Report

Semiannual Operation and Maintenance Report No. 28

November 2015 - April 2016

Project I.D.: 15W029

Wisconsin Department of Natural Resources
Wisconsin Chrome Site
BRRTS I.D. #02-45-000225
2101 Hyland Avenue, Kaukauna, WI

May 2016

Foth

Green Bay Location

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May 13, 2016

Ms. Jennifer Borski
Wisconsin Department of Natural Resources
625 East County Road "Y", Ste. 700
Oshkosh, WI 54901-9731

Dear Ms. Borski:

RE: Semiannual Progress Report for Wisconsin Chrome Site
BRRTS I.D. #02-45-000225

Foth Infrastructure & Environment, LLC (Foth) has prepared this Semiannual Operation and Maintenance Report to summarize the activities that took place at the above-referenced site from November 1, 2015 through April 30, 2016. This report documents and includes a summary of groundwater sampling results, treatment system performance, and operations and maintenance activities.

Sincerely,

Foth Infrastructure & Environment, LLC

Nick M. Glander
Environmental Scientist

Sharon V.F. Kozicki, P.G.
Project Manager

cc: Mr. Paul Ferrell, Maintenance Department, Outagamie County

Semiannual Operation and Maintenance Report No. 28

Distribution

No. of Copies	Sent To
1	Ms. Jennifer Borski Hydrogeologist Wisconsin Department of Natural Resources 625 E. County Road Y, Suite 700 Oshkosh, WI 54901-9731
1	Mr. Paul Ferrell Outagamie County Facilities Manager 410 S. Walnut Street Appleton, WI 54911

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Prepared for

Wisconsin Department of Natural Resources

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List of Abbreviations, Acronyms, and Symbols

µg/L	microgram per liter
DO	dissolved oxygen
ERP	Emergency Response Plan
ES	enforcement standard
Foth	Foth Infrastructure & Environment, LLC
O&M	Operation and Maintenance
ORP	oxidation-reduction potential
Pace	Pace Analytical Services, Inc.
QED	QED Environmental Systems
VOC	Volatile Organic Compound
WCC	Wisconsin Chrome Corporation
WDNR	Wisconsin Department of Natural Resources
Wis. Admin. Code	Wisconsin Administrative Code

1 Introduction

This Semiannual Operation and Maintenance Report (No. 28) was prepared by Foth Infrastructure & Environment, LLC (Foth) for the Wisconsin Chrome Site for the reporting period November 1, 2015 through April 30, 2016 and includes the following information:

- Background information.
- Summary of March 2016 groundwater sampling results.
- Cross-sectional view of the contaminant plumes.
- Time versus concentration graphs for selected wells and parameters.
- Graphs of influent and effluent flow and chromium concentrations.

1.1 Site History

The Wisconsin Chrome Site is a former chromium electroplating facility that was operated by the Wisconsin Chrome Corporation (WCC). Site investigation activities identified chromium and volatile organic compound (VOC) contamination at the facility. A groundwater extraction and treatment system, including collection trenches (A and B), angle injection wells, and an aboveground treatment facility, was constructed in 2001. VOCs from Trench A are treated by carbon, and chromium from Trenches A and B is treated by ion exchange. GeoTrans, Inc. installed the treatment system in accordance with the Remediation Plan approved by the Wisconsin Department of Natural Resources (WDNR).

In August 2001, GeoTrans injected 330 gallons of 10 percent ferric chloride into the four angle wells that extend below the former WCC building. The injection was completed in order to stabilize the hexavalent chromium contamination in the underlying groundwater. An evaluation of the injection was summarized in the June 14, 2004 GeoTrans report, *Supplemental Site Investigation Evaluation of Ferric Chloride Injection at the Former Wisconsin Chrome Corporation Site at 2101 Hyland Avenue, Kaukauna, Outagamie County, Wisconsin* .

In October 2006, Foth injected 300 gallons of 11.8 percent sodium bisulfite solution into the angle wells under a separate approval from the WDNR. Injection activities were reported to the WDNR in the June 2007 Foth report, *Groundwater Injection Documentation and Monitoring*. The report concluded that due to the poor hydraulic connection between the injection points and the groundwater monitoring wells, there was no measurable response in groundwater quality from the groundwater injection.

In December 2007, Foth was authorized by the WDNR to complete a bench scale treatability test and a pilot scale reductant injection test near monitoring well MW-7R. The pilot injection work was completed by Foth in April 2009. Foth prepared an update of the additional work in its May 14, 2009 *First Quarter 2009 Operations & Maintenance Report No. 14*.

In February 2009, Foth installed one injection well adjacent to monitoring well nest MW-7. A full-scale injection of a reductant was planned for 2011 via an injection network directly beneath the building and throughout the site. However, injection was put on hold until funding became available. In 2013, Foth was contracted by the WDNR to complete the full-scale injection. The

full-scale injection was completed summer of 2014. Prior to injection, additional monitoring wells and injection wells were constructed as part of the injection program to provide the necessary distribution and monitoring network. Since the injection, water quality at MW-3 and MW-21 show a steady decrease. The most recent chromium concentration was below the preventative action limit of 10 micrograms per liter. MW-2, MW-6R, and MW-22 show fluctuating concentrations of chromium, but overall appears to be decreasing.

Terracon was contracted by the WDNR to perform the operations and maintenance (O&M) activities at the site from May 1, 2012 through April 30, 2015. On May 1, 2015, Foth was contracted by the WDNR to perform the O&M activities at the site.

2 Groundwater Sampling Events

Figure 1, Former Wisconsin Chrome Project Site, shows the structures, groundwater monitoring wells and piezometers on and around the Wisconsin Chrome site. The groundwater monitoring wells and piezometers were sampled in accordance with the current monitoring schedule (Table 4 of the WDNR's Request for Bid/Scope of Work - March 2015 WDNR Emergency Response Plan [ERP] Core #: 02-45-000225). The semiannual monitoring is typically completed in March and September.

2.1 Groundwater Sampling Procedures

The groundwater sampling procedures for wells with dedicated bladder pumps are as follows:

- Water level measurements were collected from each monitoring well, prior to purging.
- Each well was purged via low-flow techniques with the dedicated QED Environmental Systems (QED) bladder pump using a pump controller and a water quality meter with a flow-through cell until parameters are stable to within 10% for three consecutive readings at least two minutes apart.
- Purge water from the wells was contained and dumped into the treatment system.
- Samples were collected directly from the QED bladder pump discharge hose.
- Quality control samples were collected per the monitoring schedule.
- The groundwater samples were submitted to Pace Analytical Services, Inc. (Pace) in Green Bay, Wisconsin.

Additional sampling procedures for groundwater wells without dedicated bladder pumps are as follows:

- Install a portable bladder pump approximately one foot above well base.
- Decontaminate the temporary bladder pump by disassembling the unit to triple rinse with de-ionized water and replace the disposable grab plate, bladder, and tubing.

The field parameters were measured using a YSI Model 556 handheld multi-meter to measure pH, specific conductance, dissolved oxygen (DO) and oxidation-reduction potential (ORP). Field measurements were made prior to sample collection. The groundwater samples were collected in the order of metals samples first, and VOC vials last (if applicable). Laboratory samples were properly containerized, preserved, and delivered to the Pace laboratory under chain-of-custody.

A summary of groundwater levels is provided in Table 1, Groundwater Elevations. Figure 2, April 2016 Groundwater Elevations, depicts the groundwater elevations for most recent sampling event.

2.2 Groundwater Sampling Results

The March 2016 sampling event was the semiannual sampling event and included sampling monitoring wells and constituents as required.

2.3 Groundwater Sampling Results History

With the volume of data collected over the site's history, Tables 1 through 4 from previously submitted reports have been archived, and the current tables will start at pre-injection data collection (November 2013). Historical Tables 1 through 4 are included in Appendix A, Historical Data Tables. Please refer to Appendix A regarding historical sampling methods and parameters pre-November 2013.

The tables provided within this report will be numbered the same as the archived historical data tables to maintain correlation between the two. This method will provide easier reference during consideration of site closure by the WDNR.

2.4 March 2016 Groundwater Sampling Results

Groundwater sampling was completed on March 15 and 16, 2016. Groundwater results are summarized in Table 2, and laboratory analytical reports are included in Appendix B. Following is a discussion of March 2016 groundwater results by parameter.

2.4.1 Total Chromium

Total chromium concentrations exceed Wisconsin Administrative Code (Wis. Admin. Code), Chapter NR 140 enforcement standard (ES) (100 microgram per liter [µg/L]) at the following monitoring points:

- MW-2 (376 µg/L)
- MW-7R (49,600 µg/L)
- MW-21 (850 µg/L)
- MW-22 (2,850 µg/L)

Figure 3, Total Chromium Exceedance Plume, illustrates a plan view of total chromium concentrations and the extent of ES exceedances for March 2016.

Time versus total chromium concentrations for monitoring wells MW-7R, P-7B, and MW-6R are provided as Figure 4, Total Chromium Concentrations Over Time – MW-7R, P-7B, and MW-6R. Figure 5, Total Chromium Concentrations Over Time – MW-2, MW-21, and MW-22 shows total chromium concentrations over time for monitoring wells MW-2, MW-21, and MW-22.

2.4.2 Volatile Organic Compounds

Selected wells were sampled for VOCs in conformance with the monitoring requirements. Individual VOC concentrations exceed ESs at the following monitoring points:

- MW-7R (2,040 µg/L 1,1-dichloroethene; 1,490 µg/L 1,1-dichloroethane; 8,940 µg/L 1,1,1-trichloroethane; 64.6 J µg/L trichloroethene; 30.7 J µg/L methylene chloride; 18.9 J µg/L vinyl chloride).
- MW-20 (804 µg/L 1,1-dichloroethene; 6,490 µg/L 1,1,1-trichloroethane; 21.1 J µg/L trichloroethene; 13.6 J µg/L vinyl chloride).
- MW-21 (28.3 µg/L 1,1-dichloroethene; 2.1 µg/L vinyl chloride).
- MW-22 (34.1 µg/L 1,1-dichloroethene; 301 µg/L 1,1,1-trichloroethane; 8.1 µg/L trichloroethene).
- P-7A (24.3 µg/L 1,1-dichloroethene).
- P-7B (1,050 µg/L 1,1-dichloroethene; 3,860 µg/L 1,1-dichloroethane; 11,200 µg/L 1,1,1-trichloroethane).

Figure 6, VOC Concentrations in Groundwater Exceedance Plume, illustrates a plan view of total VOC concentrations and the estimated extent of total VOC concentrations exceeding the 100 µg/L for March 2016.

2.5 Cross-Section

Figure 7, Cross-Section Distribution of Total Chromium and Total VOCs in Groundwater, shows the vertical distribution and estimated extended of the contamination plume across the site.

3 Treatment System Performance and Operation & Maintenance Activities

3.1 Treatment System Performance

201,022 gallons of groundwater were treated and discharged to the sanitary sewer system from November 1, 2015 through April 30, 2016. Table 3, Flow Meter Readings, provides a summary of the flow meter readings. Sump A and B influent sample and effluent sample results are summarized in Table 4, Operations & Maintenance Analytical Result Summary. Figure 8, Unfiltered Influent Chromium Concentrations, shows the chromium concentrations over time. Appendix C, Updated O&M Form 4400-194, provides a summary of the system performance during the reporting period.

From the period of November 1, 2015, through April 30, 2016, a total of 1.42 pounds of chromium and 2.28 pounds of VOCs were removed from the groundwater as shown in Table 5, Mass Removal Summary.

3.2 Operation & Maintenance Activities

Site visits to perform routine O&M activities and collect monthly/quarterly system monitoring samples typically occurred mid-month throughout the reporting period.

Additional non-routine system maintenance visits/activities are explained below.

- On December 2, 2015, the canisters were exchanged, as required, and a series of two system alarms occurred during the initial operations of the new canisters. The first alarm (December 2, 2015) was for a low pH level and the caustic injection rate was adjusted to raise the pH levels into the acceptable range. The second alarm (December 6th) was for a high pH level, and the caustic was subsequently turned off.

- Sump B has remained offline since July 15, 2015, since notification of a fracture or obstruction in the pipeline has limited the flow of groundwater to the building was made to the WDNR.

4 Conclusions and Recommendations

The results of the laboratory analysis from the March 15 through 16, 2016 sampling event indicates that the groundwater continues to exceed the 1992 NR 140, Wis. Admin. Code ESs for total chromium and six different VOCs (1,1-dichloroethane; 1,1-dichloroethene; 1,1,1- trichloroethane; trichloroethene; methylene chloride; and vinyl chloride). The areal extent of the total chromium plume appears to have decreased at the site. MW-6R showed a significant decrease in total chromium between the September 2015 and March 2016 sampling events and according to the March 2016 laboratory results is below the ES. The total chromium concentration has remained stable in the heart of the plume at observation well MW-7R. The treatment injection took place in July 2014 and should help to mitigate or arrest the vertically downward migration of contamination. The areal extent of the VOC plume has appeared to be decreasing since September 2015. Total VOC concentrations have decreased to below ES at monitoring well MW-2 and MW-6R. The containment trenches appear to be functioning generally as designed when the pumps are operating.

The groundwater laboratory analysis and the groundwater elevations indicate that the groundwater plume is generally being controlled horizontally by the groundwater containment trenches when the system is operating at design flow rates, but with seasonal variations.

Approximately 201,022 gallons of groundwater were extracted from the containment trenches from November 1, 2015, through April 30, 2016, which is approximately 53,572 gallons more than were extracted during the previous reporting period.

Based on the laboratory analysis from the November 1, 2015 through April 30, 2016 sampling event and the laboratory analysis from the effluent sampling during the reporting period, Foth recommends continued operation of the groundwater extraction system with discharge of the treated groundwater to the Heart of the Valley sanitary sewer system. However, as stated in the previous report, the following items may require action in the future:

- The increasing VOCs in the quarterly samples collected between carbon canisters and detectable VOCs in the effluent suggest that breakthrough has occurred through second carbon canister which needs to be replaced.

5 General Comments

The analysis and opinions expressed in this report are based upon data obtained from the system operation and maintenance activities and laboratory chemical analyses at the indicated locations or from other information discussed in this report. This report does not reflect variations in subsurface stratigraphy, hydrogeology, and contaminant distribution that may occur across the site. Actual subsurface conditions may vary and may not become evident without further assessment.

This report was prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted environmental engineering practices. No warranties, express or implied, are intended or made. In the event any changes in the nature or location of suspected sources of contamination as outlined in this report are observed, the conclusions and recommendations contained in this report shall not be valid unless these changes are reviewed and the opinions of this report are modified or verified in writing by Foth.

6 References

Foth Infrastructure & Environment, LLC, 2007. *Groundwater Injection Documentation and Monitoring*. June 2007.

Foth Infrastructure & Environment, LLC, 2009. *First Quarter 2009 Operations & Maintenance Report No. 14: Green Bay, WI.* May 14, 2009.

Foth Infrastructure & Environment, LLC, 2015. *Semi-annual Operation and Maintenance Report No. 27: Green Bay, WI.* November, 13, 2015.

GeoTrans, Inc., 2004. *Supplemental Site Investigation Evaluation of Ferric Chloride Injection at the Former Wisconsin Chrome Corporation Site at 2101 Hyland Avenue, Kaukauna, Outagamie County, WI.* June 14, 2004.

McMahon Associates, Inc., 2005. *Quarterly Progress Report #4, October, November, December 2004, and Semi-Annual Operations & Maintenance Report*. July 2004 – December 2004.

Terracon Consultants, Inc., 2015. *Semi-annual Operation and Maintenance Report No. 26: Franklin, WI*. June 8, 2015.

Tables

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin

Location	Measurement Date	Reference Elevation	Water Depth (ft)	Water Elevation (ft msl)
MW-2	11/20/2013	701.69	3.42	698.27
MW-2	12/19/2013	701.69	6.23	695.46
MW-2	1/20/2014	701.69	7.14	694.55
MW-2	3/10/2014	701.69	7.30	694.39
MW-2	5/14/2014	701.39	1.42	699.97
MW-2	7/29/2014	701.39	3.93	697.46
MW-2	8/20/2014	701.39	3.90	697.49
MW-2	9/18/2014	701.39	4.00	697.39
MW-2	9/24/2014	701.39	3.84	697.55
MW-2	10/20/2014	701.39	3.62	697.77
MW-2	12/17/2014	701.39	4.90	696.49
MW-2	4/15/2015	701.39	4.62	696.77
MW-2	7/15/2015	701.39	4.32	697.07
MW-2	9/23/2015	701.39	3.28	698.11
MW-2	3/16/2016	701.39	1.45	699.94
MW-3	11/20/2013	702.02	4.56	697.46
MW-3	12/19/2013	702.02	6.86	695.16
MW-3	7/28/2014	702.02	6.05	695.97
MW-3	8/20/2014	702.02	4.52	697.50
MW-3	9/18/2014	702.02	5.99	696.03
MW-3	9/24/2014	702.02	5.52	696.50
MW-3	10/20/2014	702.02	5.04	696.98
MW-3	12/17/2014	702.02	3.97	698.05
MW-3	7/15/2015	702.02	6.58	695.44
MW-3	9/23/2015	702.02	4.67	697.35
MW-3	3/16/2016	702.02	3.08	698.94
MW-4	11/18/2013	702.39	6.01	696.38
MW-4	1/21/2014	702.39	9.72	692.67
MW-4	3/10/2014	702.39	10.48	691.91
MW-4	7/28/2014	702.39	7.72	694.67
MW-4	9/18/2014	702.39	8.60	693.79
MW-4	9/23/2014	702.39	8.34	694.05
MW-4	7/15/2015	702.39	8.92	693.47
MW-4	9/23/2015	702.39	7.88	694.51
MW-4	3/15/2016	702.39	7.77	694.62
MW-6R	11/18/2013	701.42	3.52	697.90
MW-6R	12/18/2013	701.42	8.30	693.12
MW-6R	1/21/2014	701.42	10.12	691.30

Table 1 ***(Continued)***

Location	Measurement Date	Reference Elevation	Water Depth (ft)	Water Elevation (ft msl)
MW-6R	5/14/2014	701.42	1.20	700.22
MW-6R	7/28/2014	701.42	7.31	694.11
MW-6R	8/19/2014	701.42	7.20	694.22
MW-6R	9/18/2014	701.42	7.92	693.50
MW-6R	9/23/2014	701.42	7.08	694.34
MW-6R	10/20/2014	701.42	6.07	695.35
MW-6R	12/18/2014	701.42	5.12	696.30
MW-6R	4/15/2015	701.42	5.04	696.38
MW-6R	7/14/2015	701.42	8.74	692.68
MW-6R	9/23/2015	701.42	6.59	694.83
MW-6R	3/15/2016	701.42	3.95	697.47
MW-7R	11/20/2013	702.76	5.29	697.14
MW-7R	12/18/2013	702.76	7.21	695.22
MW-7R	1/20/2014	702.76	9.08	693.68
MW-7R	5/14/2014	702.43	1.20	701.23
MW-7R	7/28/2014	702.43	5.33	697.10
MW-7R	8/19/2014	702.43	6.14	696.29
MW-7R	9/18/2014	702.43	6.32	696.11
MW-7R	9/23/2014	702.43	6.04	696.39
MW-7R	10/20/2014	702.43	5.93	696.50
MW-7R	12/17/2014	702.43	6.70	695.73
MW-7R	4/15/2015	702.43	6.18	696.25
MW-7R	7/14/2015	702.3	6.38	695.92
MW-7R	9/24/2015	702.3	5.65	696.65
MW-7R	3/15/2016	702.3	5.55	696.75
MW-10	11/20/2013	696.51	3.42	693.09
MW-10	12/19/2013	696.51	5.49	691.02
MW-10	1/20/2014	696.51	6.14	690.37
MW-10	3/10/2014	696.51	6.86	689.65
MW-10	5/14/2014	700.91	0.89	700.02
MW-10	7/29/2014	700.91	3.66	697.25
MW-10	9/18/2014	700.91	5.15	695.76
MW-10	9/24/2014	700.91	5.39	695.52
MW-10	4/15/2015	700.91	2.10	698.81
MW-10	7/15/2015	700.91	3.91	697.00
MW-10	7/15/2015	700.91	3.91	697.00
MW-10	9/23/2015	700.91	2.20	698.71
MW-10	3/15/2016	700.91	0.50	700.41

Table 1 ***(Continued)***

Location	Measurement Date	Reference Elevation	Water Depth (ft)	Water Elevation (ft msl)
MW-12	5/14/2014	699.95	0.30	699.65
MW-12	9/18/2014	699.95	4.23	695.72
MW-12	4/15/2015	699.95	1.40	698.55
MW-12	9/23/2015	700.06	1.80	698.26
MW-12	3/15/2016	700.06	0.20	699.86
MW-19	9/18/2014	702.46	3.90	698.56
MW-19	9/23/2015	701.86	3.44	698.42
MW-19	3/16/2016	701.86	2.77	699.09
MW-20	11/20/2013	695.87	5.45	690.42
MW-20	12/18/2013	695.87	7.17	688.70
MW-20	1/21/2014	695.87	8.52	687.35
MW-20	3/10/2014	695.87	9.60	686.27
MW-20	7/28/2014	695.87	5.29	690.58
MW-20	8/19/2014	695.87	6.36	689.51
MW-20	9/23/2014	695.87	6.48	689.39
MW-20	10/21/2014	695.87	6.55	689.32
MW-20	12/17/2014	695.87	6.82	689.05
MW-20	7/14/2015	702.27	6.93	688.94
MW-20	9/24/2015	702.27	6.14	696.13
MW-20	3/15/2016	702.27	5.77	696.50
MW-21	11/19/2013	702.64	4.74	697.90
MW-21	12/19/2013	702.64	7.54	695.10
MW-21	1/21/2014	702.64	8.62	694.02
MW-21	3/11/2014	702.64	9.16	693.48
MW-21	5/14/2014	702.64	1.80	700.84
MW-21	7/28/2014	702.64	6.50	696.14
MW-21	8/19/2014	702.64	5.43	697.21
MW-21	9/18/2014	702.64	6.45	696.19
MW-21	9/23/2014	702.64	5.97	696.67
MW-21	10/21/2014	702.64	6.15	696.49
MW-21	12/18/2014	702.64	6.43	696.21
MW-21	4/15/2015	702.64	5.97	696.67
MW-21	7/14/2015	702.64	6.82	695.82
MW-21	9/23/2015	702.64	5.55	697.09
MW-21	3/15/2016	702.64	5.44	697.20
MW-22	11/19/2013	702.63	4.28	698.35
MW-22	12/19/2013	702.63	5.38	697.25
MW-22	1/21/2014	702.63	7.36	695.27

Table 1 ***(Continued)***

Location	Measurement Date	Reference Elevation	Water Depth (ft)	Water Elevation (ft msl)
MW-22	3/11/2014	702.63	8.36	694.27
MW-22	5/14/2014	702.63	1.71	700.92
MW-22	7/31/2014	702.63	3.78	698.85
MW-22	8/19/2014	702.63	3.75	698.88
MW-22	9/18/2014	702.63	4.00	698.63
MW-22	9/24/2014	702.63	4.00	698.63
MW-22	10/21/2014	702.63	4.01	698.62
MW-22	12/18/2014	702.63	4.22	698.41
MW-22	4/15/2015	702.63	6.38	696.25
MW-22	7/14/2015	702.63	4.05	698.58
MW-22	9/24/2015	702.63	3.77	698.86
MW-22	3/15/2016	702.63	4.49	698.14
P-2A	11/20/2013	701.54	5.71	695.83
P-2A	1/20/2014	701.54	10.37	691.17
P-2A	7/29/2014	701.54	7.49	694.05
P-2A	9/24/2014	701.04	9.52	691.52
P-2AR	7/15/2015	701.37	28.12	673.25
P-2AR	9/23/2015	701.37	23.37	678.00
P-2AR	3/16/2016	701.37	0	701.37
P-2B	11/20/2013	701.67	25.88	675.79
P-2B	1/20/2014	701.67	26.20	675.47
P-2B	3/10/2014	701.67	26.38	675.29
P-2B	7/29/2014	701.67	26.90	674.77
P-2B	9/18/2014	701.19	27.00	674.19
P-2B	9/24/2014	701.19	26.95	674.24
P-2B	7/15/2015	701.19	26.62	674.57
P-2B	9/23/2015	701.19	27.49	673.70
P-2B	3/16/2016	701.19	24.13	677.06
P-6A	11/18/2013	701.57	23.03	678.54
P-6A	12/19/2013	701.57	28.83	672.74
P-6A	1/21/2014	701.57	28.77	672.80
P-6A	3/10/2014	701.57	27.74	673.83
P-6A	7/28/2014	701.57	6.28	695.29
P-6A	8/19/2014	701.57	15.00	686.57
P-6A	9/18/2014	701.57	25.18	676.39
P-6A	9/23/2014	701.57	24.63	676.94
P-6A	10/20/2014	701.57	27.48	674.09
P-6A	12/18/2014	701.57	24.58	676.99

Table 1 ***(Continued)***

Location	Measurement Date	Reference Elevation	Water Depth (ft)	Water Elevation (ft msl)
P-6A	7/14/2015	701.57	6.00	695.57
P-6A	9/23/2015	701.57	15.84	685.73
P-6A	3/15/2016	701.57	0.25	701.32
P-6B	11/18/2013	701.52	30.87	670.65
P-6B	1/21/2014	701.52	31.59	669.93
P-6B	3/10/2014	701.52	29.65	671.87
P-6B	7/28/2014	701.52	29.78	671.74
P-6B	9/18/2014	701.36	29.91	671.45
P-6B	9/23/2014	701.36	30.03	671.33
P-6B	9/23/2015	701.36	29.66	671.70
P-6B	3/15/2016	701.36	23.75	677.61
P-6C	11/19/2013	701.43	DRY	DRY
P-6C	1/21/2014	701.43	52.42	649.01
P-6C	3/10/2014	701.43	49.37	652.06
P-6C	7/28/2014	701.43	47.54	653.89
P-6C	9/23/2014	701.43	48.07	653.36
P-6C	7/14/2015	701.36	30.40	670.96
P-6C	7/15/2015	701.43	48.14	653.29
P-6C	9/23/2015	701.43	49.95	651.48
P-6C	3/15/2016	701.43	45.76	655.67
P-7A	11/20/2013	702.67	28.51	674.16
P-7A	12/19/2013	702.67	28.54	674.13
P-7A	1/20/2014	702.67	16.60	686.07
P-7A	5/14/2014	702.67	2.80	699.87
P-7A	7/28/2014	702.67	7.62	695.05
P-7A	8/19/2014	702.67	13.37	689.30
P-7A	9/18/2014	702.67	2.40	700.27
P-7A	9/23/2014	702.67	2.59	700.08
P-7A	10/20/2014	702.67	2.42	700.25
P-7A	12/17/2014	702.67	6.42	696.25
P-7A	4/15/2015	702.67	3.21	699.46
P-7A	7/14/2015	702.37	0.00	702.37
P-7A	9/24/2015	702.37	8.52	693.85
P-7A	3/15/2016	702.37	7.45	694.92
P-7B	11/19/2013	702.76	9.53	693.23
P-7B	12/19/2013	702.76	12.63	690.13
P-7B	1/20/2014	702.76	30.34	672.42
P-7B	5/14/2014	702.27	28.60	673.67

Table 1 ***(Continued)***

Location	Measurement Date	Reference Elevation	Water Depth (ft)	Water Elevation (ft msl)
P-7B	7/28/2014	702.27	28.83	673.44
P-7B	8/19/2014	702.27	33.34	668.93
P-7B	9/18/2014	702.27	28.80	673.47
P-7B	9/23/2014	702.27	28.95	673.32
P-7B	10/20/2014	702.27	28.75	673.52
P-7B	12/17/2014	702.27	29.80	672.47
P-7B	4/15/2015	702.27	29.11	673.16
P-7B	7/14/2015	702.27	29.79	672.48
P-7B	9/24/2015	702.27	29.58	672.69
P-7B	3/15/2016	702.27	10.03	692.24
P-7C	11/20/2013	702.66	40.42	662.24
P-7C	12/18/2013	702.66	41.36	661.30
P-7C	1/21/2014	702.66	43.95	658.71
P-7C	3/10/2014	702.66	42.84	659.82
P-7C	7/28/2014	702.66	34.80	667.86
P-7C	8/19/2014	702.66	0.07	702.59
P-7C	9/18/2014	702.66	18.60	684.06
P-7C	9/23/2014	702.66	7.36	695.30
P-7C	10/20/2014	702.66	14.73	687.93
P-7C	12/18/2014	702.66	38.21	664.45
P-7C	7/14/2015	702.66	37.63	665.03
P-7C	9/24/2015	702.66	16.27	686.39
P-7C	3/15/2016	702.66	39.45	663.21
MW-T1	5/14/2014	701.04	0.95	700.09
MW-T1	9/18/2014	701.04	7.45	693.59
MW-T1	4/15/2015	701.04	6.67	694.37
MW-T1	9/23/2015	701.04	6.83	694.21
MW-T1	3/15/2016	701.04	5.79	695.25
MW-T2	5/14/2014	702.16	1.92	700.24
MW-T2	9/18/2014	702.16	7.65	694.51
MW-T2	4/15/2015	702.16	6.70	695.46
MW-T2	9/24/2015	702.16	7.57	694.59
MW-T2	3/15/2016	702.16	6.41	695.75

Notes:
ft = feet
msl = mean sea level

Prepared By: NMG1
Checked By: SVF

Table 2
Groundwater Analytical Result Summary
Wisconsin Chrome, Kaukauna, Wisconsin

		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	Chloroethane	Chloroform	Ethylbenzene	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride
WI Enforcement Standard		**200**	**5**	**850**	**7**	**5**	**480**	**400**	**6**	**700**	**5**	**5**	**800**	**5**	**0.2**
WI Preventive Action Limit		**40**	**0.5**	**85**	**0.7**	**0.5**	**96**	**80**	**0.6**	**140**	**0.5**	**0.5**	**160**	**0.5**	**0.02**
Well Name	**Sample Date**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
MW-2	11/20/2013	*98.7*	< 1.0	30.2	***12.3***	< 1.0	< 1.0	1.2	< 5.0	< 1.0	*0.53 J*	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	12/19/2013														
MW-2	1/20/2014	22.9	< 1.0	10.3	*3.5*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	0.40 J	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	3/10/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	5/14/2014														
MW-2	7/29/2014	*78.9*	< 1.0	18.8	***10.0***	< 1.0	< 1.0	0.65 J	< 5.0	< 1.0	0.34 J	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	8/20/2014														
MW-2	9/19/2014	*82.4*	0.26 J	26.7	***12.5***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	0.47 J	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	9/24/2014	*81.9*	< 1.0	23.4	***11.8***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	0.37 J	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	10/20/2014														
MW-2	12/17/2014														
MW-2	4/15/2015														
MW-2	7/15/2015	*63.5*	0.27 J	23.4	***9.5***	0.23 J	< 1.0	2.4	< 5.0	< 1.0	0.30 J	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	9/23/2015	*99.6*	< 1.0	21.6	***12.7***	< 1.0	< 1.0	2.7	< 5.0	< 1.0	0.29 J	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	3/16/2016	*14.3*	<0.20	5.7	2.4	<0.17	<0.50	<0.37	<2.5	<0.0	<0.23	<0.50	<0.50	<0.33	<0.18
MW-3	11/20/2013														
MW-3	12/19/2013														
MW-3	7/29/2014														
MW-3	8/20/2014														
MW-3	9/19/2014														
MW-3	9/24/2014														
MW-3	10/20/2014														
MW-3	12/17/2014														
MW-3	7/15/2015														
MW-3	9/23/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-3	3/16/2016														
MW-4	11/18/2013	*69.3*	< 1.0	14.3	***9***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	1/21/2014	*55.3*	< 1.0	11.9	***8.2***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	3/10/2014	39.4	< 1.0	9.0	*6.4*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	7/28/2014	*97.0*	0.22 J	22.7	***15.2***	< 1.0	< 1.0	0.58 J	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	9/19/2014	*47.6*	< 1.0	13.8	***10.2***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	9/23/2014	*40.9*	< 1.0	11.3	***8.1***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	7/15/2015	28.2	< 1.0	5.5	*3.9*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	9/23/2015	36.5	< 1.0	5.6	*3.6*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	3/15/2016	29.1	<0.20	4.7	*2.1*	<0.17	<0.50	<0.37	<2.5	<0.50	<0.23	<0.50	<0.50	<0.33	<0.18
MW-5	9/23/2015														
MW-6R	11/18/2013	*56.1*	< 1.0	6.4	*4.5*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*0.71 J*	< 1.0
MW-6R	12/18/2013														
MW-6R	1/21/2014	*47.6*	< 1.0	10.2	*5.3*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*0.68 J*	< 1.0
MW-6R	5/15/2014	32.1	< 1.0	7.9	*3.9*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	0.49 J	< 1.0
MW-6R	7/28/2014	*40.9*	< 1.0	3.6	*2.4*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*0.64 J*	< 1.0
MW-6R	8/19/2014														
MW-6R	8/20/2014														
MW-6R	9/19/2014	*54.4*	< 1.0	11.0	***7.9***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*0.82 J*	< 1.0
MW-6R	9/23/2014														
MW-6R	10/20/2014														
MW-6R	12/18/2014														
MW-6R	4/16/2015	*57.6*	< 1.0	14.2	***8.5***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*0.74 J*	< 1.0
MW-6R	7/14/2015	*60.1*	< 1.0	19.1	***11.1***	*3.3*	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*0.66 J*	< 1.0
MW-6R	9/23/2015	*77.9*	< 1.0	30.1	***15.8***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*0.94 J*	< 1.0
MW-6R	3/15/2016	30	<0.20	11.3	*5.7*	<0.17	<0.50	<0.37	<2.5	<0.50	<0.23	<0.50	<0.50	0.48 J	<0.18
MW-7R	11/20/2013	***10100***	< 200	***1210***	***1450***	< 200	< 200	*121 J*	< 1000	< 200	< 200	< 200	< 200	< 200	< 200
MW-7R	12/18/2013														
MW-7R	1/20/2014	***17700***	< 200	***1580***	***2590***	< 200	< 200	*154 J*	< 1000	< 200	< 200	< 200	< 200	< 200	< 200
MW-7R	5/15/2014	***6280***	< 50.0	*300*	***562***	< 50.0	< 50.0	33.4 J	< 250	< 50.0	< 50.0	< 50.0	< 50.0	***19.9 J***	< 50.0
MW-7R	7/28/2014	***1140***	*2.6 J*	*190*	***204***	< 10.0	< 10.0	25.2	< 50.0	< 10.0	< 10.0	< 10.0	< 10.0	***8.3 J***	< 10.0

Table 2 ***(Continued)***

Well Name	Sample Date	Total Xylene ug/L	Arsenic ug/L	Chloride mg/L	Chromium ug/L	Chromium, Hexavalent mg/L	Dissolved Organic Carbon mg/L	Total Organic Carbon mg/L	Iron ug/L	Iron, Ferrous mg/L	Manganese ug/L	Nitrogen, Nitrate mg/L	Phosphorus mg/L	Sulfate mg/L	Sulfide mg/L	Temperature deg c	Dissolved Oxygen mg/L	pH s.u.	Redox Potential mV	Specific Conductance uS/cm @25 C
WI Enforcement Standard		**2000**	**10**	**250**	**100**	**0.1**			**300**		**50**	**10**		**250**						
WI Preventive Action Limit		**400**	**1**	**125**	**10**	**0.01**			**150**		**25**	**2**		**125**						
MW-2	11/20/2013	< 3.0	*6.7 J*	25.2	***1080***	***1.2***	3.7 2q	3.5	86.5 J		***725***	0.34 J,D3	< 0.40	*213*	< 5.0	12.78	0.31	7.17	32	1470
MW-2	12/19/2013		***12.1 J***	28.1	*772*	***0.76***	4.0	4.4	143	0	***1030***	0.15 J	< 0.40	*205*	< 5.0	9.92	0.05	7	42	1733
MW-2	1/20/2014	< 3.0														6.14	5.20	6.90	-192.1	7441
MW-2	3/10/2014	< 3.0														0.59	12.03	8.49	103.3	2400
MW-2	5/14/2014				***128***															
MW-2	7/29/2014	< 3.0		*228*	***1530***	***1.5***	0.58		26.2 J	0	***347***	0.37	< 0.40	*205*	< 5.0	13.17	0.15	7.19	79	2129
MW-2	8/20/2014			*172*	***1940***	***2.5***	0.74 1q	0.60	38.5 J	0	***261***	< 6.0	< 0.40	*193*	< 5.0	14.32	0.09	7.15	107	1879
MW-2	9/19/2014	< 3.0			***1240***															
MW-2	9/24/2014	< 3.0		113	***1590***	***1.8***	2.7 1q	2.1	15.5 J	0	***309***	0.16 J	< 0.40	*197*	< 5.0	15.43	3.33	6.83	139.7	1742
MW-2	10/20/2014			84.4	***1820***	***1.9***	0.99	1.1	30.0 J	0	***310***	< 0.30	< 0.40	*199*	< 5.0	14.6	1.26	6.87	154	1657
MW-2	12/17/2014			60.2	***1720***	***1.8***	1.9 1q	1.7	25.7 J	3.097	***169***	< 0.30	< 0.40	*165*	< 5.0	9.74	1.15	7.01	66	1315
MW-2	4/15/2015				***1740***															
MW-2	7/15/2015	< 3.0			***1580***	***1.7***			< 100	0	***290***			*205*		13.09	0.35	6.86	72.7	1569
MW-2	9/23/2015	< 3.0			***2240***	***2.1***			15.1 J		***178***			*177*						
MW-2	3/16/2016	<1.5			***376***	***0.39***			<12.9		20.9			***598***		5.31	4.3	7.04	83.1	2389
MW-3	11/20/2013			2.8 J	*18.5*	0.0098 J	0.82 2q	0.68	115		5.1	< 0.30	< 0.40	23.7	< 5.0	13.44	0.36	7.52	29	513.4
MW-3	12/19/2013			3.1 J	*23.4*	*0.024*	2.3 1q	0.72	< 100	0.058	0.96 J	0.18 J	< 0.40	25.2	< 5.0	11.89	0.24	7.52	-4	596.5
MW-3	7/29/2014			3.6 J	*44.5*	*0.050*	1.2		23.4 J	0	< 5.0	0.62	< 0.40	21.0	< 5.0	13.02	2.31	7.83	77	434.6
MW-3	8/20/2014			2.8 J	*49.5*	*0.088*	0.92 1q	0.68	25.2 J	0	< 5.0	0.16 J	< 0.40	21.6	< 5.0	13.48	0.69	7.65	139	466.3
MW-3	9/19/2014				*29.2*															
MW-3	9/24/2014			3.4 J,M0	*20.5*	*0.022*	2.0 1q	0.72	15.3	0	< 5.0	0.75 J,D3,M0	< 0.40	29.2	< 5.0	14.44	0.26	7.28	82.9	422
MW-3	10/20/2014			3.4 J,M0	*12.4*	*0.010 J*	0.74	0.73	18.8	2.13	1.5 J,B	< 0.30	0.11 J,M0	33.8	< 5.0	13.9	2.91	7.13	157	603
MW-3	12/17/2014			3.1 J,M0	*19.8*	*0.017 J*	0.74 1q	0.70	< 100	0.722	< 5.0	< 1.5 D3	< 0.40	39.1	< 5.0	10.84	0.6	7.69	-20.1	662
MW-3	7/15/2015				5.7	< 0.020			< 100	0	4.5 J			53.3		11.48	0.66	7.28	-11.6	702
MW-3	9/23/2015	< 3.0			< 5.0	< 0.020			< 100		*29.5*			58.3						
MW-3	3/16/2016				<2.1	0.0051 J			<12.9		*8.4*			63.9		8.05	0.5	7.21	19.5	759
MW-4	11/18/2013	< 3.0														12.25	2.64	6.82	132	1099
MW-4	1/21/2014	< 3.0														9.90	0.94	7.37	-228.6	1260
MW-4	3/10/2014	< 3.0														9.11	2.51	6.92	48.7	1245
MW-4	7/28/2014	< 3.0														12.35	3.05	7.19	92	1121
MW-4	9/19/2014	< 3.0			*64.3*															
MW-4	9/23/2014	< 3.0														13.76	1.38	6.83	142	1102
MW-4	7/15/2015	< 3.0														11.18	3.39	6.95	29.9	1057
MW-4	9/23/2015	< 3.0			*65.6*															
MW-4	3/15/2016	<1.5			*35.6*											7.98	2.64	7.14	58.3	1071
MW-5	9/23/2015				< 5.0															
MW-6R	11/18/2013	< 3.0		25.2	***309***	***0.36***	1.3	1.4	< 100		2.8 J	1.3	< 0.40	43.4 M0	< 5.0	12.3	2.1	6.92	80	827.4
MW-6R	12/18/2013			25.3	***383***	***0.36***	1.4 2q	1.2	< 100	0.099	2.7 J	1.4	< 0.40	40.4	< 5.0	10.59	1.07	6.92	37	837.4
MW-6R	1/21/2014	< 3.0														6.87	1.58	7.08	-181.2	910
MW-6R	5/15/2014	< 3.0			*28.5*															
MW-6R	7/28/2014	< 3.0		18.4 B	***131***	***0.13***	1.9		51.2 J	0.89	*35.6*	1.2	< 0.40	45.4	< 5.0	12.11	0.46	7.32	82	872.5
MW-6R	8/19/2014			20.7	***197***	*0.027*			***356***	0.079	***108***	< 0.30	< 0.40	41.6	< 5.0	12.07	0.27	7.23	6	843.3
MW-6R	8/20/2014						2.4 1q	1.5												
MW-6R	9/19/2014	< 3.0			***281***															
MW-6R	9/23/2014			26.6	***443***	***0.47***	2.4 1q	1.3	< 100	0	***68.4***	0.26 J	< 0.40	46.3	< 5.0	12.98	0.48	6.85	64.1	925
MW-6R	10/20/2014			21.2	***310***	***0.36***	1.4	1.4	< 100	0	8.6 B	1.5	< 0.40	41.8	< 5.0	12.8	4.63	6.91	187	890
MW-6R	12/18/2014			22.4	***326***	***0.42***	1.8 1q	1.3	< 100	0	8.3	1.3	< 0.40	45.4	< 5.0	10.31	3.21	6.91	27.2	952
MW-6R	4/16/2015	< 3.0			***441***															
MW-6R	7/14/2015	< 3.0			***346***	***0.39***			< 100	0	< 5.0			47.9		11.44	3.28	6.54	94.5	913
MW-6R	9/23/2015	< 3.0			***386***	***0.43***			53.0 J		5.0			43.5						
MW-6R	3/15/2016	<1.5			*24.8*	<0.019			***2950***		***389***			39.8		6.77	1.01	7.19	-35	879
MW-7R	11/20/2013	< 600	< 40.0	78.8	***40800***	***46.5***	3.0 2q	2.9	< 200		***257***	< 1.5 D3	< 0.40	*239*	< 5.0	13.46	0.72	7.16	257	1547
MW-7R	12/18/2013		< 20.0	111	***37700***	***44.3***	3.9 2q	3.7	< 100	0.247	***247***	< 6.0 D3	< 0.40	*231*	< 5.0	11.96	0.53	6.97	81	1645
MW-7R	1/20/2014	< 600														10.53	1.81	7.05	-160.0	1765
MW-7R	5/15/2014	< 150			***3810***															
MW-7R	7/28/2014	< 30		23.0	***3890***	***3.4***	4.5		< 100	0.09	***97.7***	0.21 J	< 0.40	115	< 5.0	15.19	0.35	7.28	129	690

