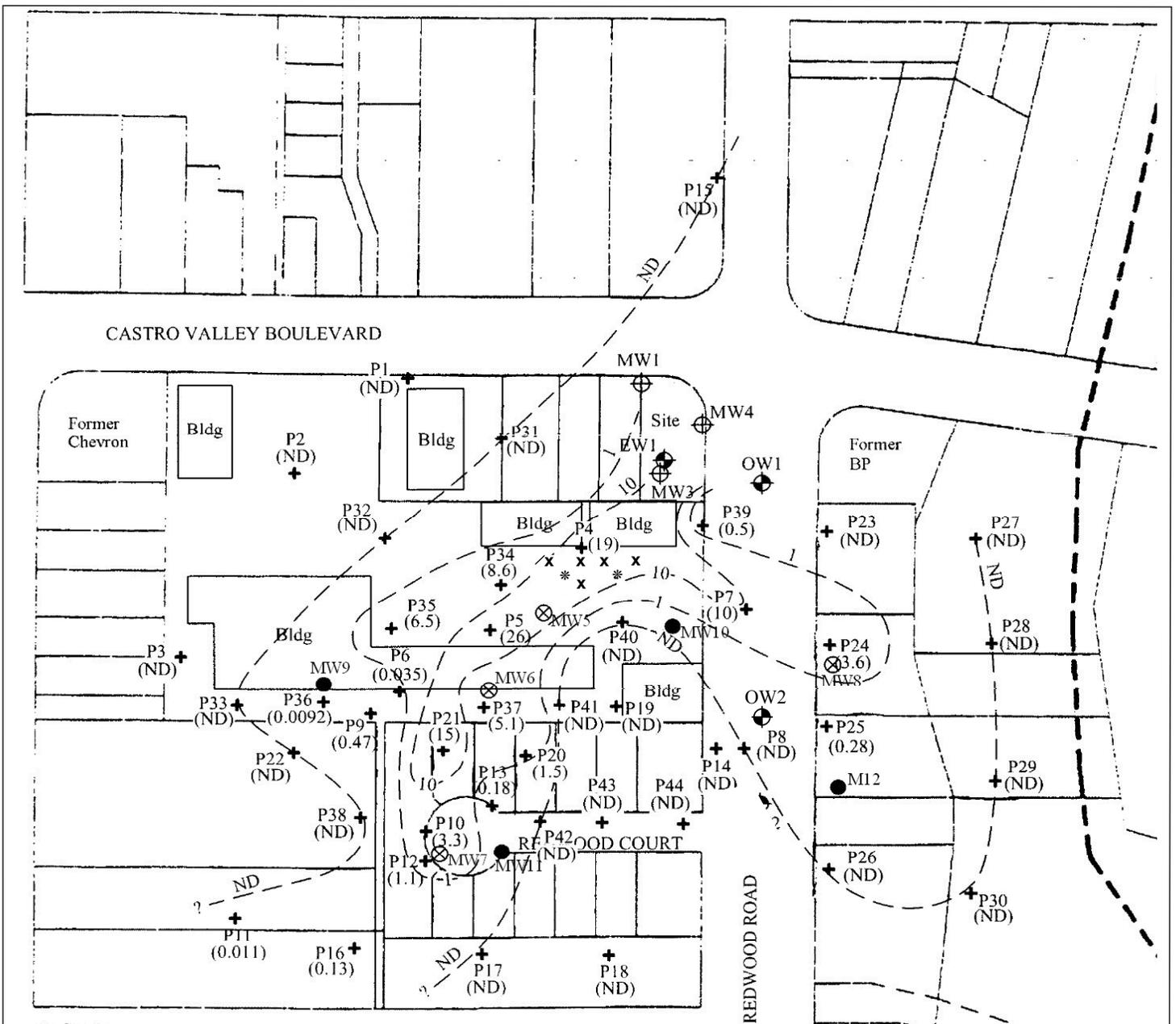


Figure 2  
 Site Plan Showing Proposed Borehole and Extraction Well Locations  
 Xtra Oil Company  
 3495 Castro Valley Blvd  
 Castro Valley, California

Base Map From:  
 Robert H. Lee & Associates, Inc.  
 August 1996, and County of Alameda  
 Public Works Agency May 1995

P & D Environmental, Inc.  
 55 Santa Clara Avenue, Suite 240  
 Oakland, CA 94610  
 (510) 658-6916





LEGEND

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>OW2  Observation Well Location</li> <li>P44  Previous Investigation Groundwater Grab Sample Collection Location</li> <li>MW4  Existing Monitoring Well Location</li> <li>EW1  Existing Extraction Well Location</li> </ul> | <ul style="list-style-type: none"> <li>MW8  Proposed Well Location For Plume Interior</li> <li>MW12  Proposed Well Location For Plume Perimeter</li> <li> Proposed Extraction Well Location</li> <li> Proposed Borehole Location</li> </ul> | <ul style="list-style-type: none"> <li>(26) Benzene Concentration in Groundwater (mg/L)</li> <li> Benzene Groundwater Isoconcentration Contour (mg/L)</li> <li> Approximate Creek Location</li> </ul> |
|---|---|---|

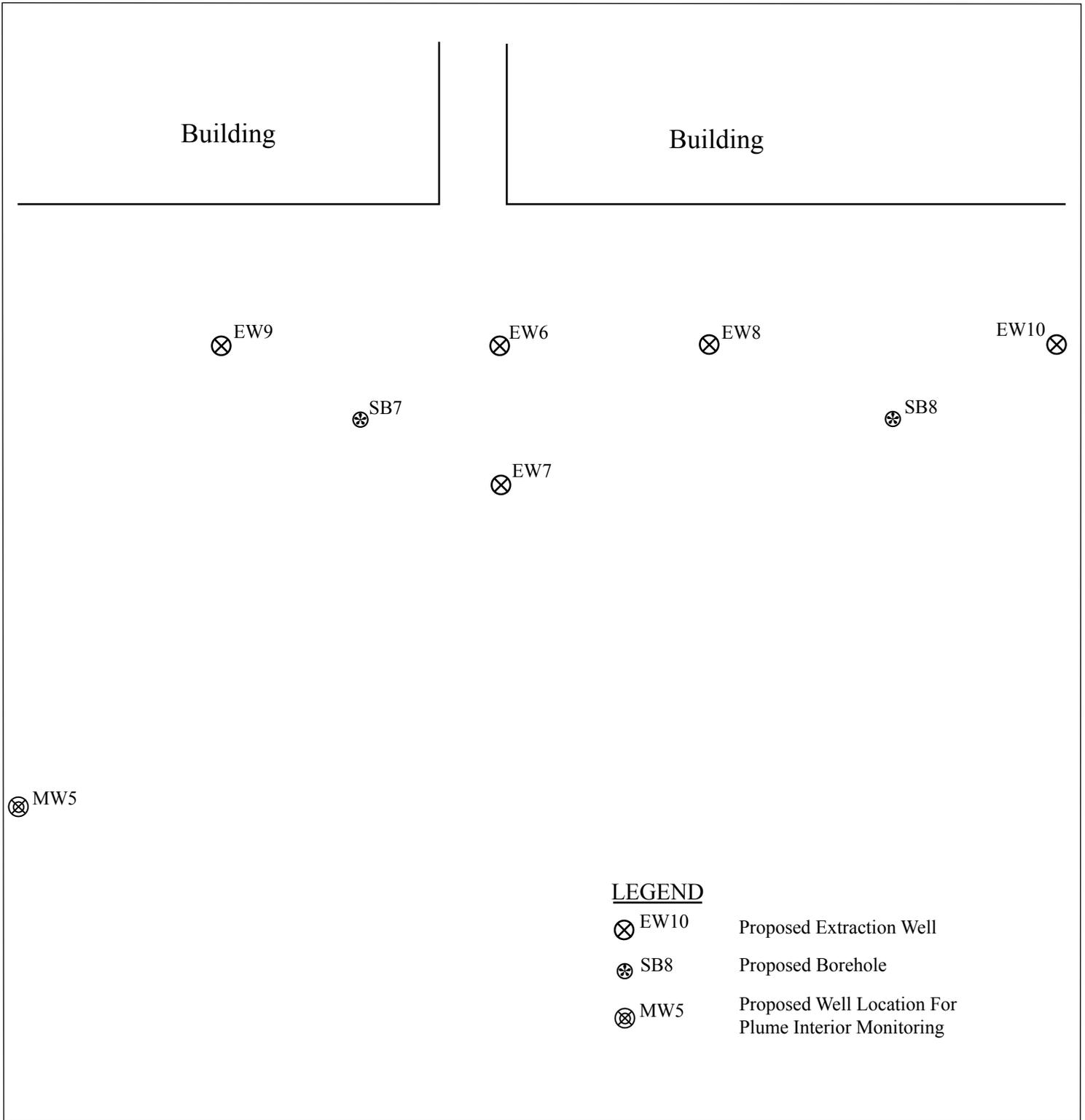
**Figure 3**  
**Site Plan Showing Proposed Benzene Isoconcentration Contours in Groundwater**  
**and Proposed Offsite Borehole and Extraction Well Locations**  
**Xtra Oil Company**  
**3495 Castro Valley Blvd**  
**Castro Valley, California**



Base Map From:  
Castro Valley Sanitation  
District

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





**Figure 4**  
**Site Vicinity Map Detail Showing Proposed Borehole and Extraction Well Locations**  
**Xtra Oil Company**  
**3495 Castro Valley Blvd**  
**Castro Valley, California**



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



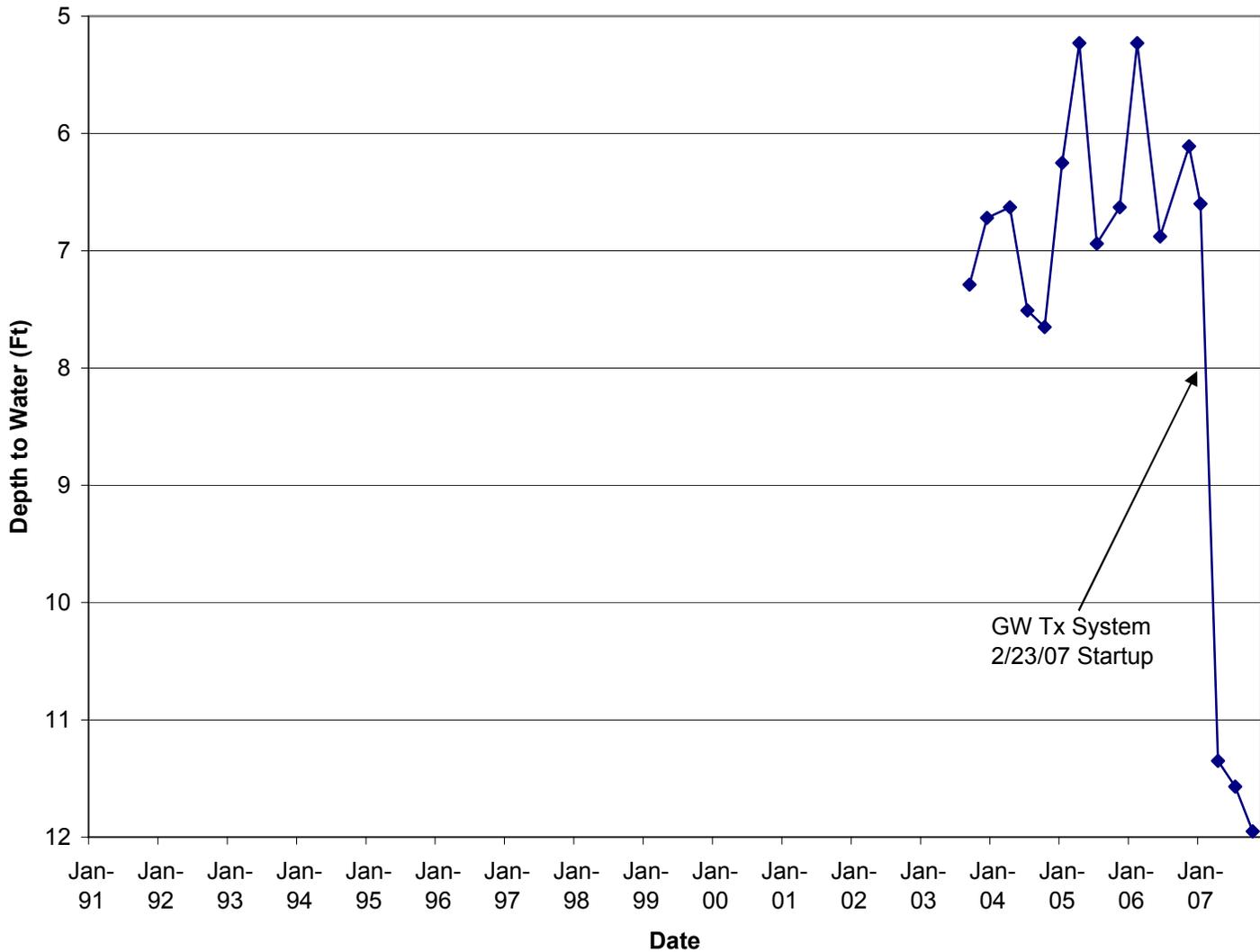


Figure 5  
 Graph of EW1 Historic Water Level Measurements  
 Xtra Oil Company  
 3495 Castro Valley Blvd.  
 Castro Valley, California