Table 2 ***(Continued)***

Well Name	Sample Date	1,1,1-Trichloroethane ug/L	1,1,2-Trichloroethane ug/L	1,1-Dichloroethane ug/L	1,1-Dichloroethene ug/L	1,2-Dichloroethane ug/L	1,3,5-Trimethylbenzene ug/L	Chloroethane ug/L	Chloroform ug/L	Ethylbenzene ug/L	Methylene Chloride ug/L	Tetrachloroethene ug/L	Toluene ug/L	Trichloroethene ug/L	Vinyl Chloride ug/L
WI Enforcement Standard		**200**	**5**	**850**	**7**	**5**	**480**	**400**	**6**	**700**	**5**	**5**	**800**	**5**	**0.2**
WI Preventive Action Limit		**40**	**0.5**	**85**	**0.7**	**0.5**	**96**	**80**	**0.6**	**140**	**0.5**	**0.5**	**160**	**0.5**	**0.02**
MW-7R	8/19/2014														
MW-7R	8/20/2014														
MW-7R	9/18/2014	***14100***	< 50.0	***1320***	***2200***	< 50.0	< 50.0	*144*	< 250	< 50.0	***64.6***	< 50.0	< 50.0	***48.2 J***	***9.6 J***
MW-7R	9/23/2014														
MW-7R	10/20/2014														
MW-7R	12/17/2014														
MW-7R	4/16/2015	***1280***	*2.7 J*	*234*	***267***	< 10.0	< 10.0	19.3	< 50.0	< 10.0	< 10.0	< 10.0	< 10.0	***10.0***	< 10.0
MW-7R	7/14/2015	***10700***	< 100	***1060***	***1690***	< 100	< 100	*123*	< 500	< 100	< 100	< 100	< 100	< 100	< 100
MW-7R	9/24/2015	***12100***	< 100	***1130***	***1830***	< 100	< 100	*220*	< 500	< 100	< 100	< 100	< 100	***57.7 J***	< 100
MW-7R	3/15/2016	***8940***	<19.7	***1490***	***2040***	<16.8	<50.0	*189*	<250	<50.0	***30.7 J***	<50.0	<50.0	***64.6 J***	***18.9 J***
MW-10	11/20/2013	5.9	< 1.0	2.1	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-10	12/19/2013														
MW-10	1/20/2014	4.0	< 1.0	1.8	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-10	3/10/2014	3.9	< 1.0	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-10	5/15/2014														
MW-10	7/29/2014	5.7	< 1.0	2.2	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-10	9/19/2014	5.6	< 1.0	2.6	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-10	9/24/2014	4.5	< 1.0	2.1	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-10	4/15/2015														
MW-10	7/15/2015	4.8	< 1.0	2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-10	9/23/2015														
MW-10	3/15/2016														
MW-12	5/15/2014														
MW-12	9/19/2014														
MW-12	4/16/2015														
MW-12	9/23/2015														
MW-12	3/15/2016														
MW-19	9/19/2014														
MW-19	9/23/2015	2.4	< 1.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-19	3/16/2016														
MW-20	11/20/2013	***444***	< 5.0	56.2	***41.3***	< 5.0	< 5.0	7.5	< 25.0	< 5.0	< 5.0	< 5.0	< 5.0	*2.0 J*	***1.8 J***
MW-20	12/18/2013														
MW-20	1/21/2014	***3120***	< 50.0	*376*	***238***	< 50.0	< 50.0	41.3 J	< 250	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
MW-20	3/10/2014	***2900***	< 40.0	*380*	***251***	< 40.0	< 40.0	48.4	< 200	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0
MW-20	7/28/2014	***1970***	*2.4 J*	*244*	***188***	< 10.0	< 10.0	34.2	< 50.0	< 10.0	*3.9*	< 10.0	< 10.0	***5.5 J***	***10 J***
MW-20	8/19/2014														
MW-20	8/20/2014														
MW-20	9/18/2014	***1260***	< 20.0	*162*	***123***	< 20.0	< 20.0	19.8 J	< 100	< 20.0	***15.7 J***	< 20.0	< 20.0	< 20.0	< 20.0
MW-20	9/23/2014	***1440***	< 10.0	*182*	***142***	< 10.0	< 10.0	19.2	< 50.0	< 10.0	*4.9 J*	< 10.0	< 10.0	***5.0 J***	***4.4 J***
MW-20	10/21/2014														
MW-20	12/17/2014														
MW-20	7/14/2015	***3580***	< 50.0	*310*	***357***	< 50.0	< 50.0	< 50.0	< 250	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
MW-20	9/24/2015	***4420***	< 50.0	*463*	***561***	< 50.0	< 50.0	44.8 J	< 250	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
MW-20	3/15/2016	***6490***	<9.9	*637*	***804***	<8.4	<25.0	62.3	<125	<25.0	<11.6	<25.0	<25.0	***21.1 J***	***13.6 J***
MW-21	11/19/2013	***572***	*2.0*	*120*	***156***	*3.3*	< 1.0	73.1	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	***6.8***	***9.3***
MW-21	12/19/2013														
MW-21	1/21/2014	***496***	< 10.0	*124*	***140***	< 10.0	< 10.0	65.6	< 50.0	< 10.0	< 10.0	< 10.0	< 10.0	***6.5 J***	***7.1 J***
MW-21	3/11/2014	***467***	< 10.0	*119*	***137***	< 10.0	< 10.0	50.5	< 50.0	< 10.0	< 10.0	< 10.0	< 10.0	***5.5 J***	***4.1 J***
MW-21	7/28/2014	***513***	< 10.0	*122*	***144***	*3.4 J*	< 10.0	52.5	< 50.0	< 10.0	< 10.0	< 10.0	< 10.0	***7.0 J***	***5.3 J***
MW-21	8/19/2014														
MW-21	8/20/2014														
MW-21	9/23/2014	***318***	*1.0 J*	72.9	***32.1***	*1.9 J*	< 2.5	25.3	< 12.5	< 2.5	*1.5 J*	< 2.5	< 2.5	*3.9*	< 2.5
MW-21	10/21/2014														
MW-21	12/18/2014														
MW-21	7/14/2015	*190*	< 1.0	34.5	***24.3***	*2.5*	< 1.0	5.4	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*3.0*	***2.1***
MW-21	9/23/2015	*183*	*0.60 J*	40.1	***26.3***	*0.77 J*	< 1.0	5.7	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	*2.5*	***2.2***
MW-21	3/15/2016	*156*	*<0.20*	43.7	***28.3***	*0.64 J*	<0.50	4..0	<2.5	<0.50	<0.23	<0.50	<0.50	*2.4*	***2.1***

Table 2 ***(Continued)***

Well Name	Sample Date	Total Xylene ug/L	Arsenic ug/L	Chloride mg/L	Chromium ug/L	Chromium, Hexavalent mg/L	Dissolved Organic Carbon mg/L	Total Organic Carbon mg/L	Iron ug/L	Iron, Ferrous mg/L	Manganese ug/L	Nitrogen, Nitrate mg/L	Phosphorus mg/L	Sulfate mg/L	Sulfide mg/L	Temperature deg c	Dissolved Oxygen mg/L	pH s.u.	Redox Potential mV	Specific Conductance uS/cm @25 C
WI Enforcement Standard		**2000**	**10**	**250**	**100**	**0.1**			**300**		**50**	**10**		**250**						
WI Preventive Action Limit		**400**	**1**	**125**	**10**	**0.01**			**150**		**25**	**2**		**125**						
MW-7R	8/19/2014			53.1	***19800***	***22.4***			< 100	0	***103***	< 1.5	< 0.80 D3	*155*	< 5.0	15.27	1.68	7.22	163	1090
MW-7R	8/20/2014						1.3 2q	1.0												
MW-7R	9/18/2014	< 150			***36300***															
MW-7R	9/23/2014			18.4 J,D3	***5140***	***5.1***	2.6 1q	1.1	< 100	0	*29.3*	0.75 J,D3	< 0.40	80.2	< 5.0	16.29	5.82	6.89	92	418
MW-7R	10/20/2014			65.4	***23900***	***32.4***	1.1	0.88	< 100	0	***64.4***	< 1.5 D3	< 0.40	*160*	< 5.0	15	3.68	6.95	169	1203
MW-7R	12/17/2014			16.6	***20400***	***23.4***	0.55	0.57	< 100	0.034	***79.4***	< 0.30	< 0.40	23.0	< 5.0	11.06	3.2	7	-115.7	1188
MW-7R	4/16/2015	< 30			***6780***															
MW-7R	7/14/2015	< 300			***39600***	***41.8***			< 100	0	***119***			*148*		12.6	0.51	6.87	92.6	1454
MW-7R	9/24/2015	< 300			***52900***	***51.8***			< 100		***166***			*154*						
MW-7R	3/15/2016	<150			***49600***	***49.6***			<12.9		***124***			*152*		8.32	0.42	7.09	41.3	1664
MW-10	11/20/2013	< 3.0	*5.0 J*																	
MW-10	12/19/2013		*7.8 J*							0.201						8.51	0.44	7.04	132	2093
MW-10	1/20/2014	< 3.0														6.31	2.36	6.83	-176.0	3319
MW-10	3/10/2014	< 3.0														5.08	4.34	6.83	259.7	2606
MW-10	5/15/2014				*56.9*															
MW-10	7/29/2014	< 3.0														12.53	0.2	7.12	104	1893
MW-10	9/19/2014	< 3.0			*34.8*															
MW-10	9/24/2014	< 3.0														14.96	0.7	6.73	133.8	2025
MW-10	4/15/2015				*62.6*															
MW-10	7/15/2015	< 3.0														13.24	0.43	7.07	-30.5	1970
MW-10	9/23/2015				6.3															
MW-10	3/15/2016				24.9											4.79	1.71	7.05	47.4	2322
MW-12	5/15/2014				5.2															
MW-12	9/19/2014				5.6															
MW-12	4/16/2015				2.2 J															
MW-12	9/23/2015				4.7 J															
MW-12	3/15/2016				<2.1											5.34	2.08	6.94	45.8	1403
MW-19	9/19/2014				*10.3*															
MW-19	9/23/2015	< 3.0			7.5															
MW-19	3/16/2016				<2.1											5.58	1.17	6.99	31.4	654
MW-20	11/20/2013	< 15.0		19.6	5.0	< 0.020	3.9 1q	1.7	***8360***		***662***	< 0.30	0.11 J	***329***	< 5.0	12.16	0.13	6.01	71	622.3
MW-20	12/18/2013		< 20.0	26.4	2.8 J	< 0.020	4.4 1q	2.9	***4590***	6.274	***550***	< 0.30	< 0.40	*201*	< 5.0	9.8	0.14	6.71	-45	1028
MW-20	1/21/2014	< 150														3.98	3.05	6.74	-171.6	1476
MW-20	3/10/2014	< 120.0														6.23	1.54	6.73	-63.9	4205
MW-20	7/28/2014	< 30.0		27.6	< 5.0	< 0.020	7.3		***2660***	2.06	***634***	< 0.30	< 0.40	*191*	< 5.0	15.81	0.11	7	-38	1110
MW-20	8/19/2014			17.8	4.6 J	< 0.020			***4170***	6.106	***696***	0.65	< 0.40	120	< 5.0	15.77	0.02	6.18	-4	1011
MW-20	8/20/2014						5.7 1q	4.3												
MW-20	9/18/2014	< 60.0			< 5.0															
MW-20	9/23/2014	< 30.0		11.0	*48.2*	< 0.020	4.0 1q	2.2	***3050***	0.873	***220***	0.22 J	< 0.40	87.8	< 5.0	16.99	0.29	6.99	-34.8	372
MW-20	10/21/2014			21.0 M0	< 5.0	< 0.020	1.8	1.9	***885***	1.94	***297***	1.0 J,1q,D3	< 0.40	*125*	< 5.0	14.3	0.48	6.98	-25.3	705
MW-20	12/17/2014			***342***	< 5.0	< 0.020	0.33 J	0.40	***1570***	5.3	***303***	0.19 J	< 0.40	*130*	< 5.0	8.01	0.99	6.9	-134.6	1991
MW-20	7/14/2015	< 150			2.1 J	< 0.10			***4000***	49.394	***576***			*171*		13.81	0.6	6.91	-26.5	1357
MW-20	9/24/2015	< 150			< 5.0	< 0.10			***5070***		***657***			***251***						
MW-20	3/15/2016	<75.0			<2.1	<0.019			***5990***		***649***			***271***		5.91	0.63	7.03	0.9	1417
MW-21	11/19/2013	< 3.0	< 20.0	57.4	***26100***	***29.4***	3.0	3.2	< 100		*37.0*	< 1.5	< 0.40	66.6	< 5.0	16.45	1.58	6.75	168	1131
MW-21	12/19/2013		< 20.0	63.9	***22600***	***25.6***	2.4 2q	2.3	< 100	0.275	*34.0*	< 3.0	< 0.40	71.1	< 5.0	16.79	0.21	7.00	77	1306
MW-21	1/21/2014	< 30.0														15.78	0.57	6.91	-224.7	1396
MW-21	3/11/2014	< 30.0														16.29	1.39	6.91	194.7	1276
MW-21	7/28/2014	< 30.0		79.2	***30300***	***32.3***	1.3		< 100	0	*38.8*	0.66	< 0.53 D3	94.3	< 5.0	15.98	0.38	7.04	124	1661
MW-21	8/19/2014			70.6	***22500***	***18.8***			23.4 J	0	***156***	< 1.5	< 0.80 D3	***381***	< 5.0	16.33	0	5.92	249	1926
MW-21	8/20/2014						1.5	3.5												
MW-21	9/23/2014	< 7.5		92.0	***1990***	***0.12***	4.0 2q	3.6	*235*	0	***926***	< 0.30	< 0.40	***409***	< 5.0	16.59	0.24	6.6	66.9	1964
MW-21	10/21/2014			67.4	***753***	***0.18***	2.1	2.3	21.4 J	0	***881***	< 0.30	0.073 J	***290***	< 5.0	16.3	1.02	6.73	12.7	1668
MW-21	12/18/2014			59.5	***1300***	***0.67***	2.2	2.2	35.7 J	0	***987***	< 0.30	< 0.40	***310***	< 5.0	16.71	0.42	6.75	-26.7	1831
MW-21	7/14/2015	< 3.0			***484***	***0.45***			110	0	***477***			*146*		15.63	2.18	6.53	86.8	1203
MW-21	9/23/2015	< 3.0			***910***	***0.88***			34.5 J		***597***			25.7						
MW-21	3/15/2016	<1.50			***850***	***0.86***			<12.9		***584***			128		14.62	0.37	7	41.3	1055

Table 2 ***(Continued)***

		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	Chloroethane	Chloroform	Ethylbenzene	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride
WI Enforcement Standard		**200**	**5**	**850**	**7**	**5**	**480**	**400**	**6**	**700**	**5**	**5**	**800**	**5**	**0.2**
WI Preventive Action Limit		**40**	**0.5**	**85**	**0.7**	**0.5**	**96**	**80**	**0.6**	**140**	**0.5**	**0.5**	**160**	**0.5**	**0.02**
Well Name	**Sample Date**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
MW-22	11/19/2013	***364***	< 1.0	22.2	***64.3***	*0.90 J*	< 1.0	0.80 J	< 5.0	< 1.0	*3.2*	*0.90 J*	< 1.0	***10.0***	< 1.0
MW-22	12/19/2013														
MW-22	1/21/2014	***341***	< 4.0	24.2	***56.7***	< 4.0	< 4.0	< 4.0	< 20.0	< 4.0	***21.4***	< 4.0	< 4.0	***8.2***	< 4.0
MW-22	3/11/2014	***376***	< 4.0	22.9	***77.2***	< 4.0	< 4.0	< 4.0	< 20.0	< 4.0	*4.7*	< 4.0	< 4.0	***10.0***	< 4.0
MW-22	7/31/2014	***584***	< 4.0	34.8	***28.4***	*1.5 J*	< 4.0	< 4.0	< 20.0	< 4.0	***8.0***	< 4.0	< 4.0	***10.6***	< 4.0
MW-22	8/19/2014														
MW-22	8/20/2014														
MW-22	9/24/2014	***397***	< 4.0	28.9	***18.2***	< 4.0	< 4.0	< 4.0	< 20.0	< 4.0	***7.1***	< 4.0	< 4.0	***9.5***	< 4.0
MW-22	10/21/2014														
MW-22	12/18/2014														
MW-22	7/14/2015	***298***	< 4.0	16.0	***28.0***	< 4.0	< 4.0	< 4.0	< 20.0	< 4.0	< 4.0	< 4.0	< 4.0	***6.7***	< 4.0
MW-22	9/24/2015	***301***	< 4.0	16.5	***29.8***	< 4.0	< 4.0	< 4.0	< 20.0	< 4.0	< 4.0	< 4.0	< 4.0	***8.9***	< 4.0
MW-22	3/15/2016	***301***	<0.79	16.9	***34.1***	<0.67	<2.0	<1.5	<10.0	<2.0	*1.3 J*	<2.0	<2.0	***8.1***	<0.70
P-2A	11/20/2013	0.96 J	< 1.0	0.37 J	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2A	1/20/2014														
P-2A	3/11/2014														
P-2A	7/29/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	*5.9*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2A	9/24/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2A	7/15/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2A	9/23/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2A	3/16/2016	<0.50	<0.20	<0.24	<0.41	<0.17	<0.50	<0.37	<2.5	<0.50	<0.23	<0.50	<0.50	<0.33	<0.18
P-2B	11/20/2013	0.67 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2B	1/20/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2B	3/10/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2B	7/29/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2B	9/24/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-2B	7/15/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-4A	11/18/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-4A	1/21/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-4A	3/10/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-4A	7/28/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-4A	9/23/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-4A	7/15/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-4A	9/23/2015														
P-6A	11/18/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6A	12/19/2013														
P-6A	1/21/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6A	3/10/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6A	7/28/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6A	8/19/2014														
P-6A	8/20/2014														
P-6A	9/23/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6A	10/20/2014														
P-6A	12/18/2014														
P-6A	7/14/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6A	9/23/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6A	3/15/2016														
P-6B	11/18/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6B	1/21/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6B	3/10/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6B	7/28/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6B	9/23/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6B	7/14/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6B	9/23/2015														
P-6C	11/19/2013														
P-6C	1/21/2014	0.45 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6C	3/10/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 2 ***(Continued)***

		Total Xylene	Arsenic	Chloride	Chromium	Chromium, Hexavalent	Dissolved Organic Carbon	Total Organic Carbon	Iron	Iron, Ferrous	Manganese	Nitrogen, Nitrate	Phosphorus	Sulfate	Sulfide	Temperature	Dissolved Oxygen	pH	Redox Potential	Specific Conductance
WI Enforcement Standard		**2000**	**10**	**250**	**100**	**0.1**			**300**		**50**	**10**		**250**						
WI Preventive Action Limit		**400**	**1**	**125**	**10**	**0.01**			**150**		**25**	**2**		**125**						
Well Name	**Sample Date**	**ug/L**	**ug/L**	**mg/L**	**ug/L**	**mg/L**	**mg/L**	**mg/L**	**ug/L**	**mg/L**	**ug/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**deg c**	**mg/L**	**s.u.**	**mV**	**uS/cm @25 C**
MW-22	11/19/2013	< 3.0	*5.0 J*	36.5	***4740***	***6.6***	0.66	0.75	15.6 J		5.2	1.1	< 0.40	118	< 5.0	16.81	0.48	7.56	117	663.2
MW-22	12/19/2013		< 20.0	34.6	***5060***	***5.4***	0.80 2q	0.75	78.3 J	0.27	5.5	1.3	< 0.40	113	< 5.0	16.21	0.58	7.7	118	770.8
MW-22	1/21/2014	< 12.0														15.92	0.88	7.71	21.2	686
MW-22	3/11/2014	< 12.0														15.76	1.93	7.58	232.4	747
MW-22	7/31/2014	< 12.0		68.6	***1910***	***0.63***	0.83		92.3 J	0	***152***	0.54	< 0.40	***346***	< 5.0	18.12	0.87	6.72	153	1365
MW-22	8/19/2014			71.5	***1090***	***0.27***			35.5 J	0.042	***439***	< 3.0	< 0.40	***466***	< 5.0	17.38	0.45	7.07	143	1528
MW-22	8/20/2014						1.2 2q	1.1												
MW-22	9/24/2014	< 12.0		102	***3540***	***1.3***	2.2 1q	1.3	38.5 J	0	***320***	1.7	< 0.40	***377***	< 5.0	17.65	0.61	7.04	116.1	1526
MW-22	10/21/2014			106	***1810***	***2.0***	0.99	0.67	21.4 J	6.41	***211***	1.7 D3	0.062 J	***376***	< 5.0	16.7	0.94	6.63	138	1525
MW-22	12/18/2014			107	***2870***	***2.9***	0.48 J	0.55	25.7 J	3.989	***173***	1.5	0.39 J,M0	***318***	< 5.0	16.32	0.29	7.1	-9.5	1841
MW-22	7/14/2015	< 12.0			***6280***	***6.8***			67.3 J,B	0	***130***			***309***		16.54	2.96	6.88	111.4	1135
MW-22	9/24/2015	< 12.0			***2880***	***3.1***			131		***115***			***259***						
MW-22	3/15/2016	<7			***2850***	***2.3***			<12.9		***66.1***			*202*		15.35	0.51	7.58	38.7	922
P-2A	11/20/2013	< 3.0														11.42	0.04	7.47	5	772
P-2A	1/20/2014																			
P-2A	3/11/2014																			
P-2A	7/29/2014	< 3.0														10.88	0.62	7.34	45	1276
P-2A	9/24/2014	< 3.0														11.79	0.7	6.49	123	951
P-2A	7/15/2015	< 3.0			8.1	< 0.020			22.3 J	0	8.8			107		11.72	2.86	6.07	29.5	549
P-2A	9/23/2015	< 3.0			< 5.0	< 0.020			13.0 J		11.8			101						
P-2A	3/16/2016	<1.5			<2.1	<0.0039			32.8 J		508			123		7.45	0.54	7.46	53.6	1927
P-2B	11/20/2013	< 3.0														10.49	1.07	8.31	-20	192.6
P-2B	1/20/2014	< 3.0														8.37	2.21	8.20	-204.6	263
P-2B	3/10/2014	< 3.0														9.03	1.62	7.01	13.6	26630
P-2B	7/29/2014	< 3.0														12.25	0.03	5.4	103	2636
P-2B	9/24/2014	< 3.0														11.5	1.78	5.6	159.1	1020
P-2B	7/15/2015	< 3.0														12.24	2.28	5.95	47	554
P-4A	11/18/2013	< 3.0														10.3	1.39	7.42	112	340.6
P-4A	1/21/2014	< 3.0														10.37	0.24	7.67	-239.9	540
P-4A	3/10/2014	< 3.0														8.41	6.94	7.08	-66.9	537
P-4A	7/28/2014	< 3.0														12.17	1.16	7.12	-21	548.8
P-4A	9/23/2014	< 3.0														12.03	0.31	7.03	-67.9	395
P-4A	7/15/2015	< 3.0														11.13	3.77	7.66	5.5	455
P-4A	9/23/2015				< 5.0															
P-6A	11/18/2013	< 3.0		3.9 J	< 5.0	< 0.020	4.3 1q	3.9	< 100		10.4	0.29 J	< 0.40	14.4	< 5.0	9.83	0.14	7.82	99	313.8
P-6A	12/19/2013																			
P-6A	1/21/2014	< 3.0														7.26	2.47	7.59	-171.1	522
P-6A	3/10/2014	< 3.0														4.49	10.10	6.50	119.5	248
P-6A	7/28/2014	< 3.0		18.0 B	< 5.0	< 0.020	9.6		***1220***	0.03	***169***	< 0.30	0.28 J	7.3	< 5.0	12.34	0.59	7.33	-135	361
P-6A	8/19/2014			10.4	2.6 J	*0.016 J*			***2290***	0	***103***	< 0.30	0.26 J	9.2	< 5.0	12.12	0.02	6.85	-118	330.9
P-6A	8/20/2014						7.5 2q	6.2												
P-6A	9/23/2014	< 3.0		15.8 J,D3	< 5.0	< 0.10	3.9 2q	3.5	***5820***	0	***379***	< 1.5 D3	0.094 J	58.4	< 5.0	11.95	0.41	6.8	-39.3	472
P-6A	10/20/2014			8.6	< 5.0	< 0.020	3.8	2.1	*230*	0.56	***114***	1.8	0.059 J	33.1	< 5.0	10.6	2.35	6.74	-17.6	624
P-6A	12/18/2014			6.4	< 5.0	< 0.020	2.1 1q	1.9	15.4 J	0.009	12.7	*2.0*	< 0.40	47.7	< 5.0	9.33	2.03	7.69	-14.9	660
P-6A	7/14/2015	< 3.0			< 5.0	< 0.020			***1420***	0.98	***100***			15.4		11.37	0.36	7.39	-114.4	452
P-6A	9/23/2015	< 3.0			< 5.0	< 0.020			***2210***		***115***			22.7						
P-6A	3/15/2016				<2.1	<0.019			***1850***		***281***			11.3		7.91	0.44	7.13	-101.4	587
P-6B	11/18/2013	< 3.0														10.07	2.5	7.43	110	212.2
P-6B	1/21/2014	< 3.0														7.98	0.96	7.70	-174.9	248
P-6B	3/10/2014	< 3.0														10.40	2.76	7.42	75.0	231
P-6B	7/28/2014	< 3.0														11.4	0.27	7.54	-32	514.8
P-6B	9/23/2014	< 3.0														11.85	0.27	6.77	-41.8	313
P-6B	7/14/2015	< 3.0														11.43	0.5	7.27	-67.8	356
P-6B	9/23/2015				< 5.0															
P-6C	11/19/2013																			
P-6C	1/21/2014	< 3.0														7.21	1.56	5.86	-159.6	583
P-6C	3/10/2014	< 3.0														8.95	3.84	5.83	127.7	335

Table 2 ***(Continued)***

		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	Chloroethane	Chloroform	Ethylbenzene	Methylene Chloride	Tetrachloroethene	Toluene	Trichloroethene	Vinyl Chloride
WI Enforcement Standard		**200**	**5**	**850**	**7**	**5**	**480**	**400**	**6**	**700**	**5**	**5**	**800**	**5**	**0.2**
WI Preventive Action Limit		**40**	**0.5**	**85**	**0.7**	**0.5**	**96**	**80**	**0.6**	**140**	**0.5**	**0.5**	**160**	**0.5**	**0.02**
Well Name	**Sample Date**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
P-6C	7/28/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6C	9/23/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-6C	7/15/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-7A	11/20/2013	***30700***	< 200	***13100***	***709***	< 200	< 200	< 200	< 1000	< 200	< 200	< 200	< 200	< 200	< 200
P-7A	12/19/2013														
P-7A	1/20/2014	*114*	< 50.0	***5010***	***1030***	***28.3 J***	< 50.0	< 50.0	< 250	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
P-7A	5/15/2014	*104*	***8.1 J***	***3680***	***741***	***21.8 J***	< 50.0	< 50.0	< 250	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
P-7A	7/28/2014	*53.8*	***5.4 J***	***2010***	***463***	***12.9 J***	< 20.0	< 20.0	< 100	< 20.0	***7.0 J***	< 20.0	< 20.0	< 20.0	< 20.0
P-7A	8/19/2014														
P-7A	8/20/2014														
P-7A	9/18/2014	6.2	< 2.0	*193*	***63.2***	*0.87 J*	< 2.0	< 2.0	< 10.0	< 2.0	*0.65 J*	< 2.0	< 2.0	< 2.0	< 2.0
P-7A	9/23/2014														
P-7A	10/20/2014														
P-7A	12/17/2014														
P-7A	4/16/2015	11.8	*1.5 J*	*412*	***82.2***	*2.9*	< 2.0	< 2.0	< 10.0	< 2.0	*0.96 J*	< 2.0	< 2.0	< 2.0	< 2.0
P-7A	7/14/2015	5.7	< 1.0	64.0	***23.0***	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	*< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0
P-7A	9/24/2015	7.8	0.26 J	*175*	***46.6***	*1.1*	< 1.0	1.4	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	***0.39 J***
P-7A	3/15/2016	3.8	<0.20	*86.7*	***24.3***	0.40 J	<0.50	<0.37	<2.5	<0.50	0.26 J	<0.50	<0.50	<0.33	<0.18
P-7B	11/19/2013	*50.0 J*	< 50.0	***3430***	***581***	< 50.0	< 50.0	< 50.0	< 250	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0
P-7B	12/19/2013														
P-7B	1/20/2014	***24200***	< 200	***11500***	***595***	< 200	< 200	< 200	< 1000	< 200	< 200	< 200	< 200	< 200	< 200
P-7B	5/15/2014	***19800***	***66.7 J***	***9540***	***503***	**42.3 J**	< 100	< 100	< 500	< 100	< 100	< 100	< 100	< 100	< 100
P-7B	7/28/2014	***28400***	***78.4 J***	***13200***	*776*	**58.8 J**	< 200	< 200	< 1000	< 200	< 200	< 200	< 200	< 200	< 200
P-7B	8/19/2014														
P-7B	8/20/2014														
P-7B	9/18/2014	***16600***	< 200	***8860***	***573***	< 200	< 200	< 200	< 1000	< 200	< 200	< 200	< 200	< 200	< 200
P-7B	9/23/2014														
P-7B	10/20/2014														
P-7B	12/17/2014														
P-7B	4/16/2015	***18800***	< 200	***9080***	*736*	< 200	< 200	< 200	< 1000	< 200	< 200	< 200	< 200	< 200	< 200
P-7B	7/14/2015	***23300***	< 100	***10000***	***904***	***45.7 J***	< 100	< 100	< 500	< 100	< 100	< 100	< 100	< 100	< 100
P-7B	9/24/2015	***13000***	< 100	***4810***	***768***	< 100	< 100	< 100	< 500	< 100	< 100	< 100	< 100	< 100	< 100
P-7B	3/15/2016	***11200***	<19.7	***3860***	***1050***	<16.8	<50	<37.5	<250	<50	<23.3	<50	<50	<33.1	<17.6
P-7C	11/20/2013	6.6	< 1.0	2.9	*2.1*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-7C	12/18/2013														
P-7C	1/21/2014	0.87 J	< 1.0	2.6	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-7C	3/10/2014	0.86 J	< 1.0	2.4	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-7C	7/28/2014	*41.0*	0.19 J	29.0	*1.0*	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	0.97 J	< 1.0	< 1.0
P-7C	8/19/2014														
P-7C	8/20/2014														
P-7C	9/23/2014	1.3	< 1.0	0.44 J	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-7C	10/20/2014														
P-7C	12/18/2014														
P-7C	7/14/2015	0.75 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-7C	9/24/2015	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-7C	3/15/2016	0.95 J	<0.20	1.1	<0.41	<0.17	<0.50	<0.37	<2.5	<0.50	<0.23	<0.50	<0.50	<0.33	<0.18
P-12A	9/23/2015														

Table 2 *(Continued)*

Well Name	Sample Date	Total Xylene ug/L	Arsenic ug/L	Chloride mg/L	Chromium ug/L	Chromium, Hexavalent mg/L	Dissolved Organic Carbon mg/L	Total Organic Carbon mg/L	Iron ug/L	Iron, Ferrous mg/L	Manganese ug/L	Nitrogen, Nitrate mg/L	Phosphorus mg/L	Sulfate mg/L	Sulfide mg/L	Temperature deg c	Dissolved Oxygen mg/L	pH s.u.	Redox Potential mV	Specific Conductance uS/cm @25 C
WI Enforcement Standard		**2000**	**10**	**250**	**100**	**0.1**			**300**		**50**	**10**		**250**						
WI Preventive Action Limit		**400**	**1**	**125**	**10**	**0.01**			**150**		**25**	**2**		**125**						
P-6C	7/28/2014	< 3.0														11.56	0.43	5.42	115	390.4
P-6C	9/23/2014	< 3.0														11.91	1.17	5.39	140.2	322
P-6C	7/15/2015	< 3.0														11.49	1.13	5.47	36.3	352
P-7A	11/20/2013	< 600		*191*	2.7 J	< 0.020	4.3 1q	3.2	***673***		***546***	< 0.30	0.20 J	***869***	< 5.0	11.15	0.14	7.43	-28	2522
P-7A	12/19/2013			*170*	2.3 J	< 0.020	4.4 2q	4.3	***534***	0.898	***484***	0.19 J	0.13 J	***760***	< 5.0	10.35	3.45	7.28	3	1207
P-7A	1/20/2014	< 150														11.96	2.53	7.31	-214.0	1640
P-7A	5/15/2014	< 150			< 5.0															
P-7A	7/28/2014	< 60.0		84.6	< 5.0	< 0.020	0.83		< 100	0.02	18.5	0.27 J	< 0.40	*173*	< 5.0	12.22	3.08	7.65	126	1134
P-7A	8/19/2014			*152*	< 5.0	< 0.020			< 100	0	*42.0*	< 0.30	< 0.40	***432***	< 5.0	12.92	0.45	7.49	73	1649
P-7A	8/20/2014						1.0	1.0												
P-7A	9/18/2014	< 6.0			< 5.0															
P-7A	9/23/2014			9.3	3.2 J	< 0.020	4.3 2q	3.6	***379***	0	23.8	0.39	< 0.40	30.0	< 5.0	13.86	4.35	7.14	44.8	220
P-7A	10/20/2014			7.6	< 5.0	< 0.020	3.9	3.2	134	2.45	17.2	0.47	0.63	19.6	< 5.0	12.9	0.69	6.78	18.6	320
P-7A	12/17/2014			*132*	< 5.0	< 0.020	0.49 J	0.47 J	< 100	0.554	4.4 J	1.4	< 0.40	15.3	< 5.0	11.21	5.93	7.16	69.8	655
P-7A	4/16/2015	< 6.0			< 5.0															
P-7A	7/14/2015	< 4.0			< 5.0	< 0.020			< 100	0	21.1			13.6		13.33	0.5	6.99	21.4	204
P-7A	9/24/2015	< 4.0			5.4	< 0.020			62.1 J		***51.8***			13.1						
P-7A	3/15/2016	<1.5			4.0 J	0.0039 J			<12.9		3.0 J			28.4		10.03	6.42	7.65	30.1	329
P-7B	11/19/2013	< 150	*9.8 J*	*133*	1.4 J	< 0.020	1.0	1.1	25.0 J		*30.4*	0.17 J	< 0.40	*216*	< 5.0	12.01	0.74	7.6	30	1201
P-7B	12/19/2013			96.6	< 5.0	< 0.020	1.5 2q	1.3	*165*	0	***175***	0.35	< 0.40	*180*	< 5.0	11.62	2.38	7.44	45	1147
P-7B	1/20/2014	< 600														10.48	0.64	7.06	-259.2	2904
P-7B	5/15/2014	< 300			2.8 J															
P-7B	7/28/2014	< 600		*203*	< 5.0	< 0.020	2.9		***577***	0.33	***480***	< 0.30	< 0.40	***863***	< 5.0	14.95	1.31	7.44	-30	2481
P-7B	8/19/2014			74.0	< 5.0	< 0.020			*166*	0	***161***	0.16 J	< 0.40	***305***	< 5.0	12.89	4.22	7.26	27	1201
P-7B	8/20/2014						1.3	1.5												
P-7B	9/18/2014	< 600			*13.4*															
P-7B	9/23/2014			*191*	*21.6*	< 0.020	1.6 2q	1.5	***622***	0	***318***	< 0.30	< 0.40	***741***	< 5.0	13.14	1.82	7.07	-24.4	2470
P-7B	10/20/2014			*198*	*30.8*	< 0.020	1.3	1.4	***557***	0.67	***371***	< 0.30	0.069 J	***759***	< 5.0	11.8	0.56	6.94	-5.2	2388
P-7B	12/17/2014			***657***	4.6 J	< 0.020	0.53	0.70	***534***	1.467	***258***	< 0.30	0.061 J	***521***	< 5.0	8.29	0.68	7.55	-36.9	3324
P-7B	4/16/2015	< 600			*43.2*															
P-7B	7/14/2015	< 300			< 5.0	< 0.020			***359***	0	***328***			***661***		15.48	0.96	7.39	-54.8	2267
P-7B	9/24/2015	< 300			3.2 J	< 0.020			*174*		***112***			*241*						
P-7B	3/15/2016	<150			<2.1	<0.0039			81.3 J		***84.3***			*168*		9.38	3	7.38	51.8	1005
P-7C	11/20/2013	< 3.0		3.7 J,M0	3.8 J	< 0.020	2.2 2q	2.1	60.6 J		1.8 J	1.3	< 0.40	26.0 M0	< 5.0	10.41	1.25	8.66	172	229.5
P-7C	12/18/2013			5.0	5.3	< 0.020	3.1 1q	2.3	28.3 J	0.91	5.2	1.3	0.13 J	25.5	< 5.0	10.16	2.3	7.26	1	232.6
P-7C	1/21/2014	< 3.0														6.36	2.12	7.20	-229.0	1303
P-7C	3/10/2014	< 3.0														9.91	3.61	7.23	43.3	685
P-7C	7/28/2014	< 3.0		4.3 B	< 5.0	< 0.020	2.8		145	0.01	***78.0***	0.38	< 0.40	9.1	< 5.0	12.98	0.41	7.82	-86	128.9
P-7C	8/19/2014			2.8 J	< 5.0	< 0.020			***350***	0	*29.3*	< 0.30	< 0.40	4.2	< 5.0	13.68	0.2	7.08	2	80.85
P-7C	8/20/2014						15.4	15.6												
P-7C	9/23/2014	< 3.0		2.1 J	*23.7*	< 0.020	3.0	3.7	***4040***	0	***93.5***	0.33	< 0.40	3.9 J	< 5.0	13.1	0.12	6.81	-39	72
P-7C	10/20/2014			3.2 J	< 5.0	< 0.020	1.8	2.4	*259*	4.58	9.0 B	0.82	< 0.40	5.8	< 5.0	11.7	0.79	6.98	-61.1	101
P-7C	12/18/2014			11.4	< 5.0	< 0.020	1.3	1.3	144	0.828	11.7	1.2	< 0.40	4.7	< 5.0	10.7	0.52	6.94	-40.1	162
P-7C	7/14/2015	< 3.0			< 5.0	< 0.020			***381***	0.267	19.1			4.0 J		13.94	0.71	7.09	4.2	154
P-7C	9/24/2015	< 3.0			< 5.0	< 0.020			*221*		14.5			2.3 J						
P-7C	3/15/2016	<1.5			<2.1	<0.0039			128		6.9			4.3		10.03	2.2	7.28	13.9	253
P-12A	9/23/2015				< 5.0															

Notes:

1q: Dissolved analyte or filtered analyte greater than total analyte; analysis failed QC based on precision criteria.
2q: Dissolved analyte or filtered analyte greater than total analyte, analysis passed QC based on precision criteria.
B: Analyte was detected in the associated method blank.
D3: Sample was diluted due to presence of high levels of non-targeted analytes or other matrix interference.
J: Analyte detected below reporting limit, therefore result is an estimate.
M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
Bold: Enforcement standard exceedance
italics: Preventative action limit exceedence

deg c = Celsius
mg/L = Milligram/Liter
mV = millivolt
ug/L = Microgram/Liter
uS/cm = microsiemens per centimeter

Prepared By: NMG1
Checked By: SVF

Table 3
Flow Meter Readings
Wisconsin Chrome, Kaukauna, Wisconsin

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
11/06/13	47,912	101,174	149,086	140,407	8,679	6%
11/14/13	52,801	106,933	159,734	150,525	9,209	6%
12/02/13	74,214	107,600	181,814	171,172	10,642	6%
12/10/13	80,565	119,013	199,578	187,509	12,069	6%
12/20/13	84,155	120,273	204,428	191,809	12,619	7%
12/31/13	84,973	120,278	205,251	192,636	12,615	7%
01/15/14	84,973	120,278	205,251	192,636	12,615	7%
02/13/14	85,330	120,278	205,251	192,636	12,615	7%
03/13/14	85,706	121,293	206,999	194,458	12,541	6%
04/01/14	85,966	121,293	207,259	194,458	12,801	7%
04/12/14	90,237	121,293	211,530	198,400	13,130	7%
04/14/14	94,813	121,293	216,106	202,546	13,560	7%
04/22/14	106,935	121,293	228,228	215,879	12,349	6%
05/13/14	114,120	121,293	235,413	222,567	12,846	6%
06/04/14	119,554	129,122	248,676	232,114	16,562	7%
06/05/14	120,961	129,122	250,083	234,267	15,816	7%
06/12/14	129,616	134,329	263,945	245,815	18,130	7%
07/01/14	158,316	164,438	322,754	298,628	24,126	8%
07/02/14	158,701	164,556	323,257	298,959	24,298	8%
08/05/14	159,447	165,368	324,815	300,373	24,442	8%
08/06/14	159,447	165,392	324,839	300,373	24,466	8%
08/07/14	159,447	167,219	326,666	302,021	24,645	8%
08/13/14	165,583	168,830	334,413	308,936	25,477	8%
08/22/14	173,879	176,422	350,301	323,194	27,107	8%
09/05/14	185,636	183,779	369,415	340,357	29,058	9%
09/17/14	197,841	195,374	393,215	361,652	31,563	9%
09/24/14	203,735	200,534	404,269	371,586	32,683	9%
10/01/14	207,855	205,840	413,695	379,956	33,739	9%
10/16/14	221,123	217,531	438,654	402,237	36,417	9%
11/04/14	236,160	229,321	465,481	426,276	39,205	9%
11/13/14	240,712	234,643	475,355	435,167	40,188	9%
12/08/14	242,571	235,940	478,511	438,078	40,433	9%
12/09/14	243,981	237,347	481,328	440,815	40,513	9%
12/12/14	245,981	239,498	485,479	444,853	40,626	9%
12/31/14	269,423	256,529	525,952	484,590	41,362	9%
01/01/15	270,532	257,650	528,182	486,734	41,448	9%
01/12/15	277,196	262,276	539,472	497,841	41,631	8%
01/31/15	280,334	265,875	546,209	504,392	41,817	8%
02/04/15	280,356	266,652	547,008	505,221	41,787	8%
02/28/15	280,376	266,652	547,028	505,234	41,794	8%
03/01/15	280,376	266,652	547,028	505,234	41,794	8%
03/11/15	280,387	266,652	547,039	505,234	41,805	8%

Table 3 ***(Continued)***

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
03/18/15	280,391	266,652	547,043	505,234	41,809	8%
04/07/15	280,499.3	266,652	547,151	505,321	41,830	8%
04/13/15	287,154.3	266,652	553,806	511,876	41,930	8%
04/15/15	293,306.3	266,652	559,958	514,049	45,909	9%
04/22/15	295,729.3	270,842	566,571	524,487	42,084	8%
04/24/15	297,320.3	271,384	568,704	526,526	42,178	8%
04/29/15	300,088.3	271,823	571,911	529,679	42,232	8%
04/30/15	300,541.3	271,855	572,396	530,187	42,209	8%
5/20/2015	307,921	271,855	579,776	537,499	42,277	8%
5/24/2015	309,040	271,855	580,895	538,568	42,327	8%
5/27/2015	312,092	273,363	585,455	542,914	42,541	8%
6/10/2015	327,192	283,283	610,475	566,749	43,726	8%
6/12/2015	329,430	284,946	614,376	570,484	43,892	8%
7/9/2015	363,595	302,473	666,068	619,989	46,079	7%
7/15/2015	366,648	303,180	669,828	623,673	46,155	7%
8/12/2015	378,528	303,180	681,708	635,092	46,616	7%
9/9/2015	395,080	303,180	698,260	650,970	47,290	7%
10/13/2015	422,909	303,180	726,089	677,637	48,452	7%
11/18/2015	441,979	303,180	745,159	695,916	49,243	7%
12/2/2015	459,706	303,180	762,886	709,863	53,023	7%
12/6/2015	466,264	303,180	769,444	716,194	53,250	7%
12/10/2015	470,324	303,180	773,504	720,060	53,444	7%
1/13/2016	531,297	303,180	834,477	778,535	55,942	7%
2/11/2016	549,026	303,180	852,206	795,543	56,663	7%
3/16/2016	584,720	303,180	887,900	829,869	58,031	7%
4/18/2016	654,484	303,180	957,664	896,938	60,726	7%

Notes:

Prepared by: NMG1

Checked by: SVF

1. The influent and effluent flow meters were replaced by Foth on 11/30/2004.
2. Influent flow meters measure more flow than the effluent flow meter when all three flow
3. Consultant transition from Foth meters are operating continuously.
4. SCS BT Squared replaces Sump A flow meter in May 2009.
5. SCS BT Squared reported out-of-service from 1/18/2012 until 3/22/2012.
6. Consultant transition from SCS BT Squared to Terracon in May 2012.
7. System remained out of operation from October 2012 until 1/27/2013.
8. The three Badger flow meters were repaired and faces replaced on 1/24/13. 1/26/2013 readings reflect the starting values on the repaired meters. Subsequent readings are the face value minus the 1/24/2013 starting values.
9. Sump A not operational from 6 are the face value minus the 1/24/2013 starting values.
10. Sump A pump replaced with a Grundfos SQE-90 (240v) submersible pump on 9/24/2013.
11. Sump B pump discharge hose inside manhole was replaced on 9/24/2013.
12. LMI Chemical pump for sodium hydroxide injection was replaced on 6/3/2014
13. Transfer pimp was replaced on 8/4/14 with a Goulds model 1SV8GC (1hp)
14. Consultant transition from Terracon to Foth in May 2015.
15. Sump B not operational as of 7/15/2015.

Table 4
Operations and Maintenance Analytical Result Summary
Wisconsin Chrome, Kaukauna, Wisconsin

Sample Location				BETWEEN CATION CANISTERS																											
Chemical Name	Result unit	WI_ES	WI_PAL	11/14/2013	12/10/2013	1/15/2014	2/13/2014	4/22/2014	5/13/2014	6/12/2014	8/13/2014	9/17/2014	10/16/2014	11/13/2014	12/12/2014	1/12/2015	2/4/2015	3/18/2015	4/15/2015	5/20/2015	6/10/2015	7/15/2015	8/12/2015	9/9/2015	10/13/2015	11/18/2015	12/10/2015	1/13/2016	2/11/2016	3/16/2016	4/18/2016
Mercury	ug/L	2	*0.2*																												
Cadmium	ug/L	**5**	*0.5*																												
Chromium	ug/L	**100**	*10*	***193***	***780***	***219***	***330***	*33.2*	*52.9*	***408***	***253***	***299***	***361***	***685***	*98.0*	***1040***	***378***	*32.7*	3.1 J	5.3	***103***	***146***	9.3	*31.4*	*12.7*	*21.4*	***117***	***687***	***376***	***1140***	***2240***
Chromium, Hexavalent	mg/L	**0.1**	*0.01*	***0.12***	***0.78***	***0.13***	***0.12***	< 0.020	< 0.020	***0.15***	***0.25***	***0.33***	***0.38***	***0.74***	*0.094*	***1.1***	***0.39***	*0.028*	< 0.020	< 0.020	***0.10***	***0.15***	< 0.020	*0.027*	0.007 J	*0.056*	***0.11***	***0.74***	***0.37***	***1.2***	***1.9***
Copper	ug/L	1300	130																												
Lead	ug/L	15	*1.5*																												
Nickel	ug/L	100	20																												
Silver	ug/L	50	*10*																												
Zinc	ug/L	5000	2500																												
Chloroethane	ug/L	400	80																												
Chloroform	ug/L	**6**	*0.6*																												
1,1-Dichloroethane	ug/L	850	*85*																												
1,1-Dichloroethene	ug/L	**7**	*0.7*																												
1,2-Dichloroethane	ug/L	**5**	*0.5*																												
Ethylbenzene	ug/L	700	140																												
Methylene Chloride	ug/L	**5**	*0.5*																												
Tetrachloroethene	ug/L	**5**	*0.5*																												
Toluene	ug/L	800	160																												
1,1,1-Trichloroethane	ug/L	**200**	*40*																												
1,1,2-Trichloroethane	ug/L	**5**	*0.5*																												
Trichloroethene	ug/L	**5**	*0.5*																												
1,3,5-Trimethylbenzene	ug/L	480	96																												
Vinyl Chloride	ug/L	**0.2**	*0.02*																												
Xylene, m & p	ug/L	2000	400																												
Xylene, o	ug/L	2000	400																												
Xylenes, Total	ug/L	2000	400																												
BOD, 5-Day	mg/L																														
Cyanide	mg/L	**0.2**	*0.04*																												
Phosphorus	mg/L																														
Oil & Grease	mg/L																														
Total Suspended Solids	mg/L																														
pH	s.u.																														
Total Toxic Organics	ug/L																														

Table 4 (*Continued*)

Sample Location				EFFLUENT																											
Chemical Name	Result unit	WI_ES	WI_PAL	11/14/2013	12/10/2013	1/15/2014	2/13/2014	3/13/2014	4/22/2014	5/13/2014	6/12/2014	8/13/2014	9/17/2014	10/16/2014	11/13/2014	12/12/2014	1/12/2015	2/4/2015	3/18/2015	4/15/2015	5/20/2015	6/10/2015	7/15/2015	8/12/2015	9/9/2015	10/13/2015	11/18/2015	12/10/2015	1/13/2016	2/11/2016	3/16/2016	4/18/2016
Mercury	ug/L	2	*0.2*					< 0.20			< 0.20		< 0.20						< 0.20			< 0.20			< 0.20		<0.022				<0.10	
Cadmium	ug/L	**5**	*0.5*					*2.6 J*			< 5.0		< 5.0						*1.2 J*			< 5.0			< 5.0		<1.0				<1.0	
Chromium	ug/L	**100**	*10*	***148***	***128***	***789***	***1770***	***341***	***101***	***3700***	***315***	*27.1*	*53.2*	*87.0*	***294***	*13.4*	*19.2*	*12.8*	*25.2*	3.6 J	*12.0*	5.0	*17.2*	*16.6*	7.6	*29.8*	*55.7*	4.3 J	2.9. J	2.0 J	*39.8*	**542**
Chromium, Hexavalent	mg/L	**0.1**	*0.01*	0.0036 J	< 0.020	< 0.02	< 0.020	< 0.020	< 0.020	*0.012 J*	< 0.020	< 0.020	0.0043 J	*0.086*	***0.31***	< 0.020	< 0.020	< 0.020	*0.014 J*	*< 0.020*	0.0059 J	< 0.020	*0.010 J*	< 0.020	0.0053 J	*0.026*	***0.13***	<0.0039	<0.0039	<0.0039	*0.034*	***0.51***
Copper	ug/L	1300	130					28.2			91.4		4.6 J						14.2			4.2			< 10.0		<3.4				7.5	
Lead	ug/L	15	*1.5*					*4.2 J*			< 7.5		< 7.5						< 7.5			< 7.5			< 7.5		*5*				<1.6	
Nickel	ug/L	100	20					8.9 J			9.3 J		6.9 J						8.6 J			3.8 J			2.0 J		<1.3				1.4 J	
Silver	ug/L	50	*10*					< 10.0			< 10.0		< 10.0						< 10.0			< 10.0			< 10.0		<3.2				<3.2	
Zinc	ug/L	5000	2500					357			723		249						160			474			538		355				470	
Chloroethane	ug/L	400	80					< 1.0			< 1.0		< 1.0						< 1.0			0.55 J			< 1.0						<3.7	
Chloroform	ug/L	**6**	*0.6*					< 5.0			< 5.0		< 5.0						< 5.0			< 5.0			< 5.0						<25.0	
1,1-Dichloroethane	ug/L	850	*85*					2.6			0.38 J		0.91 J						0.84 J			17.7			*143*						*302*	
1,1-Dichloroethene	ug/L	**7**	*0.7*					< 1.0			< 1.0		< 1.0						< 1.0			< 1.0			< 1.0						*5.2 J*	
1,2-Dichloroethane	ug/L	**5**	*0.5*					< 1.0			< 1.0		< 1.0						< 1.0			< 1.0			< 1.0						<1.7	
Ethylbenzene	ug/L	700	140					< 1.0			< 1.0		< 1.0						< 1.0			< 1.0			< 1.0		<0.39				<5.0	
Methylene Chloride	ug/L	**5**	*0.5*					< 1.0			< 1.0		< 1.0						< 1.0			< 1.0			< 1.0						<2.3	
Tetrachloroethene	ug/L	**5**	*0.5*					< 1.0			< 1.0		< 1.0						< 1.0			< 1.0			< 1.0						<5.0	
Toluene	ug/L	800	160					< 1.0			< 1.0		< 1.0						< 1.0			< 1.0			< 1.0		<0.39				<5.0	
1,1,1-Trichloroethane	ug/L	**200**	*40*					4.4			0.53 J		1.5						0.91 J			0.60 J			29.2						***620***	
1,1,2-Trichloroethane	ug/L	**5**	*0.5*					< 1.0			< 1.0		< 1.0						< 1.0			< 1.0			< 1.0						<2.0	
Trichloroethene	ug/L	**5**	*0.5*					< 1.0			< 1.0		< 1.0						< 1.0			< 1.0			< 1.0						<3.3	
1,3,5-Trimethylbenzene	ug/L	480	96																			< 1.0			< 1.0						<5.0	
Vinyl Chloride	ug/L	**0.2**	*0.02*					< 1.0			< 1.0		< 1.0						< 1.0			***0.31 J***			***0.33 J***						<1.8	
Xylene, m & p	ug/L	2000	400																												
Xylene, o	ug/L	2000	400																												
Xylenes, Total	ug/L	2000	400																			< 3.0			< 3.0		<0.45				<15.0	
BOD, 5-Day	mg/L							< 2.0			< 2.0 B3,B4		< 2.0						< 2.0			< 2.0			< 2.0		1.78				<2.0	
Cyanide	mg/L	**0.2**	*0.04*					0.0051 J			< 0.020		< 0.020						***0.29***			< 0.020			< 0.040 D3		<0.01				<0.0068	
Phosphorus	mg/L							< 0.40			< 0.40		< 0.40						< 0.40			< 0.40			< 0.40		0.49				<0.052	
Oil & Grease	mg/L										< 4.9		0.86 J						< 4.8			1.4 J			< 4.7		<1.8				1.2 J	
Total Suspended Solids	mg/L							2.0			17.0		< 2.0						< 2.0			1.0			< 2.0		4				<0.95	
pH	s.u.																		7.4 H6			7.7 H6			7.5 H6		8				7.5 H6	
Total Toxic Organics	ug/L							7			0.9		2.4						2.0			17.9			172.53						927.2	

Table 4 (*Continued*)

Sample Location				INFLUENT-EX SUMP-A								INFLUENT-EX SUMP-B				BETWEEN CARBON DRUMS							
Chemical Name	Result unit	WI_ES	WI_PAL	3/13/2014	6/12/2014	9/17/2014	11/13/2014	3/18/2015	6/10/2015	9/9/2015	3/16/2016	6/12/2014	9/17/2014	11/13/2014	6/10/2015	3/13/2014	6/12/2014	9/17/2014	11/13/2014	3/18/2015	6/10/2015	9/9/2015	3/16/2016
Mercury	ug/L	2	*0.2*																				
Cadmium	ug/L	**5**	*0.5*																				
Chromium	ug/L	**100**	*10*	7.7	***160***	***237***	***191***	*17.0*	***340***	***518***	***1170***	***905***	***382***	***673***	***286***								
Chromium, Hexavalent	mg/L	**0.1**	*0.01*	< 0.020	***0.14***	***0.13***	***0.13***	< 0.10 D3	***0.33***	***0.21***	***1.0***	< 0.020	***0.36***	***0.65***	***0.23***								
Copper	ug/L	1300	130																				
Lead	ug/L	15	*1.5*																				
Nickel	ug/L	100	20																				
Silver	ug/L	50	*10*																				
Zinc	ug/L	5000	2500																				
Chloroethane	ug/L	400	80	< 4.0	3.8 J	2.8 J	5.9	< 5.0	< 20.0	3.1	<3.7					0.53 J	1.9	2.3 J	1.7 J	2.5	5.7 J	3.2	<3.7
Chloroform	ug/L	**6**	*0.6*	< 20.0	< 25.0	< 25.0	< 50.0	< 25.0	< 100	< 5.0	<25.0					< 5.0	< 5.0	< 12.5	< 12.5	< 12.5	< 50.0	< 5.0	<25.0
1,1-Dichloroethane	ug/L	850	*85*	79.1	*98.0*	*223*	*223*	*202*	*358*	*273*	*194*					75.3	*107*	*134*	*154*	*352*	*319*	*416*	*263*
1,1-Dichloroethene	ug/L	**7**	*0.7*	***64.3***	***131***	***154***	***179***	***105***	***234***	***197***	***129***					0.67 J	*3.0*	***15.6***	***18.2***	***39.5***	***71.4***	***121***	***152***
1,2-Dichloroethane	ug/L	**5**	*0.5*	< 4.0	< 5.0	< 5.0	< 10.0	< 5.0	< 20.0	*1.5*	<1.7					< 1.0	< 1.0	< 2.5	< 2.5	*2.2 J*	< 10.0	1.7	<1.7
Ethylbenzene	ug/L	700	140	< 4.0	< 5.0	< 5.0	< 10.0	< 5.0	< 20.0	< 1.0	<5.0					< 1.0	< 1.0	< 2.5	< 2.5	< 2.5	< 10.0	< 1.0	<5.0
Methylene Chloride	ug/L	**5**	*0.5*	< 4.0	< 5.0	1.3 J	< 10.0	< 5.0	< 20.0	0.61 J	<2.3					< 1.0	< 1.0	*0.94 J*	< 2.5	*1.1 J*	< 10.0	0.83 J	<2.3
Tetrachloroethene	ug/L	**5**	*0.5*	< 4.0	< 5.0	< 5.0	< 10.0	< 5.0	< 20.0	< 1.0	<5.0					< 1.0	< 1.0	< 2.5	< 2.5	< 2.5	< 10.0	< 1.0	<5.0
Toluene	ug/L	800	160	< 4.0	< 5.0	< 5.0	< 10.0	< 5.0	< 20.0	< 1.0	<5.0					< 1.0	< 1.0	< 2.5	< 2.5	< 2.5	< 10.0	< 1.0	<5.0
1,1,1-Trichloroethane	ug/L	**200**	*40*	***325***	***573***	***1270***	***1130***	***936***	***1350***	***1140***	***768***					*48.0*	*142*	***329***	***394***	***653***	***832***	***1210***	***1080***
1,1,2-Trichloroethane	ug/L	**5**	*0.5*	< 4.0	< 5.0	< 5.0	< 10.0	< 5.0	< 20.0	*2.3*	<2.0					< 1.0	< 1.0	< 2.5	< 2.5	< 2.5	< 10.0	0.57 J	<2.0
Trichloroethene	ug/L	**5**	*0.5*	< 4.0	< 5.0	*2.4 J*	< 10.0	*1.7 J*	< 20.0	*3.0*	<3.3					< 1.0	< 1.0	< 2.5	< 2.5	< 2.5	< 10.0	< 1.0	<3.3
1,3,5-Trimethylbenzene	ug/L	480	96	< 4.0	< 5.0	< 5.0	< 10.0	< 5.0	< 20.0	< 1.0	<5.0					< 1.0	< 1.0	< 2.5	< 2.5	< 2.5	< 10.0	< 1.0	<5.0
Vinyl Chloride	ug/L	**0.2**	*0.02*	< 4.0	< 5.0	< 5.0	< 10.0	< 5.0	< 20.0	**0.71 J**	<1.8					***0.64 J***	***1.2***	***0.90 J***	***0.68 J***	***1.9 J***	< 10.0	1.4	<1.8
Xylene, m & p	ug/L	2000	400	< 8.0	< 10.0	< 10.0	< 20.0	< 10.0	< 40.0	< 2.0	<10.0					< 2.0	< 2.0	< 5.0	< 5.0	< 5.0	< 20.0	< 2.0	<10.0
Xylene, o	ug/L	2000	400	< 4.0	< 5.0	< 5.0	< 10.0	< 5.0	< 20.0	< 1.0	<5.0					< 1.0	< 1.0	< 2.5	< 2.5	< 2.5	< 10.0	< 1.0	<5.0
Xylenes, Total	ug/L	2000	400																				
BOD, 5-Day	mg/L																						
Cyanide	mg/L	**0.2**	*0.04*																				
Phosphorus	mg/L																						
Oil & Grease	mg/L																						
Total Suspended Solids	mg/L																						
pH	s.u.																						
Total Toxic Organics	ug/L			468.4	805.8	*1653.5*	1537.9	1244.7	1942	1621.22	1091					125.14	255.1	482.74	568.58	1052.2	1228.1	1754.7	

Notes:
B3: The dissolved oxygen depletion of the dilution water blank exceeded 0.2 mg/L.
B4: The glucose/glutamic acid standard exceeded the range of 198 plus or minus 30.5 mg/L.
D3: Sample was diluted due to presence of high levels of non-targeted analytes or other matrix interference.
H6: Analysis initiated more than 15 minutes after sample collection.
J: Analyte detected below reporting limit, therefore result is an estimate.
L2: Analyte recovery in the laboratory control sample (LCS) were below QC limites. Results may be biased low.
Bold: Enforcement standard exceedance
italics: Preventative action limit exceedence
ug/L: Microgram/Liter
mg/L: Milligram/Liter

Prepared By: NMG1
Checked By: SVF

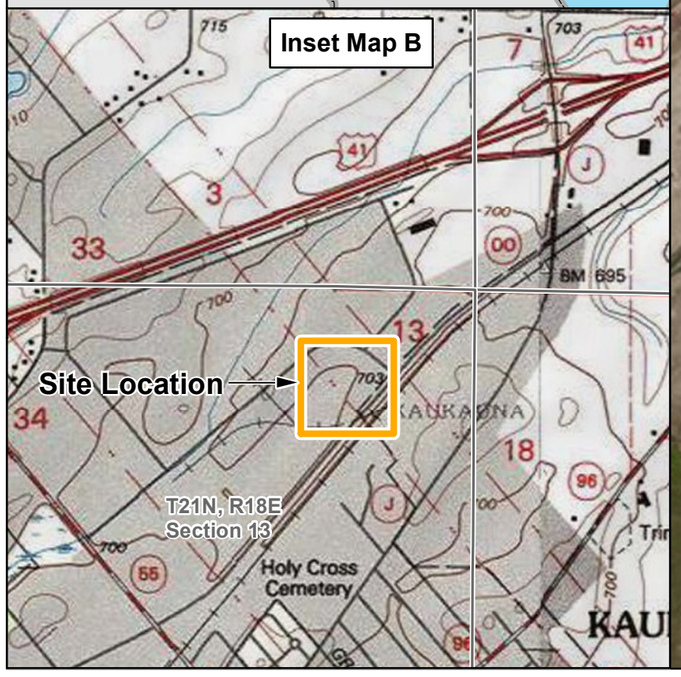
Table 5
Mass Removal Summary
November 1, 2015 through April 30, 2016
Wisconsin Chrome, Kaukauna, Wisconsin

	Concentration		Volume (gal)	Mass (lbs)
	(µg/l)	(lb./gal)		
Sump A				
Total VOCs	1356.5	0.0000113	201,022	2.28
Total Chromium	844	0.0000070	201,022	1.42
Sump B				
Total Chromium	--	--	--	--

Prepared by: NMG1
Checked by: BDS1

Notes:
Concentrations are calculated based on averages from sampling events during reporting period.
µg/l = micrograms per liter
gal = gallon
lb./gal = pound per gallon
lbs = pounds
VOC = Volatile Organic Compounds
Sump B was offline during this reporting period as directed by the WDNR.

Figures



NOTES:
1. Basemap from esri and its data suppliers.
2. Piping and trench locations are approximate.
3. Coordinate system is NAD 1983 Wisconsin State Plane Central (feet).

LEGEND
- Well Location
- Sump Location
- Influent Piping
- Effluent Piping
- Trench Location
- Approximate Property Boundary

Foth

N

0 30 60 Feet

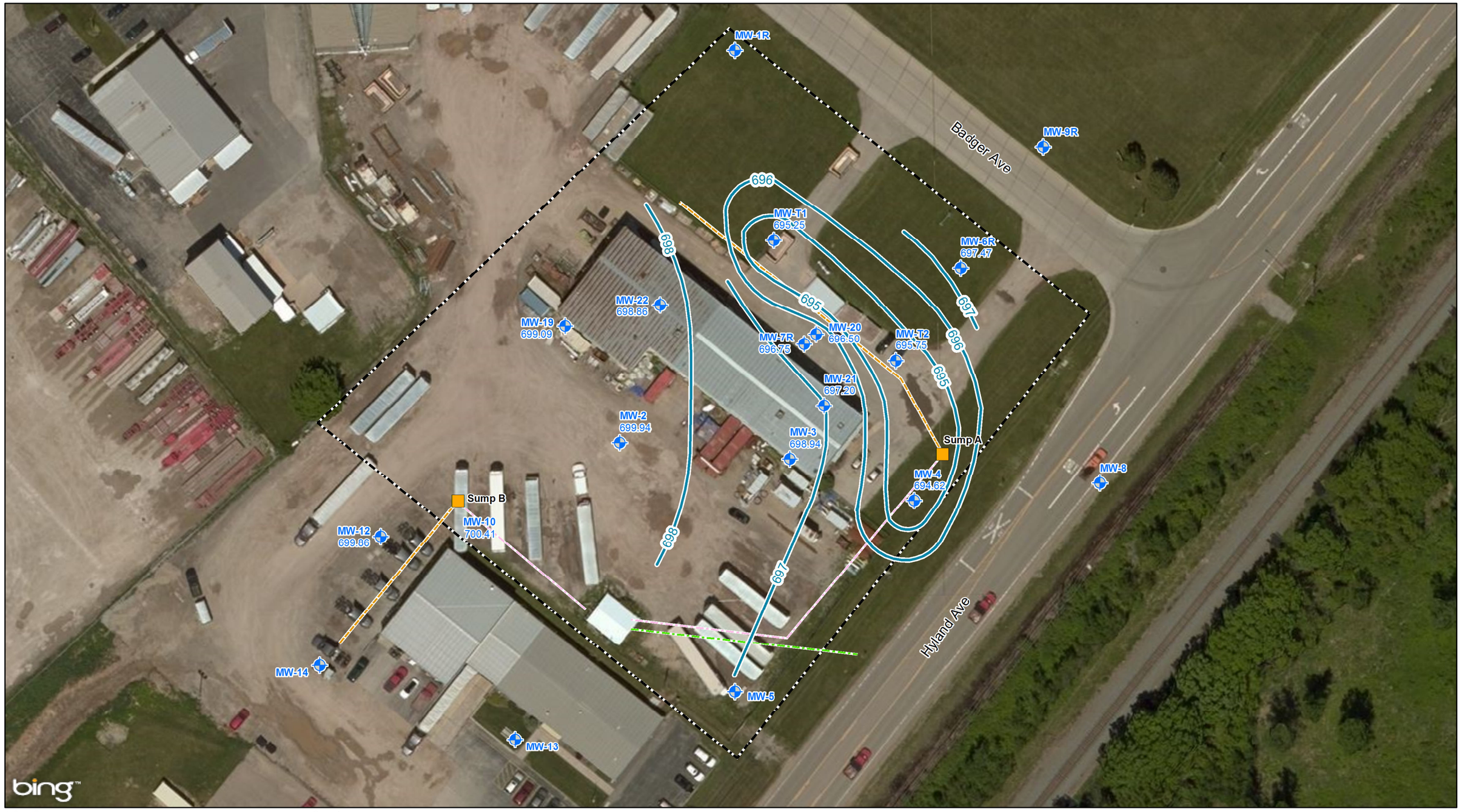
This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FIGURE 1
FORMER WISCONSIN CHROME PROJECT SITE
WDNR BRRTS# 02-45-000225
2101 HYLAND AVENUE
KAUKAUNA, WISCONSIN

Date: APRIL 2016	Revision Date:	
Drawn By: BJW1	Checked By: NMG1	Scope: 15W029

Path: X:\FOTH\IE\WI DNR\15W029-00\GIS\mxd\April2016\Figure 1 site layout map.mxd Date: 4/26/2016



NOTES:

1. Basemap from esri and its data suppliers.
2. Coordinate system is NAD 1983 Wisconsin State Plane Central (feet).
3. Vertical datum is NAVD88.

LEGEND

- Groundwater Monitoring Well with March 2016 Groundwater Elevation
- Groundwater Contour (1' Contour Interval)
- Sump Location
- Trench Location
- Influent Piping
- Effluent Piping
- Approximate Property Boundary

This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only.

Foth

N

0 30 60 Feet

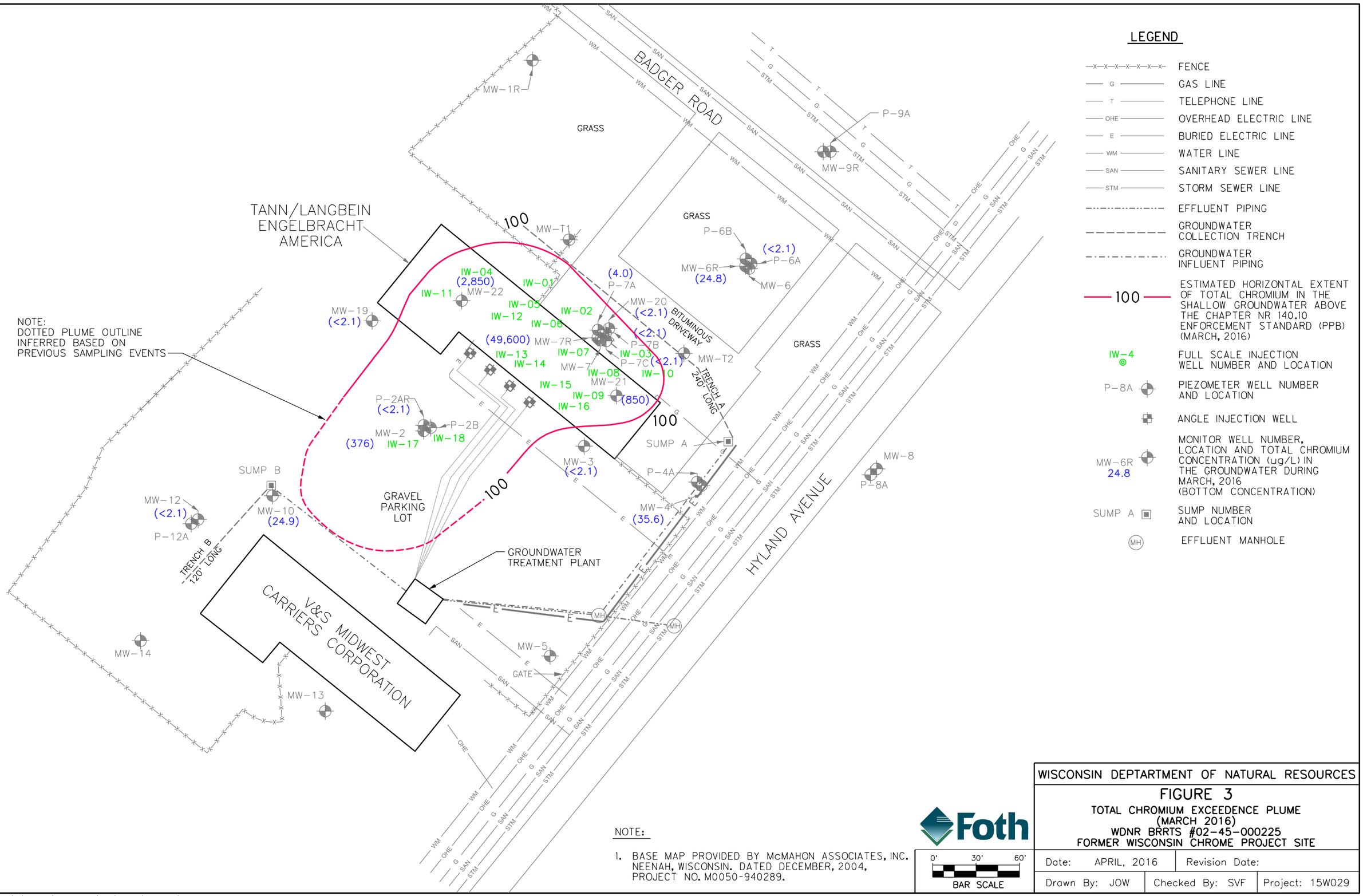
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FIGURE 2

MARCH 2016 GROUNDWATER ELEVATIONS
FORMER WISCONSIN CHROME PROJECT SITE
WDNR BRRTS# 02-45-000225
KAUKAUNA, WISCONSIN

Date: APRIL 2016	Revision Date:	
Drawn By: BJW1	Checked By: NMG1	Scope: 15W029

Path: X:\FOTH\IE\WI DNR\15W029-00\GIS\mxd\April2016\Figure 2 site GW contours.mxd Date: 5/12/2016



LEGEND

- FENCE
- GAS LINE
- TELEPHONE LINE
- OVERHEAD ELECTRIC LINE
- BURIED ELECTRIC LINE
- WATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- EFFLUENT PIPING
- GROUNDWATER COLLECTION TRENCH
- GROUNDWATER INFLUENT PIPING
- 100 — ESTIMATED HORIZONTAL EXTENT OF TOTAL CHROMIUM IN THE SHALLOW GROUNDWATER ABOVE THE CHAPTER NR 140.10 ENFORCEMENT STANDARD (PPB) (MARCH, 2016)
- IW-4 — FULL SCALE INJECTION WELL NUMBER AND LOCATION
- P-8A — PIEZOMETER WELL NUMBER AND LOCATION
- ANGLE INJECTION WELL
- MW-6R 24.8 — MONITOR WELL NUMBER, LOCATION AND TOTAL CHROMIUM CONCENTRATION (ug/L) IN THE GROUNDWATER DURING MARCH, 2016 (BOTTOM CONCENTRATION)
- SUMP A — SUMP NUMBER AND LOCATION
- (MH) — EFFLUENT MANHOLE

NOTE:

1. BASE MAP PROVIDED BY McMAHON ASSOCIATES, INC. NEENAH, WISCONSIN. DATED DECEMBER, 2004, PROJECT NO. M0050-940289.

Foth

0' 30' 60'
BAR SCALE

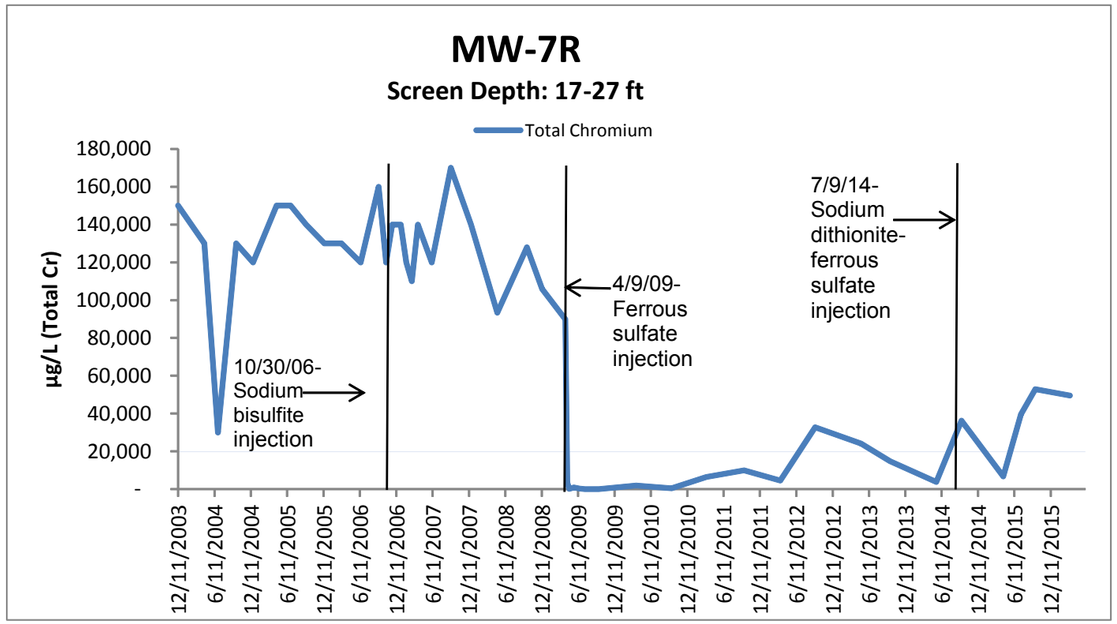
WISCONSIN DEPTARTMENT OF NATURAL RESOURCES

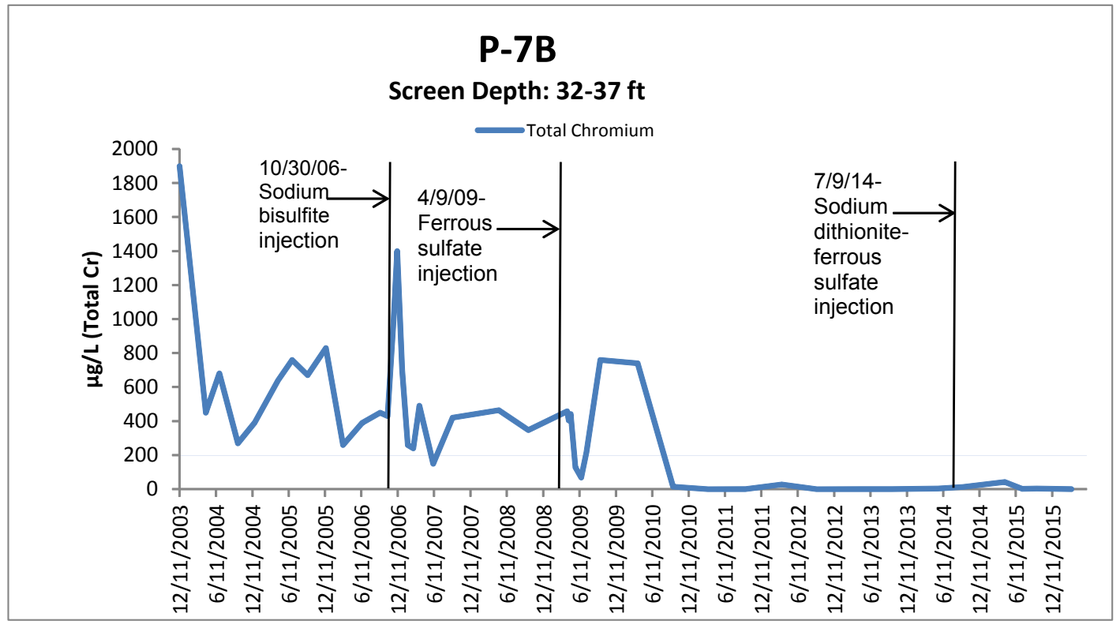
FIGURE 3

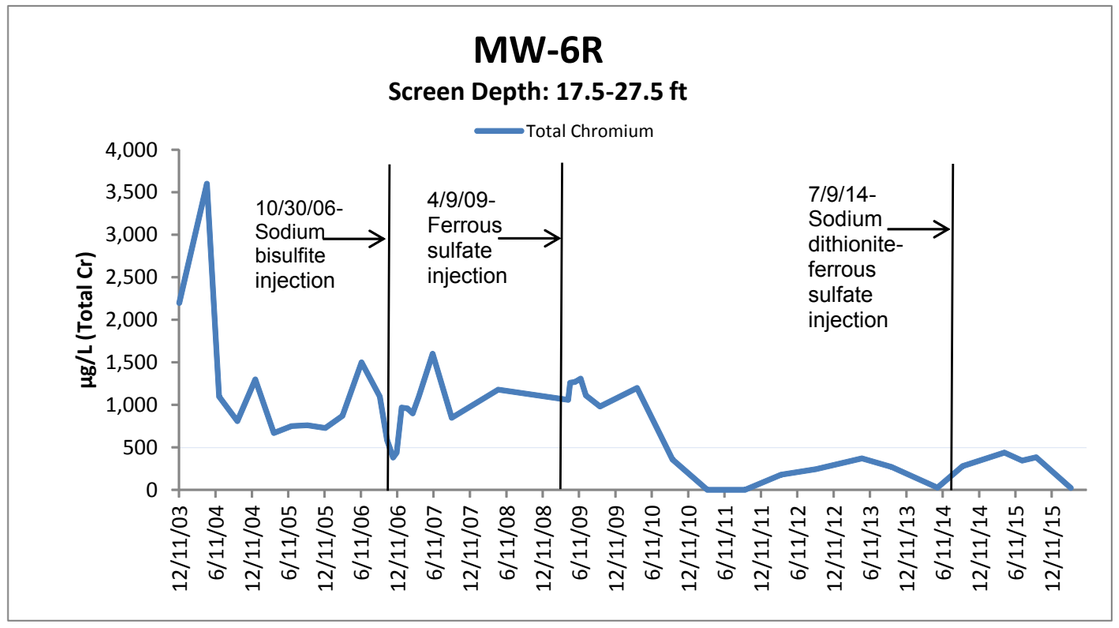
TOTAL CHROMIUM EXCEEDENCE PLUME
(MARCH 2016)
WDNR BRRTS #02-45-000225
FORMER WISCONSIN CHROME PROJECT SITE

Date: APRIL, 2016	Revision Date:	
Drawn By: JOW	Checked By: SVF	Project: 15W029

X:\FOTH\IE\WI DNR\15W029-00\CAD\figures\April2016\Figure 3 Total Chromium exceedence plume.dgn
5/2/2016 11:16:08 AM dat







Foth

NOT TO SCALE

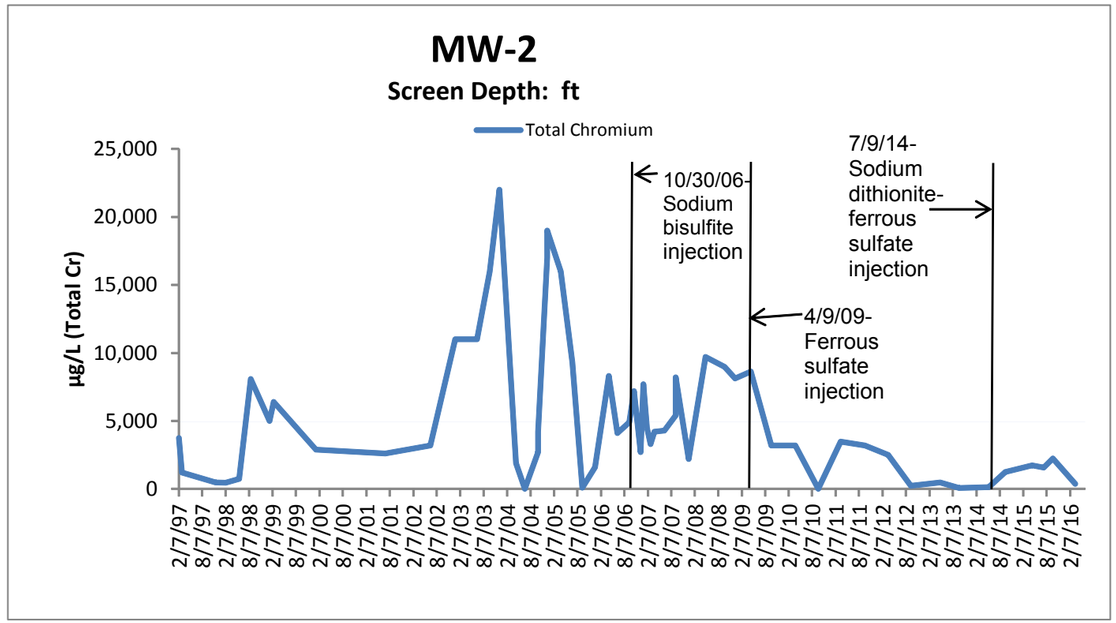
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

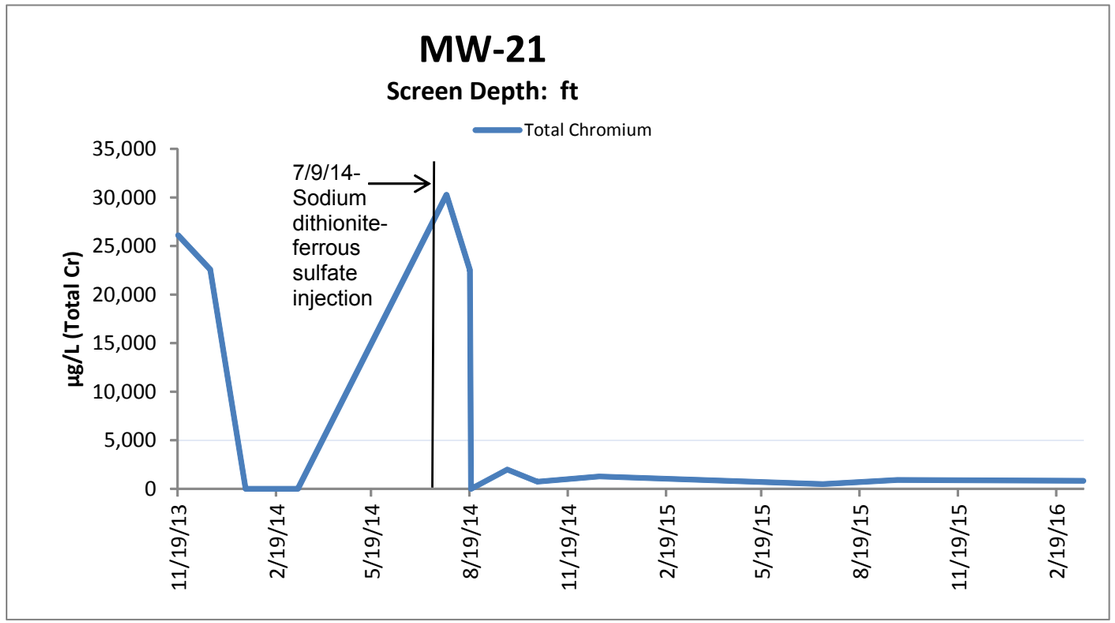
FIGURE 4

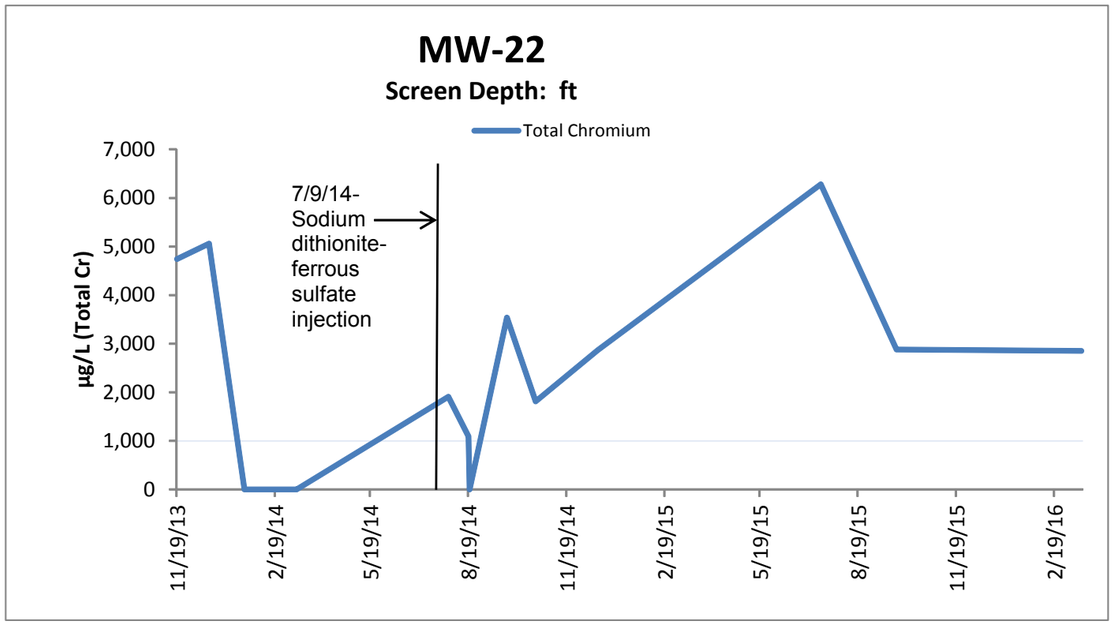
TOTAL CHROMIUM CONCENTRATIONS OVER TIME - MW-7R, P-7B, AND MW-6R
WDNR BRRTS# 02-45-000225
KAUKAUNA, WISCONSIN

Date: APRIL 2016	Revision Date:	
Drawn By: BJW1	Checked By: NMG1	Scope: 15W029

Path: X:\FOTH\IE\WI DNR\15W029-00\GIS\mxd\April2016\Figure 4 Total Chromium Concentrations.mxd Date: 4/26/2016







Foth

NOT TO SCALE

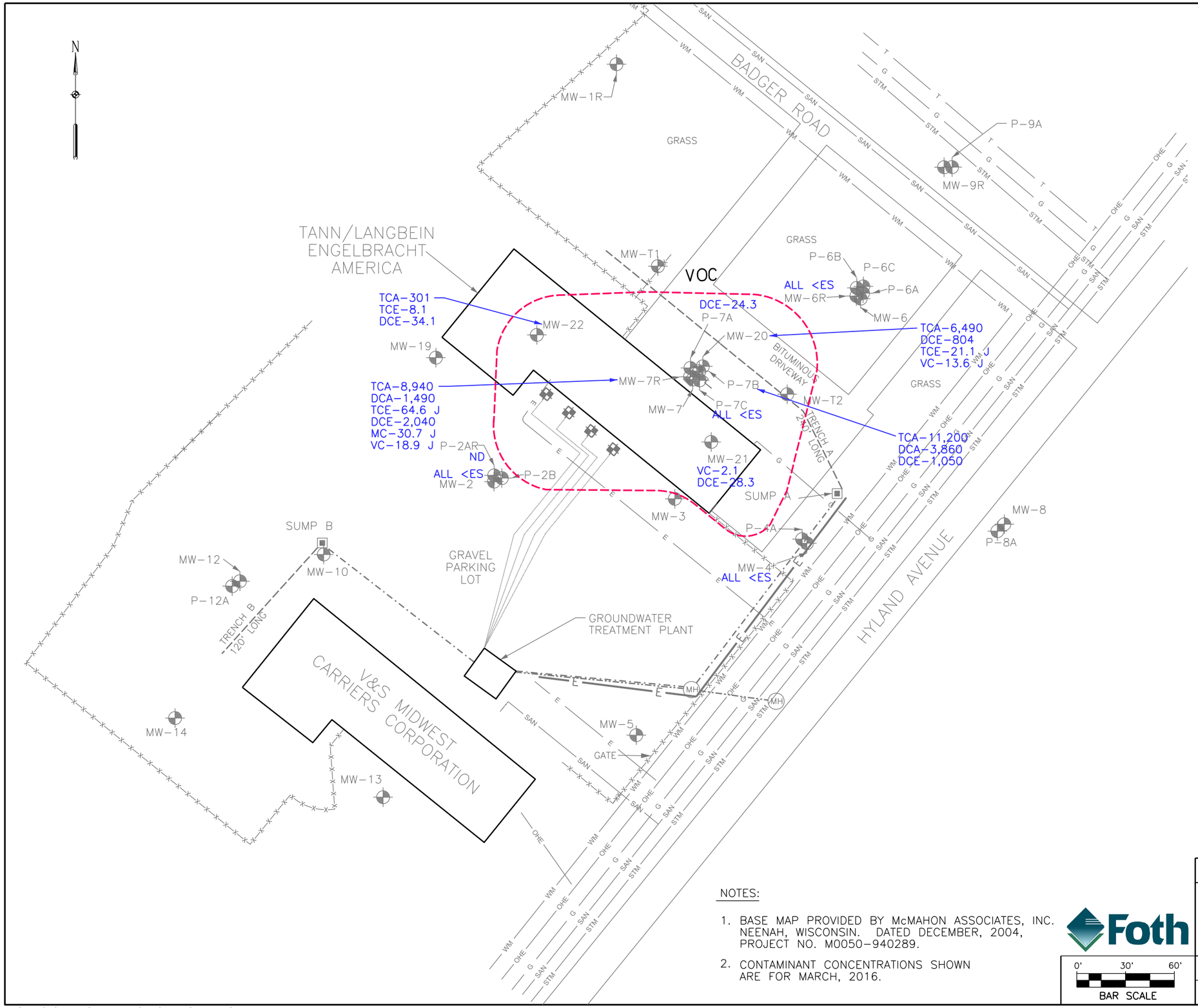
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FIGURE 5

TOTAL CHROMIUM CONCENTRATIONS OVER TIME - MW-2, MW-21, AND MW-22
WDNR BRRTS# 02-45-000225
KAUKAUNA, WISCONSIN

Date: APRIL 2016	Revision Date:	
Drawn By: BJW1	Checked By: NMG1	Scope: 15W029

Path: X:\FOTH\IE\WI DNR\15W029-00\GIS\mxd\April2016\Figure 5 Total Chromium Concentrations2.mxd Date: 4/26/2016



LEGEND

- FENCE
- GAS LINE
- TELEPHONE LINE
- OVERHEAD ELECTRIC LINE
- BURIED ELECTRIC LINE
- WATER LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- EFFLUENT PIPING
- GROUNDWATER COLLECTION TRENCH
- GROUNDWATER INFLUENT PIPING
- VOC — ESTIMATED HORIZONTAL EXTENT OF VOC IN THE SHALLOW GROUNDWATER ABOVE THE CHAPTER NR 140.10 ENFORCEMENT STANDARD (PPB) (MARCH, 2016)
- P-8A — PIEZOMETER WELL NUMBER AND LOCATION
- ANGLE INJECTION WELL
- MW-6R / ALL <ES — MONITOR WELL NUMBER, LOCATION AND VOC CONCENTRATION (ug/L) IN THE GROUNDWATER DURING MARCH, 2016 (BLANK IF WELL NOT SAMPLED)
- SUMP NUMBER AND LOCATION
- (MH) EFFLUENT MANHOLE
- 2014 FULL SCALE INJECTION WELL NUMBER AND LOCATION

TCA = 1,1,1 – TRICHLOROETHANE (200 ug/L)

DCA = 1,1 – DICHLOROETHANE (850 ug/L)

TCE = TRICHLOROETHENE (5 ug/L)

DCE = 1,1 – DICHLOROETHENE (7 ug/L)

VC = VINYL CHLORIDE (0.2 ug/L)

MC = METHYLENE CHLORIDE (5.0 ug/L)

ALL <ES = ALL VOC CONCENTRATION BELOW THE ENFORCEMENT STANDARD

ND = VOC's NOT DETECTED

J = ESTIMATED CONCENTRATION VALUE

NOTES:

1. BASE MAP PROVIDED BY McMAHON ASSOCIATES, INC. NEENAH, WISCONSIN. DATED DECEMBER, 2004, PROJECT NO. M0050-940289.
2. CONTAMINANT CONCENTRATIONS SHOWN ARE FOR MARCH, 2016.