P & D Environmental, Inc.  
 55 Santa Clara Avenue, Suite 240  
 Oakland, CA 94610  
 (510) 658-6916

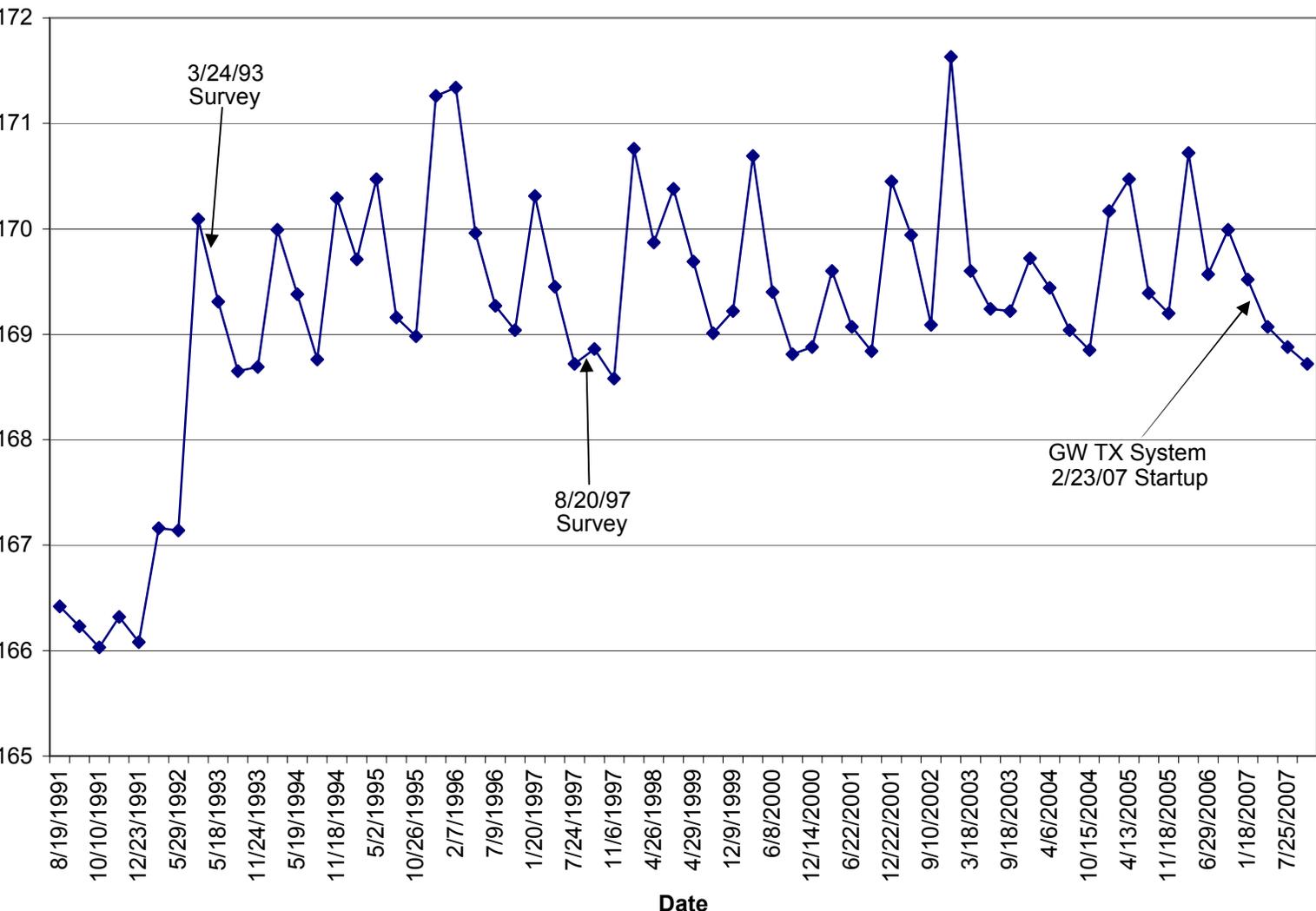


Figure 6  
 Graph of MW1 Historic Water Level Measurements  
 Xtra Oil Company  
 3495 Castro Valley Blvd.  
 Castro Valley, California

P & D Environmental, Inc.  
 55 Santa Clara Avenue, Suite 240  
 Oakland, CA 94610  
 (510) 658-6916

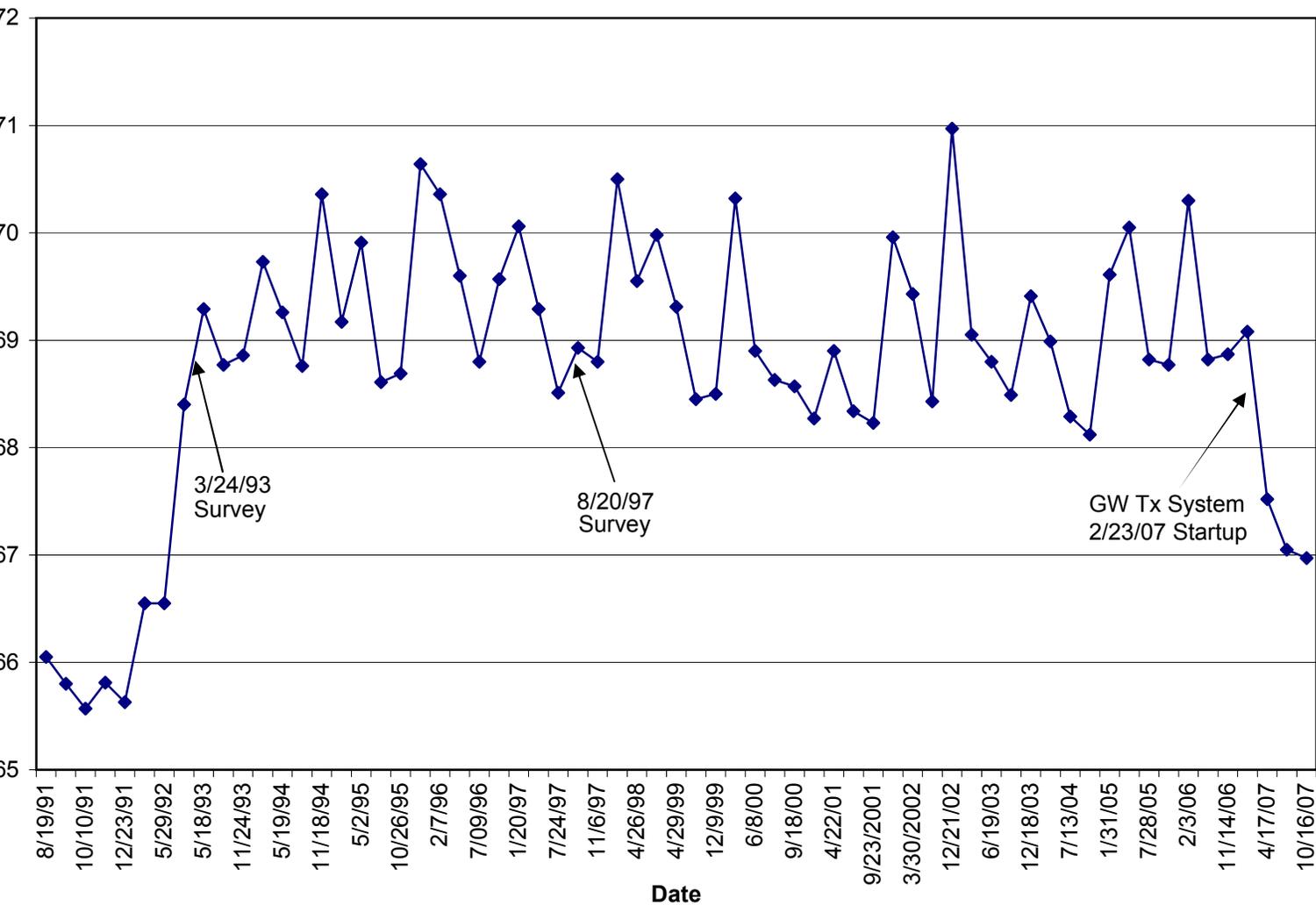


Figure 7  
 Graph of MW3 Historic Water Level Measurements  
 Xtra Oil Company  
 3495 Castro Valley Blvd.  
 Castro Valley, California

P & D Environmental, Inc.  
 55 Santa Clara Avenue, Suite 240  
 Oakland, CA 94610  
 (510) 658-6916

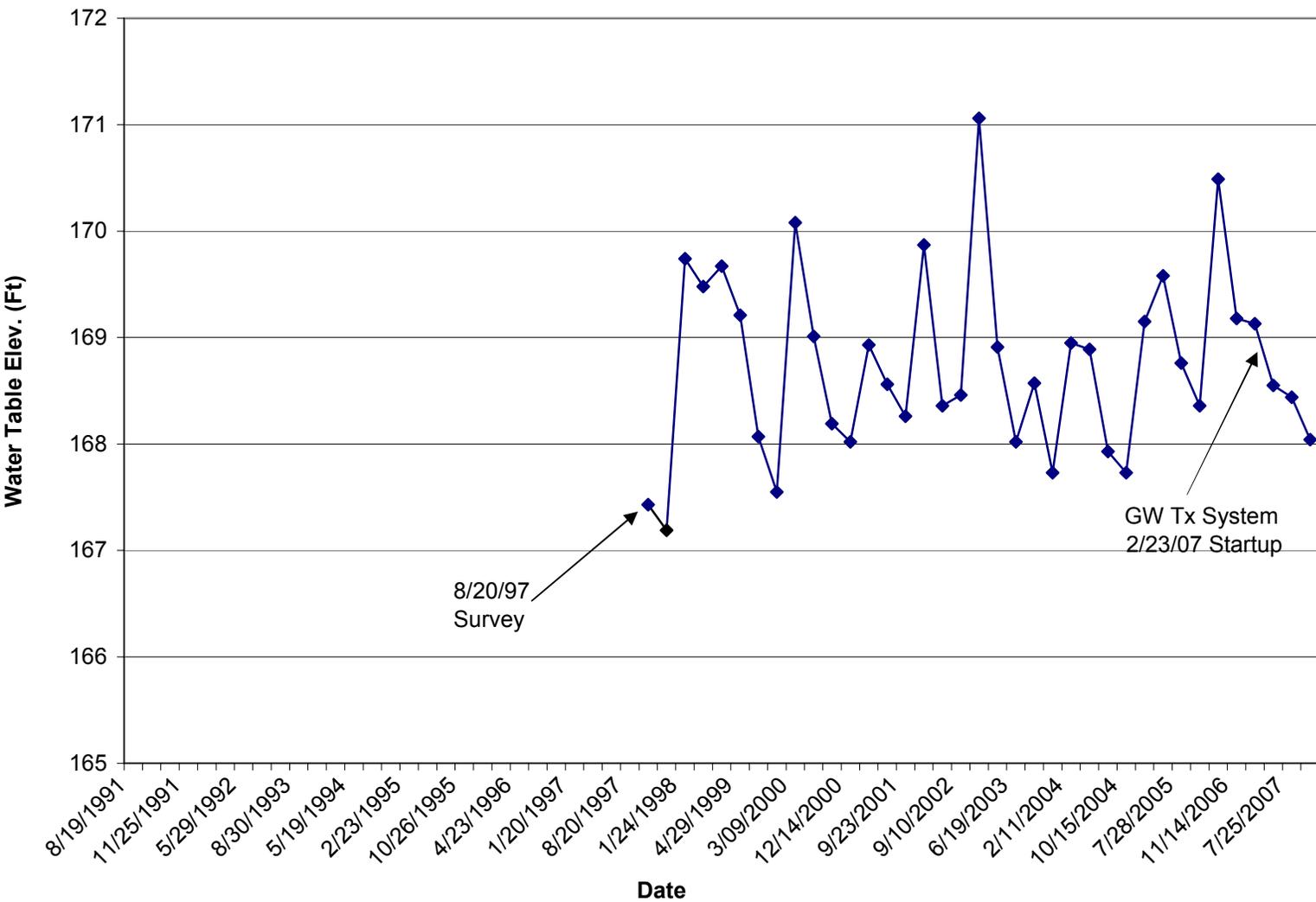


Figure 8  
 Graph of MW4 Historic Water Level Measurements  
 Xtra Oil Company  
 3495 Castro Valley Blvd.  
 Castro Valley, California