Foth

0' 30' 60'

BAR SCALE

WISCONSIN DEPTARTMENT OF NATURAL RESOURCES

FIGURE 6

VOC CONCENTRATIONS IN GROUNDWATER
EXCEEDANCE PLUME (MARCH, 2016)
WDNR BRRTS #02-45-000225
FORMER WISCONSIN CHROME PROJECT SITE

Date: APRIL, 2016	Revision Date:		
Drawn By: JOW	Checked By: SVF	Project: 15W029	

X:\FOTH\IE\WI DNR\15W029-00\CAD\figures\April2016\Figure 6 full scale injection well locations_VOC'S.dgn
5/2/2016 11:18:32 AM dat

SOUTHWEST
A

NORTHEAST
A'

MW-14 MW-12 P-12A MW-10 MW-2 P-2B P-2AR MW-22 MW-21 MW-7R P-7A P-7B P-7C MW-20 MW-T2 MW-6R P-6A P-6B P-6C MW-9R P-9A

DTL-694.92
DTL-692.24

ELEVATION IN FEET

704 702 700 698 696 694 692 690 688 686 684 682 680 678 676 674 672 670 668 666 664 662 660 658 656 654 652 650 648 646 644 642 640 638 636 634 632 630

699.86 700.41 699.09 701.37 LANGBEIN ENGELBRACHT AMERICA BUILDING 698.14 697.20 696.75 696.50 695.75 701.32 697.47

NOT SAMPLED
ND
ALL <ES
TRENCH B
DEPTH 5–10'
WIDTH – 3'
6" SLOTTED PIPE
BACKFILL 4' THICK
ALL <ES CR–376
CR
TCA–8,940
DCA–1,490
TCE–64.6 J
DCE–2,040
CR–49,600
MC–30.7 J
VC–18.9 J
TCA–301
TCE–8.1
DCE–34.6
CR–2,850
DCE–28.3
VC–2.1
CR–850
DCE–804
TCA–6,490
TCE–21.1 J
VC–13.6 J
NOT SAMPLED
12" WATERLINE
DEPTH 6–7'
27" SANITARY
SEWER DEPTH 7'
3" GAS
DEPTH?
6" STORM
SEWER 694
DEPTH 5–6'
200 PAIR
TELEPHONE LINE
DEPTH 2.5'
ALL <ES CR–24.8
NOT SAMPLED

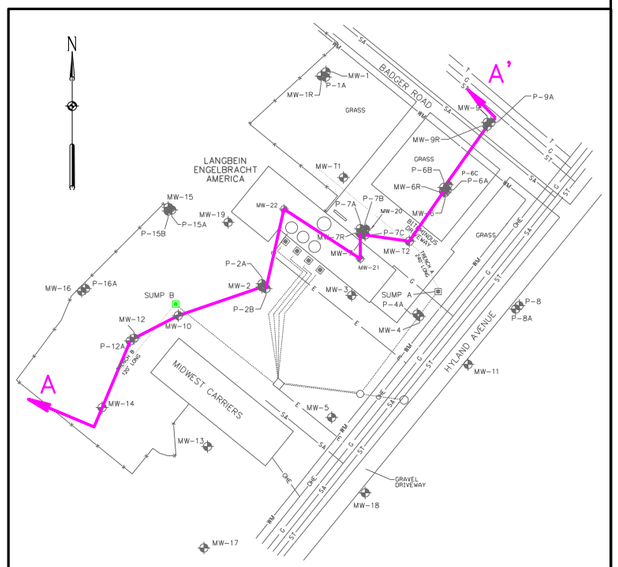
SILTY CLAY

677.06
ND
VOC
DCE–24.3
TRENCH A
DEPTH 20–25'
WIDTH 7–10'
GRAVEL BACKFILL 4' THICK
6" SLOTTED PIPE
677.61
SILTY CLAY
NOT SAMPLED

TCA–11,200
DCE–1,050
DCA–3,860
663.21
NOT SAMPLED
NOT SAMPLED

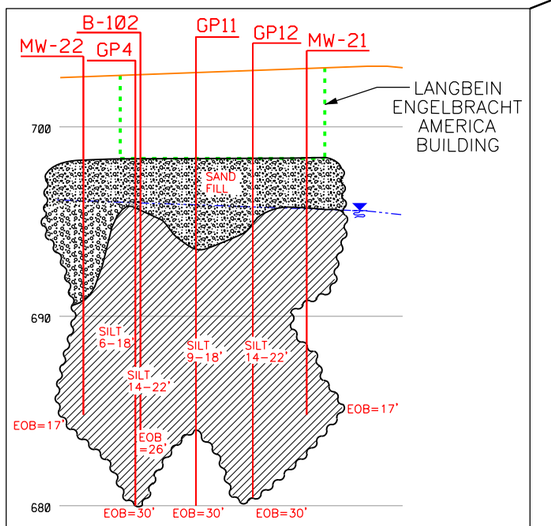
655.67
ALL <ES
NOT SAMPLED

20′
10′
5′
0
VERTICAL
HORIZONTAL
0 50′ 100′
SCALE



CROSS SECTION LOCATION MAP

0 90′ 180′



SECTION DETAIL
NOT TO SCALE

LEGEND

- WATER LEVEL INDICATOR AND GROUNDWATER ELEVATION
- SCREEN AT DEPTH
- WATER TABLE LEVEL
- – SILT
- – CLAY
- – SILTY SAND
- CR — ESTIMATED EXTENT OF TOTAL CHROMIUM ABOVE THE CHAPTER NR 140 ES
- CR = TOTAL CHROMIUM (100 ug/L)
- ALL <ES = ALL VOC CONCENTRATION BELOW THE ENFORCEMENT STANDARD
- VOC — ESTIMATED EXTENT OF VOC'S ABOVE THE CHAPTER NR140 ES.
- TCA = 1,1,1 – TRICHLOROETHANE (200 ug/L)
- DCA = 1,1 – DICHLOROETHANE (850 ug/L)
- TCE = TRICHLOROETHENE (5 ug/L)
- DCE = 1,1 – DICHLOROETHENE (7 ug/L)
- VC = VINYL CHLORIDE (0.2 ug/L)
- MC = METHYLENE CHLORIDE (5.0 ug/L)
- ND = VOC's NOT DETECTED
- J = ESTIMATED CONCENTRATION VALUE

NOTES:

1. BASE MAP PROVIDED BY McMAHON ASSOCIATES, INC. NEENAH, WISCONSIN. DATED DECEMBER, 2004, PROJECT NO. M0050–940289.
2. THE AREAS ON THE CROSS SECTION OTHER THAN SILTY SAND AND SILT ARE EITHER SILTY CLAY OR CLAYEY SILT BASED ON SOIL BORING LOGS FROM SOME (BUT NOT ALL) MONITORING WELLS AND A CONVERSATION WITH JENNIFER BORSKI OF THE WDNR.
3. GROUNDWATER ELEVATIONS SHOWN ARE FOR MARCH, 2016.
4. GEOPROBE BORINGS GP4, GP11, GP12 INSTALLED BY GEOTRANS, INC. 12/03–1/04.
5. CONTAMINANT CONCENTRATIONS SHOWN ARE FOR MARCH, 2016.

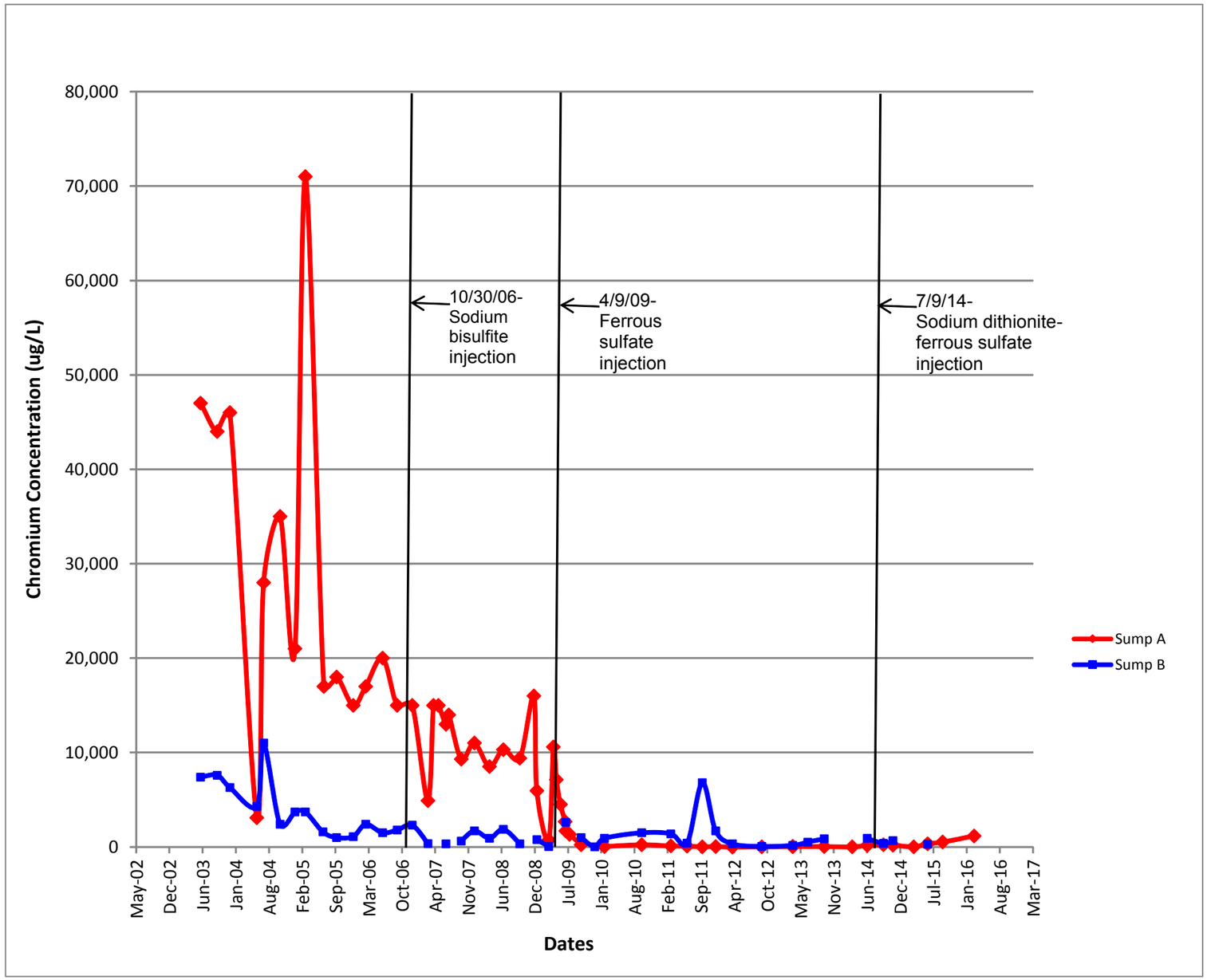
Foth

WISCONSIN DEPTARTMENT OF NATURAL RESOURCES

FIGURE 7
CROSS–SECTION DISTRIBUTION OF TOTAL CHROMIUM AND TOTAL VOCs IN GROUNDWATER
WDNR BRRTS #02–45–000225
FORMER WISCONSIN CHROME PROJECT SITE

SCALE: AS SHOWN	Date: APRIL, 2016	Revision Date:
	Drawn By: JOW	Checked By: SVF
		Project: 15W029

X:\FOTH\IE\WI DNR\15W029–00\CAD\figures\April2016\Figure 7 cross section A–A'_VOC's.dgn
5/2/2016 11:29:17 AM dat



Foth

NOT TO SCALE

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

FIGURE 8

UNFILTERED INFLUENT CHROMIUM CONCENTRATIONS
WDNR BRRTS# 02-45-000225
KAUKAUNA, WISCONSIN

Date: APRIL 2016	Revision Date:	
Drawn By: BJW1	Checked By: NMG1	Scope: 15W029

Path: X:\FOTH\IE\WI DNR\15W029-00\GIS\mxd\April2016\Figure 8 Unfiltered Influent Chromium.mxd Date: 4/26/2016

Appendix A

Historical Data Tables

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
B-101	12/21/2007	23.65			
B-102	12/21/2007	23.15			
B-103	12/21/2007	10.55			
MW-1	6/18/2002	3.10	699.96	696.86	668.2 - 678.2
	9/30/2002	10.91		689.05	
	12/23/2002	11.62		688.34	
	3/31/2003	11.00		688.96	
	4/14/2003	10.17		689.79	
	6/16/2003	9.82		690.14	
	9/23/2003	10.21		689.75	
	4/28/2004	10.03		689.93	
	6/30/2005		700.10		
MW-1R	6/18/2002	1.37	700.05	698.68	687.0 - 697.0
	9/30/2002	7.39		692.66	
	12/23/2002	9.16		690.89	
	3/31/2003	4.03		696.02	
	4/14/2003	4.23		695.82	
	6/16/2003	4.28		695.77	
	9/23/2003	5.04		695.01	
	12/9/2003	4.50		695.55	
	6/29/2004	2.53		697.52	
	9/28/2004	9.43		690.62	
	12/13/2004	3.12		696.93	
	3/29/2005	7.05	700.05	693.00	
	6/27/2005	11.81	699.68	687.87	
	9/13/2005	11.61		688.07	
	12/13/2005	11.53		688.15	
	3/9/2006	11.81		687.87	
	6/13/2006	8.76		690.92	
	9/13/2006	7.63		692.05	
	1/2/2007	2.25		697.43	
	3/29/2007	3.31		696.37	
	9/11/2007	4.20		695.85	
	9/26/2008	8.15		691.53	
	9/23/2009	4.82		694.86	
	9/23/2010	0.30		699.38	
	3/17/2011	0.30		699.38	
	9/22/2011	10.17		689.88	
	9/24/2013	4.91		694.77	
MW-2	6/18/2002	2.27	701.86	699.59	687.8 - 697.8
	9/30/2002	5.51		696.35	
	12/23/2002	7.70		694.16	
	3/31/2003	5.94		695.92	
	6/16/2003	3.66		698.20	
	9/23/2003	3.90		697.96	
	12/9/2003	4.60	701.88[#]	697.28	

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-2 (cont.)	4/15/2004	4.20		697.68	
	6/22/2004	2.51		699.37	
	9/28/2004	7.23	701.58***	694.35	
	12/13/2004	4.53	701.58***	697.05	
	3/29/2005	6.05	701.58***	695.53	
	6/27/2005	4.85	701.69	696.84	
	9/13/2005	5.15		696.54	
	12/13/2005	6.30		695.39	
	4/7/2006	5.20		696.49	
	6/13/2006	3.70		697.99	
	9/14/2006	6.35		695.34	
	1/2/2007	4.39		697.30	
	3/29/2007	3.87		697.82	
	9/11/2007	5.15		696.54	
	12/21/2007	8.00		693.69	
	4/30/2008	1.80		699.89	
	9/26/2008	7.12		694.57	
	12/15/2008	7.75		693.94	
	4/17/2009	5.04		696.65	
	9/24/2009	5.42		696.27	
	3/29/2010	3.95		697.74	
	9/23/2010	10.15		691.54	
	3/17/2011	8.13		693.56	
	9/22/2011	4.67		697.02	
	3/21/2012	3.36		698.33	
	9/12/2012	4.90		696.79	
	4/30/2013	1.94		699.75	
	9/24/2013	4.38		697.31	
	5/14/2014	1.42	701.39†	699.97	
	9/18/2014	4.00		697.39	
	4/15/2015	4.62		696.77	
MW-3	6/18/2002	3.60	702.99	699.39	686.4 - 696.4
	9/30/2002	8.40		694.59	
	12/23/2002	10.36		692.63	
	3/31/2003	6.13		696.86	
	6/16/2003	4.75		698.24	
	9/23/2003	4.82		698.17	
	12/9/2003	7.16	702.98#	695.82	
	6/22/2004	3.95		699.03	
	9/28/2004	10.63		692.35	
	12/13/2004	5.19		697.79	
	3/30/2005	6.89		696.09	
	6/27/2005	8.00	702.02	694.02	
	9/13/2005	8.20		693.82	
	12/13/2005	8.26		693.76	
	3/9/2006	7.47		694.55	

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-3 (cont.)	6/13/2006	6.87		695.15	
	9/12/2006	8.67		693.35	
	1/2/2007	5.40		696.62	
	3/29/2007	4.56		697.46	
	9/11/2007	7.62		694.40	
	9/26/2008	10.05		691.97	
	12/12/2008	9.20		692.82	
	9/23/2009	6.45		695.57	
	9/22/2011	6.33		695.69	
	9/12/2012	6.89		695.13	
	9/24/2013	6.22		695.80	
	9/18/2014	5.99		696.03	
MW-4	6/18/2002	7.54	702.38	694.84	686.9 - 696.9
	9/30/2002	11.17		691.21	
	12/23/2002	12.73		689.65	
	3/31/2003	9.20		693.18	
	6/16/2003	8.97		693.41	
	9/23/2003	9.41		692.97	
	12/9/2003	9.93		692.45	
	4/20/2004	8.63		693.75	
	6/23/2004	8.27		694.11	
	9/28/2004	12.94		689.44	
	12/13/2004	8.88		693.50	
	3/30/2005	9.68		692.70	
	6/27/2005	10.70	702.39	691.69	
	9/13/2005	10.71		691.68	
	12/13/2005	10.45		691.94	
	3/9/2006	9.72		692.67	
	6/13/2006	9.78		692.61	
	9/13/2006	11.00		691.39	
	1/2/2007	8.25		694.14	
	3/29/2007	7.22		695.17	
	9/10/2007	8.15		694.24	
	9/26/2008	13.55		688.84	
	12/12/2008	12.78		689.61	
	9/23/2009	8.95		693.44	
	9/23/2010	7.70		694.69	
	3/17/2011	7.48		694.91	
	9/22/2011	8.05		694.34	
	9/12/2012	8.51		693.88	
	9/24/2013	7.92		694.47	
	9/18/2014	8.60		693.79	
MW-5	6/18/2002	2.92	701.27	698.35	684.9 - 694.9
	9/30/2002	6.95		694.32	
	12/23/2002	8.61		692.66	
	3/31/2003	4.18		697.09	

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-5 (cont.)	4/14/2003	4.66		696.61	
	6/16/2003	4.36		696.91	
	9/23/2003	4.78		696.49	
	12/9/2003	5.62		695.65	
	4/15/2004	5.62		695.65	
	6/22/2004	3.63		697.64	
	9/28/2004	9.38		691.89	
	12/13/2004	3.81		697.46	
	3/30/2005	3.85		697.42	
	6/27/2005	5.70	701.35	695.65	
	9/13/2005	6.65		694.70	
	12/14/2005	6.70		694.65	
	3/9/2006	4.86		696.49	
	6/13/2006	5.52		695.83	
	9/12/2006	4.37		696.98	
	1/2/2007	2.87		698.48	
	9/10/2007	4.25		697.10	
	9/26/2008	9.00		692.35	
	9/23/2009	6.28		695.07	
	9/23/2010	5.13		696.22	
	9/22/2011	8.17		693.18	
	9/12/2012	7.15		694.20	
	9/24/2013	5.95		695.40	
	9/18/2014	5.05		696.30	
MW-5[2]	4/22/2015		704.78		
MW-6	6/18/2002	4.16	701.78	697.62	
	9/30/2002	11.72		690.06	
	12/23/2002	11.74		690.04	
	3/31/2003	10.92		690.86	
	6/16/2003	8.71		693.07	
	9/23/2003	10.22		691.56	
	6/27/2005	4.15	701.79		
	9/23/2010	7.20		694.58	
	3/17/2011	1.40		700.38	
	9/18/2014	8.42		693.36	
MW-6R	12/9/2003	9.00	701.38	692.38	683.9 - 693.9
	4/28/2004	10.04		691.34	
	6/28/2004	5.67		695.71	
	9/28/2004	12.88		688.50	
	12/13/2004	8.12		693.26	
	3/30/2005	12.22		689.16	
	6/27/2005	11.49	701.42	689.93	
	9/13/2005	11.01		690.41	
	12/13/2005	10.73		690.69	

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-6R (cont.)	3/9/2006	11.48		689.94	
	6/13/2006	9.28		692.14	
	9/13/2006	10.85		690.57	
	1/2/2007	7.71		693.71	
	3/29/2007	6.29		695.13	
	9/10/2007	8.10		693.32	
	4/30/2008	4.80		696.62	
	9/26/2008	14.78		686.64	
	4/17/2009	10.68		690.74	
	9/23/2009	9.02		692.40	
	3/29/2010	4.81		696.61	
	9/23/2010	6.65		694.77	
	3/17/2011	0.60		700.82	
	9/22/2011	7.75		693.67	
	3/21/2012	3.50		697.92	
	9/12/2012	7.95		693.47	
	4/30/2013	2.81		698.61	
	9/24/2013	7.10		694.32	
	5/14/2014	1.20		700.22	
	9/18/2014	7.92		693.50	
	4/15/2015	5.04		696.38	
MW-7	6/18/2002	4.92	703.00	698.08	690.8 - 700.8
	9/30/2002	8.49		694.51	
	12/23/2002	10.56		692.44	
	3/31/2003	7.69		695.31	
	6/16/2003	6.06		696.94	
	9/23/2003	6.41		696.59	
	6/27/2005	4.97		698.03	
MW-7R	12/9/2003	7.61	702.63	695.02	686.0 - 696.0
	4/28/2004	5.92		696.71	
	6/28/2004	5.05		697.58	
	9/28/2004	9.30		693.33	
	12/13/2004	6.18		696.45	
	4/18/2005	8.96		693.67	
	6/27/2005	8.33	702.76	694.43	
	9/13/2005	8.22		694.54	
	12/13/2005	8.29		694.47	
	3/9/2006	9.06		693.70	
	6/13/2006	7.30		695.46	
	9/13/2006	8.27		694.49	
	1/2/2007	6.75		696.01	
	3/29/2007	6.18		696.58	
	9/11/2007	7.20		695.56	
	12/21/2007	7.15		695.61	
	4/30/2008	6.05		696.71	
	9/26/2008	9.52		693.24	

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-7R (cont.)	12/12/2008	9.68		693.08	
	4/17/2009	7.72		695.04	
	9/23/2009	7.12		695.64	
	3/29/2010	4.93		697.83	
	9/23/2010	5.40		697.36	
	3/17/2011	5.21		697.55	
	9/22/2011	5.90		696.86	
	3/21/2012	3.95		698.81	
	9/12/2012	6.40		696.36	
	4/30/2013	2.71		700.05	
	9/24/2013	6.75		696.01	
	5/14/2014	1.20	702.43†	701.23	
	9/18/2014	6.32		696.11	
	4/15/2015	6.18		696.25	
MW-7R[3]	4/22/2015		702.30		
MW-8	6/18/2002	3.70	701.73	698.03	687.1 - 697.1
	9/30/2002	10.04		691.69	
	12/23/2002	7.93		693.80	
	3/31/2003	4.71		697.02	
	4/14/2003	4.29		697.44	
	6/16/2003	4.39		697.34	
	9/23/2003	6.29		695.44	
	12/9/2003	4.40		697.33	
	4/20/2004	4.31		697.42	
	6/30/2004	4.65		697.08	
	10/14/2004	12.16		689.57	
	12/13/2004	5.56		696.17	
	3/29/2005	3.90		697.83	
	6/27/2005	5.55	701.80	696.25	
	9/13/2005	13.05		688.75	
	12/14/2005	11.98		687.37	
	3/10/2006	9.98		691.82	
	6/13/2006	8.82		692.98	
	9/12/2006	10.95		690.85	
	1/2/2007	5.95		695.85	
	3/29/2007	5.88		695.92	
	9/10/2007	7.80		694.00	
	9/26/2008	12.38		689.42	
	9/23/2009	9.90		691.90	
	9/23/2010	4.90		696.90	
	3/17/2011	4.20		697.60	
	9/22/2011	9.75		692.05	
	9/12/2012	12.62		689.18	
	9/24/2013	10.62		691.18	
	9/18/2014	6.92		694.88	
MW-9	6/18/2002	7.47	701.10	693.63	686.5 - 696.5

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-9 (cont.)	9/30/2002	13.62		687.48	
	12/23/2002	13.64		687.46	
	3/31/2003	12.60		688.50	
	4/14/2003	8.98		692.12	
	6/16/2003	8.28		692.82	
	9/23/2003	8.56		692.54	
MW-9R	12/9/2003	9.38	700.67	691.29	683.8 - 693.8
	4/28/2004	9.74		690.93	
	6/29/2004	8.63		692.04	
	9/28/2004	14.10		686.57	
	12/13/2004	10.24		690.43	
	4/18/2005	27.90		672.77	
	6/27/2005	10.15	700.69	690.54	
	9/13/2005	14.31		686.38	
	12/13/2005	11.96		689.08	
	3/10/2006	8.75		691.94	
	6/13/2006	8.63		692.06	
	9/12/2006	14.60		686.09	
	1/2/2007	8.91		691.78	
	3/29/2007	8.10		692.59	
	9/10/2007	7.80		692.89	
	9/26/2008	16.60		684.09	
	9/23/2009	12.18		688.51	
	9/23/2010	9.67		691.02	
	3/17/2011	7.90		692.79	
	9/22/2011	11.10		689.59	
	9/12/2012	14.09		686.60	
	9/24/2013	11.75		688.94	
	9/18/2014	8.56		692.13	
MW-10	6/18/2002	5.51	701.00	695.49	688.7 - 698.7
	9/30/2002	6.51		694.49	
	12/23/2002	7.26		693.74	
	3/31/2003	1.73		699.27	
	6/16/2003	6.15		694.85	
	9/23/2003	5.95		695.05	
	12/9/2003	5.99		695.01	
	4/15/2004	4.38		696.62	
	6/29/2004	5.22	700.90**	695.68	
	9/28/2004	6.17		694.73	
	12/13/2004	5.71		695.19	
	4/18/2005	6.02		694.98	
	6/27/2005	4.95	700.91	695.96	
	9/13/2005	6.00		694.91	
	12/13/2005	6.47		694.44	
	3/9/2006	6.21		694.70	
	6/13/2006	4.22		696.69	

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Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
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Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-10 (cont.)	9/12/2006	5.84		695.07	
	1/2/2007	4.16		696.75	
	3/29/2007	3.88		697.03	
	9/10/2007	3.20		697.71	
	4/30/2008	2.00		698.91	
	9/26/2008	6.46		694.45	
	4/17/2009	5.12		695.79	
	9/23/2009	5.75		695.16	
	3/29/2010	3.27		697.64	
	9/23/2010	4.66		696.25	
	3/17/2011	5.30		695.61	
	4/11/2011		696.51		
	9/22/2011	5.13		691.38	
	3/21/2012	2.70		693.81	
	9/12/2012	4.02		692.49	
	4/30/2013	1.25		695.26	
	9/24/2013	3.44		693.07	
	5/14/2014	0.89	700.91††	700.02	
	9/18/2014	5.15		695.76	
	4/15/2015	2.10		698.81	
MW-11	6/18/2002	4.00	701.99	697.99	688.4 - 698.4
	9/30/2002	10.79		691.20	
	12/23/2002	9.00		692.99	
	3/31/2003	5.42		696.57	
	4/14/2003	5.07		696.92	
	6/16/2003	4.69		697.30	
	9/23/2003	6.89		695.10	
	12/9/2003	4.69		697.30	
	4/20/2004	4.31		697.68	
	6/30/2004	4.88		697.11	
	9/28/2004	12.55	701.85***	689.30	
	12/13/2004	6.21		695.64	
	3/29/2005	4.22		697.77	
	6/27/2005	5.91	701.94	696.03	
	9/13/2005	10.33		691.61	
	12/14/2005	7.21		694.73	
	3/10/2006	10.02		691.92	
	6/13/2006	9.98		691.96	
	9/12/2006	12.36		689.58	
	1/2/2007	6.41		695.53	
	3/29/2007	6.11		695.83	
	9/10/2007	8.30		693.64	
MW-12	6/18/2002	4.40	700.17	695.77	686.0 - 696.0
	9/30/2002	5.34		694.83	
	12/23/2002	6.01		694.16	
	3/31/2003	3.45		696.72	

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Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
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Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-12 (cont.)	6/16/2003	5.08		695.09	
	9/23/2003	4.87		695.30	
	12/9/2003	5.07		695.10	
	4/14/2004	3.97		696.20	
	6/22/2004	4.30		695.87	
	9/28/2004	5.29	699.96***	694.67	
	12/13/2004	4.40		695.56	
	3/30/2005	4.70		695.47	
	6/27/2005	19.12	699.95	680.83	
	9/13/2005	4.90		695.05	
	12/13/2005	6.15		693.8	
	3/9/2006	5.02		694.93	
	6/13/2006	3.13		696.82	
	9/12/2006	5.05		694.90	
	1/2/2007	3.01		696.94	
	3/29/2007	2.96		696.99	
	9/10/2007	2.90		697.05	
	10/1/2007	4.02		695.93	
	4/30/2008	3.05		696.90	
	9/26/2008	5.38		694.57	
	4/17/2009	4.61		695.34	
	9/23/2009	4.89		695.06	
	3/29/2010	2.26		697.69	
	9/23/2010	3.83		696.12	
	3/17/2011	3.40		696.55	
	9/22/2011	4.55		695.40	
	3/21/2012	2.06		697.89	
	9/12/2012	3.65		696.30	
	4/30/2013	0.91		699.04	
	9/24/2013	3.04		696.91	
	5/14/2014	0.30		699.65	
	9/18/2014	4.23		695.72	
	4/15/2015	1.40		698.55	
MW-12[3]	4/22/2015		700.06		
MW-13	6/18/2002	3.47	702.18	698.71	688.4 - 698.4
	9/30/2002	6.60		695.58	
	12/23/2002	8.05		694.13	
	3/31/2003	5.21		696.97	
	4/14/2003	4.25		697.93	
	6/16/2003	4.57		697.61	
	9/23/2003	4.86		697.32	
	12/9/2003	5.49		696.69	
	4/15/2004	5.23		696.95	
	6/23/2004	3.81		698.37	
	9/28/2004	8.37		693.81	
	12/13/2004	4.94		697.24	

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Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-13 (cont.)	3/30/2005	4.97		697.21	
	6/27/2005	6.16	702.23	696.07	
	9/15/2005	6.30		695.93	
	12/14/2005	7.25		694.98	
	3/10/2006	5.20		697.03	
	6/13/2006	5.24		696.99	
	9/12/2006	7.15		695.08	
	1/2/2007	4.15		698.08	
	3/29/2007	3.79		698.44	
	9/10/2007	5.00		697.23	
	9/26/2008	12.90		689.33	
	9/23/2009	6.65		695.58	
	9/23/2010	4.22		698.01	
	3/17/2011	3.79		698.44	
	9/22/2011	3.65		698.58	
	9/12/2012	6.61		695.62	
	9/24/2012	5.69		696.54	
	9/18/2014	5.16		697.07	
MW-14	6/18/2002	2.36	699.51	697.15	684.5 - 694.5
	9/30/2002	4.10		695.41	
	12/23/2002	4.81		694.70	
	3/31/2003	2.89		696.62	
	4/14/2003	2.04		697.47	
	6/16/2003	3.00		696.51	
	9/23/2003	3.17		696.34	
	12/9/2003	3.36		696.15	
	4/15/2004	2.54		696.97	
	6/23/2004	2.41		697.10	
	9/28/2004	4.87	699.41***	694.54	
	12/13/2004	2.92		696.49	
	3/30/2005	2.38		697.03	
	6/27/2005	3.30	699.48	696.18	
	9/15/2005	3.90		695.58	
	12/14/2005	4.72		694.76	
	3/10/2006	3.20		696.28	
	6/13/2006	2.51		696.97	
	9/12/2006	3.88		695.60	
	1/2/2007	3.42		696.06	
	3/29/2007	3.29		696.19	
	9/10/2007	2.85		696.63	
	9/26/2008	4.75		694.73	
	9/23/2009	3.72		695.76	
	9/23/2010	2.54		696.94	
	9/22/2011	6.38		693.10	
	9/12/2012	3.51		695.97	
	9/24/2013	2.87		696.61	

Table 1
Groundwater Elevations
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Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-14 (cont.)	9/18/2014	2.71	699.41†	696.77	
MW-15	12/9/2003	2.98	701.06	698.08	687.6 - 697.6
	4/14/2004	2.79		698.27	
	6/22/2004	1.06		700.00	
	9/28/2004	4.37		696.69	
	12/13/2004	3.21		697.85	
	4/18/2005	4.55		696.51	
	6/27/2005	20.52	701.16	680.64	
	9/15/2005	3.05		698.11	
	12/14/2005	5.02		696.95	
	4/7/2006	4.21		696.95	
	6/13/2006	3.81		697.35	
	9/12/2006	3.36		697.80	
	1/2/2007	2.71		698.45	
	3/29/2007	2.43		698.73	
	9/11/2007	2.60		698.56	
	4/30/2008	1.00		700.16	
MW-16	12/9/2003	2.95	699.22	696.27	685.8 - 695.8
	4/14/2004	2.54		696.68	
	6/23/2004	1.76		697.46	
	9/28/2004	4.48		694.74	
	12/13/2004	1.74		697.48	
	4/18/2005	3.17		696.05	
	6/27/2005	2.66	699.37	696.71	
	9/13/2005	3.60		695.77	
	12/14/2005	4.30		695.07	
	3/10/2006	3.01		696.36	
	6/13/2006	2.58		696.79	
	9/12/2006	3.99		695.38	
	1/2/2007	1.05		698.32	
	3/29/2007	1.01		698.36	
	9/10/2007	2.00		697.37	
	4/30/2008	0.80		698.55	
MW-17	12/9/2003	2.97	699.17	696.20	685.7 - 695.7
	6/23/2004	2.01		697.16	
	9/28/2004	6.55		692.62	
	12/13/2004	2.53		696.64	
	3/30/2005	2.05		697.12	
	6/27/2005		699.35		
	9/15/2005	4.13		695.22	
	9/12/2006	5.58		693.77	
	9/10/2007	3.90		695.45	
	4/30/2008	3.40		697.64	
MW-18	12/9/2003	4.51	701.40	696.89	687.9 - 697.9
	4/20/2004	4.30		697.10	
	6/23/2004	3.99		697.41	

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Groundwater Elevations
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Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-18 (cont.)	9/28/2004	12.46		688.94	
	12/13/2004	6.36		695.04	
	3/29/2005	4.30		697.10	
	6/27/2005		701.47		
	9/13/2005	9.15		692.32	
	9/12/2006	11.70		689.77	
	9/10/2007	7.18		689.77	
	4/30/2008	3.85		689.77	
MW-19	9/26/2008	6.80	701.68	694.88	
	12/12/2008	7.52		694.16	
	4/17/2009	6.33	702.46	696.13	
	9/23/2009	5.17		697.29	
	3/29/2010	4.16		698.30	
	9/23/2010	3.09		699.37	
	3/17/2011	4.86		697.60	
	9/22/2011	4.45		698.01	
	3/21/2012	3.87		698.59	
	9/12/2012	4.95		697.51	
	9/24/2013	4.61		697.85	
	9/18/2014	3.90		698.56	
MW-19[3]	4/22/2015		701.86		
MW-20	4/17/2009		702.87		
	9/23/2010	5.48		697.39	
	3/17/2011	5.39		697.48	
	4/11/2011		695.87		
	9/22/2011	5.69		690.18	
	9/24/2013	8.71		687.16	
	9/18/2014	6.71	WELL DAMAGED	689.16	
MW-20[4]	4/22/2015		702.27		
MW-21	11/19/2013	4.74	702.64	697.90	
	12/19/2013	7.54		695.10	
	1/21/2014	8.62		694.02	
	3/11/2014	9.16		693.48	
	5/14/2014	1.80		700.84	
	7/28/2014	6.50		696.14	
	8/19/2014	5.43		697.21	
	9/18/2014	6.45		696.19	
	9/23/2014	5.97		696.67	
	10/21/2014	6.15		696.49	
	12/18/2014	6.43		696.21	
	4/15/2015	5.97		696.67	
MW-22	11/19/2013	4.28	702.63	698.35	
	12/19/2013	5.38		697.25	
	1/21/2014	7.36		695.27	
	3/11/2014	8.36		694.27	
	5/14/204	1.71		700.92	

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Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-22 (cont.)	7/31/2015	3.78		698.85	
	8/19/2014	3.75		698.88	
	9/18/2014	4.00		698.63	
	9/24/2014	4.00		698.63	
	10/21/2014	4.01		698.62	
	12/18/2014	4.22		698.41	
	4/15/2015	6.38		696.25	
Inj. Well	3/21/2012	3.68		692.19	
	9/12/2012	8.85		687.02	
	4/17/2009		703.20		
P-1A	12/9/2003	19.01	699.63	680.62	670.4 - 675.4
	4/28/2004	19.46		680.17	
	6/29/2004	8.66		690.97	
	9/28/2004	12.48		687.15	
	12/13/2004	10.60		689.03	
	3/29/2005	12.38		687.25	
	6/27/2005		699.98		
	9/13/2005	12.56		687.42	
	9/13/2006	10.40		689.58	
	9/11/2007	6.10		693.88	
P-2A	12/9/2003	30.29	701.51	671.22	668.8 - 673.8
	4/15/2004	9.34		692.17	
	6/22/2004	13.13		688.38	
	9/28/2004	21.39		680.12	
	12/13/2004	19.63		681.88	
	3/30/2005	16.55		684.96	
	6/27/2005		701.54		
	9/13/2005	13.43		688.11	
	9/14/2006	13.60		687.94	
	9/11/2007	13.10		688.44	
	9/26/2008	14.40		687.14	
	9/24/2009	28.92		672.62	
	9/23/2010	27.60		673.94	
	3/17/2011	25.40		676.14	
	9/22/2011	10.65		690.89	
	9/18/2014	9.70	701.04†	691.67	
P-2AR[5]	4/22/2015		701.37		
P-2B	12/9/2003	32.36	701.66	669.30	656.7 - 661.7
	4/15/2004	28.55		673.11	
	6/22/2004	29.70		671.96	
	9/28/2004	31.41		670.25	
	12/13/2004	28.52		673.14	
	3/30/2005	28.22		673.44	
	6/27/2005		701.67		
	9/13/2005	28.50		673.17	
	9/14/2006	28.81		672.86	

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Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
P-2B (cont.)	9/11/2007	28.95		672.72	
	10/1/2007	29.68		671.99	
	9/26/2008	29.74		671.93	
	12/15/2008	26.36		675.31	
	9/12/2012	27.17		674.50	
	9/24/2013	26.80		674.87	
	9/18/2014	27.00	701.19†	674.19	
P-4	6/18/2002	21.85	702.42	680.57	666.9 - 671.9
	9/30/2002	25.41		677.01	
	12/23/2002	23.14		679.28	
	3/31/2003	30.90		671.52	
	6/16/2003	25.35		677.07	
	9/23/2003	27.83		674.59	
P-4A*	12/9/2003	29.58		672.84	
	4/20/2004	25.89		676.53	
	6/23/2004	30.90		671.52	
	9/28/2004	28.16		674.26	
	12/13/2004	30.66		671.76	
	3/30/2005	28.26		674.16	
P-4A* (cont.)	6/27/2005		702.43		
	9/13/2005	24.80		677.63	
	9/13/2006	22.95		679.48	
	9/10/2007	23.10		679.33	
	9/26/2008	22.66		679.77	
	9/23/2009	21.74		680.69	
	9/23/2010	19.93		682.50	
	3/17/2011	18.10		684.33	
	9/22/2011	20.05		682.38	
	9/12/2012	20.50		681.93	
	9/24/2013	20.11		682.32	
	9/18/2014	20.96		681.47	
P-6A	12/9/2003	dry	701.54	dry	670.0 - 675.0
	4/28/2004	29.70		671.84	
	6/28/2004	25.60		675.94	
	9/28/2004	25.82		675.72	
	12/13/2004	27.48		674.06	
	3/30/2005	26.41		675.13	
	6/27/2005		701.57		
	9/13/2005	25.05		676.52	
	9/13/2006	20.02		681.55	
	9/10/2007	20.20		681.37	
	9/26/2008	26.68		674.89	
	9/23/2009	17.77		683.80	
	9/23/2010	7.20		694.37	
	3/17/2011	15.75		685.82	
	9/22/2011	12.35		689.22	

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Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
P-6A (cont.)	9/12/2012	14.65		686.92	
	9/24/2013	14.70		686.87	
	9/18/2014	25.18		676.39	
P-6B	12/9/2003	35.39	701.48	666.09	656.8 - 661.8
	4/28/2004	31.94		669.54	
	6/28/2004	32.08		669.40	
	9/28/2004	33.99		667.49	
	12/13/2004	32.60		668.88	
	3/30/2005	31.82	701.52	669.66	
	9/13/2005	32.95		668.57	
	9/13/2006	32.85		668.67	
	9/10/2007	32.85		668.67	
	10/1/2007	34.22		667.30	
	9/26/2008	33.55		667.97	
	9/23/2009	32.50		669.02	
	9/23/2010	30.55		670.97	
	3/17/2011	4.40		697.12	
	9/22/2011	30.60		670.92	
	9/12/2012	30.95		670.57	
	9/24/2013	30.53		670.99	
	9/18/2014	29.91	701.36	671.61	
P-6C	11/19/2013	30.03	701.43	671.40	
	1/21/2014	NM		NM	
	3/10/2014	49.37		652.06	
	7/28/2014	47.54		653.89	
	9/23/2014	48.07		653.36	
P-7A	12/9/2003	31.09	702.62	671.53	670.0 - 675.0
	4/28/2004	17.57		685.05	
	6/28/2004	13.70		688.92	
	9/28/2004	14.27		688.35	
	12/13/2004	13.44		689.18	
	4/18/2005	18.55		684.07	
	6/27/2005	13.12	702.67	689.55	
	9/13/2005	13.52		689.15	
	12/13/2005	11.71		690.96	
	3/9/2006	11.41		691.26	
	6/13/2006	11.16		691.51	
	9/13/2006	13.07		689.60	
	1/2/2007	19.70		682.97	
	3/29/2007	19.51		683.16	
	9/11/2007	12.05		690.62	
	4/30/2008	7.90		694.77	
	9/26/2008	12.45		690.22	
	4/17/2009	27.82		674.85	
	9/23/2009	11.37		691.30	
	3/29/2010	9.37		693.30	

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
P-7A (cont.)	9/23/2010	7.31		695.36	
	3/17/2011	9.80		692.87	
	9/22/2011	8.40		694.27	
	3/21/2012	8.40		694.27	
	9/12/2012	6.56		696.11	
	4/30/2013	28.54		674.13	
	9/24/2013	5.65		697.02	
	5/14/2014	2.80		699.87	
	9/18/2014	2.40		700.27	
	4/15/2015	3.21		699.46	
P-7A[3]	4/22/2015		702.37		
P-7	6/18/2002	29.81	702.95	673.14	657.4 - 662.4
	9/30/2002	30.97		671.98	
	12/23/2002	30.64		672.31	
	3/31/2003	30.83		672.12	
	6/16/2003	31.42		671.53	
	9/23/2003	31.74		671.21	
P-7B	12/9/2003	31.98		670.97	
	4/28/2004	31.35		671.60	
	6/28/2004	31.19		671.76	
	9/28/2004	31.37	702.68***	671.31	
	12/13/2004	31.03		671.65	
	4/18/2005	39.00		663.68	
	6/27/2005	31.35	702.76	671.41	
	9/13/2005	31.60		671.16	
	12/13/2005	30.95		671.81	
P-7B*	3/9/2006	30.40		672.36	
	6/13/2006	30.91		671.85	
	9/13/2006	31.47		671.29	
	1/2/2007	30.85		671.91	
	3/29/2007	30.55		672.21	
	9/11/2007	31.45		671.31	
	4/30/2008	30.35		672.41	
	9/26/2008	31.42		671.34	
	4/17/2009	32.05		670.71	
	9/23/2009	31.30		671.46	
	3/29/2010	30.34		672.42	
	9/23/2010	29.65		673.11	
	3/17/2011	29.17		673.59	
	9/22/2011	29.40		673.36	
	3/21/2012	29.11		673.65	
	9/12/2012	29.35		673.41	
	4/30/2013	28.89		673.87	
	5/14/2014	28.60	702.27†	673.67	
	9/18/2014	28.80		673.47	
	4/15/2015	29.11		673.16	

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
P-7C	12/9/2003	50.91	702.64	651.73	642.4 - 647.4
	4/28/2004	42.24		660.40	
	6/28/2004	42.11		660.53	
	9/28/2004	42.08		660.56	
	12/13/2004	42.21		660.43	
	3/30/2005	dry		dry	
	6/27/2005		702.66		
	9/13/2005	42.61		660.05	
	9/13/2006	42.74		659.92	
	9/11/2007	42.75		659.91	
	9/26/2008	42.54		660.12	
	9/23/2009	42.57		660.09	
	9/23/2010	41.38		661.28	
	3/17/2011	40.51		662.15	
	9/22/2011	40.35		662.31	
	9/12/2012	30.90		671.76	
	9/24/2013	40.70		661.96	
	9/18/2014	18.60		684.06	
P-8	6/18/2002	2.79	701.84	699.05	670.1 - 675.1
	9/30/2002	8.47		693.37	
	12/23/2002	9.03		692.81	
	3/31/2003	9.56		692.28	
	4/14/2003	9.42		692.42	
	6/16/2003	21.72		680.12	
	9/23/2003	16.50		685.34	
P-8A*	12/9/2003	20.68		681.16	
	4/20/2004	11.75		690.09	
	6/30/2004	28.29		673.55	
	9/28/2004	19.30		682.54	
	12/13/2004	23.13		678.71	
	3/29/2005	13.02		688.82	
	6/27/2005		701.85		
	9/12/2006	12.85		689.00	
	9/10/2007	12.65		689.20	
	9/26/2008	12.00		689.85	
	9/23/2009	12.02		689.83	
	9/23/2010	8.88		692.97	
	3/17/2011	20.97		680.88	
	9/22/2011	10.65		691.20	
	9/12/2012	11.02		690.83	
	9/24/2013	11.06		690.79	
	9/18/2014	4.08		697.77	
P-9	6/18/2002	24.42	701.12	676.70	671.4 - 676.4
	9/30/2002	24.44		676.68	
	12/23/2002	24.22		676.90	
	3/31/2003	24.94		676.18	

Table 1 Groundwater Elevations Wisconsin Chrome, Kaukauna, Wisconsin Terracon Project No. 58127047					
Measured Location	**Date**	**Depth to Groundwater (ft)**	**Reference Elevation (ft)**	**Groundwater Elevation (ft)**	**Screened Interval (ft)**
P-9 (cont.)	4/14/2003	24.97		676.15	
	6/16/2003	27.19		673.93	
	9/23/2003	26.94		674.18	
P-9A*	12/9/2003	27.01		674.11	
	4/28/2004	26.08		675.04	
	6/29/2004	26.62		674.50	
	9/28/2004	26.58		674.54	
	12/13/2004	27.61		673.51	
	3/29/2005	25.53		675.59	
	6/27/2005		701.12		
	9/13/2005	26.61		674.51	
	9/12/2006	24.55		676.57	
	9/10/2007	24.30		676.82	
	9/26/2008	24.10		677.02	
	9/23/2009	24.30		676.82	
	9/23/2010	22.45		678.67	
	3/17/2011	20.97		680.15	
	9/22/2011	23.11		678.01	
	9/12/2012	23.21		677.91	
	9/24/2013	23.30		677.82	
	9/18/2014	22.99		678.13	
P-12A	6/18/2002	7.39	700.10	692.71	669.7 - 674.7
	9/30/2002	9.68		690.42	
	12/23/2002	9.40		690.70	
	3/31/2003	17.08		683.02	
	6/16/2003	10.19		689.91	
	9/23/2003	9.47		690.63	
P-12A	12/9/2003	8.85		691.25	
	4/14/2004	8.32		691.78	
	6/22/2004	7.45		692.65	
	9/28/2004	8.12	699.88***	691.76	
	12/13/2004	7.85		692.03	
	3/30/2005	9.18		690.70	
	6/27/2005		699.89		
	9/13/2005	7.60		692.29	
	9/12/2006	6.40		693.49	
	9/10/2007	9.10		690.79	
	9/26/2008	7.52		692.37	
	9/23/2009	5.17		694.72	
	9/23/2010	3.17		696.72	
	3/17/2011	2.81		697.08	
	9/22/2011	4.70		695.19	
	9/12/2012	3.87		696.02	
	9/24/2013	3.31		696.58	
	9/18/2014	4.25		695.64	
P-12A[3]	4/22/2015		699.90		

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
P-15A	12/9/2003	22.71	701.10	678.39	670.1 - 675.1
	4/14/2004	2.28		698.82	
	6/22/2004	21.15		679.95	
	9/28/2004	22.35		678.75	
	12/13/2004	19.16		681.94	
	4/18/2005	16.17		684.93	
	6/27/2005		701.10		
	9/15/2005	14.55		686.55	
	9/12/2006	14.61		686.49	
	9/11/2007	3.12		697.98	
	4/30/2008	7.15		693.66	
P-15B	12/9/2003	31.64	700.79	669.15	656.8 - 661.8
	4/14/2004	24.41		676.38	
	6/22/2004	26.21		674.58	
	9/28/2004	26.11		674.68	
	12/13/2004	25.75		675.04	
	4/18/2005	26.37		674.42	
	6/27/2005		700.81		
	9/15/2005	26.37		674.44	
	9/12/2006	26.55		674.26	
	9/11/2007	25.80		675.01	
	4/30/2008	25.05		674.37	
P-16A	12/9/2003	17.57	699.40	681.83	670.0 - 675.0
	4/14/2004	19.45		679.95	
	6/23/2004	18.51		680.89	
	9/28/2004	20.99		678.41	
	12/13/2004	19.16		680.24	
	4/18/2005	14.78		684.62	
	6/27/2005		699.42		
	9/15/2005	17.87		681.55	
	9/12/2006	10.88		688.54	
	9/10/2007	11.10		688.32	
	4/30/2008	9.55		691.92	
MW-T1	12/9/2003	10.52	702.01	691.49	690.5 - 698.5
	4/20/2004	7.34		694.67	
	6/22/2004	8.55		693.46	
	9/28/2004	Dry		-	
	12/13/2004	9.73		692.28	
	4/18/2005	dry		dry	
	6/27/2005	11.02	701.04	690.02	
	9/13/2005	11.12		689.92	
	12/13/2004	10.75		690.29	
	3/9/2006	10.81		690.23	
	6/13/2006	9.91		691.13	
	9/13/2006	10.66		690.38	
	1/2/2007	Dry			

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)
MW-T1 (cont.)	3/29/2007	Dry			
	9/11/2007	6.60		694.44	
	4/30/2008	6.80		694.24	
	9/26/2008	10.90		690.14	
	9/23/2009	6.88		694.16	
	3/29/2010	3.87		697.17	
	9/23/2010	4.96		696.08	
	3/17/2011	2.75		698.29	
	9/22/2011	6.51		694.53	
	3/21/2012	3.10		697.94	
	9/12/2012	6.43		694.61	
	4/30/2013	2.17		698.87	
	9/24/2013	5.64		695.40	
	5/14/2014	0.95		700.09	
	9/18/2014	7.45		693.59	
	4/15/2015	6.67		694.37	
MW-T2	12/9/2003	11.13	702.15	691.02	690.6 - 698.6
	4/20/2004	7.30		694.85	
	6/22/2004	7.51		694.64	
	9/28/2004	11.30		690.85	
	12/13/2004	8.22		693.93	
	4/18/2005	7.51		694.64	
	6/27/2005	11.05	702.16	691.11	
	9/13/2005	11.10		691.06	
	12/13/2005	7.71		694.45	
	3/9/2006	0.00		702.16	
	6/13/2006	10.72		691.44	
	9/13/2006	Dry		Dry	
	1/2/2007	Dry		Dry	
	3/29/2007	Dry		Dry	
	9/11/2007	7.72		694.44	
	4/30/2008	7.00		695.16	
	9/26/2008	11.32		690.84	
	9/23/2009	7.13		695.03	
	3/29/2010	4.56		697.60	
	9/23/2010	6.38		695.78	
	3/17/2011	5.10		697.06	
	9/22/2011	6.36		695.80	
	3/21/2012	3.42		698.74	
	9/12/2012	6.71		695.45	
	4/30/2013	2.66		699.50	
	9/24/2013	6.11		696.05	
	5/14/2014	1.92		700.24	
	9/18/2014	7.65		694.51	
	4/15/2015	6.70		695.46	

Table 1
Groundwater Elevations
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Measured Location	Date	Depth to Groundwater (ft)	Reference Elevation (ft)	Groundwater Elevation (ft)	Screened Interval (ft)

Notes:
Depth to groundwater is measured from the top of the riser pipe.
Screen elevations estimated based upon depth to bottom of well and an assumed 10-foot screen length for observation wells and 5-foot screen length for piezometers.

NM = Not Measured
[1] - Depth to groundwater in Ex Sump A and Ex Sump B is the approximate depth to groundwater that trips the high float to initiate groundwater extraction.
[#] - PVC elevation for monitoring wells MW-2 and MW-3 re-surveyed 12/16/03.
** - PVC casing was cut down 0.10 feet following the April 2004 water level measurement.
***- PVC casing was cut down following the June 2004 sampling event.
† - PVC casing elevation resurveyed after well repair during summer 2013
†† - MW-10 reference elevation reverted back to previous elevation based on Sump B rim elevation
[2] - MW-5 PVC casing extended above grade and conveted to protop well protection on 4/22/15
[3] - PVC casing cut down and resurveyed on 4/22/15; MW-12 and P-12A each received new flushmount protective cover set in a concrete pad
[4] - MW-20 damaged PVC casing cut down and re-extended on 4/22/15
[5] - P-2A abandoned and replacement well P-2AR constructed on 4/22/15

Created by: Terracon
Edited by: Chris W. Ingram, Terracon 4/17/15
Checked by: Scott A. Hodgson, Terracon 5/7/15

N:\Projects\2012\58127047\Working Files\Tables\[Wis_Chrome_Tables_120621.xls]Table 1