P & D Environmental, Inc.  
 55 Santa Clara Avenue, Suite 240  
 Oakland, CA 94610  
 (510) 658-6916

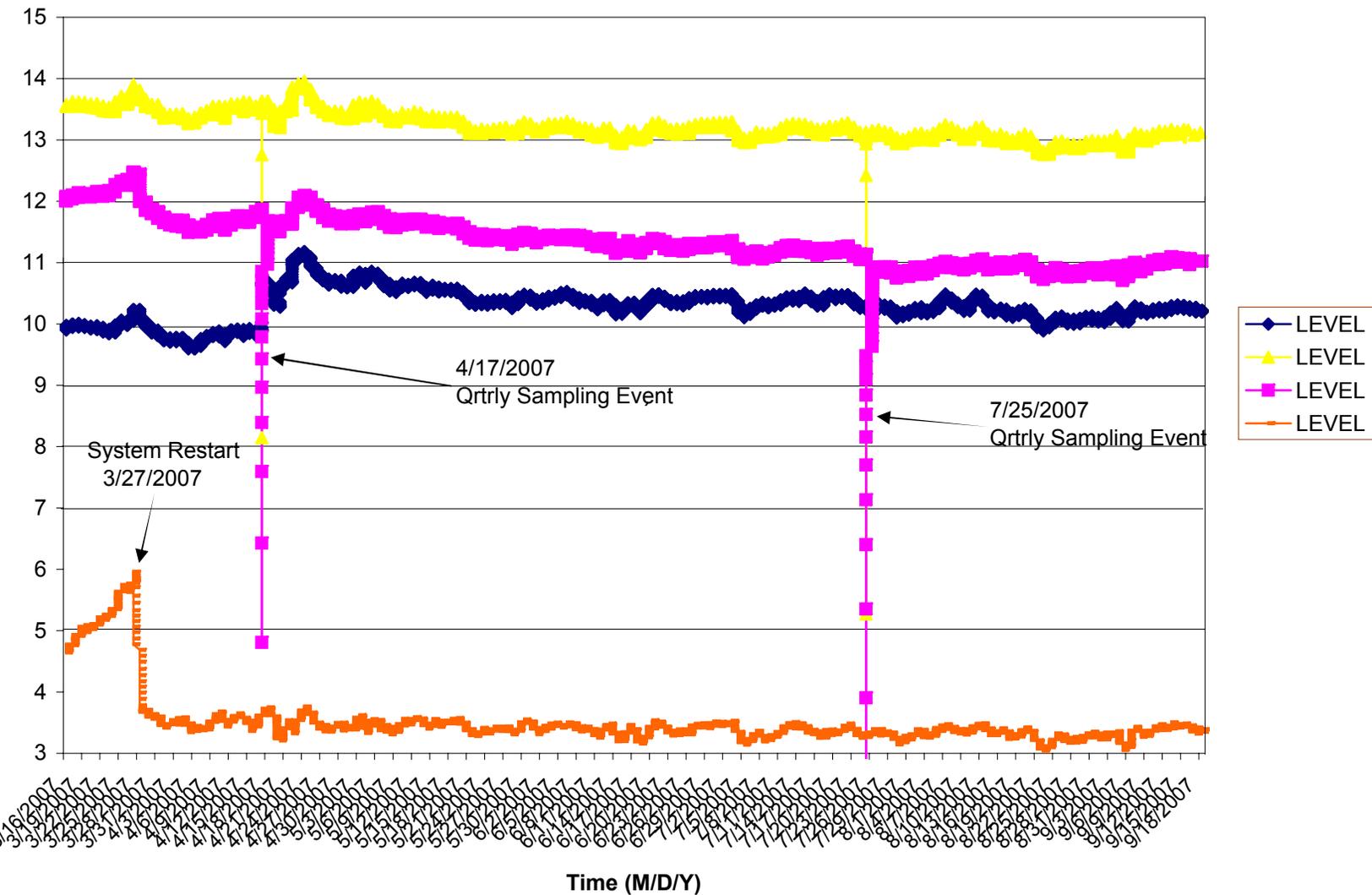


Figure 9  
 Graph of MW1, MW3, MW4, EW1 Historic Water Level Measurements  
 Xtra Oil Company  
 3495 Castro Valley Blvd.  
 Castro Valley, California

P & D Environmental, Inc.  
 55 Santa Clara Avenue, Suite 240  
 Oakland, CA 94610  
 (510) 658-6916

**GROUNDWATER TREATMENT SYSTEM  
MONTHLY MONITORING  
LABORATORY REPORTS  
AND CHAIN OF CUSTODY  
DOCUMENTATION**



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil Castro Valley	Date Sampled: 01/31/07
	Client Contact: Steve Carmack	Date Received: 02/01/07
	Client P.O.:	Date Reported: 02/08/07
		Date Completed: 02/08/07

**WorkOrder: 0702032**

February 08, 2007

Dear Steve:

Enclosed are:

- 1). the results of 1 analyzed sample from your **#0014; Xtra Oil Castro Valley project,**
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager





# McC Campbell Analytical, Inc.



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0702032

ClientID: PDEO

EDF

Fax

Email

HardCopy

ThirdParty

Report to:

Steve Carmack  
P & D Environmental  
55 Santa Clara, Ste.240  
Oakland, CA 94610

Email:

TEL: (510) 658-691 FAX: 510-834-0152  
ProjectNo: #0014; Xtra Oil Castro Valley  
PO:

Bill to

Accounts Payable  
Xtra Oil  
2307 Pacific Ave  
Alameda, CA 94507

Requested TAT: 5 days

Date Received: 02/01/2007

Date Printed: 02/08/2007

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0702032-001	Effluent-013107	Water	01/31/07 12:00:00	<input type="checkbox"/>	G	H	E	A	B	C	F	D					

Test Legend:

1	5520B_SG_W	2	5520B_W	3	624_W	4	CAM17(T)MS_W	5	CN_TOTAL_W
6	G-MBTEX_W	7	PHENOLICS_W	8	TPH(DMO)_W	9		10	
11		12							

Prepared by: Rosa Venegas

Comments:

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







# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mccampbell.com E-mail: main@mccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental  55 Santa Clara, Ste.240  Oakland, CA 94610	Client Project ID: #0014; Xtra Oil Castro Valley	Date Sampled: 01/31/07
	Client Contact: Steve Carmack	Date Received: 02/01/07
	Client P.O.:	Date Extracted: 02/02/07
		Date Analyzed 02/02/07

### Volatile Organics by P&T and GC/MS (624 Basic Target List)\*

Extraction Method: E624

Analytical Method: E624

Work Order: 0702032

Lab ID	0702032-001E
Client ID	Effluent-013107
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acrolein	ND	1.0	5.0	Acrylonitrile	ND	1.0	2.0
Benzene	ND	1.0	0.5	Bromodichloromethane	ND	1.0	0.5
Bromoform	ND	1.0	0.5	Bromomethane	ND	1.0	0.5
Carbon tetrachloride	ND	1.0	0.5	Chlorobenzene	ND	1.0	0.5
Chloroethane	ND	1.0	0.5	2-Chloroethyl vinyl ether	ND	1.0	1.0
Chloroform	ND	1.0	0.5	Chloromethane	ND	1.0	0.5
Dibromochloromethane	ND	1.0	0.5	Dichlorodifluoromethane	ND	1.0	0.5
1,2-Dichlorobenzene	ND	1.0	0.5	1,3-Dichlorobenzene	ND	1.0	0.5
1,4-Dichlorobenzene	ND	1.0	0.5	1,1-Dichloroethane	ND	1.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND	1.0	0.5	1,1-Dichloroethene	ND	1.0	0.5
cis-1,2-Dichloroethene	ND	1.0	0.5	trans-1,2-Dichloroethene	ND	1.0	0.5
1,2-Dichloropropane	ND	1.0	0.5	cis-1,3-Dichloropropene	ND	1.0	0.5
trans-1,3-Dichloropropene	ND	1.0	0.5	Ethylbenzene	ND	1.0	0.5
Hexachlorobutadiene	ND	1.0	0.5	Hexachloroethane	ND	1.0	0.5
Methyl-t-butyl ether (MTBE)	ND	1.0	0.5	Methylene chloride	ND	1.0	0.5
Naphthalene	ND	1.0	0.5	Nitrobenzene	ND	1.0	10
Styrene	ND	1.0	0.5	1,1,2,2-Tetrachloroethane	ND	1.0	0.5
Tetrachloroethene	ND	1.0	0.5	Toluene	ND	1.0	0.5
1,2,4-Trichlorobenzene	ND	1.0	0.5	1,1,1-Trichloroethane	ND	1.0	0.5
1,1,2-Trichloroethane	ND	1.0	0.5	Trichloroethene	ND	1.0	0.5
Trichlorofluoromethane	ND	1.0	0.5	Freon 113	ND	1.0	10
Vinyl chloride	ND	1.0	0.5	Xylenes	ND	1.0	0.5

### Surrogate Recoveries (%)

%SS1:	110	%SS2:	99
%SS3:	103		

#### Comments:

\* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil Castro Valley	Date Sampled: 01/31/07
	Client Contact: Steve Carmack	Date Received: 02/01/07
	Client P.O.:	Date Extracted: 02/01/07
		Date Analyzed: 02/05/07

### CAM / CCR 17 Metals\*

Lab ID	0702032-001A				Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	Effluent-013107				S	W
Matrix	W				mg/kg	µg/L
Extraction Type	TTLIC					

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8

Extraction Method: E200.8

Work Order: 0702032

Dilution Factor	1			1	1
Antimony	5.5			NA	0.5
Arsenic	69			NA	0.5
Barium	ND			NA	5.0
Beryllium	ND			NA	0.5
Cadmium	ND			NA	0.25
Chromium	ND			NA	0.5
Cobalt	ND			NA	0.5
Copper	13			NA	0.5
Lead	2.1			NA	0.5
Mercury	ND			NA	0.012
Molybdenum	56			NA	0.5
Nickel	ND			NA	0.5
Selenium	0.94			NA	0.5
Silver	ND			NA	0.19
Thallium	ND			NA	0.5
Vanadium	2.3			NA	0.5
Zinc	14			NA	5.0
%SS:	103				

#### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TTLIC metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.











**QC SUMMARY REPORT FOR SM5520B/F**

W.O. Sample Matrix: Water/Water

QC Matrix: Water

WorkOrder 0702032

EPA Method SM5520B/F		Extraction SM5520B/F				BatchID: 26047			Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/L	mg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
POG	N/A	100	N/A	N/A	N/A	96.1	97.8	1.71	N/A	N/A	70 - 130	25

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 26047 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702032-001	1/31/07 12:00 PM	2/01/07	2/06/07 2:58 PM	0702032-001	1/31/07 12:00 PM	2/01/07	2/06/07 3:08 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 % Recovery =  $100 * (MS - Sample) / (Amount Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E420.2

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0702032

EPA Method E420.2	Extraction E420.2			BatchID: 26057			Spiked Sample ID: 0702032-001F					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Phenolics	ND	40	123	114	7.79	95.7	101	5.25	70 - 130	30	80 - 120	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 26057 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702032-001	1/31/07 12:00 PM	2/02/07	2/02/07 1:21 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0702032

EPA Method SW8015C	Extraction SW3510C			BatchID: 26036				Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	103	102	1.13	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	102	100	1.71	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 26036 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702032-001	1/31/07 12:00 PM	2/01/07	2/01/07 9:35 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR Kelada-01

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0702032

EPA Method E335.3 / Kelada-01		Extraction E335.3 / Kelada-01			BatchID: 26043			Spiked Sample ID: 0702032-001B				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Total Cyanide	ND	40	84.1	82.8	1.62	98.4	92.5	6.17	80 - 120	20	90 - 110	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 26043 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702032-001	1/31/07 12:00 PM	2/02/07	2/02/07 1:37 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 % Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).  
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E624

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0702032

EPA Method E624		Extraction E624			BatchID: 26056			Spiked Sample ID: 0702033-011A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Benzene	ND	10	127	125	1.64	127	127	0	70 - 130	30	70 - 130	30
Chlorobenzene	ND	10	99.3	100	1.05	97.3	98.5	1.17	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	92.8	99.4	6.82	105	106	0.722	70 - 130	30	70 - 130	30
Toluene	ND	10	103	96.8	6.41	100	97	3.02	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	78.3	77.5	1.03	79.5	77.9	2.09	70 - 130	30	70 - 130	30
%SS1:	105	10	104	103	1.56	105	104	0.545	70 - 130	30	70 - 130	30
%SS2:	97	10	93	86	7.88	91	87	3.56	70 - 130	30	70 - 130	30
%SS3:	101	10	104	101	3.37	104	101	2.95	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 26056 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702032-001	1/31/07 12:00 PM	2/02/07	2/02/07 9:20 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 % Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).  
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0702032

EPA Method E200.8	Extraction E200.8			BatchID: 26049					Spiked Sample ID: 0702031-001A			
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	2.2	10	93.4	94.2	0.690	95.4	94.4	0.959	75 - 125	20	85 - 115	20
Arsenic	770	10	NR	NR	NR	103	101	1.27	75 - 125	20	85 - 115	20
Barium	ND	100	93.8	93.8	0	95.2	95.7	0.576	75 - 125	20	85 - 115	20
Beryllium	ND	10	99.4	100	0.732	99.6	98.7	0.908	75 - 125	20	85 - 115	20
Cadmium	ND	10	97.9	98.2	0.275	102	101	0.0986	75 - 125	20	85 - 115	20
Chromium	0.61	10	98.5	103	4.03	104	105	0.671	75 - 125	20	85 - 115	20
Cobalt	0.68	10	88.4	89.1	0.753	98.5	97.3	1.23	75 - 125	20	85 - 115	20
Copper	3.7	10	105	111	3.87	104	106	1.14	75 - 125	20	85 - 115	20
Lead	3.3	10	94.4	95.1	0.547	94.3	94.4	0.117	75 - 125	20	85 - 115	20
Mercury	0.26	0.50	95.9	98.7	1.86	90.2	90.1	0.111	75 - 125	20	85 - 115	20
Molybdenum	2.8	10	101	102	1.16	97.8	98.3	0.490	75 - 125	20	85 - 115	20
Nickel	6.8	10	98.3	100	1.19	104	105	0.960	75 - 125	20	85 - 115	20
Selenium	6.0	10	103	103	0	104	104	0	75 - 125	20	85 - 115	20
Silver	0.35	10	90.2	90.5	0.288	97.6	98.4	0.755	75 - 125	20	85 - 115	20
Thallium	ND	10	92.5	93.1	0.690	92.5	93.8	1.44	75 - 125	20	85 - 115	20
Vanadium	1.8	10	100	103	2.49	100	101	0.398	75 - 125	20	85 - 115	20
Zinc	20	100	84.7	86.3	1.52	94.8	105	9.81	75 - 125	20	85 - 115	20
%SS:	102	750	103	101	2.05	102	103	0.768	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 26049 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702032-001	1/31/07 12:00 PM	2/01/07	2/05/07 3:49 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.  
 % Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).  
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.  
 N/A = not applicable to this method.  
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**QC SUMMARY REPORT FOR SW8021B/8015Cm**

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0702032

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 26054			Spiked Sample ID: 0702033-011A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>£</sup>	ND	60	96.1	99.6	3.62	91.4	95.4	4.33	70 - 130	30	70 - 130	30
MTBE	ND	10	91.7	86	6.41	93.6	88.9	5.16	70 - 130	30	70 - 130	30
Benzene	ND	10	106	96.3	9.99	102	100	1.61	70 - 130	30	70 - 130	30
Toluene	ND	10	105	95.8	9.44	101	99.2	2.15	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	107	99.7	7.26	104	99.7	4.18	70 - 130	30	70 - 130	30
Xylenes	ND	30	120	110	8.70	117	110	5.88	70 - 130	30	70 - 130	30
%SS:	106	10	95	92	4.02	95	93	2.40	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 26054 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702032-001	1/31/07 12:00 PM	2/07/07	2/07/07 1:24 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

# cluttered chromatogram; sample peak coelutes with surrogate peak.



**McC Campbell Analytical, Inc.**

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Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/Castro Valley	Date Sampled: 04/24/07
		Date Received: 04/24/07
	Client Contact: Steve Carmack	Date Reported: 04/30/07
	Client P.O.:	Date Completed: 04/30/07

**WorkOrder: 0704481**

April 30, 2007

Dear Steve:

Enclosed are:

- 1). the results of 1 analyzed sample from your **#0014; Xtra Oil/Castro Valley project,**
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager



# McC Campbell Analytical, Inc.



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

# CHAIN-OF-CUSTODY RECORD

**WorkOrder: 0704481**

**ClientID: PDEO**

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

<b>Report to:</b>	<b>Bill to:</b>	<b>Requested TAT: 5 days</b>
Steve Carmack	Accounts Payable	
P & D Environmental	Xtra Oil Company	<i>Date Received 04/24/2007</i>
55 Santa Clara, Ste.240	2307 Pacific Avenue	<i>Date Printed: 04/24/2007</i>
Oakland, CA 94610	Alameda, CA 94507	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0704481-001	Effluent-042407	Water	4/24/07 9:40:00	<input type="checkbox"/>	C	A	B	A									

**Test Legend:**

1	8082A_PCB_W	2	CAM17MS DISS	3	PHENOLICS_W	4	PRDISSOLVED	5	
6		7		8		9		10	
11		12							

**Prepared by: Melissa Valles**

**Comments:**

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



### Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **4/24/07 3:44:09 PM**

Project Name: **#0014; Xtra Oil/Castro Valley**

Checklist completed and reviewed by: **Melissa Valles**

WorkOrder N°: **0704481** Matrix Water

Carrier: Rob Pringle (MAI Courier)

#### Chain of Custody (COC) Information

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

#### Sample Receipt Information

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

#### Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes  No
- Container/Temp Blank temperature Cooler Temp: 3.8°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  N

-----

Client contacted:

Date contacted:

Contacted by:

Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/Castro Valley	Date Sampled: 04/24/07
	Client Contact: Steve Carmack	Date Received: 04/24/07
	Client P.O.:	Date Analyzed: 04/27/07
		Date Extracted: 04/24/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C

Analytical Method: SW8082A

Work Order: 0704481

Lab ID	0704481-001C			Reporting Limit for DF =1	
Client ID	Effluent-042407				
Matrix	W				
DF	1				S

Compound	Concentration				ug/kg	µg/L
Aroclor1016	ND				NA	0.5
Aroclor1221	ND				NA	0.5
Aroclor1232	ND				NA	0.5
Aroclor1242	ND				NA	0.5
Aroclor1248	ND				NA	0.5
Aroclor1254	ND				NA	0.5
Aroclor1260	ND				NA	0.5
PCBs, total	ND				NA	0.5

### Surrogate Recoveries (%)

%SS:	119			
------	-----	--	--	--

### Comments

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(a) PCB aroclor 1016; (b) PCB aroclor 1221; (c) PCB aroclor 1232; (d) PCB aroclor 1242; (e) PCB aroclor 1248; (f) PCB aroclor 1254; (g) PCB aroclor 1260; (h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >~1 vol. % sediment; (j) sample diluted due to high organic content; (k) p,p,- is the same as 4,4,-; (l) florasil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (r) results are reported on a dry weight basis; (p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/Castro Valley	Date Sampled: 04/24/07
	Client Contact: Steve Carmack	Date Received: 04/24/07
	Client P.O.:	Date Extracted: 04/24/07
		Date Analyzed: 04/26/07

### CAM / CCR 17 Metals\*

Lab ID	0704481-001A				Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	Effluent-042407				S	W
Matrix	W				mg/kg	µg/L
Extraction Type	DISS.					

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8

Extraction Method: E200.8

Work Order: 0704481

Dilution Factor	1			1	1
Antimony	ND			NA	0.5
Arsenic	2.4			NA	0.5
Barium	700			NA	5.0
Beryllium	ND			NA	0.5
Cadmium	ND			NA	0.25
Chromium	ND			NA	0.5
Cobalt	ND			NA	0.5
Copper	3.0			NA	0.5
Lead	ND			NA	0.5
Mercury	0.019			NA	0.012
Molybdenum	1.3			NA	0.5
Nickel	0.86			NA	0.5
Selenium	ND			NA	0.5
Silver	ND			NA	0.19
Thallium	ND			NA	0.5
Vanadium	ND			NA	0.5
Zinc	180			NA	5.0
%SS:	N/A				

#### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TTLC metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.





### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0704481

EPA Method SW8082A	Extraction SW3510C			BatchID: 27582			Spiked Sample ID: N/A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	N/A	3.75	N/A	N/A	N/A	124	126	1.75	N/A	N/A	70 - 130	20
%SS:	N/A	2.5	N/A	N/A	N/A	121	127	5.19	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 27582 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704481-001C	04/24/07 9:40 AM	04/24/07	04/27/07 9:54 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0704481

EPA Method E200.8	Extraction E200.8			BatchID: 27595					Spiked Sample ID: 0704511-001A			
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	5.6	10	108	106	1.10	110	106	3.33	75 - 125	20	85 - 115	20
Arsenic	4.2	10	98.1	100	1.70	96.7	93.6	3.17	75 - 125	20	85 - 115	20
Barium	60	100	96.3	95.1	0.772	95	92.6	2.52	75 - 125	20	85 - 115	20
Beryllium	ND	10	85.4	82.6	3.27	97.7	97.2	0.575	75 - 125	20	85 - 115	20
Cadmium	1.3	10	94.7	93.8	0.843	97.4	94.7	2.84	75 - 125	20	85 - 115	20
Chromium	3.6	10	97.2	97.1	0.0750	96.4	95.2	1.32	75 - 125	20	85 - 115	20
Cobalt	1.2	10	90.2	88.3	1.81	94	93.2	0.801	75 - 125	20	85 - 115	20
Copper	39	10	87.5	90.8	0.687	98	99.8	1.88	75 - 125	20	85 - 115	20
Lead	2.1	10	95.1	93.4	1.48	94.5	93.4	1.23	75 - 125	20	85 - 115	20
Mercury	0.039	0.25	98.4	99.2	0.734	96	95.9	0.125	75 - 125	20	85 - 115	20
Molybdenum	70	10	96	82.8	1.67	91.6	90.5	1.14	75 - 125	20	85 - 115	20
Nickel	20	10	94.4	93.7	0.238	95.6	97	1.53	75 - 125	20	85 - 115	20
Selenium	ND	10	93	91.3	1.78	91.6	90.2	1.58	75 - 125	20	85 - 115	20
Silver	ND	10	93.5	92.8	0.751	98.3	94.5	3.94	75 - 125	20	85 - 115	20
Thallium	ND	10	95.4	93.9	1.56	92.6	90.7	2.02	75 - 125	20	85 - 115	20
Vanadium	8.2	10	101	100	0.164	96.9	95.6	1.32	75 - 125	20	85 - 115	20
Zinc	62	100	92.8	90.7	1.36	93.7	92.6	1.20	75 - 125	20	85 - 115	20
%SS:	114	750	98	98	0	103	100	3.12	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 27595 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704481-001A	04/24/07 9:40 AM	04/24/07	04/26/07 4:53 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E420.2