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,000	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	9,000	NE			690	4,100	NE	4,200																		NE	1,900	NE	100	NE	5-9				
Sample Location	**Sample Date**	Total Toxic Organics (TTO) < 2.130																																							
B-103	12/20/07	-	-	*130*	***29,000***	**33,000**	-	<50	*600*	-	-	-	-	-	<1.0	-	5	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<17	-	-	-	-	330	0.43	5.60	6.20
B-102	12/20/07	-	-	*340*	*18*	25	-	<50	*660*	-	-	-	-	-	<1.0	-	5	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<17	-	-	-	-	460	0.64	15.00	14.00
B-101	12/20/07	-	-	71	**2,300**	**2,700**	-	136	*180*	-	-	-	-	-	<1.0	-	5	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	<17	-	-	-	-	380	1.90	20.00	20.00
MW-1	2/7/97	-	-	-	*11*	-	-	-	-	-	-	-	-	-	<1.0	-	5	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	*25*	-	-	-	-	-	-	-	-	-	<1.0	-	5	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/15/98	-	-	-	<10	<10	-	-	-	-	-	-	-	-	<5	<5	<5	<5	<5	<5	<5	-	<5	<5.0	<5	<5	<5	-	<5	<5.0	0	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	<5.0	*34*	-	-	-	-	-	-	-	-	<1.0	<0.5	10	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	10	-	-	-	-	-	-	-	-	-	-	-
	5/23/98	-	-	-	*12*	*11*	-	-	-	-	-	-	-	-	<0.5	<0.5	6	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	6	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<0.5	<0.5	5	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	5	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	30	2.9	<4.2	-	**1,600**	-	-	-	-	-	-	<0.25	<0.25	6.4	<0.25	<0.25	<0.25	<0.25	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	6	-	-	-	-	-	-	-	-	-	-	-
	9/6/01	-	-	35	0.64	<4.2	-	**5,800**	-	-	-	-	-	-	<0.25	<0.25	4.8	<0.25	<0.25	<0.25	0.27	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	5	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	33	0.25	<4.2	-	**15,000**	-	-	-	-	-	-	<0.25	<0.25	5.2	<0.25	<0.25	<0.25	*0.61*	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	6	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	37	9.8	<4.2	-	**62,000**	-	-	-	-	-	-	<0.25	<0.25	6.2	<0.25	*6.2*	<0.25	*0.93*	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	13	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	34	*21*	<20	-	**23,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-
	6/17/03	-	-	35	*35*	<2.6	-	**10,000**	-	-	-	-	-	-	<0.97	<0.37	5.1	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	5	-	-	-	7.00	-	-	-	-	-	-	-
	9/24/03	-	-	31	*18*	<2.6	-	**31,000**	-	-	-	-	-	-	<0.97	<0.37	4.9	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	5	-	-	-	7.00	-	-	-	-	-	-	-
	4/28/04	-	-	30	2.8	<2.7	-	**340**	-	-	-	-	-	-	<0.97	<0.37	4.0	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	4	-	-	-	-	-	-	-	-	-	-	-
MW-1R	2/7/97	-	-	-	**410**	-	-	-	-	-	-	-	-	-	<1.0	-	9	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	*21*	-	-	-	-	-	-	-	-	-	<1.0	-	13	-	*3*	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/1/21/97	-	-	-	<5.0	<10	-	-	-	-	-	-	-	-	<2	<2	19	<2	<2	<2	<2	<10	<2	<2.0	<2	<2	<2	<2	<2	<2.0	19	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	5/23/98	-	-	-	*1.0*	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	11.8	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	12	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	10	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<0.1	7	<0.5	<0.5	<1.0	<0.2	<1.0	17	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	25	0.97	<4.2	-	**2,000**	-	-	-	-	-	-	<0.25	<0.25	6	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	6	-	-	-	-	-	-	-	-	-	-	-
	9/6/01	-	-	29	1	<4.2	-	**470**	-	-	-	-	-	-	<0.25	<0.25	6	<0.25	<0.25	<0.25	0.37	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	6	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	28	0.94	<4.2	-	**43,000**	-	-	-	-	-	-	<0.25	<0.25	4.4	<0.25	<0.25	<0.25	0.36	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	5	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	33	<0.5 2	<4.3	-	**110,000**	-	-	-	-	-	-	<0.26	<0.25	5.4	<0.26	*4.9*	<0.25	0.29	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	11	-	-	-	-	-	-	-	-	-	-	-
	4/1/03	-	-	31	*12*	<20	-	**11,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-
	6/17/03	-	-	34	*17*	<2.6	-	**13,000**	-	-	-	-	-	-	<0.97	<0.37	2.2	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	2	-	-	-	7.00	-	-	-	-	-	-	-
	9/24/03	-	-	29	**270**	<2.6	-	**200,000**	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	7.00	-	-	-	-	-	-	-
	12/11/03	-	-	27	*52*	<2.6	-	**38,000**	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	7.00	-	-	-	-	-	-	-
	6/29/04	-	-	25	*1.5*	<2.7	-	<17	-	=	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/5/04	-	-	27	<0.52	<2.7	-	<17	-	-	-	-	-	-	<0.97	<0.37	3.6	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	3.6	-	-	-	-	-	-	-	-	-	-	-
	12/27/04	-	-	24	0.71	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/05	-	-	23	0.88	<2.7	-	<18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.11	-	-	-	-	-	-	-
	9/14/05	-	-	-	0.73	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/13/06	-	-	-	<1.9	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.78	-	-	-	-	-	-	-	-	-	-	-
	9/11/07	-	-	-	<0.43	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.01	1,046	-	-	-	-	-	-
MW-2	2/7/97	-	-	-	**3,750**	-	-	-	-	-	-	-	-	-	<1.0	-	7	-	<0.5	-	-	-	-	-	*60*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	**1,200**	-	-	-	-	-	-	-	-	-	3	-	8	-	<0.5	-	-	-	-	-	*72*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/1/21/97	-	-	-	**469**	**560**	-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2.0	33	<2	*4*	<2	<2	<2.0	37	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	**459**	**770**	-	-	-	-	-	-	-	-	<1.0	<0.5	7	<0.5	*2*	<1.0	<0.5	<5.0	<0.5	<1.0	*50*	<0.5	<0.5	<1.0	<0.2	<1.0	59	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	**746**	**724**	-	-	-	-	-	-	-	-	<1.0	<0.5	7.2	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	36.9	<0.5	<0.5	<1.0	<0.2	<1.0	44	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	**8,080**	**8,080**	-	-	-	-	-	-	-	-	<1.0	<0.5	14	<0.5	*4*	<1.0	<0.5	<5.0	<0.5	<1.0	*67*	<0.5	<0.5	<1.0	<0.2	<1.0	85	-	-	-	-	-	-	-	-	-	-	-
	1/14/99	-	-	-	**5,000**	**5,800**	-	-	-	-	-	-	-	-	<0.25	<0.25	13	<0.25	*4.8*	<0.25	<0.25	<0.25	<0.25	<0.1	*93*	<0.25	<0.25	<0.10	<0.25	<2.5	111	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	**6,400**	**8,000**	-	-	-	-	-	-	-	-	1.6	<0.18	15	<0.20	*6.1*	<0.38	<0.87	<0.14	<0.63	<0.39	*110*	<0.15	<0.49	<0.33	<0.46	<1.1	133	-	-	-	-	-	-	-	-	-	-	-
	1/10/00	-	-	-	**2,900**	**3,300**	-	-	-	-	-	-	-	-	<0.5	<0.5	9.4	<0.5	*3.3*	<0.5	*3.2*	<0.5	<0.5	<0.2	*63*	<0.5	<0.5	*<0.2*	<0.5	<0.5	79	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	**2,600**	**3,000**	-	-	-	-	-	-	-	-	<1	<1	11	<1	*3.7*	<1	*4.6*	<1	<1	<0.4	*50*	<1	<1	<0.4	<1	<1.0	69	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	13	**3,200**	**620**	-	**62,000**	-	-	-	-	-	-	<0.57	<0.75	1.5	<0.47	<0.85	<0.43	<0.85	<1	<0.57	<0.47	5.9	<0.72	<0.89	<0.52	<0.18	<1.94	7	-	-	-	7.00	-	-	-	-	-	-	-
	12/30/02	-	-	-	**11,000**	**8,500**	-	**59,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-
	6/16/03	-	-	17	**11,000**	**10,000**	-	**16,000**	-	-	-	-	-	-	1.6	<0.37	18	<0.36	**11**	<0.54	<0.43	-	<0.45	<0.67	*150*	<0.42	<0.48	<0.83	<0.18	<2.63	181	-	-	-	7.00	-	-	-	-	-	-	-
	9/24/03	-	-	19	**16,000**	**13,000**	-	**20,000**	-	-	-	-	-	-	2.7	<0.37	22	<0.36	**9.0**	<0.54	*1.5*	-	<0.45	<0.67	*140*	<0.42	<0.48	<0.83	<0.18	<2.63	175	-	-	-	7.00	-	-	-	-	-	-	-
	12/9/03	-	-	28	**22,000**	**26,000**	-	**18,000**	-	-	-	-	-	-	3.1	<0.37	30	<0.36	**13**	<0.54	*1.4*	-	<0.45	<0.67	*180*	<0.42	<0.48	<0.83	<0.18	<2.63	228	-	-	-	7.00	-	-	-	-	-	-	-
	4/15/04	-	-	46	**1,900**	**1,900**	-	130	-	-	-	-	-	-	<0.97	<0.37	2.2	<0.36	*0.8*	<0.54	*<0.43*	-	<0.45	<0.67	17	<0.42	<0.48	<0.83	<0.18	<2.63	20	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	27	*17*	*14*	-	70	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
	10/5/04	-	-	29	**2,700**	**3,600**	-	<17	-	-	-	-	-	-	1.3	<0.37	9.0	<0.36	*3.7*	<0.54	<0.43	-	<0.45	<0.67	*45*	<0.42	<0.48	<0.83	<0.18	<2.63	-	-	-	-	-	-	-	-	-	-	-	-
	10/5/04[1]	-	-	28	**4,200**	**4,000**	-	<17	-	-	-	-	-	-	<0.92	<0.37	7.6	<0.36	*2.4*	<0.54	<0.43	-	<0.45	<0.67	*29*	<0.42	<0.48	<0.83	<0.18	<2.63	39	-	-	-	-	-	-	-	-	-	-	-
	12/15/04	-	-	29	**17,000**	**19,000**	-	<17	-	-	-	-	-	-	4.0	<0.37	27	<0.36	**11**	<0.54	*2.3*	-	<0.45	<0.67	*120*	0.48	<0.48	<0.83	<0.18	<2.63	164.78	-	-	-	-	-	-	-	-	-	-	-
	12/15/04[2]	-	-	28	**18,000**	**18,000**	-	<17	-	-	-	-	-	-	3.8	<0.37	29	<0.36	**12**	<0.54	*2.0*	-	<0.45	<0.67	*130*	0.49	<0.48	<0.83	<0.18	<2.63	177.29	-	-	-	-	-	-	-	-	-	-	-
	12/15/04JF	-	-	-	**19,000**	**19,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/05	-	-	39	**16,000**	**16,000**	-	<17	-	-	-	-	-	-	4.3	<0.37	30	0.37	**9.2**	<0.54	<0.43	-	<0.45	<0.67	*110*	<0.42	<0.48	<0.83	<0.18	<2.63	153.87	-	-	-	-	6.87	-	-	-	-	-	-
	6/28/05	-	-	-	**9,300**	**10,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.05	-	-	-	-	-	-
	9/14/05	-	-	-	*96*	*98*	-	-	-	-	-	-	-	-	-	-	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	11	1.8	<0.42	<0.48	<0.83	<0.18	<2.63	12.8	-	-	-	-	6.87	-	-	-	-	-	-
	12/22/05	-	-	-	**1,600**	**1,600**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.99	-	-	-	-	-	-
	4/7/06	-	-	-	**8,300**	**12,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.87	844	-	-	-	-	-
	6/14/06	-	-	-	**4,100**	**4,300**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.89	1,484	-	-	-	-	-
	9/14/06	-	-	-	**4,900**	-	-	-	-	-	-	-	-	-	3.3	<0.37	28	<0.36	**11**	<0.54	*1*	-	<0.45	<0.67	*110*	<0.42	<0.48	<0.83	<0.18	<2.63	153.3	-	-	-	-	7.18	1,217	-	-	-	-	-
	10/20/06	-	-	23	**7,200**	**8,000**	-	<50	*160*	<2.5	-	-	-	-	3.9	<0.37	13	<0.36	**13**	<0.54	*1.2*	-	<0.45	<0.67	*120*	<0.42	<0.48	<0.83	<0.18	<2.63	151.1	-	-	-	-	7.49	1,333	-	-	-	-	-
own August 5, 2010. Transfer pump failed a		-	-	22	**2,300**	**2,900**	-	<50	120	<2.5	-	-	-	-	2.2	<0.37	25	<0.36	**9.3**	<0.54	<0.43	-	<0.45	<0.67	*120*	<0.42	<0.48	<0.83	<0.18	<2.63	156.5	-	-	-	-	7.33	1,300	-	-	-	-	-
	12/11/06	-	-	-	**2,700**	**3,000**	-	<50	*130*	<2.5	-	-	-	-	1.3	<0.37	11	<0.36	*3.4*	<0.54	<0.43	-	<0.45	<0.67	*41*	<0.42	<0.48	<0.83	<0.18	<2.63	56.7	-	-	-	-	-	-	-	-	-	-	-
	1/2/07	-	-	-	**7,700**	**7,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.15	1,264	-	-	-	-	-
	1/30/07	-	-	-	**4,500**	**4,900**	-	<50	*160*	<2.5	-	-	-	-	3.0	<0.37	23	<0.36	**10**	<0.54	<0.43	-	<0.45	<0.67	*91*	<0.42	<0.48	<0.83	<0.18	<2.63	127	-	-	-	-	-	-	-	-	-	-	-
	2/26/07	-	-	52	**3,300**	**3,800**	-	<50	*180*	<2.5	*1.6*	-	-	-	1.6	**20**	<0.36	*6.3*	<0.54	*0.52*	<0.45	-	<0.67	*52*	<0.42	<0.48	<0.83	<0.18	<2.63	<1.8	80.42	-	-	-	-	6.94	1,575	-	-	-	-	-
	3/29/07	-	-	-	**4,200**	**4,400**	-	<50	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.35	1,193	-	-	-	-	-
	6/15/07	-	-	-	**4,300**	**5,400**	-	<50	*170*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/11/07	-	-	-	**5,400**	**110**	-	-	-	-	-	-	-	-	1.9	<0.37	15	<0.36	*6.4*	<0.54	0.52	-	<0.45	<0.67	*65*	<0.42	<0.48	<0.83	<0.18	<0.83	88.82	-	-	-	-	6.99	1,039	-	-	-	-	-
	09/11/07[3]	-	-	-	**8,200**	**170**	-	-	-	-	-	-	-	-	3.4	<0.37	24	<0.36	***11***	<0.54	0.9	-	<0.45	<0.67	*100*	<0.42	<0.48	<0.83	<0.18	<0.83	139.3	-	-	-	-	6.99	1,039	-	-	-	-	-
	12/21/07	-	-	25	**2,200**	**2,500**	-	<50	*170*	-	-	-	-	-	3.4	<0.37	24	<0.36	***11***	<0.54	0.9	-	<0.45	<0.67	*100*	<0.42	<0.48	<0.83	<0.18	<0.83	139.3	-	-	< 0.17	-	6.99	1,039	170	< 0.085	5.000	3.600
	4/30/08	-	-	-	**9,700**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/26/08	-	-	-	**8,970**	-	-	-	-	-	-	-	-	-	3.1	<1.3	25.9	<0.36	**12**	<0.54	1	-	<0.45	<0.67	*116*	<0.42	<0.48	<0.83	<0.18	<2.63	158	-	-	-	-	7.08	1467	-	-	-	-	-
	12/15/08	-	-	18.3	**8,130**	**6,300**	-	32.7	-	169.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.68	-	-	-	64	< 0.085	5.20	8.50
MW-2 (cont.)	**4/17/09**	-	-	-	**8,640**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/24/09 [4,J]	-	-	-	**3,200**	-	-	-	-	-	-	-	-	-	3.0	<0.20	31	<0.50	**11**	<0.50	<1.0	-	<0.50	<0.50	*110*	0.35	<0.20	<0.20	<0.20	<0.50	155.35	-	-	-	-	7.10	1,310	-	-	-	-	-
	3/29/10	-	-	-	**3,200**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	1,215	-	-	-	-	-
	9/23/10	-	-	-	<10	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	6.89	1,170	-	-	-	-	-
	3/17/2011[4,P]	-	-	-	**3,470**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.47	1,460	-	-	-	-	-
	9/22/2011[4,N]	-	-	-	**3,200**	-	-	-	-	-	-	-	-	-	1.6	<0.20	21	<0.50	**12**	<0.50	<1.0	-	<0.50	<0.50	*110*	0.50	<0.20	<0.20	<0.20	<0.50	145.10	-	-	-	-	7.32	1,250	-	-	-	-	-
	3/21/12	-	-	-	**2,500**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.75	1,280	-	-	-	-	-
	9/13/12	-	-	-	**2.29**	-	-	-	-	-	-	-	-	-	<0.97	<1.3	5.8	<0.36	*2.7*	<0.54	<0.43	-	<0.45	<0.67	17.8	<0.42	<0.48	<0.83	<0.18	<2.63	26.30	-	-	-	-	7.75	1,280	-	-	-	-	-
	4/30/13	-	-	-	**485**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.61	1,070	-	-	-	-	-
	9/24/13	-	-	-	*64.0*	-	-	-	-	-	-	-	-	-	2.7	<0.69	44.1	<0.48	*6.2*	<0.50	<0.36	-	<0.47	<0.44	27.9	<0.39	<0.36	<0.50	<0.18	<1.32	144.9	-	-	-	-	7.61	1,070	-	-	-	-	-
	5/14/14	-	-	-	**128**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.59	3,660	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,000	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE				690	4,100	NE	4,200	Total Toxic Organics (TTO) < 2.130																	NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																									
	9/19/14	-	-	-	1,240	-	-	-	-	-	-	-	-	-	<0.37	<2.5	26.7	<0.17	12.5	<0.50	0.47	-	<0.50	<0.50	82.4	0.26	<0.33	<0.50	<0.18	<1.5	122.3	-	-	-	-	-	6.26	1,360	-	-	-	-
	4/15/15	-	-	-	1,740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.81	5,560	-	-	-	-
MW-3	2/7/97	-	-	-	2,740	-	-	-	-	-	-	-	-	-	<1.0	-	3	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	409	-	-	-	-	-	-	-	-	-	<1.0	-	3	-	<0.5	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/97	-	-	-	*81*	*68*	-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2.0	6	<2	<2	<2	<2	<2.0	6	-	-	-	-	-	-	-	-	-	-	-
	11/21/97	-	-	-	*82*	*80*	-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2.0	6	<2	<2	<2	<2	<2.0	6	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	223	198	-	-	-	-	-	-	-	-	<1.0	<0.5	4	<0.5	<0.5	<1.0	<0.5	<5.0	*4*	<1.0	5	<0.5	<0.5	<1.0	<0.2	<1.0	13	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	510	242	-	-	-	-	-	-	-	-	<1.0	<0.5	2.9	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	4.8	<0.5	<0.5	<1.0	<0.2	<1.0	8	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	*54*	*92*	-	-	-	-	-	-	-	-	<1.0	<0.5	2	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	2	-	-	-	-	-	-	-	-	-	-	-
	1/14/99	-	-	-	530	440	-	-	-	-	-	-	-	-	<0.25	<0.25	2.9	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	5.9	<0.25	<0.25	<0.10	<0.25	<0.25	9	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	190	240	-	-	-	-	-	-	-	-	<1.2	<0.18	2.8	<0.20	<0.73	<0.38	<0.87	<0.14	<0.63	<0.39	5	<0.15	<0.49	<0.33	<0.46	<1.1	8	-	-	-	-	-	-	-	-	-	-	-
	1/10/00	-	-	-	170	220	-	-	-	-	-	-	-	-	<0.25	<0.25	3	<0.25	0.66	<0.25	<0.25	<0.25	<0.25	<0.1	7.2	<0.25	<0.25	<0.1	<0.25	<0.25	11	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	170	150	-	-	-	-	-	-	-	-	<0.25	<0.25	1.6	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	2.9	<0.25	<0.25	<0.1	<0.25	<0.25	4.5	-	-	-	-	-	-	-	-	-	-	-
	9/20/01	-	-	<5	*54*	*53*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	<5	*66*	*63*	-	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/15/01	-	-	<5	160	*53*	-	1,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/29/01	-	-	6	7,500	*71*	-	190,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	<5	14,000	*85*	-	350,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	3.8	13,000	*55*	-	400,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/30/02	-	-	-	15,000	<20	-	390,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	8.1	4,500	<2.6	-	120,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	10	1,300	<2.6	-	56,000	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	0.93	<0.42	<0.48	<0.83	<0.18	<2.63	1	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03	-	-	5.5	3,100	<2.6	-	94,000	-	-	-	-	-	-	<0.97	<0.37	0.76	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	1.0	<0.42	<0.48	<0.83	<0.18	<2.63	1.76	-	-	-	-	-	7.00	-	-	-	-	-
	4/15/04	-	-	5.8	9.7	*4*	-	*220*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	3.2	*36*	*35*	-	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/7/04	-	-	11	6.9	*4*	-	<17	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.81	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
	12/15/04	-	-	3.9	*18*	*18*	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/15/04UF	-	-	-	*44*	*22*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	22	*83*	*96*	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.26	-	-	-	-	-
	6/28/05	-	-	-	2.5	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.40	-	-	-	-	-
	9/14/05	-	-	-	1.1	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.77	-	-	-	-	-
	12/14/05	-	-	-	*2*	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.34	-	-	-	-	-
	3/10/06	-	-	-	<1.3	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.42	829	-	-	-	-
	6/14/06	-	-	-	0.88	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.43	804	-	-	-	-
	9/12/06	-	-	-	1.7	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.35	770	-	-	-	-
	10/20/06	-	-	1.6	7.2	<6.8	-	<50	54	<2.5	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	6.25	655	-	-	-	-
	11/20/06	-	-	4.5	3.6	<6.8	-	<50	75	<2.5	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.36	750	-	-	-	-
	12/8/06	-	-	-	<1.9	<6.8	-	<50	78	<2.5	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.75	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.21	896	-	-	-	-
	1/2/07	-	-	-	*2.9*	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.56	830	-	-	-	-
	1/30/07	-	-	-	2.1	<6.8	-	<50	79	<2.5	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.75	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
	3/29/07	-	-	-	*31*	*26*	-	<50	*47*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.28	570	-	-	-	-
	6/6/07	-	-	-	*20*	*14*	-	<50	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/11/07	-	-	-	*8.8*	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.24	665	-	-	-	-
	9/26/08	-	-	-	*36.30*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.17	577	-	-	-	-
	12/12/08	-	-	4.2	*21.8*	11	-	442.0	-	58.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<.17	-	-	-	-	61.80	0.160	-	3.60
	4/8/09	-	-	3.1	*38.1*	<38	-	12.3	34.8	<2.3	-	-	-	-	<0.97	<1.3	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<1.8	0	-	-	-	-	-	<.17	-	-	-	0.97	0.78	-	<1.4
	4/27/09	-	-	3.6	*43.6*	*49*	-	43.4	31.0	<2.3	-	-	-	-	<0.97	<1.3	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<1.8	0	-	-	-	-	-	<.17	-	-	-	32.10	1.4	2.5	<1.4
	5/21/09	-	-	3.3	*53.3*	*55*	-	36.2	30.3	<1.7	-	-	-	-	<0.97	<1.3	<0.75	<0.36	*1.3*	<0.54	<0.43	-	<0.45	<0.67	8.8	<0.42	<0.48	<0.83	<0.18	<1.8	8.1	-	-	-	-	-	<0.25	-	-	-	15.4	1.7	<1.4	<1.4
	6/18/09	-	-	3.1	*65.3*	*56*	-	*7.9*	26.6	<1.7	-	-	-	-	<0.97	<1.3	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<1.8	0	-	-	-	-	-	<0.25	-	-	-	0.53	1.8	<1.4	<1.4
	7/15/09	-	-	3.2	*74.1*	*86*	-	5.5	29.4	<1.7	-	-	-	-	<0.97	<1.3	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<1.8	0	-	-	-	-	-	<0.25	-	-	-	0.29	1.7	<1.4	<1.4
	9/23/09	-	-	-	*88*	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	6.8	495	-	-	-	-
	9/22/11	-	-	-	*29*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.67	410	-	-	-	-
	9/13/12	-	-	-	*17.3*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.67	410	-	-	-	-
	9/24/13	-	-	-	*45.7*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.67	410	-	-	-	-
	9/19/14	-	-	-	*29.2*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.48	439	-	-	-	-
MW-4	2/7/97	-	-	-	5,390	-	-	-	-	-	-	-	-	-	<1.0	-	34	-	7	-	-	-	-	-	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	6,030	-	-	-	-	-	-	-	-	-	*4*	-	48	-	10	-	-	-	-	-	*54*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/97	-	-	-	8,400	10,900	-	-	-	-	-	-	-	-	<2	<2	72	<2	<2	<2	<2	<10	<2	<2.0	*108*	<2	<2	<2	<2	<2.0	180	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	2,340	2,570	-	-	-	-	-	-	-	-	<10.0	<5.0	20	<5.0	<5.0	<10.0	<5.0	<50.0	110	<10	*50*	<5.0	17	<10.0	<2.0	<10	197	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	9,040	8,230	-	-	-	-	-	-	-	-	8.2	<0.5	60.2	<0.5	17.9	<1.0	<0.5	<5.0	<0.5	<1.0	*74.9*	<0.5	<0.5	<1.0	<0.2	<1.0	161	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	9,140	8,680	-	-	-	-	-	-	-	-	<1.0	<0.5	61	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	*74.1*	<0.5	<0.5	<1.0	<0.2	<1.0	135	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	8,900	8,900	-	-	-	-	-	-	-	-	6	<0.5	50	<0.5	11	<1.0	<0.5	<5.0	<0.5	<1.0	*44*	<0.5	<0.5	<1.0	<0.2	<1.0	111	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	8,380	8,380	-	-	-	-	-	-	-	-	4	<0.5	30	<0.5	8	<1.0	<0.5	<5.0	<0.5	<1.0	30	<0.5	<0.5	<1.0	<0.2	<1.0	72	-	-	-	-	-	-	-	-	-	-	-
	1/18/99	-	-	-	1,900	2,300	-	-	-	-	-	-	-	-	<0.25	<0.25	22	<0.25	*6.7*	<0.25	<0.25	<0.25	<0.25	<0.1	*45*	0.31	<0.25	<0.1	<0.25	<0.25	74	-	-	-	-	-	-	-	-	-	-	-
	1/18/99	-	-	-	1,700	1,900	-	-	-	-	-	-	-	-	<0.25	<0.25	23	<0.25	7.8	<0.25	<0.25	<0.25	<0.25	<0.1	*51*	0.32	<0.25	<0.1	<0.25	<0.25	82	-	-	-	-	-	-	-	-	-	-	-
	2/17/99	-	-	64	3,000	3,500	-	<24	-	-	-	-	-	-	1.3	<0.25	24	<0.25	7.6	<0.25	<0.25	<0.25	<0.25	<0.1	38	<0.25	<0.25	<0.1	<0.25	<0.25	71	-	-	-	-	-	-	-	-	-	-	-
	1/10/00	-	-	-	2,000	1,900	-	-	-	-	-	-	-	-	*1.4*	<0.25	19	<0.25	*5.7*	<0.25	<0.25	<0.25	<0.25	<0.1	35	<0.25	<0.25	<0.1	<0.25	<0.25	61	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	920	1,800	-	-	-	-	-	-	-	-	1	<0.25	33	0.34	30	<0.25	<0.25	<0.25	<0.25	<0.1	*110*	*0.52*	<0.25	<0.1	<0.25	<0.25	175	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	1,000	1,700	-	-	-	-	-	-	-	-	*1.2*	<0.25	30	0.37	23	<0.25	<0.25	<0.25	<0.25	<0.1	*91*	0.48	<0.25	<0.1	<0.25	<0.25	146	-	-	-	-	-	-	-	-	-	-	-
	9/19/01	-	-	37	3,700	4,700	-	3,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	52	2,500	3,000	-	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/15/01	-	-	32	3,000	3,600	-	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/29/01	-	-	27	3,700	2,400	-	59,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	28	5,200	2,000	-	130,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01[1]	-	-	29	3,800	2,000	-	73,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	38	1,700	530	-	74,000	-	-	-	-	-	-	<0.57	<0.75	29	<0.47	17	<0.43	<0.85	-	<0.57	<0.57	*120*	<0.72	<0.89	<0.52	<0.18	<1.94	166	-	-	-	-	-	-	-	-	-	-	-	-
	12/30/02	-	-	-	1,600	230	-	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	31	520	100	-	31,000	-	-	-	-	-	-	<0.97	<0.37	12	<0.36	*5.6*	<0.54	<0.43	-	<0.45	<0.67	*58*	<0.42	<0.48	<0.83	<0.18	<2.63	76	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	23	940	*92*	-	57,000	-	-	-	-	-	-	<0.97	<0.37	8.8	<0.36	*5.0*	<0.54	<0.43	-	<0.45	<0.67	*43*	<0.42	<0.48	<0.83	<0.18	<2.63	57	-	-	-	-	-	7.00	-	-	-	-	-
	12/11/03	-	-	26	330	110	-	25,000	-	-	-	-	-	-	<0.97	<0.37	12	<0.36	7.1	<0.54	<0.43	-	<0.45	<0.67	*69*	<0.42	<0.48	<0.83	<0.18	<2.63	88	-	-	-	-	-	7.00	-	-	-	-	-
	4/20/04	-	-	26	*73*	*9*	-	*<32*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/04	-	-	23	*56*	*52*	-	*150*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/12/04	-	-	25	*36*	*38*	-	<17	-	-	-	-	-	-	<0.24	<0.37	4.6	<0.36	*1.8*	<0.54	<0.43	-	<0.45	<0.67	21	<0.42	<0.48	<0.83	<0.18	<2.63	27.4	-	-	-	-	-	-	-	-	-	-	-	-
MW-4 (cont.)	12/28/04	-	-	21	*66*	*73*	-	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.8	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	22	*83*	*96*	-	<17	-	-	-	-	-	-	<0.97	<0.37	5.5	<0.36	*3.8*	<0.54	<0.43	-	<0.45	<0.67	36	<0.42	<0.48	<0.83	<0.18	<2.63	45.3	-	-	-	-	-	6.90	-	-	-	-	-
	6/28/05	-	-	-	*85*	*85*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.75	-	-	-	-	-
	9/14/05	-	-	-	*80*	*76*	-	-	-	-	-	-	-	-	<0.97	<0.37	3.3	<0.36	*2.5*	<0.54	<0.43	-	<0.45	<0.67	24	<0.42	<0.48	<0.83	<0.18	<2.63	29.8	-	-	-	-	-	7.06	-	-	-	-	-
	12/14/05	-	-	-	*68*	*81*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.26	-	-	-	-	-
	3/10/06	-	-	-	*64*	*85*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.18	1,142	-	-	-	-
	6/14/06	-	-	-	*40*	*47*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.91	793	-	-	-	-
	9/13/06	-	-	-	*39*	*35*	-	-	-	-	-	-	-	-	<0.97	<0.37	3.8	<0.36	*2.5*	<0.54	<0.43	-	<0.45	<0.67	27	<0.42	<0.48	<0.83	<0.18	<2.63	33.3	-	-	-	-	-	7.58	1,114	-	-	-	-
	10/20/06	-	-	19	*60*	*67*	-	<50	110	<2.5	-	-	-	-	<0.97	<0.37	3.7	<0.56	*3.4*	<0.54	<0.43	-	<0.45	<0.67	*41*	<0.42	<0.48	<0.83	<0.18	<2.63	48.10	-	-	-	-	-	6.74	1,003	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	4,100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200										Total Toxic Organics (TTO) < 2.130								NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																									
	11/20/06	-	-	23	*28*	*29*	-	<50	100	<2.5	-	-	-	-	<0.97	<0.37	1.9	<0.36	*0.83*	<0.54	<0.43	-	<0.45	<0.67	15	<0.42	<0.48	<0.83	<0.18	<2.63	17.73	-	-	-	-	-	7.12	660	-	-	-	-
	12/8/06	-	-	-	*52*	*48*	-	<50	110	<2.5	-	-	-	-	<0.97	<0.37	2.6	<0.56	*1.6*	<0.54	<0.43	-	<0.45	<0.67	27	<0.42	<0.48	<0.83	<0.18	<2.63	31.2	-	-	-	-	-	7.12	1,159	-	-	-	-
	1/2/07	-	-	-	*63*	*62*	-	-	-	-	-	-	-	-	<0.97	<0.37	1.7	<0.36	*1.5*	<0.54	<0.43	-	<0.54	<0.67	25	<0.42	<0.48	<0.83	<0.18	<2.63	28.2	-	-	-	-	-	6.93	1,045	-	-	-	-
	1/30/07	-	-	-	*63*	*68*	-	<50	*140*	<2.5	-	-	-	-	<0.97	<0.37	2.1	<0.36	*1.5*	<0.54	<0.43	-	<0.54	<0.67	30	<0.42	<0.48	<0.83	<0.18	<2.63	33.6	-	-	-	-	-	-	-	-	-	-	-
	2/26/07	-	-	2.7	*70*	*67*	-	<50	*130*	<2.5	-	-	-	-	<0.97	<0.37	1.8	<0.36	*1.4*	<0.54	<0.43	-	<0.45	<0.67	*24*	<0.42	<0.48	<0.83	<0.18	<2.83	*27.2*	-	-	-	-	-	7.04	-	-	-	-	-
	3/29/07	-	-	-	*57*	*53*	-	<50	*140*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.17	1,047	-	-	-	-
	6/6/07	-	-	-	*53*	*51*	-	<50	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/10/07	-	-	-	*47*	*48*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.64	991	-	-	-	-
	9/26/08	-	-	-	*47*	-	-	-	-	-	-	-	-	-	<0.97	<1.3	1.7	<0.36	0.69	<0.54	<0.43	-	<0.45	<0.67	10.5	<0.42	<0.48	<0.83	<0.18	<2.63	12.89	-	-	-	-	-	6.91	1353	-	-	-	-
	12/8/08	-	-	34	*35*	*32*	-	39.1	-	1.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<17	-	-	-	4.70	< 0.085	-	1.50
	9/23/09	-	-	-	380	-	-	-	-	-	-	-	-	-	<1.0	<0.20	15	<0.50	11	<0.50	<1.0	-	<0.50	<0.50	*71*	<0.25	<0.20	<0.20	<0.20	<0.50	97	-	-	-	-	-	7.1	1,150	-	-	-	-
	9/2 3/10 [X]	-	-	-	160	-	-	-	-	-	-	-	-	-	<1.0	0.22	53	<0.50	46	<0.50	<1.0	-	<0.50	<0.50	230	0.49	0.30	<0.20	<0.20	<0.50	330	-	-	-	-	-	7.58	1,110	-	-	-	-
	9/2 2/2011 [QC]	-	-	-	240	-	-	-	-	-	-	-	-	-	<1.0	<0.20	15	<0.50	13	<0.50	<1.0	-	<0.50	<0.50	*93*	0.27	0.23	<0.20	<0.20	<0.50	122	-	-	-	-	-	7.25	890	-	-	-	-
	9/1 3/2012 [QC]	-	-	-	246	-	-	-	-	-	-	-	-	-	<0.97	<1.3	9.6	<0.36	*6.6*	<0.54	<0.43	-	<0.45	<0.67	*6.9.8*	<0.42	<0.48	<0.83	<0.18	<2.63	76	-	-	-	-	-	7.25	890	-	-	-	-
	9/2 5/2013 [QC]	-	-	-	186	-	-	-	-	-	-	-	-	-	0.74	<0.69	*24.6*	<0.48	15.9	<0.50	<0.36	-	<0.47	<0.44	*104*	<0.39	<0.36	<0.50	<0.18	<1.0	145.24	-	-	-	-	-	7.25	890	-	-	-	-
	9/1/9/14	-	-	-	*64.9*	-	-	-	-	-	-	-	-	-	*<0.37*	<2.5	13.8	<0.17	10.2	<0.50	<0.23	-	<0.50	<0.50	*4.7.6*	<0.16	<0.33	<0.50	<0.18	<1.5	71.6	-	-	-	-	-	11.14	820	-	-	-	-
MW-5	2/7/97	-	-	-	410	-	-	-	-	-	-	-	-	-	<1.0	-	<1.0	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	*14*	-	-	-	-	-	-	-	-	-	<1.0	-	<1.0	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/97	-	-	-	<5.0	<10	-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<10	<2	<2.0	<2	<2.0	<2	<2	<2	<2	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	8/19/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	1.6	<4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	12	110	<20	-	110,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	9.7	250	<2.6	-	170,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	10	120	3.5	-	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03	-	-	10	210	<2.6	-	170,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03 [3]	-	-	12	160	<2.6	-	130,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/15/04	-	-	11	4.8	<2.7	-	310,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	11	3.5	<2.7	-	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/5/04	-	-	11	*1.4*	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/15/04	-	-	11	1.8	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/15/04UF	-	-	-	*13*	<2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	11	0.86	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.90	-	-	-	-	-
	9/14/04	-	-	-	0.98	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.60	-	-	-	-	-
	9/12/06	-	-	-	1.5	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.89	-	-	-	-	-
	9/10/07	-	-	-	1.6	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.10	1,083	-	-	-	-
MW-6	2/7/97	-	-	-	4,370	-	-	-	-	-	-	-	-	-	<1.0	-	42	-	55	-	-	-	-	-	610	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	5,420	-	-	-	-	-	-	-	-	-	<1.0	-	55	-	79	-	-	-	-	-	720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	5,570	-	-	-	-	-	-	-	-	-	<1.0	-	53	-	73	-	-	-	-	-	697	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/97	-	-	-	3,910	4,660	-	-	-	-	-	-	-	-	<2	<2	54	<2	82	<2	<2	<10	<2	<2.0	697	<2	*2*	<2	<2	<2.0	835	-	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	3,000	2,890	-	-	-	-	-	-	-	-	<1.0	<0.5	36.2	<0.5	51.5	<1.0	<0.5	<5.0	<0.5	<1.0	509	<0.5	<0.5	<1.0	<0.2	<1.0	597	-	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	4,200	498	-	-	-	-	-	-	-	-	2.1	<0.5	40	28	57	<1.0	<0.5	<5.0	<0.5	<1.0	409	<0.5	<0.5	<1.0	<0.2	<1.0	536	-	-	-	-	-	-	-	-	-	-	-	-
	1/14/99	-	-	-	1,900	5,300	-	-	-	-	-	-	-	-	<2.5	<2.5	69	<2.5	62	<2.5	<2.5	<5.0	<2.5	<2.5	420	<2.5	<2.5	<1.0	<2.5	<2.5	551	-	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	3,600	4,700	-	-	-	-	-	-	-	-	<12	<1.8	58	<2.0	65	<3.8	<8.7	<1.4	<6.3	<0.39	590	<1.5	<4.9	<3.3	<4.6	<11	713	-	-	-	-	-	-	-	-	-	-	-	-
	1/10/00	-	-	-	8,400	6,200	-	-	-	-	-	-	-	-	5.2	<0.25	*110*	*2.2*	*2.2*	<0.25	*3.3*	<0.25	<0.25	1	*2.2*	*2.2*	*1.7*	<0.1	0.69	<0.25	1,130	-	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	17	1,100	1,800	-	1,200	-	-	-	-	-	-	<2.5	<2.5	30	<2.5	<2.5	<2.5	11	<2.5	<2.5	<1.0	<2.5	<2.5	<2.5	<1	<2.5	<2.5	41	-	-	-	-	-	-	-	-	-	-	-	-
	9/6/01	-	-	31	6,800	7,700	-	3,300	-	-	-	-	-	-	<6.2	<6.2	70	<6.2	<6.2	<6.2	78	<6.2	<6.2	<2.5	<6.2	<6.2	<6.2	<2.5	<6.2	<6.2	148	-	-	-	-	-	-	-	-	-	-	-	-
	9/20/01	-	-	32	*54*	*53*	-	2,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	49	9,100	10,000	-	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	17	1,900	2,300	-	27,000	-	-	-	-	-	-	<1.1	<1.5	28	<0.94	37	<0.86	<1.7	-	<1.1	<0.94	260	<1.4	<1.8	<1.0	<0.36	<3.9	325	-	-	-	-	-	7.00	-	-	-	-	-	-
	12/30/02	-	-	-	9,200	-	-	350,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-
	6/17/03	-	-	41	4,700	4,900	-	18,000	-	-	-	-	-	-	<4.8	<1.8	*120*	<1.8	81	<2.7	*<2.2*	-	<2.2	<3.4	480	<2.1	<2.4	<4.2	<0.90	<13.2	681	-	-	-	-	-	7.00	-	-	-	-	-	-
	9/24/03	-	-	39	5,100	5,200	-	8,700	-	-	-	-	-	-	3.0	<0.37	*120*	*1.5*	110	<0.54	*1.5*	-	<0.45	<0.67	340	*1.7*	*1.9*	<0.83	<0.18	<2.63	580	-	-	-	-	-	7.00	-	-	-	-	-	-
MW-6R	12/11/03	-	-	44	2,200	2,100	-	63,000	-	-	-	-	-	-	<4.8	<1.8	*110*	<1.8	96	<2.7	*<2.2*	-	<2.2	<3.4	460	<2.1	<2.4	<4.1	<0.90	<13.1	666	-	-	-	-	-	7.00	-	-	-	-	-	-
	4/28/04	-	-	39	3,600	3,400	-	310	-	-	-	-	-	-	*2.4*	<0.74	*100*	*1.2*	86	<1.1	*1.4*	-	<0.90	<1.3	380	*1.2*	*1.5*	<1.7	<0.36	<5.3	573.7	-	-	-	-	-	-	-	-	-	-	-	-
	6/28/04	-	-	1.8	1,100	1,700	-	*200*	-	-	-	-	-	-	2.1	<0.74	51	<0.72	55	<1.1	*0.99*	-	<0.90	<1.3	280	<1.8	*1.4*	<1.7	<0.36	<5.3	390.49	-	-	-	-	-	-	-	-	-	-	-	-
	9/28/04	-	-	46	810	840	-	<18	-	-	-	-	-	-	*2.2*	<0.74	*110*	*1.4*	59	<1.1	<0.86	-	<0.90	<1.3	260	<0.84	<0.96	<1.7	0.58	<1.7	432.6	-	-	-	-	-	-	-	-	-	-	-	-
	12/27/04	-	-	37	1,300	1,500	-	18	-	-	-	-	-	-	*<2.4*	<0.92	82	*0.90*	64	<1.4	<1.1	-	<1.1	<1.7	310	<1.0	<1.2	<2.1	<0.45	<6.6	456.9	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	49	670	860	-	<17	-	-	-	-	-	-	-	<0.37	*98*	<0.36	47	<0.54	0.43	-	<0.45	<0.67	*190*	<0.42	*0.64*	<0.83	<0.18	<2.63	337.14	-	-	-	-	-	6.88	-	-	-	-	-	-
	6/28/05	-	-	-	750	880	-	-	-	-	-	-	-	-	*<2.4*	<0.92	*160*	*1.50*	96	<1.4	<1.1	-	<1.1	<1.7	270	<1.0	*1.30*	<2.1	<0.45	<4.5	528.80	-	-	-	-	-	-	-	-	-	-	-	-
	9/1/05	-	-	-	760	860	-	-	-	-	-	-	-	-	*2.8*	<0.37	*140*	*1.2*	78	<0.54	<0.43	-	<0.45	<0.67	190	*0.89*	*1.00*	<0.83	0.47	<2.63	419.8	-	-	-	-	-	7.20	-	-	-	-	-	-
	12/14/05	-	-	-	730	970	-	-	-	-	-	-	-	-	2.5	<0.74	*130*	*1.2*	64	<1.1	<0.86	-	<0.90	<1.3	220	<0.84	*0.97*	<1.7	<0.36	<5.3	418.47	-	-	-	-	-	6.51	-	-	-	-	-	-
	3/10/06	-	-	-	870	1,100	-	-	-	-	-	-	-	-	<1.9	<0.74	*130*	*1.0*	67	<1.1	<0.86	-	<0.90	<1.3	230	<0.84	*1.10*	<1.7	<0.36	<5.3	429.06	-	-	-	-	-	7.10	1,312	-	-	-	-
	6/14/06	-	-	-	1,500	1,400	-	-	-	-	-	-	-	-	1.6	<0.37	*100*	*0.88*	66	<0.54	<0.43	-	<0.45	<0.67	240	*0.6*	*1.20*	<0.83	<0.18	<2.63	410.30	-	-	-	-	-	6.91	1,259	-	-	-	-
	9/13/06	-	-	-	1,100	1,000	-	-	-	-	-	-	-	-	2.0	<0.37	*110*	*1.00*	79	<0.54	<0.43	-	<0.45	<0.67	250	*0.7*	*1.30*	<0.83	0.31	<2.63	444.00	-	-	-	-	-	7.21	1,257	-	-	-	-
	10/20/06	-	-	38	590	680	-	<50	*140*	<2.5	-	-	-	-	2.3	<0.37	*120*	*1.10*	83	<0.54	<0.43	-	<0.45	<0.67	250	*0.7*	*1.20*	<0.83	0.56	<2.63	459.00	-	-	-	-	-	7.57	1,221	-	-	-	-
	11/20/06	-	-	*37*	380	390	-	<50	*140*	<2.5	-	-	-	-	2.0	<0.37	*110*	*1.40*	52	<0.54	<0.43	-	<0.45	<0.67	230	*0.64*	*1.10*	<0.83	<0.18	<2.63	397.00	-	-	-	-	-	-	-	-	-	-	-	-
	12/8/06	-	-	-	440	450	-	<50	*150*	<2.5	-	-	-	-	<1.9	<0.74	*110*	*0.94*	64	<1.1	<0.86	-	<0.90	<1.3	210	<0.84	*1.00*	<1.7	<0.36	<5.3	386.00	-	-	-	-	-	-	-	-	-	-	-	-
	1/2/07	-	-	-	970	1,000	-	-	-	-	-	-	-	-	<1.9	<0.74	76	<0.72	53	<1.1	<0.86	-	<0.90	<1.3	200	<0.84	*1.10*	<1.7	<0.36	<5.3	330.10	-	-	-	-	-	6.98	1,211	-	-	-	-
	1/31/07	-	-	-	960	970	-	<50	*140*	<2.5	-	-	-	-	2.1	<0.37	*120*	1.10	80	<0.54	<0.43	-	<0.45	<0.67	250	*0.8*	*1.50*	<0.83	<0.18	<0.83	456.47	-	-	-	-	-	-	-	-	-	-	-	-
	2/26/07	-	-	38	900	970	-	<50	*150*	<2.5	-	-	-	-	2.6	<0.74	*150*	*1.40*	89	<1.1	<0.86	-	<0.9	<1.3	210	*0.99*	*1.30*	<1.7	0.41	<5.3	454.30	-	-	-	-	-	6.95	1,316	-	-	-	-
	3/29/07	-	-	-	1,100	1,100	-	<50	*150*	-	-	-	-	-	2.3	<0.37	*140*	*1.50*	100	<0.54	<0.43	-	<0.45	<0.67	260	*0.99*	*1.70*	<0.83	0.61	<2.63	507.00	-	-	-	-	-	6.99	1,257	-	-	-	-
	6/6/07	-	-	-	1,600	1,500	-	<50	*140*	-	-	-	-	-	1.3	<0.37	*89*	*0.85*	63	<0.54	<0.43	-	<0.45	<0.67	280	*0.84*	*1.40*	<0.83	*<0.18*	<2.63	436.00	-	-	-	-	-	-	-	-	-	-	-	-
	9/10/07	-	-	-	850	880	-	-	-	-	-	-	-	-	1.5	<0.37	*88*	<0.36	55	<0.54	<0.43	-	<0.45	<0.67	250	<0.42	*1.10*	<0.83	*<0.18*	<2.63	395.60	-	-	-	-	-	6.97	1,113	-	-	-	-
	4/30/08	-	-	-	1,180	-	-	-	-	-	-	-	-	-	<0.97	<0.37	21	<0.36	29	<0.54	<0.43	-	<0.45	<0.67	*194*	<0.42	*1.20*	<0.83	*<0.18*	<1.8	245.10	-	-	-	-	-	-	-	-	-	-	-	-
	4/17/09	-	-	-	1,060	-	-	-	-	-	-	-	-	-	<1.9	<2.6	34	<0.72	28	<1.1	<0.86	-	<0.9	<1.3	*167*	<0.84	<0.96	<1.7	<0.36	<3.6	228.80	-	-	-	-	-	-	-	-	-	-	-	-
	4/27/09	-	-	12.7	1,260	1,500	-	<4.0	*134*	<2.3	-	-	-	-	<1.9	<2.6	63.5	<0.72	41.5	<1.1	<0.86	-	<0.9	<1.3	*181*	<0.84	*1.10*	<1.7	<0.36	<1.7	287.1	-	-	<0.17	-	-	-	0.21	3.2	2.4
	5/21/09	-	-	9.4	1,270	1,900	-	*4.4*	*158*	<1.7	-	-	-	-	<1.9	*2.6*	*22.1*	<0.72	29	<1.1	<0.86	-	<0.9	<1.3	*172*	<0.84	<0.96	<1.7	<0.36	<3.6	223.1	-	-	<0.25	-	-	-	0.34	1.8	2.7
	6/18/09	-	-	8.6	1,310	1,200	-	4.0	*149*	<1.7	-	-	-	-	0.99	<1.3	57.6	*0.66*	36.9	<0.54	<0.43	-	<0.45	<0.67	*184*	*0.69*	*1.10*	<0.83	<0.18	<1.8	281.9	-	-	<0.25	-	-	-	*2.2*	4.8	2.3	1.7
	7/15/09	-	-	13.1	1,110	640	-	90.6	*199*	<1.7	-	-	-	-	<0.97	<1.3	20.7	<0.36	29.2	<0.54	<0.43	-	<0.45	<0.67	215	<0.42	*1.40*	<0.83	<0.18	<1.8	266.3	-	-	<0.25	-	-	-	16.2	2.8	4.2	5.4
MW-6R (cont.)	9/23/09 [7]	-	-	-	980	-	-	-	-	-	-	-	-	-	<5.0	<1.0	79	<2.5	40	<2.5	<5.0	-	<2.5	<2.5	*170*	<1.2	*1.4*	<1.0	<1.0	<2.5	290.40	-	-	-	-	-	7.1	925	-	-	-	-
	3/29/10 [J]	-	-	-	1,200	-	-	-	-	-	-	-	-	-	<2.0	<0.40	29	<1.0	12	<1.0	<2.0	-	<1.0	<1.0	*110*	<0.50	*0.72*	<0.40	<0.40	<1.0	151.72	-	-	-	-	-	7.2	1,075	-	-	-	-
	9/23/10 [7]	-	-	-	360	-	-	-	-	-	-	-	-	-	<1.0	<0.20	*2.1*	<0.50	5.2	<0.50	<1.0	-	<0.50	<0.50	*110*	<0.25	*0.93*	<0.20	<0.20	<0.50	118.23	-	-	-	-	-	*7.12*	900	-	-	-	-
	3/1 7/11 [RE]	-	-	-	<1.81	-	-	-	-	-	-	-	-	-	<1.0	<0.20	0.85	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	1.5	<0.25	<0.20	<0.20	<0.20	<0.50	2.35	-	-	-	-	-	8.4	280	-	-	-	-
	9/22/11 [RE]	-	-	-	<1.5	-	-	-	-	-	-	-	-	-	<1.0	<0.20	2.5	<0.50	2.2	<0.50	<1.0	-	<0.50	<0.50	*45*	<0.25	0.42	<0.20	<0.20	<0.50	50.12	-	-	-	-	-	7.32	750	-	-	-	-
	3/21/12 [RE]	-	-	-	180	-	-	-	-	-	-	-	-	-	<1.0	<0.20	3.3	<0.50	*3.4*	<0.50	<1.0	-	<0.50	<0.50	*58*	<0.25	*0.54*	<0.20	<0.20	<0.50	65.24	-	-	-	-	-	7.73	770	-	-	-	-
	9/13/12 [RE]	-	-	-	244	-	-	-	-	-	-	-	-	-	<0.97	<1.3	3.5	<0.36	*3.5*	<0.54	<0.43	-	<0.45	<0.67	*7.0.2*	<0.42	*0.82*	<0.83	<0.18	<2.63	78.02	-	-	-	-	-	7.73	770	-	-	-	-
	5/1/13 [PR]	-	-	-	371	-	-	-	-	-	-	-	-	-	<0.44	<0.69	3.8	<0.48	*3.4*	<0.50	<0.36	-	<0.47	<0.44	*5.8.9*	<0.39	*0.73*	<2.5	<0.18	<1.32	78.02	-	-	-	-	-	7.12	930	-	-	-	-
	9/26/13 [RE]	-	-	-	270	-	-	-	-	-	-	-	-	-	<0.44	<0.69	1.5	<0.48	*1.9*	<0.50	<0.36	-	<0.47	<0.44	*4.7.9*	<0.39	*0.68*	<0.50	<0.18	<1.0	51.98	-	-	-	-	-	7.12	930	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC) Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	6,000	NE			690	4,100	NE	4,200																		NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																									
	5/15/14	-	-	-	28.5	-	-	-	-	-	-	-	-	-	<0.37	<2.5	7.9	<0.17	3.9	<0.50	<0.23	-	<0.50	<0.50	32.1	<0.16	0.49 [A1]	<0.50	<0.18	<1.5	43.90	-	-	-	-	-	5.97	472	-	-	-	-
	9/19/14	-	-	-	281	-	-	-	-	-	-	-	-	-	<0.37	<2.5	11.0	<0.17	7.9	<0.50	<0.23	-	<0.50	<0.50	5.4.4	<0.16	0.82	<0.50	<0.18	<1.5	74.12	-	-	-	-	-	5.97	472	-	-	-	-
	4/16/15	-	-	-	441	-	-	-	-	-	-	-	-	-	<0.37	<2.5	14.2	<0.17	8.5	<0.50	<0.23	-	<0.50	<0.50	5.7.6	<0.20	0.74	<0.50	<0.18	<0.50	81.04	-	-	-	-	-	6.38	3,130	-	-	-	-
MW-7	2/7/97	-	-	-	253,000	-	-	-	-	-	-	-	-	-	<100	-	1,000	-	5,200	-	-	-	-	-	73,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	352,000	-	-	-	-	-	-	-	-	-	44	-	1,570	-	9,640	-	-	-	-	-	168,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/97	-	-	-	30,400	40,500	-	-	-	-	-	-	-	-	<2	<2	353	<2	512	<2	<2	<10	<2	< 2.0	5,230	15	23	<2	3	<2.0	6,136	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	167,000	96,000	-	-	-	-	-	-	-	-	51	4	600	<0.5	2,050	3	19	<5.0	<0.5	<11.0	16,600	29	39	<1.0	14	<13	19,409	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	1,320	1,280	-	-	-	-	-	-	-	-	<1.0	<0.5	71.2	<0.5	113	<1.0	<0.5	<5.0	<0.5	< 1.0	512	<0.5	2.2	<1.0	<0.2	<1.0	698	-	-	-	-	-	-	-	-	-	-	-
	8/19/98	-	-	-	93,500	151,000	-	-	-	-	-	-	-	-	26	5	500	22	15,000	<1.0	<0.5	<5.0	<0.5	< 1.0	3,750,000	46	17	<1.0	4	<1.0	3,765,620	-	-	-	-	-	-	-	-	-	-	-
	1/18/99	-	-	-	150,000	140,000	-	-	-	-	-	-	-	-	<20	<20	470	<20	940	<20	220	<20	<20	<80	8,600	29	<20	<8.0	<20	<20	10,259	-	-	-	-	-	-	-	-	-	-	-
	2/17/99	-	-	100	170,000	180,000	-	<24	-	-	-	-	-	-	<250	<250	880	<250	4,700	<250	<250	<250	<250	<100	41,000	<250	<250	<100	<250	<250	46,580	-	-	-	-	-	-	-	-	-	-	-
	1/10/00	-	-	-	140,000	160,000	-	-	-	-	-	-	-	-	<120	<120	900	<120	6,000	<120	<120	<120	<120	<50	40,000	160	<120	<50	<120	<120	47,060	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	380	650	-	-	-	-	-	-	-	-	<2.5	<2.5	35	<2.5	59	<2.5	11	<2.5	<2.5	< 1.0	510	<2.5	<2.5	<1	<2.5	<2.5	615	-	-	-	-	-	-	-	-	-	-	-
	9/19/01	-	-	28	8,100	20,000	-	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	80	32,000	34,000	-	<42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/15/01	-	-	84	56,000	54,000	-	<42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/29/01	-	-	77	69,000	57,000	-	8,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	100	64,000	59,000	-	61,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	37	20,000	16,000	-	24,000	-	-	-	-	-	-	31	<38	300	<23	780	<22	<42	-	<28	<23	6,400	<36	<44	<26	<9	<97	7,511	-	-	-	-	-	7.00	-	-	-	-	-