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0704481

EPA Method E420.2	Extraction E420.2			BatchID: 27523			Spiked Sample ID: 0704358-001D					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Phenolics	ND	40	93.2	93.3	0.137	92.6	93	0.421	70 - 130	30	80 - 120	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 27523 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704481-001B	04/24/07 9:40 AM	04/25/07	04/25/07 1:22 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/ Castro Valley	Date Sampled: 05/29/07
		Date Received: 05/29/07
	Client Contact: Paul King	Date Reported: 06/01/07
	Client P.O.:	Date Completed: 06/04/07

**WorkOrder: 0705711**

June 04, 2007

Dear Paul:

Enclosed are:

- 1). the results of 1 analyzed sample from your **#0014; Xtra Oil/ Castro Valley project,**
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

**P & D ENVIRONMENTAL, INC.**

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

0705711 PDEO

**CHAIN OF CUSTODY RECORD**

PAGE 1 OF 1

PROJECT NUMBER: 0014			PROJECT NAME: Xtra Oil / Castro Valley			NUMBER OF CONTAINERS	ANALYSIS(ES): CAM17 / CCR17 Phenolics, Total by 4202 PCB's By 8082A	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) Steve Carmack <i>[Signature]</i>									
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION					
✓ E1052907	5/29/07	0820	H2O			8	X X X	ICE	5 day Turnaround time
ICE: <u>3.8</u> GOOD CONDITION <input checked="" type="checkbox"/> APPROPRIATE CONTAINERS <input checked="" type="checkbox"/> HEAD SPACE ABSENT <input checked="" type="checkbox"/> PRESERVED IN LAB <input checked="" type="checkbox"/> DECHLORINATED IN LAB <input type="checkbox"/> PRESERVATION: VOAS <input type="checkbox"/> O&G <input type="checkbox"/> METALS <input type="checkbox"/> OTHER <input type="checkbox"/>						TOTAL NO. OF SAMPLES (THIS SHIPMENT): 1		LABORATORY: McLampbell Analytical	
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>						TOTAL NO. OF CONTAINERS (THIS SHIPMENT): 8		LABORATORY CONTACT: Angela Rydelius	
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>						LABORATORY CONTACT: Angela Rydelius		LABORATORY PHONE NUMBER: (925) 252-9262	
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>						RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>[Signature]</i>		SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( ) YES (X) NO	

REMARKS: Amber 1L's preserved w/ H2SO4 (yellow stickers)  
- PLEASE FILTER + PRESERVE POLY'S Prior to Analysis.

# McC Campbell Analytical, Inc.



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

# CHAIN-OF-CUSTODY RECORD

**WorkOrder: 0705711**

**ClientID: PDEO**

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

<b>Report to:</b>		<b>Bill to</b>	<b>Requested TAT: 5 days</b>
Paul King	Email: PDKing0000@aol.com	Accounts Payable	
P & D Environmental	TEL: (510) 658-691 FAX: 510-834-0152	P & D Environmental	<i>Date Received 05/29/2007</i>
55 Santa Clara, Ste.240	ProjectNo: #0014; Xtra Oil/ Castro Valley	55 Santa Clara, Ste.240	<i>Date Printed: 05/29/2007</i>
Oakland, CA 94610	PO:	Oakland, CA 94610	
		PDKing0000@aol.com	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0705711-001	E1052907	Water	05/29/07 8:20:00	<input type="checkbox"/>	A	C	B	C									

**Test Legend:**

1	8082A_PCB_W	2	CAM17MS DISS	3	PHENOLICS_W	4	PRDISSOLVED	5	
6		7		8		9		10	
11		12							

**Prepared by: Sheli Cryderman**

**Comments:**

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



### Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **05/29/07 5:07:27 PM**  
 Project Name: **#0014; Xtra Oil/ Castro Valley** Checklist completed and reviewed by: **SC**  
 WorkOrder N°: **0705711** Matrix Water Carrier: Courier

#### Chain of Custody (COC) Information

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

#### Sample Receipt Information

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

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 3.8°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

-----

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Contacted by: \_\_\_\_\_  
 Comments: \_\_\_\_\_



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/ Castro Valley	Date Sampled: 05/29/07
	Client Contact: Paul King	Date Received: 05/29/07
	Client P.O.:	Date Analyzed 05/31/07
		Date Extracted: 05/29/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C

Analytical Method: SW8082A

Work Order: 0705711

Lab ID	0705711-001A				Reporting Limit for DF =1	
Client ID	E1052907					
Matrix	W					
DF	1					

Compound	Concentration				ug/kg	µg/L
Aroclor1016	ND				NA	0.5
Aroclor1221	ND				NA	0.5
Aroclor1232	ND				NA	0.5
Aroclor1242	ND				NA	0.5
Aroclor1248	ND				NA	0.5
Aroclor1254	ND				NA	0.5
Aroclor1260	ND				NA	0.5
PCBs, total	ND				NA	0.5

### Surrogate Recoveries (%)

%SS:	119				
------	-----	--	--	--	--

**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >>1 vol. % sediment; (j) sample diluted due to high organic content; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (r) results are reported on a dry weight basis; (p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; Xtra Oil/ Castro Valley	Date Sampled: 05/29/07
	Client Contact: Paul King	Date Received: 05/29/07
	Client P.O.:	Date Extracted: 05/29/07
		Date Analyzed 05/31/07

### CAM / CCR 17 Metals\*

Lab ID	0705711-001C				Reporting Limit for DF =1; ND means not detected above the reporting limit		
Client ID	E1052907						
Matrix	W					S	W
Extraction Type	DISS.					mg/kg	µg/L

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8

Extraction Method: E200.8

Work Order: 0705711

Dilution Factor	1				1	1
Antimony	ND				NA	0.5
Arsenic	1.0				NA	0.5
Barium	700				NA	5.0
Beryllium	ND				NA	0.5
Cadmium	ND				NA	0.25
Chromium	ND				NA	0.5
Cobalt	ND				NA	0.5
Copper	1.1				NA	0.5
Lead	ND				NA	0.5
Mercury	ND				NA	0.012
Molybdenum	0.64				NA	0.5
Nickel	ND				NA	0.5
Selenium	ND				NA	0.5
Silver	ND				NA	0.19
Thallium	ND				NA	0.5
Vanadium	ND				NA	0.5
Zinc	96				NA	5.0
%SS:	N/A					

#### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TTLC metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.





### QC SUMMARY REPORT FOR E420.2

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0705711

EPA Method E420.2	Extraction E420.2			BatchID: 28309			Spiked Sample ID: 0705627-001B					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Phenolics	81	40	81.3	84.9	1.27	91	91.5	0.521	70 - 130	30	80 - 120	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 28309 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0705711-001B	05/29/07 8:20 AM	05/30/07	05/30/07 1:33 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0705711

EPA Method SW8082A	Extraction SW3510C			BatchID: 28368			Spiked Sample ID: N/A					
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	N/A	3.75	N/A	N/A	N/A	120	121	0.822	N/A	N/A	70 - 130	20
%SS:	N/A	2.5	N/A	N/A	N/A	119	117	1.40	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 28368 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0705711-001A	05/29/07 8:20 AM	05/29/07	05/31/07 5:48 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0705711

EPA Method E200.8	Extraction E200.8			BatchID: 28362					Spiked Sample ID: 0705705-001A			
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	3.6	10	113	109	3.25	104	102	1.85	75 - 125	20	85 - 115	20
Arsenic	1.4	10	111	106	4.07	106	107	0.564	75 - 125	20	85 - 115	20
Barium	61	100	114	108	3.21	104	103	1.35	75 - 125	20	85 - 115	20
Beryllium	ND	10	97.7	96	1.81	102	99.1	2.99	75 - 125	20	85 - 115	20
Cadmium	1.1	10	111	106	4.11	105	104	1.82	75 - 125	20	85 - 115	20
Chromium	3.6	10	121	115	3.83	108	105	3.66	75 - 125	20	85 - 115	20
Cobalt	0.60	10	113	112	0.846	111	110	1.09	75 - 125	20	85 - 115	20
Copper	380	10	NR	NR	NR	92.9	85.8	7.89	75 - 125	20	85 - 115	20
Lead	6.9	10	102	95.5	3.93	108	104	3.97	75 - 125	20	85 - 115	20
Mercury	0.37	0.25	93.7	81	5.44	98.1	96.5	1.60	75 - 125	20	85 - 115	20
Molybdenum	420	10	NR	NR	NR	100	98.9	1.04	75 - 125	20	85 - 115	20
Nickel	2.8	10	102	113	8.73	89.7	86.6	3.46	75 - 125	20	85 - 115	20
Selenium	0.97	10	115	108	5.37	104	103	0.867	75 - 125	20	85 - 115	20
Silver	5.4	10	101	95.2	4.02	105	104	1.34	75 - 125	20	85 - 115	20
Thallium	ND	10	101	97.4	3.32	100	99.2	0.973	75 - 125	20	85 - 115	20
Vanadium	91	10	NR	116	NR	109	106	2.89	75 - 125	20	85 - 115	20
Zinc	390	100	116	98.8	3.51	103	102	1.37	75 - 125	20	85 - 115	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

#### BATCH 28362 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0705711-001C	05/29/07 8:20 AM	05/29/07	05/31/07 7:53 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; XtremeOil/ Castro Valley	Date Sampled: 06/18/07
		Date Received: 06/18/07
	Client Contact: Steve Carmack	Date Reported: 06/22/07
	Client P.O.:	Date Completed: 06/22/07

**WorkOrder: 0706466**

June 22, 2007

Dear Steve:

Enclosed are:

- 1). the results of 1 analyzed sample from your **#0014; XtremeOil/ Castro Valley project,**
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

0706466

PDEO

# P & D ENVIRONMENTAL, INC.

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

## CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER: <b>0014</b>			PROJECT NAME: <b>Xtra Oil/Casta Valley</b>			NUMBER OF CONTAINERS	ANALYSIS(ES): <b>CAMP/CEP7 PHENOL/TOLUENE/PAH PCBs by 8082A</b>	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) <b>Steven Carmack</b> <i>Steven Carmack</i>									
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION					
<b>E1061807</b>	<b>6/18/07</b>	<b>1050</b>	<b>H2O</b>			<b>6</b>	<b>XXX</b>	<b>ICE</b>	<b>5 day Turnaround Time</b>
ICE IT? <input checked="" type="checkbox"/> <b>7.100</b> GOOD CONDITION <input checked="" type="checkbox"/> HEAD SPACE ABSENT <input checked="" type="checkbox"/> DECHLORINATED IN LAB <input checked="" type="checkbox"/> PRESERVATION <input checked="" type="checkbox"/>						APPROPRIATE CONTAINERS <input checked="" type="checkbox"/> PRESERVED IN LAB <input checked="" type="checkbox"/> DECHLORINATED IN LAB <input checked="" type="checkbox"/> PRESERVED IN LAB <input checked="" type="checkbox"/> PRESERVATION <input checked="" type="checkbox"/>			
RELINQUISHED BY: (SIGNATURE) <i>Steven Carmack</i>			DATE <b>6/18/07</b>	TIME <b>500</b>	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>			TOTAL NO. OF SAMPLES (THIS SHIPMENT) <b>1</b>	LABORATORY: <b>McLambell Analytical Inc</b>
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>			DATE <b>6/18/07</b>	TIME <b>45</b>	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>			TOTAL NO. OF CONTAINERS (THIS SHIPMENT) <b>6</b>	LABORATORY CONTACT: <b>Angela Rydelius</b>
RELINQUISHED BY: (SIGNATURE)			DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)			LABORATORY PHONE NUMBER: <b>(877) 252-9262</b>	
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com						REMARKS: <b>- 2 Ambers preserved w/ H2SO4 - Please filter + preserve poly S prior to analysis.</b>			

f

# McC Campbell Analytical, Inc.



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0706466

ClientID: PDEO

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

Report to:		Bill to:	Requested TAT: <b>5 days</b>
Steve Carmack	Email: lab@pdenviro.com	Accounts Payable	
P & D Environmental	TEL: (510) 658-691 FAX: 510-834-0152	Xtra Oil Company	<i>Date Received</i> 06/18/2007
55 Santa Clara, Ste.240	ProjectNo: #0014; XtreOil/ Castro Valley	2307 Pacific Avenue	<i>Date Printed:</i> 06/22/2007
Oakland, CA 94610	PO:	Alameda, CA 94507	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0706466-001	E1061807	Water	6/18/2007	<input type="checkbox"/>	C	A	B	A									

**Test Legend:**

1	8082A_PCB_W	2	CAM17MS DISS	3	PHENOLICS_W	4	PRDISSOLVED	5	
6		7		8		9		10	
11		12							

**Prepared by: Chloe Lam**

**Comments:**

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



### Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **6/18/2007 4:57:34 PM**  
 Project Name: **#0014; XtremeOil/ Castro Valley** Checklist completed and reviewed by: **Chloe Lam**  
 WorkOrder N°: **0706466** Matrix Water Carrier: Client Drop-In

#### Chain of Custody (COC) Information

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

#### Sample Receipt Information

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

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 7.4°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Contacted by: \_\_\_\_\_

Comments: \_\_\_\_\_



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"When Quality Counts"

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Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; XtreOil/ Castro Valley	Date Sampled: 06/18/07
	Client Contact: Steve Carmack	Date Received: 06/18/07
	Client P.O.:	Date Analyzed 06/19/07
		Date Extracted: 06/18/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C

Analytical Method: SW8082A

Work Order: 0706466

Lab ID	0706466-001C				Reporting Limit for DF =1	
Client ID	E1061807					
Matrix	W					
DF	1					

Compound	Concentration				ug/kg	µg/L
Aroclor1016	ND				NA	0.5
Aroclor1221	ND				NA	0.5
Aroclor1232	ND				NA	0.5
Aroclor1242	ND				NA	0.5
Aroclor1248	ND				NA	0.5
Aroclor1254	ND				NA	0.5
Aroclor1260	ND				NA	0.5
PCBs, total	ND				NA	0.5

### Surrogate Recoveries (%)

%SS:	115				
------	-----	--	--	--	--

**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >>1 vol. % sediment; (j) sample diluted due to high organic content; (k) p.p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (r) results are reported on a dry weight basis; (p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; XtreOil/ Castro Valley	Date Sampled: 06/18/07
	Client Contact: Steve Carmack	Date Received: 06/18/07
	Client P.O.:	Date Extracted: 06/18/07
		Date Analyzed: 06/20/07

### CAM / CCR 17 Metals\*

Lab ID	0706466-001A			Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	E1061807				
Matrix	W				
Extraction Type	DISS.				
				S	W
				mg/kg	µg/L

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8

Extraction Method: E200.8

Work Order: 0706466

Dilution Factor	1			1	1
Antimony	ND			NA	0.5
Arsenic	1.8			NA	0.5
Barium	720			NA	5.0
Beryllium	ND			NA	0.5
Cadmium	ND			NA	0.25
Chromium	ND			NA	0.5
Cobalt	ND			NA	0.5
Copper	ND			NA	0.5
Lead	ND			NA	0.5
Mercury	0.042			NA	0.012
Molybdenum	ND			NA	0.5
Nickel	3.1			NA	0.5
Selenium	ND			NA	0.5
Silver	ND			NA	0.19
Thallium	ND			NA	0.5
Vanadium	ND			NA	0.5
Zinc	140			NA	5.0
%SS:	N/A				

#### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TTLC metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.





### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0706466

EPA Method SW8082A		Extraction SW3510C			BatchID: 28794			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	N/A	3.75	N/A	N/A	N/A	130	130	0	N/A	N/A	70 - 130	20
%SS:	N/A	2.5	N/A	N/A	N/A	112	113	0.430	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 28794 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706466-001C	06/18/07 10:50 AM	06/18/07	06/19/07 4:38 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0706466

EPA Method E200.8	Extraction E200.8			BatchID: 28793			Spiked Sample ID: 0706474-001A					
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	ND	10	97.5	96	1.52	94.5	95.8	1.31	75 - 125	20	85 - 115	20
Arsenic	ND	10	96.5	97.6	1.16	92	97.1	5.40	75 - 125	20	85 - 115	20
Barium	ND	100	96.8	96.3	0.465	94.9	95.2	0.326	75 - 125	20	85 - 115	20
Beryllium	ND	10	95.2	94.5	0.696	94.6	94.6	0	75 - 125	20	85 - 115	20
Cadmium	ND	10	96.6	96.2	0.457	95.2	96	0.827	75 - 125	20	85 - 115	20
Chromium	ND	10	98.3	95	3.38	94.9	95.7	0.913	75 - 125	20	85 - 115	20
Cobalt	ND	10	97	96	1.02	95.8	96.5	0.728	75 - 125	20	85 - 115	20
Copper	2.3	10	111	98.6	9.78	93.9	92.8	1.19	75 - 125	20	85 - 115	20
Lead	ND	10	99.2	95.9	3.25	94.5	93.9	0.595	75 - 125	20	85 - 115	20
Mercury	ND	0.25	93.9	93.4	0.513	93.2	91.5	1.82	75 - 125	20	85 - 115	20
Molybdenum	ND	10	91.2	92.2	1.16	90.7	91.1	0.506	75 - 125	20	85 - 115	20
Nickel	ND	10	95.6	95.6	0	95.7	94.8	0.976	75 - 125	20	85 - 115	20
Selenium	ND	10	92.3	91.7	0.652	91.7	93.1	1.50	75 - 125	20	85 - 115	20
Silver	ND	10	95.6	95.1	0.598	95	95.4	0.420	75 - 125	20	85 - 115	20
Thallium	ND	10	85.9	86.5	0.748	96.4	97.2	0.847	75 - 125	20	85 - 115	20
Vanadium	ND	10	98.2	96.1	2.11	96.5	95.1	1.50	75 - 125	20	85 - 115	20
Zinc	9.9	100	96.2	94.3	1.81	93.5	94.3	0.927	75 - 125	20	85 - 115	20
%SS:	96	750	96	98	1.45	96	96	0	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 28793 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706466-001A	06/18/07 10:50 AM	06/18/07	06/20/07 1:17 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E420.2

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0706466

EPA Method E420.2		Extraction E420.2			BatchID: 28713			Spiked Sample ID: 0706362-001B				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Phenolics	ND	40	113	110	2.39	99.4	99.3	0.0618	70 - 130	30	80 - 120	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 28713 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706466-001B	06/18/07 10:50 AM	06/20/07	06/20/07 1:18 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; XtraOil/Castro Valley	Date Sampled: 07/26/07
	Client Contact: Steve Carmack	Date Received: 07/30/07
	Client P.O.:	Date Reported: 08/06/07
		Date Completed: 08/06/07

**WorkOrder: 0707685**

August 06, 2007

Dear Steve:

Enclosed are:

- 1). the results of 1 analyzed sample from your **#0014; XtraOil/Castro Valley project,**
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

0707675

PDEO

# P & D ENVIRONMENTAL, INC.

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

## CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NUMBER: <u>0014</u>		PROJECT NAME: <u>Aragal / Castro Valley</u>		NUMBER OF CONTAINERS	ANALYSIS(ES): <u>TPH - McPherson</u> <u>MPTEX / factories &amp; L</u> <u>Phenols (TOD)</u> <u>Can / Metals / CER 7</u> <u>PCB's by 6007A</u> <u>420.2</u>	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) <u>Steven Carmack</u> <u>[Signature]</u>							
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION			
<u>MW1</u>	<u>7/25/07</u>	<u>1420</u>	<u>Water</u>		<u>7</u>	<u>ICE</u>	<u>Normal Temperature</u>
<u>MW3</u>		<u>1430</u>	<u>"</u>		<u>7</u>	<u>"</u>	<u>" " "</u>
<u>EW1</u>		<u>1405</u>	<u>"</u>		<u>7</u>	<u>"</u>	<u>" " "</u>
<u>E1072607</u>	<u>7/26/07</u>	<u>0915</u>	<u>Effluent</u>		<u>4</u>	<u>"</u>	<u>" " "</u>
<u>sample log in as WOH 0707684 per client request - CI</u>							
RELINQUISHED BY: (SIGNATURE) <u>[Signature]</u>					DATE	TIME	RECEIVED BY: (SIGNATURE) <u>[Signature]</u>
RELINQUISHED BY: (SIGNATURE) <u>[Signature]</u>					DATE	TIME	RECEIVED BY: (SIGNATURE) <u>[Signature]</u>
RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)
TOTAL NO. OF SAMPLES (THIS SHIPMENT) <u>4</u>					LABORATORY:		<u>McGambell Analytical</u>
TOTAL NO. OF CONTAINERS (THIS SHIPMENT) <u>25</u>					LABORATORY CONTACT:		<u>Angela Rydelius</u>
LABORATORY PHONE NUMBER:					<u>(877) 250-9282</u>		
RESULTS AND BILLING TO:					SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( ) YES (X) NO		
P&D Environmental, Inc. lab@pdenviro.com					REMARKS: <u>Voas preserved w/ HCl; 1 Amber preserved w/ H2SO4; please filter + preserve poly's prior to analysis.</u>		

ICE? 1400 ✓  
 GOOD CONDITION ✓  
 HEAD SPACE ABSENT ✓  
 DECONTAMINATED IN LAB ✓  
 PRESERVATION: VOAS | O&G | METALS (X) | OTHER

# McC Campbell Analytical, Inc.



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

# CHAIN-OF-CUSTODY RECORD

**WorkOrder: 0707685**

**ClientID: PDEO**

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

<b>Report to:</b>		<b>Bill to</b>	<b>Requested TAT: 5 days</b>
Steve Carmack	Email: lab@pdenviro.com	Accounts Payable	
P & D Environmental	TEL: (510) 658-691 FAX: (510) 834-015	Xtra Oil Company	<i>Date Received 07/27/2007</i>
55 Santa Clara, Ste.240	ProjectNo: #0014; XtraOil/Castro Valley	2307 Pacific Ave	<i>Date Printed: 08/06/2007</i>
Oakland, CA 94610	PO:	Alameda, CA 94610	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0707685-001	E1072607	Water	7/26/2007 7:15:00	<input type="checkbox"/>	C	B	A	B									

**Test Legend:**

1	8082A_PCB_W	2	CAM17MS DISS	3	PHENOLICS_W	4	PRDISSOLVED	5	
6		7		8		9		10	
11		12							

**Prepared by: Chloe Lam**

**Comments:**

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



### Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **7/27/2007 1:28:52 PM**  
 Project Name: **#0014; XtraOil/Castro Valley** Checklist completed and reviewed by: **Chloe Lam**  
 WorkOrder N°: **0707685** Matrix Water Carrier: Rob Pringle (MAI Courier)

#### Chain of Custody (COC) Information

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

#### Sample Receipt Information

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

#### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 14°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted   
 Sample labels checked for correct preservation? Yes  No   
 TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Contacted by: \_\_\_\_\_

Comments:



# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; XtraOil/Castro Valley	Date Sampled: 07/26/07
	Client Contact: Steve Carmack	Date Received: 07/30/07
	Client P.O.:	Date Analyzed: 08/02/07
		Date Extracted: 07/30/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C

Analytical Method: SW8082A

Work Order: 0707685

Lab ID	0707685-001C			Reporting Limit for DF =1	
Client ID	E1072607				
Matrix	W				
DF	1				S

Compound	Concentration				ug/kg	µg/L
Aroclor1016	ND				NA	0.5
Aroclor1221	ND				NA	0.5
Aroclor1232	ND				NA	0.5
Aroclor1242	ND				NA	0.5
Aroclor1248	ND				NA	0.5
Aroclor1254	ND				NA	0.5
Aroclor1260	ND				NA	0.5
PCBs, total	ND				NA	0.5

### Surrogate Recoveries (%)

%SS:	104			
------	-----	--	--	--

**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >>1 vol. % sediment; (j) sample diluted due to high organic content; (k) p,p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (r) results are reported on a dry weight basis; (p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; XtraOil/Castro Valley	Date Sampled: 07/26/07
	Client Contact: Steve Carmack	Date Received: 07/30/07
	Client P.O.:	Date Extracted: 07/30/07
		Date Analyzed: 08/04/07

### CAM / CCR 17 Metals\*

Lab ID	0707685-001B			Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	E1072607				
Matrix	W				
Extraction Type	DISS.				
				S	W
				mg/kg	µg/L

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8      Extraction Method: E200.8      Work Order: 0707685

Dilution Factor	1			1	1
Antimony	ND			NA	0.5
Arsenic	2.4			NA	0.5
Barium	750			NA	5.0
Beryllium	ND			NA	0.5
Cadmium	ND			NA	0.25
Chromium	ND			NA	0.5
Cobalt	ND			NA	0.5
Copper	0.97			NA	0.5
Lead	ND			NA	0.5
Mercury	ND			NA	0.012
Molybdenum	0.55			NA	0.5
Nickel	2.7			NA	0.5
Selenium	ND			NA	0.5
Silver	ND			NA	0.19
Thallium	ND			NA	0.5
Vanadium	ND			NA	0.5
Zinc	95			NA	5.0
%SS:	N/A				

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL^ = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; XtraOil/Castro Valley	Date Sampled: 07/26/07
	Client Contact: Steve Carmack	Date Received: 07/30/07
	Client P.O.:	Date Extracted: 07/30/07
		Date Analyzed: 08/04/07

### CAM / CCR 17 Metals\*

Lab ID	0707685-001B				Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	E1072607					
Matrix	W				S	W
Extraction Type	DISS.				mg/kg	µg/L

### ICP-MS Metals, Concentration\*

Analytical Method E200.8

Extraction Method: E200.8

Work Order: 0707685

Dilution Factor	1				1	1
Antimony	ND				NA	0.5
Arsenic	2.4				NA	0.5
Barium	750				NA	5.0
Beryllium	ND				NA	0.5
Cadmium	ND				NA	0.25
Chromium	ND				NA	0.5
Cobalt	ND				NA	0.5
Copper	0.97				NA	0.5
Lead	ND				NA	0.5
Mercury	ND				NA	0.012
Molybdenum	0.55				NA	0.5
Nickel	2.7				NA	0.5
Selenium	ND				NA	0.5
Silver	ND				NA	0.19
Thallium	ND				NA	0.5
Vanadium	ND				NA	0.5
Zinc	95				NA	5.0
%SS:	N/A					

#### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL^ = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.