	12/30/02	-	-	-	69,000	58,000	-	6,300	-	-	-	-	-	-	<84	<45	790	<55	2,100	<53	<47	-	<63	<84	17,000	<50	41	<64	<11	<183	19,931	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	19	4,000	4,000	-	3,200	-	-	-	-	-	-	<48	<18	200	<18	410	<27	<22	-	<22	<34	4,700	<21	<24	<42	<9.0	<132	5,310	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	64	51,000	48,000	-	3,300	-	-	-	-	-	-	<240	<92	710	<90	2,700	<140	<110	-	<110	<170	27,000	<100	<120	<210	<45	<660	30,410	-	-	-	-	-	7.00	-	-	-	-	-
MW-7R	12/11/03	-	-	240	150,000	150,000	-	27,000	-	-	-	-	-	-	<1900	<740	3,000	<720	12,000	<1100	<860	-	<900	<1300	160,000	<840	<960	<1700	<360	<5300	175,000	-	-	-	-	-	7.00	-	-	-	-	-
	4/20/04	-	-	170	130,000	140,000	-	<64	-	-	-	-	-	-	<970	<370	2,900	<360	5,200	<540	<430	-	<450	<670	74,000	<420	<480	<830	<180	<2630	82,100	-	-	-	-	-	-	-	-	-	-	-
	6/28/04	-	-	20	30,000	87,000	-	2,600	-	-	-	-	-	-	<480	<180	2,000	<180	4,800	<270	<220	-	<220	<340	49,000	<210	<240	<420	<90	<1320	55,800	-	-	-	-	-	-	-	-	-	-	-
	06/28/04 [2]	-	-	100	88,000	91,000	-	200	-	-	-	-	-	-	<480	<180	2,200	<180	4,600	<270	<220	-	<220	<340	49,000	<460	<240	<420	<90	<1320	55,800	-	-	-	-	-	-	-	-	-	-	-
	9/28/04	-	-	150	130,000	120,000	-	<920	-	-	-	-	-	-	<970	<370	2,300	<360	5,700	<540	<430	-	<450	<670	89,000	<420	<480	<830	<180	<2630	97,000	-	-	-	-	-	-	-	-	-	-	-
	09/28/04 [2]	-	-	160	130,000	130,000	-	<920	-	-	-	-	-	-	<970	<370	2,500	<360	8,000	<540	<430	-	<450	<670	120,000	<420	<480	<830	<180	<2630	130,900	-	-	-	-	-	-	-	-	-	-	-
	12/21/04	-	-	130	120,000	130,000	-	<17	-	-	-	-	-	-	<480	<180	1,700	<180	5,400	<270	<220	-	<220	<340	59,000	<210	<240	<420	<90	<1320	66,100	-	-	-	-	-	-	-	-	-	-	-
	12/21/04 [3]	-	-	130	120,000	130,000	-	<17	-	-	-	-	-	-	<480	<180	1,600	<180	4,500	<270	<220	-	<220	<340	50,000	<210	<240	<420	<90	<1320	56,100	-	-	-	-	-	-	-	-	-	-	-
	12/21/05 UF	-	-	-	130,000	120,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/1/05	-	-	170	150,000	150,000	-	18	-	-	-	-	-	-	<970	<370	2,800	<360	6,000	<540	<430	-	<450	<670	85,000	<420	<480	<830	<180	<2630	93,800	-	-	-	-	-	7.07	-	-	-	-	-
	6/28/05	-	-	-	150,000	140,000	-	-	-	-	-	-	-	-	<480	<180	2,000	<180	5,700	<270	<220	-	<220	<340	79,000	<210	<240	<420	<90	<1320	86,700	-	-	-	-	-	6.71	-	-	-	-	-
	9/14/05	-	-	-	140,000	150,000	-	-	-	-	-	-	-	-	<610	<230	2,600	<220	5,100	<340	<270	-	<280	<420	63,000	<260	<300	<520	<110	<1620	70,700	-	-	-	-	-	6.61	-	-	-	-	-
	12/14/05	-	-	-	130,000	130,000	-	-	-	-	-	-	-	-	<480	<180	2,300	<180	4,600	<270	<220	-	<220	<340	56,000	<210	<240	<420	<90	<1,320	58,900	-	-	-	-	-	6.51	-	-	-	-	-
	12/14/05 [3]	-	-	-	140,000	120,000	-	-	-	-	-	-	-	-	<480	<180	2,400	<280	4,900	<270	<220	-	<220	<340	61,000	<210	<240	<420	<90	<1,320	68,300	-	-	-	-	-	6.50	-	-	-	-	-
	3/10/06	-	-	-	130,000	140,000	-	-	-	-	-	-	-	-	<480	<180	2,700	<180	5,200	<270	<220	-	<220	<340	71,000	<210	<240	<420	<90	<1320	78,900	-	-	-	-	-	6.98	2,137	-	-	-	-
	3/10/06 [2]	-	-	-	120,000	140,000	-	-	-	-	-	-	-	-	<480	<180	2,600	<180	4,700	<270	<220	-	<220	<340	64,000	<210	<240	<420	<90	<1320	71,300	-	-	-	-	-	6.99	2,140	-	-	-	-
	6/14/06	-	-	-	120,000	140,000	-	-	-	-	-	-	-	-	<240	<92	2,100	<90	4,400	<140	<110	-	<110	<170	46,000	<100	<120	<210	<45	<660	52,500	-	-	-	-	-	6.92	1,979	-	-	-	-
	6/14/06 [2]	-	-	-	120,000	140,000	-	-	-	-	-	-	-	-	<190	<74	2,100	<72	4,000	<110	<86	-	<90	<130	41,000	<84	<96	<170	<36	<530	47,100	-	-	-	-	-	6.92	1,981	-	-	-	-
	9/13/06	-	-	-	160,000	50,000	-	-	-	-	-	-	-	-	<480	<180	2,700	<180	6,500	<270	<220	-	<220	<340	73,000	<210	<240	<420	<90	<1320	82,200	-	-	-	-	-	7.16	1,538	-	-	-	-
	09/13/06 [3]	-	-	-	170,000	45,000	-	-	-	-	-	-	-	-	<480	<180	2,700	<180	6,600	<270	<220	-	<220	<340	73,000	<210	<240	<420	<90	<1320	82,300	-	-	-	-	-	7.18	1,544	-	-	-	-
	10/20/06	-	-	150	120,000	140,000	-	<50	-	-	-	-	-	-	<24	<9.2	3,200	18	380	<14	16	-	<11	<17	190	<10	<12	<21	<4.5	<66	3,804	-	-	-	-	-	7.17	1,780	-	-	-	-
	10/20/06 [2]	-	-	180	130,000	170,000	-	<50	<1.2	<2.5	-	-	-	-	250	<92	2,400	<90	4,200	<140	<110	-	<110	<170	34,000	<100	<120	<210	<45	<660	40,950	-	-	-	-	-	-	-	-	-	-	-
	11/20/06	-	-	160	140,000	190,000	-	<50	220	-	-	-	-	-	<240	<92	2,400	<90	4,300	<140	<110	-	<110	<170	45,000	<100	<120	<210	<45	<660	51,700	-	-	-	-	-	7.07	1,642	-	-	-	-
	11/20/06 [3]	-	-	160	160,000	180,000	-	<50	220	<2.5	-	-	-	-	<390	<150	2,300	<140	4,200	<220	380	-	<180	<270	42,000	<170	<190	<330	<72	<1050	48,800	-	-	-	-	-	7.02	1,637	-	-	-	-
	12/8/06	-	-	-	140,000	160,000	-	<50	11	-	-	-	-	-	<480	<180	2,900	<180	5,100	<270	<220	-	<220	<340	62,000	<210	<240	<420	<90	<1320	70,000	-	-	-	-	-	7.20	2,106	-	-	-	-
	12/08/06 [3]	-	-	-	150,000	160,000	-	<50	11	<2.5	-	-	-	-	<480	<180	2,100	<180	4,100	<270	<220	-	<220	<340	49,000	<210	<240	<420	<90	<1320	55,200	-	-	-	-	-	-	-	-	-	-	-
	1/2/07	-	-	-	140,000	150,000	-	-	-	-	-	-	-	-	<480	<180	2,600	<180	5,400	<270	<220	-	<220	<340	60,000	<210	<240	<420	<90	<1320	68,000	-	-	-	-	-	6.46	2,078	-	-	-	-
	1/20/07 [2]	-	-	-	140,000	150,000	-	-	-	-	-	-	-	-	<480	<180	2,500	<180	5,300	<270	<220	-	<220	<340	58,000	<210	<240	<420	<90	<1320	65,800	-	-	-	-	-	6.45	2,081	-	-	-	-
	1/30/07	-	-	-	120,000	140,000	-	<50	220	<2.5	-	-	-	-	<390	<150	4,700	<140	7,500	<220	<170	-	<180	<270	90,000	<170	<190	<330	<72	<1050	102,200	-	-	-	-	-	-	-	-	-	-	-
	1/30/07 [2]	-	-	-	130,000	150,000	-	<50	220	<2.5	-	-	-	-	<92	<60	2,500	<90	3,900	<140	<110	-	<110	<170	33,000	<100	<120	<210	<45	<450	39,400	-	-	-	-	-	-	-	-	-	-	-
	2/26/07	-	-	130	110,000	140,000	-	<50	200	<2.5	-	-	-	-	<480	<180	3,100	<180	4,400	<270	<220	-	<220	<340	39,000	<210	<240	<420	<90	<1320	46,500	-	-	-	-	-	6.85	2,081	-	-	-	-
	2/26/07 [2]	-	-	140	110,000	140,000	-	<50	200	<2.5	-	-	-	-	<480	<180	3,500	<180	5,300	<270	<220	-	<220	<340	50,000	<210	<240	<420	<90	<1320	58,800	-	-	-	-	-	7.10	1,795	-	-	-	-
	3/2/07	-	-	-	140,000	150,000	-	<50	-	-	-	-	-	-	<480	<180	2,700	<180	5,300	<270	<220	-	<220	<340	64,000	<210	<240	<420	<90	<1320	72,000	-	-	-	-	-	7.10	1,775	-	-	-	-
	3/2/07 [2]	-	-	-	140,000	150,000	-	<50	-	-	-	-	-	-	<480	<180	2,600	<180	5,300	<270	<220	-	<220	<340	64,000	<210	<240	<420	<90	<1320	71,900	-	-	-	-	-	-	-	-	-	-	-
	6/6/07	-	-	-	120,000	140,000	-	<50	-	-	-	-	-	-	260	<74	2,200	<72	3,300	<110	<86	-	<90	<130	29,000	<84	<96	<170	<36	<530	34,760	-	-	-	-	-	-	-	-	-	-	-
	6/6/07 [2]	-	-	-	130,000	130,000	-	<50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/11/07	-	-	-	170,000	280	-	-	-	-	-	-	-	-	<240	<92	2,200	<90	4,400	<140	<110	-	<110	<170	51,000	<100	<120	<210	<45	<660	57,600	-	-	-	-	-	6.91	1,733	-	-	-	-
	12/21/07	-	-	140	140,000	140,000	-	<50	240	-	-	-	-	-	<240	<92	2,200	<90	4,400	<140	<110	-	<110	<170	51,000	<100	<120	<210	<45	<660	59,800	-	-	-	-	<0.17	-	6.91	1,733	32	< 0.085	6.70	6.00
	5/1/08	-	-	-	93,300	-	-	-	-	-	-	-	-	-	<388	<148	1,700	<143	2,900	<216	<172	-	<180	<268	32,600	<168	<192	<332	<72	<720	37,260	-	-	-	-	-	-	-	-	-	-	-
	5/1/08 [2]	-	-	-	95,600	-	-	-	-	-	-	-	-	-	<388	<148	2,270	<144	4,400	<216	<172	-	<180	<268	47,700	<168	<192	<332	<72	<720	54,370	-	-	-	-	-	-	-	-	-	-	-
	9/26/08	-	-	-	128,000	-	-	-	-	-	-	-	-	-	<242	<325	2,070	<90	2,830	<135	<108	-	<112	<168	27,400	<105	<120	<208	<45	<658	32,200	-	-	-	-	-	6.96	1,924	-	-	-	-
	12/8/08	-	-	139	106,000	127	-	132.0	-	181.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 68	-	-	-	36	< 0.085	-	7.50
	12/12/08 [3]	-	-	152	111,000	140	-	<7.2	-	192.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 68	-	-	-	30	< 0.085	-	7.50
	4/8/09	-	-	116	89,800	110,000	-	<6.9	143	<2.3	-	-	-	-	<242	<325	2,190	<90	3,120	<135	<108	-	<112	<168	36,100	<105	<120	<208	<45	<450	41,410	-	-	-	-	-	<0.68	-	-	-	-	-
	4/8/09 [3]	-	-	115	86,900	104,000	-	<6.9	142	-	-	-	-	-	<242	<325	2,210	<90	3,230	<135	<108	-	<112	<168	36,500	<105	<120	<208	<45	<450	41,940	-	-	-	-	-	<0.68	-	18.6	<4.2	4.9	4.5
	4/17/09	-	-	-	3,460	-	-	-	-	-	-	-	-	-	<242	<325	1,720	<90	<142	<135	<108	-	<112	<168	19,000	<105	<120	<208	<45	<450	20,720	-	-	-	-	-	-	-	-	-	-	-
	04/17/09 [3]	-	-	-	3,750	-	-	-	-	-	-	-	-	-	<242	<325	1,850	<90	<142	<135	<108	-	<112	<168	23,700	<105	<120	<208	<45	<450	25,550	-	-	-	-	-	-	-	-	-	-	-
	4/27/09	-	-	76.7	159	<17	-	114,000	2,060	7.8	-	-	-	-	<242	<325	2,300	<90	168	<135	<108	-	<112	<168	27,600	<105	<120	<208	<45	<450	30,068	-	-	-	-	<0.17	-	-	-	4,500	<0.085	54.2	24.5
	4/27/09 [2]	-	-	83.3	196	<17	-	144,000	2,260	7.4	-	-	-	-	<242	<325	2,020	<90	176	<135	<108	-	<112	<168	24,500	<105	<120	<208	<45	<450	26,696	-	-	-	-	<0.17	-	-	-	5,540	<0.085	24.4	22.1
	5/21/09	-	-	83.6	964	<17	-	378,000	1,610	4.8	-	-	-	-	<242	<325	1,330	<90	<142	<135	<108	-	<112	<168	16,400	<105	<120	<208	<45	<450	17,730	-	-	-	-	<0.25	-	-	-	12,200	0.160	13.0	12.9
	5/21/09 [2]	-	-	80.8	580	<17	-	278,000	1,550	4.8	-	-	-	-	<242	<325	1,240	<90	<142	<135	<108	-	<112	<168	15,600	<105	<120	<208	<45	<450	16,840	-	-	-	-	<0.25	-	-	-	10,600	0.160	13.9	13.2
	6/18/09	-	-	63.8	300	<20	-	66,000	1,100	1.8	-	-	-	-	<194	<260	1,290	<72	<114	<108	<86	-	<90	<134	12,600	<84	<96	<166	<36	<360	13,890	-	-	-	-	<0.25	-	-	-	4,090	<0.25	7.2	4.8
	6/18/09 [2]	-	-	64.4	504	<20	-	77,200	1,120	<1.7	-	-	-	-	<194	<260	1,500	<72	<114	<108	<86	-	<90	<134	18,900	<84	<96	<166	<36	<360	20,400	-	-	-	-	<0.25	-	-	-	4,520	<0.25	4.5	4.4
	7/15/09	-	-	77.1	13.4	<3.9	-	18,000	900	<1.7	-	-	-	-	<194	<260	1,310	<72	<114	<108	<86	-	<90	<134	20,000	<84	<96	<166	<36	<360	21,310	-	-	-	-	<0.25	-	-	-	2,560	<0.25	4.5	4.4
	7/15/09 [2]	-	-	77.2	11.7	<3.9	-	16,000	897	<1.7	-	-	-	-	<194	<260	1,200	<72	<114	<108	<86	-	<90	<134	17,300	<84	<96	<166	<36	<360	18,500	-	-	-	-	<0.25	-	-	-	2,510	<0.25	8.3	7.9
	9/23/09	-	-	-	11	-	-	-	-	-	-	-	-	-	<400	<80	2,100	<200	<200	<200	<400	-	<200	<200	28,000	<100	<80	<80	<80	<200	30,100	-	-	-	-	-	6.90	1,731	-	-	-	-
	3/29/10 [2]	-	-	-	1,900	-	-	-	-	-	-	-	-	-	<250	<50	1,200	<120	220	<120	<250	-	<120	<120	13,000	<62	<50	<50	<50	<120	14,420	-	-	-	-	-	-	-	-	-	-	-
	3/29/10 [3]	-	-	-	-	-	-	-	-	-	-	-	-	-	<250	<50	1,300	<120	230	<120	<250	-	<120	<120	14,000	<62	<50	<50	<50	<120	15,530	-	-	-	-	-	7.10	1,510	-	-	-	-
	9/2/10 [Y]	-	-	-	480	-	-	-	-	-	-	-	-	-	160	<32	1,200	<80	970	<80	<160	-	<80	<80	11,000	<40	40	<32	<32	<80	12,970	-	-	-	-	-	6.98	1,630	-	-	-	-
	3/17/11	-	-	-	6,380	-	-	-	-	-	-	-	-	-	<160	<32	1,200	<80	680	<80	<160	-	<80	<80	12,000	<40	38	<32	<32	<80	13,918	-	-	-	-	-	7.63	1,570	-	-	-	-
	9/22/11 [DO]	-	-	-	10,000	-	-	-	-	-	-	-	-	-	140	<20	1,000	<50	830	<50	<100	-	<50	<50	7,900	<25	42	<20	<20	<50	9,912	-	-	-	-	-	-	-	-	-	-	-
MW-7R (cont.)	9/22/11 [D,RM]	-	-	-	-	-	-	-	-	-	-	-	-	-	130	<20	1,000	<50	800	<50	<100	-	<50	<50	7,800	<25	38	<20	<20	<50	9,768	-	-	-	-	-	7.25	1,320	-	-	-	-
	3/21/12 [AB]	-	-	-	4,500	-	-	-	-	-	-	-	-	-	19	0.47	440	2.6	410	<0.50	1.6	-	<0.50	<0.50	5,100	3.9	8.5	<0.20	0.52	<0.50	5,987	-	-	-	-	-	7.84	540	-	-	-	-
	9/13/12 [AB]	-	-	-	32,700	-	-	-	-	-	-	-	-	-	<194	<260	1,520	<72.0	1,900	<108	<86.0	-	<90.0	<134	18,400	<84.0	<96	<166	<36	<526	21,820	-	-	-	-	-	7.84	540	-	-	-	-
	5/8,13 [AB]	-	-	-	24,100	-	-	-	-	-	-	-	-	-	<88.7	<138	1,300	<36.3	1,560	<100	<71.7	-	<94.4	<87.7	16,200	<78.0	<85.5	<100	<37.0	<263	19,060	-	-	-	-	-	7.27	301	-	-	-	-
	9/25/13 [AB]	-	-	-	14,700	-	-	-	-	-	-	-	-	-	112	<34.4	1,040	<23.8	1,090	<25.0	<17.9	-	<23.6	<21.6	7,710	<19.5	37.3	<25.0	14.6	<65.9	10,004	-	-	-	-	-	7.27	301	-	-	-	-
	5/15/14	-	-	-	3,810	-	-	-	-	-	-	-	-	-	33.4 [AV]	<125	300	<8.4	562	<25.0	<11.6	-	<25.0	<25.0	6,280	<7.8	19.9 [AV]	<25.0	<8.8	<75.0	7,142	-	-	-	-	-	6.65	312	-	-	-	-
	9/18/14	-	-	-	36,300	-	-	-	-	-	-	-	-	-	144	<125	1,320	<8.4	2,200	<25.0	64.6	-	<25.0	<25.0	14,100	<7.8	48.2	<25.0	9.6	<75.0	17,886	-	-	-	-	-	6.65	312	-	-	-	-
	4/16/15	-	-	-	6,780	-	-	-	-	-	-	-	-	-	19.3	<25.0	234	<1.7	267	<5.0	<2.3	-	<5.0	<5.0	1,280	2.7	10.0	<5.0	<1.8	<15.0	1,813	-	-	-	-	-	6.63	2,520	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200																		NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																									
MW-8	11/21/97	-	-	-	<5.0	<10	-	-							<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2.0	0	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	18	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<1.0	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	1/14/99	-	-	-	4	<4.2	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	6	<4.2	-	-	-	-	-	-	-	-	<1.2	<0.18	<0.25	<0.20	<0.73	<0.38	<0.87	<0.14	<0.63	<0.39	<0.28	<0.15	<0.49	<0.33	<0.46	<1.1	0	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	690	8	<4.2	-	250	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	9/6/01	-	-	420	12	10	-	8,200	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.52	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	1	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	310	6	6	-	18,000	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	290	<0.52	<4.2	-	79,000	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.48	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	590	17	<20	-	13,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/16/03	-	-	810	19	4	-	9,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	550	30	<2.6	-	20,000	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-	-
	12/15/03	-	-	710	59	<2.6	-	40,000	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-	-
	4/20/04	-	-	450	3	<2.7	-	<32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/30/04	-	-	440	3	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/14/04	-	-	380	3	<2.7	-	71	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.56	<0.75	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
	12/28/04	-	-	430	2	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/05	-	-	520	7	<2.7	-	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.22	-	-	-	-	-
MW-9	11/21/97	-	-	-	<5.0	<10	-	-							<2	<2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2	<2	<2.0	0	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<50.0	<5.0	<10	<5.0	<5.0	<5.0	<10.0	<2.0	<10	0	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	8/19/98	-	-	-	10	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	1/14/99	-	-	-	5	<4.2	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	3	<4.2	-	-	-	-	-	-	-	-	<1.2	<0.18	<0.25	<0.20	<0.73	<0.38	<0.87	<0.14	<0.63	<0.39	<0.28	<0.15	<0.49	<0.33	<0.46	<1.1	0	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	2	<4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	330	10	<20	-	7,900	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	250	8	<2.6	-	3,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	310	17	<2.6	-	12,000	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-	-
MW-9R	12/11/03	-	-	320	3	<2.6	-	650	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-	-
	4/28/04	-	-	320	3	<2.7	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/29/04	-	-	260	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/5/04	-	-	240	<0.52	<2.7	-	18	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
	4/18/05	-	-	14	<0.65	<5	-	<18	-	-	-	-	-	-	<0.97	<0.37	0.98	<0.36	<0.57	<0.54	0.53	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	1.51	-	-	-	-	-	-	-	-	-	-	-
	9/14/05	-	-	-	2	<5.0	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	6.96	-	-	-	-	-
	9/13/06	-	-	-	<1.9	<6.8	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.97	<0.18	<2.63	0	-	-	-	-	-	7.45	-	-	-	-	-
	9/10/07	-	-	-	1	<3.4	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	6.99	1,581	-	-	-	-
MW-10	1/14/99	-	-	-	2,100	2,600	-	-	-	-	-	-	-	-	<0.25	<0.25	10	<0.25	3.3	<0.25	1.8	<0.25	<0.25	<0.1	44	<0.25	<0.25	<0.10	<0.25	<0.72	59	-	-	-	-	-	-	-	-	-	-	-
	2/17/99	-	-	-	26,000	29,000	-	-	-	-	-	-	-	-	<1.2	<1.2	9.5	<1.2	<1.2	<1.2	<12	<1.2	<1.2	<0.5	36	<1.2	<1.2	<0.50	<1.2	<1.2	46	-	-	-	-	-	-	-	-	-	-	-
	2/17/99	-	-	-	26,000	25,000	-	-	-	-	-	-	-	-	<1.2	<1.2	9.2	<1.2	<1.2	<1.2	3.6	<1.2	<1.2	<0.5	37	<1.2	<1.2	<0.50	<1.2	<1.2	50	-	-	-	-	-	-	-	-	-	-	-
	3/22/00	-	-	-	14,000	15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	12,000	13,000	-	-	-	-	-	-	-	-	0.93	<0.25	8.6	<0.25	3.1	<0.25	0.82	<0.25	<0.25	<0.1	39	<0.25	<0.25	<0.1	<0.25	<0.25	52	-	-	-	-	-	-	-	-	-	-	-
	9/20/01	-	-	34	5,300	6,400	-	2,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	42	7,400	10,000	-	580	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/15/01	-	-	30	8,000	9,600	-	<42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	29	9,400	12,000	-	77,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	33	11,000	11,000	-	200,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	28	8,800	5,500	-	150,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/30/02	-	-	-	7,500	3,900	-	180,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-
	6/17/03	-	-	31	4,900	4,400	-	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-
	9/24/03	-	-	24	2,700	2,600	-	60,000	-	-	-	-	-	-	<0.97	<0.37	7.0	<0.36	2.7	<0.54	<0.43	-	<0.45	<0.67	33	<0.42	<0.48	<0.83	<0.18	<2.63	43	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03	-	-	25	3,800	3,100	-	100,000	-	-	-	-	-	-	<0.97	<0.37	6.6	<0.36	3.1	<0.54	<0.43	-	<0.45	<0.67	42	<0.42	<0.48	<0.83	<0.18	<2.63	52	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03[2]	-	-	24	3,900	3,200	-	120,000	-	-	-	-	-	-	<0.97	<0.37	6.8	<0.36	3.1	<0.54	<0.43	-	<0.45	<0.67	43	<0.42	<0.48	<0.83	<0.18	<2.63	53	-	-	-	-	-	-	-	-	-	-	-
	4/15/04	-	-	25	2,400	2,600	-	430	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/29/04	-	-	34	2,100	2,000	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/29/04[2]	-	-	32	2,200	2,100	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/7/04	-	-	24	1,300	1,400	-	<17	-	-	-	-	-	-	<0.97	<0.37	4.6	<0.36	2.0	<0.54	<0.43	-	<0.45	<0.67	29	<0.42	<0.48	<0.83	<0.18	<2.63	35.6	-	-	-	-	-	-	-	-	-	-	-
	10/07/04[2]	-	-	23	1,300	1,400	-	<17	-	-	-	-	-	-	<0.97	<0.37	4.1	<0.36	1.6	<0.54	<0.43	-	<0.45	<0.67	26	<0.42	<0.48	<0.83	<0.18	<2.63	31.7	-	-	-	-	-	-	-	-	-	-	-
	12/30/04	-	-	52	1,300	1,300	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/30/04[2]	-	-	51	1,300	1,300	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/19/05	-	-	22	1,400	1,300	-	22	-	-	-	-	-	-	<0.97	<0.37	4.6	<0.36	1.7	<0.54	0.53	-	<0.45	<0.67	23	<0.42	<0.48	<0.83	<0.18	<2.63	29.3	-	-	-	-	-	7.27	-	-	-	-	-
	6/28/05	-	-	-	1,200	1,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.04	-	-	-	-	-
	9/14/05	-	-	-	790	810	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.84	-	-	-	-	-
	12/14/05	-	-	-	1,000	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.78	-	-	-	-	-
	3/10/06	-	-	-	650	770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.30	-	-	-	-	-
	6/14/06	-	-	-	510	630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/12/06	-	-	-	380	420	-	-	-	-	-	-	-	-	<0.97	<0.37	3.8	<0.36	0.85	<0.54	<0.43	-	<0.45	<0.67	19	<0.42	<0.48	<0.83	<0.18	<2.63	23.65	-	-	-	-	-	7.10	-	-	-	-	-
	1/2/07	-	-	-	470	470	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	3/29/07	-	-	-	420	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.14	-	-	-	-	-
	6/6/07	-	-	-	360	380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/10/07	-	-	-	240	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.78	1,602	-	-	-	-
	4/30/08	-	-	-	297	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/23/08	-	-	-	109	-	-	-	-	-	-	-	-	-	<0.97	<1.3	2.1	<0.36	<.57	<0.54	<0.43	-	<0.45	<0.67	7.9	<0.42	<0.48	<0.83	<0.18	<2.63	10	-	-	-	-	-	6.99	1,791	-	-	-	-
	4/17/09	-	-	-	152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/23/09	-	-	-	160	-	-	-	-	-	-	-	-	-	<1.0	<0.20	1.8	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	5.1	<0.25	<0.20	<0.20	<0.20	<0.50	6.9	-	-	-	-	-	-	-	-	-	-	-
	9/23/09[5]	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	1.8	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	4.3	<0.25	<0.20	<0.20	<0.20	<0.50	6.1	-	-	-	-	-	6.8	1,250	-	-	-	-
	3/29/10	-	-	-	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	1,050	-	-	-	-
MW-10 (cont.)	9/23/10	-	-	-	130	-	-	-	-	-	-	-	-	-	<1.0	<0.20	2.4	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	9.3	<0.25	<0.20	<0.20	<0.20	<0.50	11.7	-	-	-	-	-	7.22	1,650	-	-	-	-
	3/17/11	-	-	-	97.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	1,270	-	-	-	-
	9/22/11	-	-	-	43	-	-	-	-	-	-	-	-	-	<1.0	<0.20	2.3	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	8.6	<0.25	<0.20	<0.20	<0.20	<0.50	10.9	-	-	-	-	-	7.09	700	-	-	-	-
	3/21/12	-	-	-	74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.47	1,470	-	-	-	-
	9/13/12	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	<0.97	<1.3	2	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	5.1	<0.42	<0.48	<0.83	<0.18	<2.63	7.1	-	-	-	-	-	7.47	1,470	-	-	-	-
	4/30/13	-	-	-	7.8	-	-	-	-	-	-	-	-	-	<0.97	<1.3	2	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	5.1	<0.42	<0.48	<0.83	<0.18	<2.63	7.1	-	-	-	-	-	7.34	1,820	-	-	-	-
	9/25/13	-	-	-	24.3	-	-	-	-	-	-	-	-	-	<.44	<0.69	2.3	<0.48	<.043	<0.54	<0.36	-	<0.47	<0.44	5.7	<0.39	<0.36	<0.50	<0.18	<1.32	8.0	-	-	-	-	-	7.34	1,820	-	-	-	-
	5/14/14	-	-	-	56.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.55	1,150	-	-	-	-
	9/19/14	-	-	-	34.8	-	-	-	-	-	-	-	-	-	<0.37	<2.5	2.6	<0.17	<0.41	<0.50	<0.23	-	<0.50	<0.50	5.6	<0.16	<0.33	<0.50	<0.18	<1.50	8.2	-	-	-	-	-	5.55	1,150	-	-	-	-
	4/15/15	-	-	-	62.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.74	1,640	-	-	-	-
MW-11	1/14/99	-	-	-	3.4	<4.2	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0.23	<0.25	<2.1	0	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	3.7	<4.2	-	-	-	-	-	-	-	-	<1.2	<0.18	<0.25	<0.20	<0.73	<0.38	<0.87	<0.14	<0.63	<0.39	<0.28	<0.15	<0.49	<0.33	<0.46	<1.1	0	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	9.8	<4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	490	62	<20	-	58,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/16/03	-	-	690	62	<2.6	-	50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	790	81	9	-	69,000	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,000	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200	Total Toxic Organics (TTO) < 2,130																	NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																								
	12/15/03	-	-	850	54	<2.6	-	43,000	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-	-
	12/15/03D	-	-	690	59	<2.6	-	46,000	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
	4/20/04	-	-	260	1.1	<2.7	-	<32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/30/04	-	-	230	2.5	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/04	-	-	320	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/05	-	-	460	2	<2.7	–	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.31	1,510	-	-	-	-
MW-12	1/10/00	-	-	-	24,000	27,000	-	-	-	-	-	-	-	-	<0.25	<0.25	1.4	<0.25	<0.25	<0.25	0.88	<0.25	<0.25	<0.1	3.3	<0.25	<0.25	<0.1	<0.25	<0.25	6	-	-	-	-	-	-	-	-	-	-	-
	1/10/00	-	-	-	27,000	40,000	-	-	-	-	-	-	-	-	<0.25	<0.25	1.6	<0.25	<0.25	<0.25	0.88	<0.25	<0.25	<0.1	3.6	<0.25	<0.25	<0.1	<0.25	<0.25	6	-	-	-	-	-	-	-	-	-	-	-
	2/17/00	-	-	-	48,000	42,000	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	1.5	<0.25	<0.25	<0.25	<0.25	<0.1	3.9	<0.25	<0.25	<0.1	<0.25	<0.25	5	-	-	-	-	-	-	-	-	-	-	-
	6/29/01	-	-	28	35,000	40,000	-	1,500	-	-	-	-	-	-	<1	<1	<1	<1	<1	<1	5.3	<1	<1	<0.4	1.9	<1	<1	<0.4	<1	<1.0	7	-	-	-	-	-	-	-	-	-	-	-
	9/20/01	-	-	28	35,000	37,000	-	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	36	31,000	31,000	-	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/15/01	-	-	28	34,000	32,000	-	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	30	32,000	28,000	-	62,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	34	34,000	29,000	-	92,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	26	21,000	15,000	-	61,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	12/30/02	-	-	-	20,000	21,000	-	120,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	39	16,000	19,000	-	12,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	43	7,500	7,000	-	37,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03	-	-	39	6,600	7,400	-	38,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/15/04	-	-	47	3,100	3,200	-	560	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	48	2,400	2,500	-	190	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/11/04	-	-	46	4,300	4,100	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04	-	-	55	1,400	1,400	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04	-	-	54	1,200	1,400	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	50	1,400	2,300	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.79	-	-	-	-	-
	6/28/05	-	-	-	<0.52	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.22	-	-	-	-	-
	9/14/05	-	-	-	280	280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.69	-	-	-	-	-
	12/14/05	-	-	-	110	86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.91	-	-	-	-	-
	3/10/06	-	-	-	480	570	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.03	-	-	-	-	-
	6/14/06	-	-	-	190	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.67	-	-	-	-	-
	9/12/06	-	-	-	240	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80	-	-	-	-	-
	1/2/07	-	-	-	43	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.66	-	-	-	-	-
	3/29/07	-	-	-	74	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.79	-	-	-	-	-
	6/6/07	-	-	-	37	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/10/07	-	-	-	41	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.44	1,392	-	-	-	-
	10/1/07	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	1.4	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	1.4	-	-	-	-	-	6.86	1,480	-	-	-	-
	10/01/07[2]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	1.5	<0.56	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	1.5	-	-	-	-	-	6.86	1,480	-	-	-	-
	4/30/08	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/26/08	-	-	-	17.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.59	1576	-	-	-	-
	4/17/09	-	-	-	7.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/23/09	-	-	-	7.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	1350	-	-	-	-
	3/29/10	-	-	-	1.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	1,200	-	-	-	-
	9/23/10	-	-	-	<.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.62	2,000	-	-	-	-
	3/17/11	-	-	-	<1.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.14	2,910	-	-	-	-
	9/22/11[DU]	-	-	-	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.95	1,410	-	-	-	-
	3/21/12	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.29	1,210	-	-	-	-
	9/13/12	-	-	-	5.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.29	1,210	-	-	-	-
	4/30/13	-	-	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.27	2,340	-	-	-	-
	9/24/13	-	-	-	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.27	2,340	-	-	-	-
	5/14/14	-	-	-	5.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.83	930	-	-	-	-
	9/19/14	-	-	-	5.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.81	1,280	-	-	-	-
	4/16/15	-	-	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.02	6,020	-	-	-	-
MW-13	1/10/00	-	-	-	1	<4.2	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	2/17/00	-	-	-	4	7	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	6/29/01	-	-	-	10	<4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	230	110	<20	-	100,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	660	65	<2.6	-	490,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	250	61	7	-	48,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03	-	-	250	110	<2.6	-	81,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/20/04	-	-	600	<1.1	<2.7	-	<32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/04	-	-	500	3	<2.7	-	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/12/04	-	-	160	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/21/04	-	-	270	<0.52	<2.7	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	460	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.79	-	-	-	-	-
MW-14	3/22/00	-	-	-	1	<4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/22/00	-	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/29/01	-	-	-	12	<4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	43	49	<20	-	36,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	50	64	<2.6	-	41,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	55	170	5	-	120,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03	-	-	59	200	<2.6	-	140,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/20/04	-	-	76	<1.1	<2.7	-	<32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/04	-	-	81	4	<2.7	-	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/12/04	-	-	100	3	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/21/04	-	-	130	1	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	150	1	<2.7	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.45	-	-	-	-	-
MW-15	12/10/03[3]	-	-	41	33	<2.6	-	13,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/14/04	-	-	110	2	<2.7	-	230	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	95	2	<2.7	-	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/11/04	-	-	99	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04	-	-	75	1	<2.7	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/19/05	-	-	90	1	<5	-	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.19	-	-	-	-	-
MW-16	12/9/03[3]	-	-	34	<0.93	<2.6	-	510	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/14/04	-	-	49	4	<2.7	-	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/04	-	-	25	2	<2.7	-	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/12/04	-	-	30	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04	-	-	32	1	<2.7	-	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/19/05	-	-	59	1	<5	-	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.23	-	-	-	-	-
MW-17	12/9/03	-	-	140	51	<2.6	-	39,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200									Total Toxic Organics (TTO) < 2,130									NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																									
	4/20/04	-	-	*160*	<1.1	<2.7	-	<32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/04	-	-	*150*	*48*	<2.7	-	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/12/04	-	-	*130*	<0.52	<2.7	-	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/04	-	-	*160*	<0.52	<2.7	-	**320**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/19/05	-	-	*160*	<0.52	<2.7	-	**730**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.62	-	-	-	-	-
MW-18	12/15/03	-	-	**1,100**	15	<2.6	-	**12,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/20/04	-	-	**660**	1.3	<2.7	-	<32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/04	-	-	**780**	1.6	<2.7	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/28/04	-	-	**780**	1.7	<2.7	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/05	-	-	**680**	5.3	<2.7	-	<18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-19	9/26/08	-	-	*64*	-	-	-	-	-	-	-	-	-	-	<0.97	<1.3	4.40	<0.36	*1.50*	<0.54	<0.43	-	<0.45	<0.67	20.3	<0.42	<0.48	<0.83	<0.18	<2.63	26.2	-	-	-	-	-	-	7.11	789	-	-	-	-
	12/12/08	-	-	9.2	<1.1	< 0.00 34	-	25.5	-	45.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<.17	-	-	-	692	< 0.085	-	2.40
	4/17/09	-	-	-	*78*	-	-	-	-	-	-	-	-	-	<0.97	<1.3	7.8	<0.36	*3.1*	<0.54	<0.43	-	<0.45	<0.67	27	<0.42	<0.48	<0.83	<0.18	<1.8	37.9	-	-	-	-	-	-	-	-	-	-	-	-
	9/23/09 [Q]	-	-	-	*20*	-	-	-	-	-	-	-	-	-	<1.0	<0.20	3.7	<0.50	*0.98*	<0.50	<1.0	-	<0.50	<0.50	9.0	<0.25	<0.20	<0.20	<0.20	<0.50	13.7	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/10	-	-	-	*41*	-	-	-	-	-	-	-	-	-	<1.0	<0.20	2.1	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	3.9	<0.25	<0.20	<0.20	<0.20	<0.50	6.0	-	-	-	-	-	-	7.0	775	-	-	-	-
	9/2 3/10 [2]	-	-	-	<10	-	-	-	-	-	-	-	-	-	<1.0	<0.20	1.2	<0.50	*0.70*	<0.50	<1.0	-	<0.50	<0.50	7.3	<0.25	<0.20	<0.20	<0.20	<0.50	9.2	-	-	-	-	-	-	7.21	620	-	-	-	-
	3/17/11	-	-	-	<1.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.20	250	-	-	-	-
	9/22/2 011 [TT,UU]	-	-	-	*2.4*	-	-	-	-	-	-	-	-	-	<1.0	<0.20	0.66	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	0.98	<0.25	<0.20	<0.20	<0.20	<0.50	1.6	-	-	-	-	-	-	7.03	610	-	-	-	-
	3/21/12 [VV]	-	-	-	5.7	-	-	-	-	-	-	-	-	-	<1.0	<0.20	2.1	<0.50	*1.0*	<0.50	<1.0	-	<0.50	<0.50	9.2	<0.25	<0.50	<0.20	<0.20	<0.50	12.3	-	-	-	-	-	-	7.47	450	-	-	-	-
	3/21/12 [ZZ,AEE]	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	2.5	<0.50	*0.71*	<0.50	<1.0	-	<0.50	<0.50	8.3	<0.25	<0.20	<0.20	<0.20	<0.50	11.5	-	-	-	-	-	-	-	-	-	-	-	-
	9/13/12 [ZZ,AEE]	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	<1.0	<0.20	2.5	<0.50	*0.71*	<0.50	<1.0	-	<0.50	<0.50	8.3	<0.25	<0.20	<0.20	<0.20	<0.50	11.5	-	-	-	-	-	-	-	-	-	-	-	-
	9/24/13 [ZZ,AEE]	-	-	-	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.83	780	-	-	-	-
	9/19/14	-	-	-	*10.3*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-20	4/8/09	-	-	94.6	**78,300**	*94.2*	-	<6.9	*153*	<2.3	-	-	-	-	<242	<325	**1,170**	<90	**2,960**	<135	<108	-	<112	<168	**29,800**	<105	<120	< 208	<45	<450	33,930	-	-	<0.68	-	-	-	-	-	102,000	188	<4.2	4.9
	4/27/09	-	-	64.7	**411**	<17	-	**799,000**	**6,990**	15.0	-	-	-	-	<97	<130	*766*	<36	**167**	<54	**89.2**	-	<45	<67	**14,600**	<42	<48	<83	<18	<180	15,622	-	-	1.0	-	-	-	-	-	2,460,000	10,900	0.30	33.7
	5/21/09	-	-	35.3	*58.8*	<17	-	**169,000**	**1,250**	1.8	-	-	-	-	<48.5	<65	*298*	<18	**54.6**	<27	<21.5	-	<22.5	<33.5	**5,410**	<21	<24	<41.5	<9	<90	5,763	-	-	0.35	-	-	-	-	-	449,000	8,220	0.16	10.6
	6/18/09	-	-	13.7	*8.9*	<20	-	**32,200**	**488**	<1.7	-	-	-	-	<48.5	<65	*190*	<18	**39.4**	<27	<21.5	-	<22.5	<33.5	**2,780**	<21	<24	<41.5	<9	<90	3,009	-	-	<0.25	-	-	-	-	-	102,000	2,030	<0.25	5.8
	7/15/09	-	-	26.8	*44.6*	<3.9	-	**180,000**	**761**	8.6	-	-	-	-	<48.5	<65	*359*	<18	<28.5	<27	<21.5	-	<22.5	<33.5	**8,970**	<21	<24	<41.5	<9	<90	9,328	-	-	0.25	-	-	-	-	-	440,000	8,350	<0.25	12.0
	9/23/10 [AA]	-	-	-	<10	-	-	-	-	-	-	-	-	-	19.0	*0.89*	*300*	*3.1*	**100**	<0.50	**6.5**	-	<0.50	<0.50	**4,300**	**5.1**	**13**	<0.20	**2.1**	<0.50	4,750	-	-	-	-	-	-	6.93	1,550	-	-	-	-
	3/17/11	-	-	-	<1.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.40	1,660	-	-	-	-
	9/22/11 [W]	-	-	-	-	-	-	-	-	-	-	-	-	-	<50	<10	*420*	<25	**240**	<25	<50	-	<25	<25	**4,900**	<13	**17**	<10	<10	<25	5,577	-	-	-	-	-	-	6.95	675	-	-	-	-
	3/21/12 [AE,AI]	-	-	-	1.5	-	-	-	-	-	-	-	-	-	4.0	0.28	*120*	*1.1*	**25**	<0.50	*1.6*	-	<0.50	<0.50	**990**	*1.7*	*3.4*	<0.20	<0.20	<0.50	1,147	-	-	-	-	-	-	7.58	880	-	-	-	-
	9/13/12 [AE,AI]	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	<38.8	<5.2.0	**3,070**	**19.5**	**950**	<21.6	<17.2	-	<18.0	<26.8	*92*	<16.8	<19.2	<33.2	<7.2	<105.2	3,702	-	-	-	-	-	-	7.58	880	-	-	-	-
	9/25/13 [AE,AI]	-	-	-	<1.2	-	-	-	-	-	-	-	-	-	<9.7	<17.2	**1,120**	<11.9	**224**	<12.5	<9.0	-	<11.8	<11.0	26	<9.7	<9.1	<12.5	<4.6	<32.9	1,370	-	-	-	-	-	-	7.58	880	-	-	-	-
	9/18/14	-	-	-	<2.1	-	-	-	-	-	-	-	-	-	19.8	<50.0	*162*	<3.4	**123**	<10.0	**15.7**	-	<10.0	<10.0	**1,260**	<3.1	<6.6	<10.0	<3.5	<30.0	1,581	-	-	-	-	-	-	11.34	1,130	-	-	-	-
MW-21	1/1/19/13	-	-	57.4	*26.1*	29.4	-	<14.0	66.6	<2.3	-	-	-	-	73.1	<0.69	*120*	-	**156**	<0.50	<0.36	-	<0.47	<0.44	**572**	*2.0*	**6.8**	<0.50	**9.3**	<1.32	939.2	-	-	<0.088	-	-	-	6.75	1,131	<0.34	<0.75	3.20	-
	12/19/13	-	-	63.9	*22.6*	25.6	-	<14.0	71.1	<2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	<0.088	-	-	-	7.00	1,306	-	<1.5	2.30	-
	1/21/14	-	-	-	-	-	-	-	-	-	-	-	-	-	65.6	<6.9	*124*	-	**140**	<5.0	<3.6	-	<4.7	<4.4	**496**	<3.9	**6.5**	<5.0	**7.1**	<13.2	839.2	-	-	-	-	-	-	6.91	1,396	<3.4	-	-	-
	3/11/14	-	-	-	-	-	-	-	-	-	-	-	-	-	50.5	<6.9	*119*	-	**137**	<5.0	<3.6	-	<4.7	<4.4	**467**	<3.9	**5.5**	<5.0	**4.1**	<13.2	783.1	-	-	-	-	-	-	6.91	1,276	<3.4	-	-	-
	7/28/14	-	-	79.2	*30.3*	32.3	-	<12.9	94.3	<2.3	-	-	-	-	52.5	<25.0	*122*	-	**144**	<5.0	<2.3	-	<5.0	<5.0	**513**	<1.6	**7.0**	<5.0	**5.3**	<10.5	843.8	-	-	<0.069	-	-	-	7.04	1,661	<1.4	0.66	-	-
	8/19/14	-	-	70.6	*22.5*	18.8	-	23.4	**381**	<2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	<0.10	-	-	-	5.92	1,926	-	<0.75	-	-
	8/20/14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	3.50	-
	9/23/14	-	-	92.0	1.99	0.12	-	235	**409**	<2.3	-	-	-	-	25.3	<6.2	72.9	-	**32.1**	<1.2	*1.5*	-	<1.2	<1.2	**318**	*1.0*	*3.9*	<1.2	<0.44	<3.7	454.7	-	-	<0.052	-	-	-	6.60	1,964	<0.36	<0.15	3.60	-
	10/21/14	-	-	67.4	0.753	0.18	-	21.4	**290**	<2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	0.073	-	-	-	6.73	1,668	-	<0.15	2.30	-
	12/18/14	-	-	59.5	1.3	0.67	-	35.7	**310**	<2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	<0.052	-	-	-	6.75	1,831	-	<0.15	2.20	-
MW-22	1/19/13	-	-	36.5	4.74	6.6	-	15.6	1.18	<2.3	-	-	-	-	0.80	<0.69	22.2	-	**64.3**	<0.50	*3.2*	-	*0.90*	<0.44	**364**	<0.39	**10.0**	<0.50	<0.18	<1.32	465.4	-	-	<0.088	-	-	-	7.56	663.2	<0.34	1.1	0.75	-
	12/19/13	-	-	34.6	5.06	5.4	-	78.3	1.13	<2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	<0.088	-	-	-	7.70	770.8	-	1.3	0.75	-
	1/21/14	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.8	<2.8	24.2	-	**56.7**	<2.0	**21.4**	-	<1.9	<1.8	**341**	<1.6	**8.2**	<2.0	<0.74	<5.3	451.5	-	-	-	-	-	-	7.71	686	<1.4	-	-	-
	3/11/14	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.8	<2.8	22.9	-	**77.2**	<2.0	*4.7*	-	<1.9	<1.8	**376**	<1.6	**10.0**	<2.0	<0.74	<5.3	490.8	-	-	-	-	-	-	7.58	747	<1.4	-	-	-
	7/31/14	-	-	68.6	-	0.63	-	92.3	**346**	<2.3	-	-	-	-	<1.5	<10.0	34.8	-	**28.4**	<2.0	**8.0**	-	<2.0	<2.0	**584**	<0.62	**10.6**	<2.0	<0.70	<6.0	665.8	-	-	<0.052	-	-	-	6.72	1,365	<0.57	0.54	-	-
	8/19/14	-	-	71.5	1.09	0.27	-	35.5	**466**	<2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	<0.052	-	-	-	7.07	1,528	-	<1.5	-	-
	8/20/14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	1.1	-
	9/24/14	-	-	102	3.54	1.3	-	38.5	**377**	<2.3	-	-	-	-	<1.5	<10.0	28.9	-	**18.2**	<2.0	**7.1**	-	<2.0	<2.0	**397**	<0.62	**9.5**	<2.0	<0.70	<6.0	460.7	-	-	<0.052	-	-	-	7.04	1,526	<0.57	1.7	1.3	-
	10/21/14	-	-	106	1.81	2.0	-	21.4	**376**	<2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	0.062	-	-	-	6.63	1,525	-	1.7	0.67	-
	12/18/14	-	-	107	2.87	2.9	-	25.7	**318**	<2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	0.39	-	-	-	7.10	1,841	-	1.5	0.55	-
Injection Well	4/8/09	-	-	*195*	**123,000**	**144**	-	<6.9	**296**	-	-	-	-	-	<485	<650	**3,760**	<180	**10,900**	<270	<215	-	<225	<335	**81,700**	<210	<240	<415	<90	<900	96,360	-	-	<0.68	-	-	-	-	-	218	<4.2	9.0	8.3
	4/27/09	-	-	16.5	*36.2*	<17	-	**546,000**	**5,540**	8.4	-	-	-	-	<24.2	<32.5	*159*	<9.0	**24**	<13.5	**33.9**	-	<11.2	<16.8	**3,140**	<10.5	<12.0	<20.8	<4.5	<45.0	3,357	-	-	0.36	-	-	-	-	-	9,810	0.24	35.9	33.7
	5/21/09	-	-	14.0	*22.7*	<17	-	**256,000**	**1,260**	5.6	-	-	-	-	<24.2	<32.5	*249*	<9.0	**31.2**	<13.5	<10.8	-	<11.2	<16.8	**4,990**	<10.5	<12	<20.8	<4.5	<45	5,270	-	-	<0.25	-	-	-	-	-	7,040	0.17	13.8	11.9
	6/18/09	-	-	36.3	*42.4*	<20	-	**242,000**	**2,150**	5.6	-	-	-	-	<38.8	<52.0	*423*	<14.4	**31**	<21.6	<17.2	-	<18	<26.8	**7,240**	<16.8	<19.2	<33.2	<7.2	<72	7,694	-	-	0.25	-	-	-	-	-	7,960	<0.25	10.0	9.8
	7/15/09	-	-	10.3	2.3	<3.9	-	**215,000**	**1,080**	7.2	-	-	-	-	<19.4	<26	*110*	<7.2	**24.5**	<10.8	<8.6	-	<9	<13.4	**1,330**	<8.4	<9.6	<16.6	<3.6	<36	1,465	-	-	0.25	-	-	-	-	-	7,570	<0.25	14.2	8.3
P-1A	12/11/03 [C]	-	-	21	3	<2.6	-	**1,400**	-	-	-	-	-	-	<0.24	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/28/04	-	-	19	2	<2.7	-	110	-	-	-	-	-	-	<0.97	<0.37	2.3	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	2.3	-	-	-	-	-	-	-	-	-	-	-	-
	6/29/04	-	-	*27*	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/5/04	-	-	25	<0.52	<2.7	-	<17	-	-	-	-	-	-	<0.97	<0.37	2.2	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0.0	-	-	-	-	-	-	-	-	-	-	-	-
	12/27/04	-	-	22	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/05	-	-	25	1	<2.7	-	<18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.44	-	-	-	-	-