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P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: #0014; XtraOil/Castro Valley	Date Sampled: 07/26/07
	Client Contact: Steve Carmack	Date Received: 07/30/07
	Client P.O.:	Date Extracted: 07/30/07
		Date Analyzed: 08/04/07

### CAM / CCR 17 Metals\*

Lab ID	0707685-001B			Reporting Limit for DF =1; ND means not detected above the reporting limit	
Client ID	E1072607				
Matrix	W				
Extraction Type	DISS.				
				S	W
				mg/kg	µg/L

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8      Extraction Method: E200.8      Work Order: 0707685

Dilution Factor	1			1	1
Antimony	ND			NA	0.5
Arsenic	2.4			NA	0.5
Barium	750			NA	5.0
Beryllium	ND			NA	0.5
Cadmium	ND			NA	0.25
Chromium	ND			NA	0.5
Cobalt	ND			NA	0.5
Copper	0.97			NA	0.5
Lead	ND			NA	0.5
Mercury	ND			NA	0.012
Molybdenum	0.55			NA	0.5
Nickel	2.7			NA	0.5
Selenium	ND			NA	0.5
Silver	ND			NA	0.19
Thallium	ND			NA	0.5
Vanadium	ND			NA	0.5
Zinc	95			NA	5.0
%SS:	N/A				

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL^ = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.









### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0707685

EPA Method SW8082A		Extraction SW3510C			BatchID: 29638			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	N/A	3.75	N/A	N/A	N/A	112	112	0	N/A	N/A	70 - 130	20
%SS:	N/A	2.5	N/A	N/A	N/A	109	109	0	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 29638 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0707685-001C	07/26/07 7:15 AM	07/30/07	08/02/07 7:06 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0707685

EPA Method E200.8	Extraction E200.8			BatchID: 29608			Spiked Sample ID: 0707645-001A			Acceptance Criteria (%)			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	MS / MSD	RPD	LCS/LCSD	RPD	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD					
Antimony	20	10	99.4	94.1	2.06	99.6	100	0.890	70 - 130	20	80 - 120	20	
Arsenic	32	10	129	127	0.513	93.8	94.1	0.277	70 - 130	20	80 - 120	20	
Barium	ND	100	93.8	93.6	0.261	100	101	0.695	70 - 130	20	80 - 120	20	
Beryllium	ND	10	106	105	1.14	82.6	90.2	8.78	70 - 130	20	80 - 120	20	
Cadmium	0.34	10	90.3	88.8	1.63	99.4	99.8	0.432	70 - 130	20	80 - 120	20	
Chromium	150	10	NR	NR	NR	96.5	97.8	1.37	70 - 130	20	80 - 120	20	
Cobalt	0.73	10	77.1	76.7	0.499	100	101	0.892	70 - 130	20	80 - 120	20	
Copper	85	10	NR	NR	NR	87.2	88.1	1.03	70 - 130	20	80 - 120	20	
Lead	0.64	10	99.4	99.4	0	101	102	0.691	70 - 130	20	80 - 120	20	
Mercury	0.014	0.25	108	104	2.87	95.6	97.9	2.40	70 - 130	20	80 - 120	20	
Molybdenum	630	10	NR	NR	NR	89.2	89.6	0.503	70 - 130	20	80 - 120	20	
Nickel	27	10	139, F1	134, F1	1.18	87.9	90.1	2.43	70 - 130	20	80 - 120	20	
Selenium	8.1	10	96.3	86.7	5.57	96.3	94.2	2.16	70 - 130	20	80 - 120	20	
Silver	ND	10	90.5	88.8	1.86	94	94.5	0.615	70 - 130	20	80 - 120	20	
Thallium	ND	10	101	101	0	103	104	0.386	70 - 130	20	80 - 120	20	
Vanadium	35	10	80.6	80.3	0.0703	98.3	99.4	1.11	70 - 130	20	80 - 120	20	
Zinc	170	100	107	106	0.108	97.6	99.4	1.76	70 - 130	20	80 - 120	20	
%SS:	89	750	91	89	2.04	94	93	1.16	70 - 130	20	70 - 130	20	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

F1 = MS / MSD exceed acceptance criteria. LCS - LCSD validate prep batch.

#### BATCH 29608 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0707685-001B	07/26/07 7:15 AM	07/30/07	08/04/07 10:07 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E420.2

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0707685

EPA Method E420.2		Extraction E420.2			BatchID: 29535			Spiked Sample ID: 0707549-001B				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Phenolics	3.0	40	102	103	0.530	94.4	93.7	0.827	70 - 130	30	80 - 120	20
<p>All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE</p>												

BATCH 29535 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0707685-001A	07/26/07 7:15 AM	08/02/07	08/02/07 1:21 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



**McC Campbell Analytical, Inc.**

"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: # 0014; Xtra Oil/ Castro Valley	Date Sampled: 08/16/07
		Date Received: 08/16/07
	Client Contact: Steve Carmack	Date Reported: 08/22/07
	Client P.O.:	Date Completed: 08/22/07

**WorkOrder: 0708485**

August 22, 2007

Dear Steve:

Enclosed are:

- 1). the results of 1 analyzed sample from your **#0014; Xtra Oil/ Castro Valley project,**
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

PDEO 0708485

**P & D ENVIRONMENTAL, INC.**

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

**CHAIN OF CUSTODY RECORD**

PROJECT NUMBER: <b>0014</b>		PROJECT NAME: <b>Xtra Oil/ Castro Valley</b>		NUMBER OF CONTAINERS	ANALYSIS(ES): <b>Phenolics (Total) by SAM/F/CCR17 PEB's by 8082A 4420.2</b>	PRESERVATIVE	REMARKS
SAMPLED BY: (PRINTED AND SIGNATURE) <b>Steven Carmack</b> <i>[Signature]</i>							
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION			
<b>E1081607</b>	<b>8/16/07</b>	<b>1120</b>	<b>Water</b>	<b>GW Tx System Effluent</b>	<b>6</b>	<b>X X X</b>	<b>ICE</b> <b>Normal Turnaround Time</b>
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>					DATE	TIME	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>
RELINQUISHED BY: (SIGNATURE) <i>[Signature]</i>					DATE	TIME	RECEIVED BY: (SIGNATURE) <i>[Signature]</i>
RELINQUISHED BY: (SIGNATURE)					DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)
TOTAL NO. OF SAMPLES (THIS SHIPMENT)					<b>1</b>	LABORATORY:	
TOTAL NO. OF CONTAINERS (THIS SHIPMENT)					<b>6</b>	<b>McCampbell Analytical</b>	
LABORATORY CONTACT:					LABORATORY PHONE NUMBER:		
<b>Angela Rydelius</b>					<b>(877) 252-9262</b>		
RESULTS AND BILLING TO:					REMARKS:		
P&D Environmental, Inc. lab@pdenviro.com					<b>2 amber preserved w/ H2SO4 (marked B);</b> <b>Please filter &amp; preserve polys prior to analysis.</b>		

ICE? Yes  
 APPROPRIATE CONTAINERS PRESERVED IN LAB? Yes  
 HEADSPACE ABSENT? Yes  
 PRESERVATION: VOAS | O&G | METALS | OTHER

# McCampbell Analytical, Inc.



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0708485

ClientID: PDEO

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

Report to:	Steve Carmack	Email: lab@pdenviro.com	Bill to	Accounts Payable	Requested TAT: <b>5 days</b>
	P & D Environmental	TEL: (510) 658-691 FAX: 510-834-0152		P & D Environmental	<i>Date Received</i> 08/16/2007
	55 Santa Clara, Ste.240	ProjectNo: # 0014; Xtra Oil/ Castro Valley		55 Santa Clara, Ste.240	<i>Date Printed:</i> 08/16/2007
	Oakland, CA 94610	PO:		Oakland, CA 94610	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0708485-001	E1081607	Water	8/16/2007	<input type="checkbox"/>	C	B	A	B									

**Test Legend:**

1	8082A_PCB_W	2	CAM17MS DISS	3	PHENOLICS_W	4	PRDISSOLVED	5	
6		7		8		9		10	
11		12							

Prepared by: Kimberly Burks

**Comments:**

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



### Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **8/16/2007 8:11:14 PM**

Project Name: **# 0014; Xtra Oil/ Castro Valley**

Checklist completed and reviewed by: **Kimberly Burks**

WorkOrder N°: **0708485** Matrix Water

Carrier: Rob Pringle (MAI Courier)

#### Chain of Custody (COC) Information

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

#### Sample Receipt Information

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

#### Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes  No
- Container/Temp Blank temperature Cooler Temp: 14.6°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

-----

Client contacted:

Date contacted:

Contacted by:

Comments:



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Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: # 0014; Xtra Oil/ Castro Valley	Date Sampled: 08/16/07
	Client Contact: Steve Carmack	Date Received: 08/16/07
	Client P.O.:	Date Analyzed: 08/18/07
		Date Extracted: 08/16/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C

Analytical Method: SW8082A

Work Order: 0708485

Lab ID	0708485-001C				Reporting Limit for DF =1	
Client ID	E1081607					
Matrix	W					
DF	1					

Compound	Concentration				ug/kg	µg/L
Aroclor1016	ND				NA	0.5
Aroclor1221	ND				NA	0.5
Aroclor1232	ND				NA	0.5
Aroclor1242	ND				NA	0.5
Aroclor1248	ND				NA	0.5
Aroclor1254	ND				NA	0.5
Aroclor1260	ND				NA	0.5
PCBs, total	ND				NA	0.5

### Surrogate Recoveries (%)

%SS:	105				
------	-----	--	--	--	--

**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >>1 vol. % sediment; (j) sample diluted due to high organic content; (k) p.p.- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (r) results are reported on a dry weight basis; (p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental  55 Santa Clara, Ste.240  Oakland, CA 94610	Client Project ID: # 0014; Xtra Oil/ Castro Valley	Date Sampled: 08/16/07
	Client Contact: Steve Carmack	Date Received: 08/16/07
	Client P.O.:	Date Analyzed 08/18/07

### CAM / CCR 17 Metals\*

Lab ID	0708485-001B				Reporting Limit for DF =1; ND means not detected above the reporting limit
Client ID	E1081607				
Matrix	W				S W
Extraction Type	DISS.				mg/kg µg/L

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8	Extraction Method: E200.8	Work Order: 0708485
Dilution Factor	1	1
Antimony	0.52	0.5
Arsenic	3.6	0.5
Barium	840	5.0
Beryllium	ND	0.5
Cadmium	ND	0.25
Chromium	ND	0.5
Cobalt	ND	0.5
Copper	1.6	0.5
Lead	ND	0.5
Mercury	ND	0.012
Molybdenum	0.67	0.5
Nickel	16	0.5
Selenium	ND	0.5
Silver	ND	0.19
Thallium	ND	0.5
Vanadium	ND	0.5
Zinc	200	5.0
%SS:	N/A	

### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL^ = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.





### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0708485

EPA Method SW8082A		Extraction SW3510C			BatchID: 30057			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	N/A	3.75	N/A	N/A	N/A	118	116	1.72	N/A	N/A	70 - 130	20
%SS:	N/A	2.5	N/A	N/A	N/A	129	128	0.609	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

BATCH 30057 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0708485-001C	08/16/07 11:20 AM	08/16/07	08/18/07 5:58 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0708485

EPA Method E200.8	Extraction E200.8			BatchID: 30036			Spiked Sample ID: 0708468-004C			Acceptance Criteria (%)			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	MS / MSD	RPD	LCS/LCSD	RPD	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD					
Antimony	ND	10	101	101	0	95.7	96.2	0.511	70 - 130	20	80 - 120	20	
Arsenic	6.9	10	100	98.5	0.892	99	98.8	0.233	70 - 130	20	80 - 120	20	
Barium	21	100	115	115	0	94	95.3	1.38	70 - 130	20	80 - 120	20	
Beryllium	ND	10	122	123	0.409	107	107	0	70 - 130	20	80 - 120	20	
Cadmium	ND	10	109	110	0.626	92.5	92.6	0.151	70 - 130	20	80 - 120	20	
Chromium	1.2	10	102	102	0	97.8	97.9	0.123	70 - 130	20	80 - 120	20	
Cobalt	3.1	10	118	118	0	94.7	93.6	1.21	70 - 130	20	80 - 120	20	
Copper	52,000	10	NR	NR	NR	101	100	0.389	70 - 130	20	80 - 120	20	
Lead	5.6	10	117	118	0.867	91.9	92.8	1.03	70 - 130	20	80 - 120	20	
Mercury	ND	0.25	96.9	101	3.93	92.4	92.6	0.260	70 - 130	20	80 - 120	20	
Molybdenum	ND	10	98.8	99.2	0.393	96.7	97.2	0.526	70 - 130	20	80 - 120	20	
Nickel	390	10	NR	NR	NR	100	99.4	0.622	70 - 130	20	80 - 120	20	
Selenium	2.8	10	115	117	1.18	97.2	97.2	0	70 - 130	20	80 - 120	20	
Silver	0.26	10	113	115	1.46	93.1	94	0.951	70 - 130	20	80 - 120	20	
Thallium	ND	10	110	112	0.991	90	90.9	0.984	70 - 130	20	80 - 120	20	
Vanadium	2.4	10	133, F1	132, F1	0.191	99.1	99.5	0.403	70 - 130	20	80 - 120	20	
Zinc	87	100	110	113	1.26	95.4	95.7	0.248	70 - 130	20	80 - 120	20	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

F1 = MS / MSD outside of acceptance criteria. LCS - LCSD validate prep batch.

#### BATCH 30036 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0708485-001B	08/16/07 11:20 AM	08/16/07	08/18/07 12:48 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E420.2

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0708485

EPA Method E420.2		Extraction E420.2			BatchID: 29988			Spiked Sample ID: 0708485-001A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Phenolics	ND	40	118	120	1.21	98.9	107	7.52	70 - 130	30	80 - 120	20
<p>All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE</p>												

BATCH 29988 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0708485-001A	08/16/07 11:20 AM	08/20/07	08/20/07 1:22 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ;  $RPD = 100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: # 0014; Xtra Oil/Castro Valley	Date Sampled: 09/18/07
		Date Received: 09/19/07
	Client Contact: Steve Carmack	Date Reported: 09/26/07
	Client P.O.:	Date Completed: 09/26/07

**WorkOrder: 0709457**

September 26, 2007

Dear Steve:

Enclosed are:

- 1). the results of **1** analyzed sample from your **#0014; Xtra Oil/Castro Valley project,**
- 2). a QC report for the above sample
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager



# McC Campbell Analytical, Inc.



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

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 0709457

ClientID: PDEO

EDF   
  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty

Report to:	Steve Carmack	Email: lab@pdenviro.com	Bill to	Accounts Payable	Requested TAT: <b>5 days</b>
	P & D Environmental	TEL: (510) 658-691 FAX: 510-834-0152		Xtra Oil Company	<i>Date Received</i> 09/19/2007
	55 Santa Clara, Ste.240	ProjectNo: # 0014; Xtra Oil/Castro Valley		2307 Pacific Avenue	<i>Date Printed:</i> 09/19/2007
	Oakland, CA 94610	PO:		Alameda, CA 94610	

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0709457-001	E1091807	Water	9/18/2007	<input type="checkbox"/>	C	B	A										

**Test Legend:**

1	8082A_PCB_W	2	CAM17(T)MS_W	3	PHENOLICS_W	4		5	
6		7		8		9		10	
11		12							

**Prepared by: Kimberly Burks**

**Comments:**

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



### Sample Receipt Checklist

Client Name: **P & D Environmental**

Date and Time Received: **9/19/2007 9:00:48 PM**

Project Name: **# 0014; Xtra Oil/Castro Valley**

Checklist completed and reviewed by: **Kimberly Burks**

WorkOrder N°: **0709457** Matrix Water

Carrier: Client Drop-In

#### Chain of Custody (COC) Information

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

#### Sample Receipt Information

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

#### Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes  No
- Container/Temp Blank temperature Cooler Temp: 15.1°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes  No  No VOA vials submitted
- Sample labels checked for correct preservation? Yes  No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes  No  NA

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Client contacted:

Date contacted:

Contacted by:

Comments:



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental 55 Santa Clara, Ste.240 Oakland, CA 94610	Client Project ID: # 0014; Xtra Oil/Castro Valley	Date Sampled: 09/18/07
	Client Contact: Steve Carmack	Date Received: 09/19/07
	Client P.O.:	Date Analyzed: 09/21/07
		Date Extracted: 09/19/07

### Polychlorinated Biphenyls (PCBs) Aroclors by GC-ECD\*

Extraction Method: SW3510C

Analytical Method: SW8082A

Work Order: 0709457

Lab ID	0709457-001C			Reporting Limit for DF =1	
Client ID	E1091807				
Matrix	W				
DF	1				S

Compound	Concentration				ug/kg	µg/L
Aroclor1016	ND				NA	0.5
Aroclor1221	ND				NA	0.5
Aroclor1232	ND				NA	0.5
Aroclor1242	ND				NA	0.5
Aroclor1248	ND				NA	0.5
Aroclor1254	ND				NA	0.5
Aroclor1260	ND				NA	0.5
PCBs, total	ND				NA	0.5

### Surrogate Recoveries (%)

%SS:	97			
------	----	--	--	--

**Comments**

\* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

(h) a lighter than water immiscible sheen/product is present; (i) liquid sample that contains >>1 vol. % sediment; (j) sample diluted due to high organic content; (k) p.p,- is the same as 4,4,-; (l) florisisil (EPA 3620) cleanup; (m) silica-gel (EPA 3630) cleanup; (n) elemental sulfur (EPA 3660) cleanup; (o) sulfuric acid permanganate (EPA 3665) cleanup; (r) results are reported on a dry weight basis; (p) see attached narrative.



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Telephone: 877-252-9262 Fax: 925-252-9269

P & D Environmental  55 Santa Clara, Ste.240  Oakland, CA 94610	Client Project ID: # 0014; Xtra Oil/Castro Valley	Date Sampled: 09/18/07
	Client Contact: Steve Carmack	Date Received: 09/19/07
	Client P.O.:	Date Extracted: 09/19/07
		Date Analyzed 09/24/07

### CAM / CCR 17 Metals\*

Lab ID	0709457-001B				Reporting Limit for DF =1; ND means not detected above the reporting limit
Client ID	E1091807				
Matrix	W				S W
Extraction Type	TOTAL				mg/kg µg/L

### ICP-MS Metals, Concentration\*

Analytical Method: E200.8

Extraction Method: E200.8

Work Order: 0709457

Dilution Factor	1			1	1
Antimony	ND			NA	0.5
Arsenic	6.0			NA	0.5
Barium	530			NA	5.0
Beryllium	ND			NA	0.5
Cadmium	ND			NA	0.25
Chromium	ND			NA	0.5
Cobalt	ND			NA	0.5
Copper	2.0			NA	0.5
Lead	ND			NA	0.5
Mercury	ND			NA	0.012
Molybdenum	1.0			NA	0.5
Nickel	2.1			NA	0.5
Selenium	ND			NA	0.5
Silver	ND			NA	0.19
Thallium	ND			NA	0.5
Vanadium	ND			NA	0.5
Zinc	18			NA	5.0
%SS:	99				

#### Comments

\*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

# means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

TOTAL = acid digestion.

WET = Waste Extraction Test (STLC).

DI WET = Waste Extraction Test using de-ionized water.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TOTAL^ metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.





### QC SUMMARY REPORT FOR SW8082A

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0709457

EPA Method SW8082A		Extraction SW3510C			BatchID: 30754			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Aroclor1260	N/A	3.75	N/A	N/A	N/A	119	120	0.697	N/A	N/A	70 - 130	20
%SS:	N/A	2.5	N/A	N/A	N/A	121	122	0.334	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 30754 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0709457-001C	09/18/07 12:45 PM	09/19/07	09/21/07 7:46 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0709457

EPA Method E200.8	Extraction E200.8								BatchID: 30747		Spiked Sample ID: 0709457-001B		
	Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
		µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Antimony	ND	10	99.1	98.9	0.198	92.2	94.5	2.51	70 - 130	20	80 - 120	20	
Arsenic	6.0	10	94.9	92	1.89	87.2	93.8	7.31	70 - 130	20	80 - 120	20	
Barium	530	100	96.8	103	0.942	92.2	93.6	1.56	70 - 130	20	80 - 120	20	
Beryllium	ND	10	86.5	85.7	0.918	91.3	94	2.95	70 - 130	20	80 - 120	20	
Cadmium	ND	10	95.7	95	0.755	93	94	0.995	70 - 130	20	80 - 120	20	
Chromium	ND	10	95.1	91.7	3.62	90.3	93.5	3.48	70 - 130	20	80 - 120	20	
Cobalt	ND	10	82.6	82.9	0.295	103	105	2.11	70 - 130	20	80 - 120	20	
Copper	2.0	10	91.4	92.3	0.804	95	98.4	3.58	70 - 130	20	80 - 120	20	
Lead	ND	10	97.3	97	0.298	92.7	94.6	2.00	70 - 130	20	80 - 120	20	
Mercury	ND	0.25	92	90.6	1.58	89.2	91.2	2.26	70 - 130	20	80 - 120	20	
Molybdenum	1.0	10	96.8	98	1.12	88.8	91.4	2.86	70 - 130	20	80 - 120	20	
Nickel	2.1	10	95.2	90.1	4.50	94.2	96.6	2.49	70 - 130	20	80 - 120	20	
Selenium	ND	10	99.8	99.6	0.221	89.7	99.7	10.5	70 - 130	20	80 - 120	20	
Silver	ND	10	96.3	94.8	1.55	92.8	94.7	2.04	70 - 130	20	80 - 120	20	
Thallium	ND	10	96.4	95.9	0.541	85.8	89.4	4.06	70 - 130	20	80 - 120	20	
Vanadium	ND	10	98.2	95.3	2.96	93.4	97.6	4.39	70 - 130	20	80 - 120	20	
Zinc	18	100	94	93.8	0.179	92.8	93.3	0.529	70 - 130	20	80 - 120	20	
%SS:	99	750	98	98	0	91	91	0	70 - 130	20	70 - 130	20	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:  
NONE

#### BATCH 30747 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0709457-001B	09/18/07 12:45 PM	09/19/07	09/24/07 2:00 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 \* (MS-Sample) / (Amount Spiked); RPD = 100 \* (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



### QC SUMMARY REPORT FOR E420.2

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0709457

EPA Method E420.2		Extraction E420.2			BatchID: 30753			Spiked Sample ID: 0709468-003B				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Phenolics	2.4	40	106	96.3	8.89	101	102	1.08	70 - 130	30	80 - 120	20
All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE												

BATCH 30753 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0709457-001A	09/18/07 12:45 PM	09/21/07	09/21/07 1:21 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery =  $100 * (MS - Sample) / (Amount\ Spiked)$ ; RPD =  $100 * (MS - MSD) / ((MS + MSD) / 2)$ .

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.