P-2A	12/9/03 [C]	-	-	15	**380**	**400**	-	**4,100**	-	-	-	-	-	-	<0.97	<0.37	1.4	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	3.7	<0.42	<0.48	<0.83	<0.18	<2.63	5	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/2 9/04 [E]	-	-	26	<1.1	<2.7	-	<32	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	6.5	2	<2.7	-	<8	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-	-
	10/7/04	-	-	3.3	0.91	<2.7	-	<17	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-	-
	12/15/04	-	-	6.2	1.1	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	5.7	3	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.51	-	-	-	-	-
	9/14/05	-	-	-	0.81	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.39	-	-	-	-	-
	9/14/06	-	-	-	<1.3	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.88	-	-	-	-	-
	9/11/07	-	-	-	<0.43	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.64	545	-	-	-	-
P-2B	12/10/03	-	-	3.5	**410**	*98*	-	**74,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	12/10/03 [3]	-	-	3.5	**350**	**340**	-	**48,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/15/04	-	-	12	1.6	<2.7	-	89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	3.6	0.53	4	-	<8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/7/04	-	-	3.3	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/15/04	-	-	3.2	3.9	<2.7	-	*290*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	3.3	0.74	<2.7	-	**490**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.33	-	-	-	-	-
	10/1/07	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	8.73	219	-	-	-	-
P-4	2/7/97	-	-	-	**183**	-	-	-	-	-	-	-	-	-	<1.0	-	<1.0	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4/97	-	-	-	**141**	-	-	-	-	-	-	-	-	-	<1.0	-	<1.0	-	<0.5	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/97	-	-	-	<5.0	*33*	-	-	-	-	-	-	-	-	<2	<2	<2	<2	<2	<2	<2	<10	<2	<2.0	<2	<2	<2	<2	<2	<2.0	0	-	-	-	-	-	-	-	-	-	-	-	-
	2/5/98	-	-	-	*42*	<10.0	-	-	-	-	-	-	-	-	<10.0	<5.0	<10.0	<5.0	<5.0	<10.0	<5.0	<50.0	**10**	<10	<5.0	<5.0	**10**	<10.0	<2.0	<10	20	-	-	-	-	-	-	-	-	-	-	-	-
	5/22/98	-	-	-	*22*	*18*	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	*12*	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-
	1/18/99	-	-	-	*17*	<4.2	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.94	<0.25	<0.25	<0.1	<0.25	<0.25	1	-	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	1	<4.2	-	-	-	-	-	-	-	-	<1.2	<0.18	<0.25	<0.20	<0.73	<0.38	<0.87	<0.14	<0.63	<0.39	<0.28	<0.15	<0.49	<0.33	<0.46	<1.0	0	-	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	*25*	<4.2	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.3	<0.25	<0.25	<0.10	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Metals													Volatile Organic Compounds (VOC)																		Other								
		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200										Total Toxic Organics (TTO) < 2,130								NE	1,900	NE	100	NE	5-9				
Sample Location	**Sample Date**																																							
	9/20/01	-	-	11	0.93	<4.2	-	19,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	<5	16	<4.2	-	2,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/15/01	-	-	<5	2	<4.2	-	<42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/29/01	-	-	5.5	49	15	-	7,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	<5	130	9	-	38,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	3.7	220	<12	-	94,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-
	12/30/02	-	-	-	42	<20	-	16,000	-	-	-	-	-	-	<0.84	<0.45	<0.87	<0.55	<0.56	<0.53	<0.47	-	<0.63	<0.84	<0.65	<0.50	<0.39	<0.64	<0.11	<1.83	0	-	-	-	-	-	7.00	-	-	-	-
	6/17/03	-	-	3.7	19	<2.6	-	8,300	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-
	9/24/03	-	-	3.4	27	<2.6	-	13,000	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-
P-4A*	12/11/03	-	-	4.1	12	<2.6	-	6,200	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-
	4/20/04	-	-	4.0	<1.1	6.3*	-	<32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-
	6/23/04	-	-	3.7	0.96	<2.7	-	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/12/04	-	-	5.1	0.73	<2.7	-	<17	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-
	12/21/04	-	-	5.1	<0.52	<2.7	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	5.3	<0.52	<2.7	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.92	-	-	-	-
	9/14/05	-	-	-	<0.62	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.28	-	-	-	-
	9/13/06	-	-	-	<1.9	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.99	-	-	-	-
	9/10/07	-	-	-	1.2	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.16	257	-	-	-
	9/23/09	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	350	-	-	-
	9/22/11	-	-	-	<1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.84	290	-	-	-
	9/25/13	-	-	-	<1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.84	290	-	-	-
P-6A	12/15/03	-	-	-	11	-	-	2,300	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-
	4/28/04	-	-	6.9	0.95	<2.7	-	56	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-
	6/28/04	-	-	4.2	4.6	<2.7	-	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/28/04	-	-	3.8	1.2	<2.7	-	27	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-
	12/27/04	-	-	3.6	0.77	<2.7	-	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	4.2	<0.52	<2.7	-	<17	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.97	-	-	-	-
	9/14/05	-	-	-	<0.62	<5.0	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.11	-	-	-	-
	9/13/06	-	-	-	<1.9	<6.8	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.86	-	-	-	-
	9/10/07	-	-	-	0.44	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.99	323	-	-	-
	4/8/09	-	-	2.3	1.0	<3.4	-	<6.9	36.4	<2.3	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<1.8	0	-	-	<0.17	-	-	-	-	0.59	0.79	<1.4	<1.4
	9/23/09	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.70	410	-	-	-	-
	9/23/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.39	1,050	-	-	-	-
	9/22/11	-	-	-	-	<1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.60	310	-	-	-	-
	9/25/13	-	-	-	-	<1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.60	310	-	-	-	-
P-6B	12/11/03	-	-	5.8	4.8	<2.6	-	2,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-
	4/28/04	-	-	2.2	0.56	<2.7	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/28/04	-	-	2.5	1.2	<2.7	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/28/04	-	-	2.7	0.87	<2.7	-	<18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/27/04	-	-	2.8	<0.52	<2.7	-	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/1/07	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	8.31	167	-	-	-
	3/30/05	-	-	3.6	<0.65	<2.7	-	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.38	-	-	-	-
	9/14/05	-	-	-	<0.62	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.51	-	-	-	-
	9/13/06	-	-	-	<1.9	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.38	-	-	-	-
	9/10/07	-	-	-	48	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.40	223	-	-	-
	9/23/09	-	-	-	<2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.60	395	-	-	-
	9/23/10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.95	1,110	-	-	-	-
	9/22/11	-	-	-	<1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.72	180	-	-	-	-
	9/25/13	-	-	-	<1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.72	180	-	-	-	-
P-6C	1/21/14	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.44	<0.69	<0.28	<0.48	<0.43	<0.50	<0.36	-	<0.47	<0.44	0.45	<0.39	<0.36	<0.50	<0.18	<1.32	0.45	-	-	-	-	-	5.86	583	-	-	-	-
	3/10/14	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.44	<0.69	<0.28	<0.48	<0.43	<0.50	<0.36	-	<0.47	<0.44	<0.44	<0.39	<0.36	<0.50	<0.18	<1.32	0	-	-	-	-	-	5.83	335	-	-	-	-
	7/28/14	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.37	<2.5	<0.24	<0.17	<0.41	<0.50	<0.23	-	<0.50	<0.50	<0.50	<0.16	<0.33	<0.50	<0.18	<1.5	0	-	-	-	-	-	5.39	390.4	-	-	-	-
	9/23/14	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.37	<2.5	<0.24	<0.17	<0.41	<0.50	<0.23	-	<0.50	<0.50	<0.50	<0.16	<0.33	<0.50	<0.18	<1.5	0	-	-	-	-	-	5.42	322	-	-	-	-
P-7A	12/11/03	-	-	120	7,600	7,300	-	3,600	-	-	-	-	-	-	<39	<15	450	<14	390	<22	<17	-	<18	<27	4,700	<17	<19	<33	<7.2	<105	5,540	-	-	-	-	-	7.00	-	-	-	-
	4/21/04	-	-	100	74	64	-	<32	-	-	-	-	-	-	<19	<7.4	540	<7.2	130	<11	<8.6	-	<9.0	<13	1,800	<8.4	<9.6	<17	<3.6	<53	2,470	-	-	-	-	-	-	-	-	-	-
	6/28/04	-	-	140	20	4	-	78	-	-	-	-	-	-	<9.7	<3.7	1,200	8.9	190	<5.4	8.0	-	<4.5	<6.7	1,500	<5.2	<6.7	2.6	<3.6	<53	2910	-	-	-	-	-	-	-	-	-	-
	9/28/04	-	-	120	4.9	<2.7	-	<18	-	-	-	-	-	-	<9.7	<3.7	1,100	8.5	130	<5.4	<4.3	-	<4.5	<6.7	1,000	8.4	<4.8	<8.3	<1.8	<2.63	2247	-	-	-	-	-	-	-	-	-	-
	12/21/04	-	-	130	9.9	<2.7	-	19	-	-	-	-	-	-	<19	<7.4	1,300	<7.2	120	<11	<8.6	-	13	<13	500	<8.4	<9.6	<17	<3.6	<53	1,933	-	-	-	-	-	-	-	-	-	-
	12/21/04UF	-	-	-	7.6	<2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/18/05	-	-	110	2.4	<5	-	<18	-	-	-	-	-	-	<9.7	<3.7	1,300	<5.6	110	<5.4	6.3	-	<4.5	<6.7	400	<4.2	<4.8	<8.3	<1.8	<26.3	1816	-	-	-	-	-	7.99	-	-	-	-
	6/28/05	-	-	-	8.5	<5	-	-	-	-	-	-	-	-	<19	<7.4	1,800	9.6	140	<11	<8.6	-	<9	<13	300	<8.4	<9.6	<17	<3.6	<53	2249	-	-	-	-	-	6.89	-	-	-	-
	9/14/05	-	-	-	20	12	-	-	-	-	-	-	-	-	<19	<7.4	1,900	<7.2	150	<11	11	-	<9.0	<13	170	<8.4	<9.6	<17	<3.6	<53	2237	-	-	-	-	-	7.13	-	-	-	-
	12/14/05	-	-	-	4.8	<5.0	-	-	-	-	-	-	-	-	<24	<9.2	3,000	14	-	<14	<11	-	<11	<17	250	<10	<12	<21	<4.5	<66	3534	-	-	-	-	-	7.83	-	-	-	-
	3/10/06	-	-	-	7.9	<5.0	-	-	-	-	-	-	-	-	<9.7	<3.7	1,600	8.6	140	<5.4	5.3	-	<4.5	<6.7	140	4.4	<4.8	<8.3	<1.8	<26.3	1898	-	-	-	-	-	7.43	807	-	-	-	-
	6/14/06	-	-	-	5.8	<6.8	-	-	-	-	-	-	-	-	<19	<7.4	2,300	13	200	<11	<8.6	-	<9	<13	150	9.3	<9.6	<17	<3.6	<53	2672	-	-	-	-	-	7.25	1,107	-	-	-	-
	9/13/06	-	-	-	19	<6.8	-	-	-	-	-	-	-	-	<19	<7.4	3,000	17	340	<11	11	-	<9.0	<13	170	9.2	<9.6	<17	<3.6	<53	3547	-	-	-	-	-	7.36	1,116	-	-	-	-
	12/20/06	-	-	180	4	<6.8	-	<50	140	<2.5	-	-	-	-	<240	<92	2,300	<90	4,000	<140	<110	-	4	<170	32,000	<100	<120	<210	<45	<660	38300	-	-	-	-	-	7.70	1,141	-	-	-	-
	1/1/20/06	-	-	170	6	7	-	<50	150	<2.5	-	-	-	-	<48	<18	3,600	<18	390	<27	92	-	<22	<34	270	<21	<24	<42	<9	<132	4,352	-	-	-	-	-	7.52	1,236	-	-	-	-
	12/8/06	-	-	-	12	<6.8	-	<50	150	<2.5	-	-	-	-	<24	<9.2	3,100	18	360	<14	<15	-	<11	<17	210	<10	<12	<21	<4.5	<66	3,328	-	-	-	-	-	7.19	2,110	-	-	-	-
	1/2/07	-	-	-	9.3	<6.8	-	-	-	-	-	-	-	-	<24	<9.2	3,200	18	440	<14	13	-	<11	<17	260	<10	<12	<21	<4.5	<66	3,931	-	-	-	-	-	7.08	1,340	-	-	-	-
	1/30/07	-	-	-	16	<6.8	-	<50	160	<2.5	-	-	-	-	<39	<15	4,100	<14	600	<22	24	-	<18	<27	400	<17	<19	<33	<7.2	<72	5,124	-	-	-	-	-	-	-	-	-	-
	2/26/07	-	-	200	10	<6.8	-	<50	160	<2.5	-	-	-	-	<48	<18	5,000	31	740	<27	24	-	<22	<34	580	<21	<24	<42	<9	<132	6,376	-	-	-	-	-	6.78	1,356	-	-	-	-
	3/29/07	-	-	-	15	<6.8	-	<50	150	-	-	-	-	-	<39	<15	4,200	29	980	<22	18	-	<18	<27	510	<17	<19	<33	<7.2	<105	5,337	-	-	-	-	-	7.56	1,421	-	-	-	-
	6/6/07	-	-	-	9	<6.8	-	<50	180	-	-	-	-	-	<39	<15	4,500	45/00	880	<22	24	-	<18	<27	620	20	<19	<33	<7.2	<105	10,244	-	-	-	-	-	-	-	-	-	-
	9/11/07	-	-	-	110	<3.4	-	-	-	-	-	-	-	-	<19	<7.4	4,000	24	960	<11	15	-	<9	<13	440	15	<9.6	<17	<3.6	<17	5,054	-	-	-	-	-	7.50	1,065	-	-	-	-
	4/30/08	-	-	-	13	-	-	-	-	-	-	-	-	-	<24.2	<9.2	3,690	<9	519	<13.5	<10.8	-	<11.2	<16.8	274	<10.5	<12	<20.8	<4.5	<45	4,483	-	-	-	-	-	-	-	-	-	-
	9/26/08	-	-	-	11	-	-	-	-	-	-	-	-	-	<24.2	<32.5	3,240	21.1	409	<13.5	<10.8	-	<11.2	<16.8	294	15.5	<12	<20.8	<4.5	<65.8	3,980	-	-	-	-	-	7.22	1,178	-	-	-	-
	4/8/09	-	-	158	10.4	<3.4	-	<6.9	124	-	-	-	-	-	<24.2	<32.5	3,350	<9	486	<13.5	<10.8	-	<11.2	<16.8	161	<10.5	<12	<20.8	<4.5	<45	3,997	-	-	<0.17	-	-	-	-	1.2	0.17	1.8	2.4
	4/17/09	-	-	-	7.20	-	-	-	-	-	-	-	-	-	<24.2	<32.5	2,740	21.2	189	<13.5	11.5	-	<11.2	<16.8	188	12.7	<12	<20.8	<4.5	<45	3,162	-	-	-	-	-	-	-	-	-	-	-
	4/27/09	-	-	245	11.3	8.9	-	16	180	<2.3	-	-	-	-	<24.2	<32.5	4,760	31.7	633	<13.5	13.4	-	<11.2	<16.8	670	15.4	<12	<20.8	<4.5	<45	6,124	-	-	<0.17	-	-	-	-	39.4	< 0.085	4.0	3.0
	5/21/09	-	-	237	8.6	<3.4	-	12.6	178	<1.7	-	-	-	-	<38.8	<52.0	9,510	57.4	1,930	<21.6	36.9	-	<18.0	<26.8	910	33.3	<19.2	<33.2	<7.2	<72.0	12,478	-	-	<0.25	-	-	-	-	4.0	<0.085	1.8	2.6
	6/18/09	-	-	255	10.5	<3.9	-	19.6	187	<1.7	-	-	-	-	<38.8	<52.0	5,770	46.6	818	<21.6	<17.2	-	<18.0	<26.8	603	22.8	<19.2	<33.2	<7.2	<72.0	7,260	-	-	<0.25	-	-	-	-	1.4	<0.25	3.5	3.3
	7/15/09	-	-	245	11.2	7.8	-	5.3	181	<1.7	-	-	-	-	<48.5	<65	4,210	41.7	657	<27	<21.5	-	<22.5	<33.5	624	<21	<24	<41.5	<9	<90	5,533	-	-	<0.25	-	-	-	-	1.4	<0.25	3.7	3.3
	9/23/09	-	-	-	10	-	-	-	-	-	-	-	-	-	<32	<6.4	5,400	44	1,400	<16	<32	-	<16	<16	880	28	<6.4	<6.4	<6.4	<16	8,752	-	-	-	-	-	-	-	-	-	-	-
	9/23/09	-	-	-	-	-	-	-	-	-	-	-	-	-	<32	<6.4	6,500	44	1,400	<16	<32	-	<16	<16	860	27	<6.4	<6.4	<6.4	<16	8,831	-	-	-	-	-	7.1	1,010	-	-	-	-
	3/2 9/10	-	-	-	12	-	-	-	-	-	-	-	-	-	<100	<20	4,400	<50	620	<50	<100	-	<50	<50	380	<25	<20	<20	<20	<50	5,400	-	-	-	-	-	6.9	1,110	-	-	-	-
	9/23/10	-	-	-	<10	-	-	-	-	-	-	-	-	-	<50	<10	4,100	<25	820	<25	<50	-	<25	<25	310	<13	<10	<10	<10	<25	5,230	-	-	-	-	-	7.63	1,100	-	-	-	-
	3/17/11	-	-	-	<1.81	-	-	-	-	-	-	-	-	-	<50	<10	2,400	<25	410	<25	<50	-	<25	<25	110	<13	<10	<10	<10	<25	2,920	-	-	-	-	-	8.15	990	-	-	-	-
	9/22/11	-	-	-	1.5	-	-	-	-	-	-	-	-	-	<25	<5.0	3,200	20	660	<13	<25	-	<13	<13	150	11	<5.0	<5.0	<5.0	<13	4,041	-	-	-	-	-	7.51	910	-	-	-	-
	3/21/12	-	-	-	1.4	-	-	-	-	-	-	-	-	-	4.0	0.35	3,000	20	310	<0.50	7.4	-	<0.50	<0.50	170	11	0.80	<0.20	0.55	<0.50	3,524	-	-	-	-	-	7.60	990	-	-	-	-
	9/14/12	-	-	-	7.3	-	-	-	-	-	-	-	-	-	<48.5	<65.0	3,000	<18.0	168	<27.0	<21.5	-	<24.0	<33.5	9,900	<21.0	<24.0	<41.5	<9.0	<131.5	13,068	-	-	-	-	-	7.60	960	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Metals													Volatile Organic Compounds (VOC)																Other									
		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)Dissolved (mg/L)
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200										Total Toxic Organics (TTO) < 2.130								NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																							
	5/1 /13[AC]	-	-	-	2.7	-	-	-	-	-	-	-	-	-	<88.7	<138	6,580	<95.3	353	<100	<71.7	-	<94.4	<87.7	16,600	<78.0	<85.8	<500	<37.0	<263	23,533	-	-	-	-	-	8.80	187	-	-	-	-
	9/25/13[AC]	-	-	-	5.1	-	-	-	-	-	-	-	-	-	<88.7	<138	6,600	<95.3	301	<100	<71.7	-	<94.4	<87.7	13,600	<78.0	<72.8	<100	<37.0	<263	20,501	-	-	-	-	-	8.80	187	-	-	-	-
	5/15/14	-	-	-	<2.1	-	-	-	-	-	-	-	-	-	<18.7	<125	3,680	21.8	741	<25.0	<11.6	-	<25.0	<25.0	*104*	8.1[AO]	<16.5	<25.0	<8.8	<75.0	4,547	-	-	-	-	-	6.91	1,000	-	-	-	-
	9/18/14	-	-	-	<2.1	-	-	-	-	-	-	-	-	-	<0.75	<5.0	*193*	*0.87*	63.2	<1.0	*0.65*	-	<1.0	<1.0	6.2	<0.31	<0.66	<1.0	<0.35	<3.0	264	-	-	-	-	-	6.91	1,000	-	-	-	-
	4/16/15	-	-	-	<2.1	-	-	-	-	-	-	-	-	-	<0.75	<5.0	*412*	*2.9*	82.2	<1.0	*0.96*	-	<1.0	<1.0	11.8	*1.5*	<0.66	<1.0	<0.35	<3.0	511	-	-	-	-	-	6.74	1,640	-	-	-	-
P-7	1/18/99	-	-	-	140	140	-	-	-	-	-	-	-	-	<0.25	<0.25	34	<0.25	12	<0.25	<0.25	<0.25	<0.25	<1.2	*140*	<0.25	<0.25	0.25	<0.25	<1.0	186	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	2,600	1,100	-	-	-	-	-	-	-	-	<4.8	<0.72	35	<0.80	15	<1.5	<3.5	<0.56	<2.5	<1.6	210	<0.60	<2.0	<1.3	<1.8	*<4.4*	260	-	-	-	-	-	-	-	-	-	-	-
	1/10/00	-	-	-	*37*	<4.2	-	-	-	-	-	-	-	-	0.44	*1.5*	*480*	7.5	350	<0.25	5	<0.25	<0.25	<0.1	1,700	7.5	*0.57*	<0.1	0.89	<0.25	2,553	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	1,000	900	-	-	-	-	-	-	-	-	<25	<25	6,100	35	1,700	<25	120	<25	<25	<10	9,700	37	<25	<10	<25	<25	17,692	-	-	-	-	-	-	-	-	-	-	-
	9/19/01	-	-	*180*	850	1,100	-	1,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	*170*	690	810	-	<42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/15/01	-	-	*150*	320	310	-	340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/29/01	-	-	*130*	2,200	890	-	5,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	*170*	2,200	1,400	-	3,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	*67*	1,400	410	-	24,000	-	-	-	-	-	-	<57	<75	3,100	<47	1,000	<43	<85	-	<57	<47	6,200	<72	<89	<53	<18	<194	10,400	-	-	-	-	-	7.00	-	-	-	-	-
	12/30/02	-	-	-	2,000	1,100	-	12,000	-	-	-	-	-	-	<170	<90	12,000	<110	3,800	<110	<94	-	<130	<170	26,000	<100	<78	<130	<22	<370	41,800	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	300	1,200	410	-	13,000	-	-	-	-	-	-	<480	<180	15,000	<180	3,700	<270	<220	-	<220	<340	33,000	<210	<240	<420	<90	<1320	51,700	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	*130*	1,100	800	-	5,200	-	-	-	-	-	-	<240	<92	14,000	120	4,800	<140	<110	-	<110	<170	29,000	140	<120	<210	<45	<660	48,060	-	-	-	-	-	7.00	-	-	-	-	-
P-7B[a]	12/11/03	-	-	320	1,900	1,200	-	11,000	-	-	-	-	-	-	<480	<180	14,000	<180	4,300	<270	<220	-	<220	<340	35,000	<210	<240	<420	<90	<1320	53,300	-	-	-	-	-	7.00	-	-	-	-	-
	4/21/04	-	-	280	450	460	-	<32	-	-	-	-	-	-	<190	<74	13,000	95	3,400	<110	<86	-	<90	<130	27,000	110	<96	<170	<36	<530	43,605	-	-	-	-	-	-	-	-	-	-	-
	6/28/04	-	-	310	680	700	-	*170*	-	-	-	-	-	-	<240	<92	17,000	110	5,500	<140	<110	-	<110	<170	34,000	<230	<120	<210	<45	<660	56,610	-	-	-	-	-	-	-	-	-	-	-
	6/28/04[D]	-	-	310	710	700	-	*180*	-	-	-	-	-	-	<240	<92	18,000	110	5,800	<140	<110	-	<110	<170	37,000	130	<120	<210	<45	<660	61,040	-	-	-	-	-	-	-	-	-	-	-
	9/28/04	-	-	330	270	360	-	<18	-	-	-	-	-	-	<390	<150	18,000	180	5,500	<220	<170	-	<180	<270	46,000	<170	<190	<330	<72	<1050	69,680	-	-	-	-	-	-	-	-	-	-	-
	12/21/04	-	-	300	390	380	-	<17	-	-	-	-	-	-	<60	<92	15,000	<90	5,100	<140	<110	-	<110	<170	41,000	130	<120	<210	<45	<660	61,230	-	-	-	-	-	-	-	-	-	-	-
	4/18/05	-	-	*150*	640	540	-	19	-	-	-	-	-	-	<190	<74	8,900	<72	3,400	<110	<86	-	<90	<130	27,000	<84	<96	<170	<36	<530	39,300	-	-	-	-	-	7.86	-	-	-	-	-
	6/28/05	-	-	-	760	570	-	-	-	-	-	-	-	-	<480	<180	15,000	<180	4,800	<270	<220	-	<220	<340	43,000	<210	<240	<420	<90	<1320	62,800	-	-	-	-	-	6.98	-	-	-	-	-
	9/14/05	-	-	-	670	700	-	-	-	-	-	-	-	-	<390	<150	16,000	<330	5,000	<220	<170	-	<180	<270	38,000	<170	<190	<350	<72	<1,050	59,000	-	-	-	-	-	7.18	-	-	-	-	-
	12/14/05	-	-	-	830	510	-	-	-	-	-	-	-	-	<480	<180	17,000	<180	6,000	<270	<220	-	<220	<340	53,000	<210	<240	<420	<90	<1320	76,000	-	-	-	-	-	7.78	-	-	-	-	-
	3/10/06	-	-	-	260	290	-	-	-	-	-	-	-	-	<240	<92	14,000	<90	5,500	<140	<110	-	<110	<70	48,000	<100	<120	<210	<45	<660	27,500	-	-	-	-	-	7.08	1,598	-	-	-	-
	6/14/06	-	-	-	390	340	-	-	-	-	-	-	-	-	<970	<370	16,000	<560	5,900	<540	<430	-	<450	<670	50,000	<420	<480	<830	<180	<2630	71,900	-	-	-	-	-	7.05	1,579	-	-	-	-
	9/13/06	-	-	-	450	450	-	-	-	-	-	-	-	-	<480	<180	16,000	<180	6,700	<270	<220	-	<220	<340	56,000	<210	<240	<420	<90	<1320	78,700	-	-	-	-	-	7.25	1,427	-	-	-	-
	10/20/06	-	-	290	430	350	-	<50	250	<2.5	-	-	-	-	<240	<92	16,000	100	6,500	<140	<110	-	<110	<170	53,000	110	<120	<210	<45	<660	75,710	-	-	-	-	-	7.69	1,438	-	-	-	-
	11/20/06	-	-	310	1,000	1,100	-	<50	300	<2.5	-	-	-	-	<970	<370	16,000	<360	5,400	<540	760	-	<450	<670	51,000	<420	<480	<830	<180	<10100	73,160	-	-	-	-	-	6.91	1,438	-	-	-	-
	12/8/06	-	-	-	1,400	1,300	-	<50	*210*	<2.5	-	-	-	-	<190	<74	13,000	<72	4,500	<110	<86	-	<90	<130	41,000	85	<96	<170	<36	<530	58,585	-	-	-	-	-	7.73	1,533	-	-	-	-
	1/2/07	-	-	-	700	890	-	-	-	-	-	-	-	-	<480	<180	11,000	<180	4,400	<270	<220	-	<220	<340	37,000	<210	<240	<420	<90	<1320	52,400	-	-	-	-	-	6.83	1,602	-	-	-	-
	1/30/07	-	-	-	260	270	-	<50	*240*	<2.5	-	-	-	-	<74	<48	15,000	<72	6,200	<110	<86	-	<90	<130	50,000	<84	<96	<170	<36	<360	71,200	-	-	-	-	-	-	-	-	-	-	-
	2/26/07	-	-	*240*	240	<6.8	-	4100	250	<2.5	-	-	-	-	<480	<180	14,000	<180	5,300	<270	<220	-	<220	<340	41,000	<210	<240	<420	<90	<1320	60,300	-	-	-	-	-	6.31	1,399	-	-	-	-
	3/29/07	-	-	-	490	360	-	<50	*130*	-	-	-	-	-	<240	<92	13,000	<90	5,400	<140	<110	-	<110	<170	50,000	<100	<120	<210	<45	<660	68,400	-	-	-	-	-	7.70	1,491	-	-	-	-
	6/6/07	-	-	-	150	180	-	<50	69	-	-	-	-	-	<97	<37	4,000	<36	1,700	<54	<43	-	<45	<67	14,000	<42	<48	<83	<18	<263	19,700	-	-	-	-	-	-	-	-	-	-	-
	9/11/07	-	-	-	420	340	-	-	-	-	-	-	-	-	<240	<92	14,000	<90	5,200	<140	<110	-	<110	<170	46,000	110	<120	<210	<45	<210	65,310	-	-	-	-	-	7.78	1322	-	-	-	-
	4/30/08	-	-	-	465	-	-	-	-	-	-	-	-	-	<485	<185	15,600	<180	7,160	<270	<215	-	<225	<335	54,200	<210	<240	<415	<90	<900	76,960	-	-	-	-	-	-	-	-	-	-	-
	9/26/08	-	-	-	347	-	-	-	-	-	-	-	-	-	<242	<325	12,000	<90	4,530	<135	<108	-	<112	<168	41,400	<105	<120	<208	<45	<658	57,930	-	-	-	-	-	7.68	1,364	-	-	-	-
	4/9/09	-	-	*218*	458	310	-	<7.2	*204*	<2.3	-	-	-	-	<1210	<1620	16,400	<450	4,700	<675	<538	-	<562	<838	39,800	<525	<600	<1040	<225	<2250	60,900	-	-	<0.17	-	-	-	-	136	<0.85	6.5	5.7
	4/17/09	-	-	-	405	-	-	-	-	-	-	-	-	-	<485	<650	13,300	<180	4,560	<270	<215	-	<225	<335	40,300	<210	<240	<415	<90	<900	58,160	-	-	-	-	-	7.68	1364	-	-	-	-
	4/27/09	-	-	253	442	350	-	<4.0	*240*	<2.3	-	-	-	-	<485	<650	12,100	<180	3,920	<270	385	-	<225	<335	35,400	<210	<240	<415	<90	<900	51,805	-	-	<0.17	-	-	-	-	57.5	<0.085	4.6	6.6
	5/21/09	-	-	*229*	129	*92*	-	11.4	*219*	<1.7	-	-	-	-	<388	<520	14,100	<144	5,460	<216	<172	-	<180	<268	38,300	<168	<192	<332	<72	<720	58,309	-	-	<0.25	-	-	-	-	72.0	<0.17	4.1	4.6
	6/18/09	-	-	*249*	*68.5*	*25*	-	17.1	*238*	<1.7	-	-	-	-	<388	<520	12,700	<144	3,410	<216	<172	-	<180	<268	33,000	<168	<192	<332	<72	<720	49,110	-	-	<0.25	-	-	-	-	130	<0.25	5.4	5.5
	7/15/09	-	-	-	265	217	310	-	4.9	256	<1.7	-	-	-	-	<388	<520	8,010	<144	2,660	<216	<172	-	<180	<268	30,500	<168	<192	<332	<72	<720	41,170	-	-	<0.25	-	-	-	-	150	0.37	5.4	5.6
	9/23/09[I,M,R]	-	-	-	760	-	-	-	-	-	-	-	-	-	28	13	12,000	65	3,600	<0.50	32	-	*1.2*	0.65	28,000	110	41	<0.20	40	<0.50	43,931	-	-	-	-	-	7.1	1,210	-	-	-	-
	3/29/10	-	-	-	740	-	-	-	-	-	-	-	-	-	<500	<100	11,000	<250	3,000	<250	<500	-	<250	<250	31,000	<120	<100	<100	<100	<250	45,000	-	-	-	-	-	7.0	550	-	-	-	-
	9/23/10[I]	-	-	-	*15*	-	-	-	-	-	-	-	-	-	<400	<80	13,000	<200	5,100	<200	<400	-	<200	<200	46,000	<100	<80	<80	<80	<200	64,100	-	-	-	-	-	6.69	1,290	-	-	-	-
	9/23/10[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	<400	<80	13,000	<200	5,000	<200	<400	-	<200	<200	46,000	<100	<80	<80	<80	<200	64,000	-	-	-	-	-	-	-	-	-	-	-
	3/17/11[HH]	-	-	-	<1.81	-	-	-	-	-	-	-	-	-	<500	<100	10,000	<250	2,900	<250	<500	-	<250	<250	35,000	<130	<100	<100	<100	<250	47,900	-	-	-	-	-	7.87	1,860	-	-	-	-
	3/17/11[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	<500	<100	11,000	<250	3,100	<250	<500	-	<250	<250	38,000	<130	<100	<100	<100	<250	52,100	-	-	-	-	-	-	-	-	-	-	-
	9/22/11	-	-	-	<1.5	-	-	-	-	-	-	-	-	-	<50	<10	1,200	<25	140	<25	<50	-	<25	<25	4,800	<13	<10	<10	<10	<25	6,140	-	-	-	-	-	7.66	300	-	-	-	-
	3/21/12[AL]	-	-	-	*28*	-	-	-	-	-	-	-	-	-	<1.0	0.21	200	*1.1*	58	<0.50	<1.0	-	<0.50	<0.50	2,200	*2.4*	*1.2*	<0.20	0.20	<0.50	2,463	-	-	-	-	-	7.77	180	-	-	-	-
	9/13/12[AL]	-	-	-	<2.0	-	-	-	-	-	-	-	-	-	<0.97	<1.3	<0.75	<0.36	0.59	<0.54	<0.43	-	<0.45	<0.67	2.4	<2.4	<0.48	<0.83	<0.18	<2.63	2.4	-	-	-	-	-	7.77	180	-	-	-	-
	5/1/13[AL]	-	-	-	<1.2	-	-	-	-	-	-	-	-	-	<0.44	<0.69	1.9	<0.48	<0.43	<0.50	<0.36	-	<0.47	<0.44	1.7	<0.39	<0.43	<2.5	<0.18	<1.32	3.6	-	-	-	-	-	8.80	187	-	-	-	-
	9/25/13[AL]	-	-	-	<1.2	-	-	-	-	-	-	-	-	-	<0.44	<0.69	3.7	<0.48	<0.43	<0.50	<0.36	-	<0.47	<0.44	4.8	<0.39	<0.36	<0.5	<0.18	<1.32	8.5	-	-	-	-	-	8.80	187	-	-	-	-
	5/15/14	-	-	-	2.8[AO]	-	-	-	-	-	-	-	-	-	<37.5	<250	9,540	42.3[AO]	503	<50.0	<23.3	-	<50.0	<50.0	19,800	66.7[AO]	<33.1	<50.0	<17.6	<150.0	29,843	-	-	-	-	-	7.29	1,490	-	-	-	-
	9/18/14	-	-	-	*13.4*	-	-	-	-	-	-	-	-	-	<74.9	<500	8,880	<33.5	573	<100	<46.5	-	<100	<100	16,600	<31.1	<66.1	<100	<35.1	<300	26,033	-	-	-	-	-	7.29	1,490	-	-	-	-
	4/16/15	-	-	-	*43.2*	-	-	-	-	-	-	-	-	-	<74.9	<500	9,080	<33.6	736	<100	<46.5	-	<100	<100	18,800	<39.5	<66.1	<100	<35.1	<300	28,616	-	-	-	-	-	-	-	-	-	-	-
P-7C	12/11/03	-	-	13	590	<2.6	-	66,000	-	-	-	--	-	-	<1.9	<0.74	*64*	<0.72	12	<1.1	<0.86	-	<0.90	<1300	260	<0.84	<0.96	<1.7	<0.36	<5300	336	-	-	-	-	-	7.00	-	-	-	-	-
	4/21/04	-	-	4.9	<1.1	<2.7	-	<32	-	-	-	-	-	-	<0.97	<0.37	*18*	<0.36	*1.7*	<0.54	<0.43	-	<0.45	<0.67	*44.00*	<0.42	<0.48	<0.83	<0.18	<2.63	63.7	-	-	-	-	-	-	-	-	-	-	-
	6/28/04	-	-	4.4	1.8	<2.7	-	21	-	-	-	-	-	-	<0.97	<0.37	16	<0.36	*1.6*	<0.54	<0.43	-	<0.45	<0.67	32.00	<0.92	<0.48	<0.83	<0.18	<2.63	49.6	-	-	-	-	-	-	-	-	-	-	-
	9/28/04	-	-	4.0	1.4	<2.7	-	<18	-	-	-	-	-	-	<0.97	<0.37	14	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	17.00	<0.42	<0.48	<0.83	<0.18	<2.63	31	-	-	-	-	-	-	-	-	-	-	-
	12/21/04	-	-	4.0	1.5	<2.7	-	<17	-	-	-	-	-	-	<0.97	<0.37	9.9	<0.36	0.61	<0.54	<0.43	-	<0.45	<0.67	12.00	<0.42	<0.48	<0.83	<0.18	<2.63	22.51	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	4.6	0.69	<2.7	-	19	-	-	-	-	-	-	<0.97	<0.37	13.0	<0.36	*0.76*	<0.54	<0.43	-	<0.45	<0.67	13.00	<0.42	<0.48	<0.83	<0.18	<2.63	26.76	-	-	-	-	-	8.44	-	-	-	-	-
	9/14/05	-	-	-	3.9	<5.0	-	-	-	-	-	-	-	-	<0.97	<0.37	8.8	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	4.60	<0.42	<0.48	<0.83	<0.18	<2.63	13.4	-	-	-	-	-	7.42	-	-	-	-	-
	9/13/06	-	-	-	2.3	<6.8	-	-	-	-	-	-	-	-	<0.97	<0.37	6.6	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	5.00	<0.42	<0.48	<0.83	<0.18	<2.63	11.6	-	-	-	-	-	8.30	-	-	-	-	-
	9/11/07	-	-	-	1.5	<3.4	-	-	-	-	-	-	-	-	<0.97	<0.37	4.7	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	5	<0.42	<0.48	<0.83	<0.18	<0.83	9.7	-	-	-	-	-	8.39	231	-	-	-	-
	9/23/09[I]	-	-	-	9.6	-	-	-	-	-	-	-	-	-	<1.0	<0.20	2.6	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	0.87	0.29	<0.20	<0.20	<0.20	<0.50	3.76	-	-	-	-	-	7.00	425	-	-	-	-
	9/22/11[T]	-	-	-	<1.5	-	-	-	-	-	-	-	-	-	<1.0	<0.20	0.56	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	1.1	<0.25	<0.20	<0.20	<0.20	<0.50	1.66	-	-	-	-	-	7.86	150	-	-	-	-
	9/25/13[T]	-	-	-	*2.4*	-	-	-	-	-	-	-	-	-	29.5	<17.2	*240*	<11.9	135	<12.5	<9.0	-	<11.8	<11.0	2,330	<9.7	<9.1	<12.5	7.8	<32.9	2,746.3	-	-	-	-	-	7.86	150	-	-	-	-
P-8	5/22/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	55.2	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	55	-	-	-	-	-	-	-	-	-	-	-
	8/20/98	-	-	-	<5.0	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	1/14/99	-	-	-	2.2	7	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	2.2	<4.2	-	-	-	-	-	-	-	-	<1.2	<0.18	<0.25	<0.20	<0.73	<0.38	<0.87	<0.14	<0.63	<0.39	<0.28	<0.15	<0.49	<0.33	<0.46	<1.1	0	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	<5	*13*	<4.2	-	440	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.43	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	9/6/01	-	-	<5	1.6	<4.2	-	4,000	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.45	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	6.3	9.2	<4.2	-	13,000	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.57	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	1	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	<5	*14*	<4.2	-	27,000	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	*0.6*	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<0.25	1	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	440	*25*	<20	-	17,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/16/03	-	-	420	*20*	<2.6	-	14,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	*240*	*34*	<2.6	-	24,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
P-8A[a]	12/15/03	-	-	260	*24*	<2.6	-	18,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/21/04	-	-	*170*	*11*	<2.7	-	<32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/30/04	-	-	*140*	0.85	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/12/04	-	-	*150*	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	500	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,000	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200	Total Toxic Organics (TTO) < 2.130																	NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																									
	12/28/04	-	-	110	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/05	-	-	**600**	0.82	<2.7	-	<18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.69	-	-	-	-	-
P-9	8/19/98	-	-	-	8	<10.0	-	-	-	-	-	-	-	-	<1.0	<0.5	<1.0	<0.5	<0.5	<1.0	<0.5	<5.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0	<0.2	<1.0	0	-	-	-	-	-	-	-	-	-	-	-
	1/14/99	-	-	-	4	<4.2	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.10	<0.25	<0.25	0	-	-	-	-	-	-	-	-	-	-	-
	2/16/99	-	-	-	3	<4.2	-	-	-	-	-	-	-	-	<1.2	<0.18	<0.25	<0.20	<0.23	<0.38	<0.87	<0.14	<0.63	<0.39	<0.28	<0.15	<0.49	<0.33	<0.46	<1.1	0	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	0.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/14/03	-	-	1.2	6	<20	-	**6,100**	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	1.7	4.8	<2.6	-	**3,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	1.5	*10*	<2.6	-	**7,600**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
P-9A^	**12/11/03**	-	-	2.1	9.4	<2.6	-	**8,100**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/28/04	-	-	1.9	1.2	<2.9	-	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/29/04	-	-	3.0	0.62	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/8/04	-	-	2.7	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/05	-	-	19	<0.65	<2.7	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-12	3/22/00	-	-	-	**9,100**	**10,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/9/00	-	-	-	*15*	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/2/01	-	-	-	6.6	<4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/20/01	-	-	<5	2.5	<4.2	-	**3,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/4/01	-	-	<5	*57*	<4.2	-	**3,500**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/15/01	-	-	<5	5	9	-	*<42*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	<5	*12*	*20*	-	**78,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	<5	**420**	**100**	-	**110,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/19/02	-	-	2.1	**960**	<12	-	**140,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	12/30/02	-	-	-	**240**	<10	-	**50,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	6/17/03	-	-	2.1	**130**	<2.6	-	**22,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	9/24/03	-	-	5.3	**110**	*17*	-	**20,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
P-12A^	**12/10/03**	-	-	2.0	**120**	<2.6	-	**22,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/15/04	-	-	2.1	*5.7*	<2.7	-	*170*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	2.0	7.3	4	-	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/11/04	-	-	2.5	5.5	*10*	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04	-	-	3.2	4.7	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/30/05	-	-	12	5.8	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.38	-	-	-	-	-
	9/14/05	-	-	-	3.5	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.06	-	-	-	-	-
	9/12/06	-	-	-	<1.3	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.52	-	-	-	-	-
	9/10/07	-	-	-	0.47	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.51	770	-	-	-	-
	9/23/09	-	-	-	<2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.80	910	-	-	-	-
	9/22/11	-	-	-	<1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.21	890	-	-	-	-
	9/24/13	-	-	-	<1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.21	890	-	-	-	-
P-15A	**12/10/03[7]**	-	-	60	95	<2.6	-	**44,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/14/04	-	-	72	0.59	<2.7	-	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	30	1.1	<2.7	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/11/04	-	-	30	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04	-	-	14	0.95	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/18/05	-	-	22	0.89	<5	-	<18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.05	-	-	-	-	-
P-15B	**12/10/03[7]**	-	-	23	**910**	<2.6	-	**45,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/14/04	-	-	100	0.53	<2.7	-	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/22/04	-	-	72	0.94	<2.7	-	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/11/04	-	-	61	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04UF	-	-	-	**300**	<2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04	-	-	43	*22*	<2.7	-	**10,000** [9]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/18/05	-	-	*24*	1.2	<5	-	<18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.17	-	-	-	-	-
P-16A	**12/10/03[7]**	-	-	30	**230**	<2.6	-	**170,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-
	4/14/04	-	-	8.8	1.2	<2.7	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/04	-	-	5.8	1.4	<2.7	-	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/12/04	-	-	5.3	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/16/04	-	-	4.8	<0.52	<2.7	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/18/05	-	-	4.5	<0.65	<5	-	<18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.95	-	-	-	-	-
Sump A Influent	**9/19/01**	-	-	61	**4,500**	**5,100**	-	*<42*	-	-	-	-	-	-	<25	<25	*310*	<25	**360**	<25	**44**	<25	<25	<10	**2,500**	<25	<25	<10	<25	<25	3,214	-	-	-	-	-	-	-	-	-	-	-
	10/3/01	-	-	85	**3,000**	**3,300**	-	**890**	-	-	-	-	-	-	<50	<50	*330*	<50	**290**	<50	**160**	<50	<50	<20	**2,700**	<50	<50	<20	<50	<50	3,480	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	68	**15,000**	**13,000**	-	*290*	-	-	-	-	-	-	<50	<50	*380*	<50	**470**	<50	**260**	<50	<50	<20	**4,000**	<50	<50	<20	<50	<50	5,110	-	-	-	-	-	-	-	-	-	-	-
	3/13/02	-	-	**580**	**890,000**	**790,000**	-	*190*	-	-	-	-	-	-	<12	<12	**1,300**	<12	**2,400**	<12	<12	<5.0	<12	<12	**32**	<12	<12	<5.0	<12	<12	0.964	-	-	-	-	-	-	-	-	-	-	-
	6/18/02	-	-	56	**12,000**	**8,900**	-	*290*	-	-	-	-	-	-	<14	<19	*490*	<12	**470**	<11	<21	-	<14	<12	**3,300**	<18	<22	<13	<4.5	<49	4,260	-	-	-	-	-	7.00	-	-	-	-	-
	9/30/02	-	-	-	**76,000**	**88,000**	-	120	-	-	-	-	-	-	<21	<11	*530*	<14	**400**	<13	<12	-	<16	<21	**2,800**	<12	<9.8	<16	<2.8	<46	3,730	-	-	-	-	-	7.00	-	-	-	-	-
	12/23/02	-	-	-	**180,000**	**170,000**	-	48	-	-	-	-	-	-	<17	<9.0	*530*	<11	**770**	<11	<9.4	-	<13	<17	**3,600**	<10	<7.8	<13	<2.2	<37	4,900	-	-	-	-	-	7.00	-	-	-	-	-
	3/31/03	-	-	-	**56,000**	**41,000**	-	**450**	-	-	-	-	-	-	<19	*<7.4*	*320*	<7.2	**500**	<11	<8.6	-	<9.0	<13	**2,000**	<8.4	<9.6	<17	<3.6	<53	2,820	-	-	-	-	-	7.00	-	-	-	-	-
	6/16/03	-	-	70	**47,000**	**41,000**	-	110	-	-	-	-	-	-	<48	<18	*740*	<18	**650**	<27	<22	-	<22	<34	**4,100**	<21	<24	<42	<9.0	<132	5,490	-	-	-	-	-	7.00	-	-	-	-	-
	9/23/03	-	-	69	**44,000**	**37,000**	-	<48	-	-	-	-	-	-	<48	<18	*690*	<18	**790**	<27	<22	-	<22	<34	**4,700**	<21	<24	<42	<9.0	<132	6,180	-	-	-	-	-	7.00	-	-	-	-	-
	12/9/03	-	-	66	**46,000**	**49,000**	-	<47	-	-	-	-	-	-	<39	<15	*730*	<14	**810**	<22	<17	-	<18	<27	**4,100**	<17	<19	<33	<7.2	<105	5,640	-	-	-	-	-	7.00	-	-	-	-	-
	5/19/04	-	-	55	**3,100**	**39,000**	-	*<400*	-	-	-	-	-	-	<39	<15	*400*	<14	**460**	<22	<17	-	<18	<27	**2,700**	<17	<19	<33	<7.2	<105	3,560	-	-	-	-	-	-	-	-	-	-	-
	6/29/04	-	-	50	**28,000**	**29,000**	-	<17	-	-	-	-	-	-	<19	*<7.4*	*640*	<7.2	**700**	<11	<8.6	-	<9.0	<13	**3,500**	<18	<9.6	<17	<3.6	<53	4,840	-	-	-	-	-	-	-	-	-	-	-
	10/6/04	-	-	65	**35,000**	-	-	<17	-	-	-	-	-	-	<97	<37	550	<36	**700**	<54	<43	-	<45	<67	**3,000**	<42	<48	<83	<18	<263	3,700	-	-	-	-	-	-	-	-	-	-	-
	01/10/4/05	-	-	55	**21,000**	**22,000**	-	58	-	-	-	-	-	-	<24	<9.2	*640*	<9.0	**660**	<14	<11	-	<11	<17	**3,900**	<10	<12	<21	<4.5	<66	5,200	-	-	-	-	-	-	-	-	-	-	-
	3/9/05	-	-	97	**71,000**	**72,000**	-	<18	-	-	-	-	-	-	<24	<9.2	**1,100**	<9	**1,000**	<14	<11	-	<11	<17	**2,800**	**17**	<12	<21	<4.5	<66	4,917	-	-	-	-	-	-	-	-	-	-	-
	6/27/05	-	-	-	**17,000**	**17,000**	-	-	-	-	-	-	-	-	<24	<9.2	*530*	<9	**470**	<14	<11	-	<11	<17	**3,200**	<23	<12	<21	<4.5	<66	4,200	-	-	-	-	-	-	-	-	-	-	-
	9/12/05	-	-	-	**18,000**	**21,000**	-	-	-	-	-	-	-	-	<24	<9.2	*560*	<9.0	***500***	<14	<11	-	<11	<17	**2,800**	<10	<12	<21	<4.5	<66	3,866	-	-	-	-	-	-	-	-	-	-	-
	12/20/05	-	-	-	**15,000**	**15,000**	-	-	-	-	-	-	-	-	<19	*<7.4*	*490*	<7.2	***550***	<11	<8.6	-	<9	<13	**3,100**	<8.4	<9.6	<17	<3.6	<53	4,140	-	-	-	-	-	-	-	-	-	-	-
	12/20/05[5]	-	-	-	**15,000**	**14,000**	-	-	-	-	-	-	-	-	<19	*<7.4*	*490*	<7.2	***550***	<11	<8.6	-	<9	<13	**3,200**	<8.4	<9.6	<17	<3.6	<53	4,240	-	-	-	-	-	-	-	-	-	-	-
	3/6/06	-	-	-	**17,000**	**19,000**	-	-	-	-	-	-	-	-	<24	<9.2	*480*	<9.0	***490***	<14	<11	-	<11	<17	**2,600**	<10	<12	<21	<4.5	<66	3,570	-	-	-	-	-	-	-	-	-	-	-
	6/15/06	-	-	-	**20,000**	**22,000**	-	-	-	-	-	-	-	-	<19	*<7.4*	*480*	<7.2	***450***	<11	<8.6	-	<9.0	<13	**2,100**	<8.4	<9.6	<17	<3.6	<53	3,030	-	-	-	-	-	-	-	-	-	-	-
	9/11/06	-	-	-	**15,000**	**17,000**	-	-	-	-	-	-	-	-	<24	<9.2	*500*	<9.0	***530***	<14	<15	-	<11	<17	**2,100**	<10	<12	<21	<4.5	<66	3,130	-	-	-	-	-	-	-	-	-	-	-
	12/11/06	-	-	-	**15,000**	**16,000**	-	-	-	-	-	-	-	-	<9.7	<3.7	*370*	<3.6	***330***	<5.4	<4.3	-	<4.5	<6.7	**1,800**	**5.8**	<4.8	<8.3	<1.8	<26.3	2,466	-	-	-	-	-	-	-	-	-	-	-
	12/11/06[5]	-	-	-	-	-	-	-	-	-	-	-	-	-	<24	<9.2	*450*	<9.0	***470***	<14	<11	-	<11	<17	**2,400**	<10	<12	<21	<4.5	<66	3,320	-	-	-	-	-	-	-	-	-	-	-
	3/15/07	-	-	-	**4,900**	**6,300**	-	-	-	-	-	-	-	-	<9.7	<3.7	*220*	<3.6	***210***	<5.4	<4.3	-	<4.5	<6.7	**1,300**	<4.2	<4.8	<8.3	<1.8	<26.3	1,790	-	-	-	-	-	-	-	-	-	-	-
	3/15/07[5]	-	-	-	-	-	-	-	-	-	-	-	-	-	<9.7	<3.7	*210*	<3.6	**220**	<5.4	<4.3	-	<4.5	<6.7	**1,200**	<4.2	<4.8	<8.3	<1.8	<26.3	1,630	-	-	-	-	-	-	-	-	-	-	-
	4/18/07	-	-	-	**15,000**	**16,000**	-	55	*190*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/17/07	-	-	-	**15,000**	**15,000**	-	**580**	*180*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/2/07[6]	-	-	-	**13,000**	**13,000**	-	*250*	*180*	-	-	-	-	-	<24	<9.2	*400*	-	**380**	<14	<11	-	<11	<17	**2,400**	<10	<12	<21	<4.5	<66	3,180	-	-	-	-	-	-	-	-	-	-	-
	7/19/07	-	-	-	**14,000**	**14,000**	-	<50	*160*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sept Monthly Sample	**10/2/07**	-	-	-	**9,300**	**10,000**	-	-	-	-	-	-	-	-	<24	<9.2	*470*	<9.0	**430**	<14	<11	-	<11	<17	**2,800**	<10	<12	<21	<4.5	<66	3,700	-	-	-	-	-	-	-	-	-	-	-
	12/20/07	-	-	-	**11,000**	**13,000**	-	-	-	-	-	-	-	-	*<24*	<9.2	*360*	<9.0	**420**	<14	<11	-	<11	<17	**1,900**	<10	<12	<21	<4.5	<66	2,957	-	-	-	-	-	-	-	-	-	-	-
	12/20/07D	-	-	-	-	-	-	-	-	-	-	-	-	-	<24	<9.2	*380*	<9.0	**420**	<14	<11	-	<11	<17	**2,000**	<10	<12	<21	<4.5	<66	3,079	-	-	-	-	-	-	-	-	-	-	-
	3/20/08	-	-	-	**8,510**	**9,900**	-	-	-	-	-	-	-	-	*<24*	<9.2	*271*	<9.0	**250**	<14	<11	-	<11	<17	**1,550**	<10	<12	<21	<4.5	<66	2,071	-	-	-	-	-	-	-	-	-	-	-
	6/12/08	-	-	-	**10,300**	**12,100**	-	-	-	-	-	-	-	-	*<24*	<9.2	*388*	<9.0	**429**	<14	<11	-	<11	<17	**2,380**	<10	<12	<21	<4.5	<66	3,397	-	-	-	-	-	-	-	-	-	-	-
	9/19/08	-	-	-	**9,400**	**10,300**	-	-	-	-	-	-	-	-	<24	<32.5	*424*	<9.0	**453**	<13.5	<10.8	-	<11.2	<16.8	**2,950**	<10.5	<12	<20.8	<4.5	<65.8	3,827	-	-	-	-	-	-	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Metals													Volatile Organic Compounds (VOC)																Other									
		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC) Dissolved (mg/L)
NR 140 PAL		*0.5*	*125*	*10*	*10*	*130*	*150*	*125*	*NE*	*1.5*	*20*	*10*	NE	*80*	*0.6*	*85*	*0.5*	*0.7*	*140*	*0.5*	*50*	*0.5*	*200*	*40*	*0.5*	*0.5*	*96*	*0.02*	*1,000*	NE	NE	*40*	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		**5**	**250**	**100**	**100**	**1,300**	**300**	**250**	**NE**	**15**	**100**	**50**	NE	**400**	**6**	**850**	**5**	**7**	**700**	**5**	**500**	**5**	**1,000**	**200**	**5**	**5**	**480**	**0.2**	**10,000**	NE	NE	**200**	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		**300**	NE	**4,000**	NE	**6,000**	NE			**690**	**4,100**	NE	**4,200**										Total Toxic Organics (TTO) < 2.130							NE	**1,900**	NE	**100**	NE	**5-9**				
Sample Location	**Sample Date**																																						
Grab @ Sump Manhole	**12/12/08**	-	-	97.2	**16,000**	**13,300**	-	1,970.0	-	1,020.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<.68	-	-	-	321	< 0.085	5.2	-
	12/30/08	-	-	-	**5,960**	**6,000**	-	-	-	-	-	-	-	<19.4	<26	333	<7.2	334	<10.8	<8.6	-	<9	<13.4	2230	<8.4	<9.6	<16.6	<3.6	<52.6	2897	-	-	-	-	-	-	-	-	-	-
Sump A	**3/12/09**	-	-	-	**736**	40	-	-	-	-	-	-	-	<3.9	<5.2	60.5	<1.4	50.1	<2.2	<1.7	-	<1.8	<2.7	367	<1.7	<1.9	<3.3	<0.72	<10.5	477.6	-	-	-	-	-	-	-	-	-	-
Influent (Continued)	**4/9/09**	-	-	-	**10,600**	**4,700**	-	8.4	-	<2.3	-	-	-	<19.4	<26.0	*5.15*	<7.2	**385**	<10.8	<8.6	-	<9.0	<13.4	**1,100**	<8.4	<9.6	<16.6	<3.6	<36.0	2,000	-	-	<0.68	-	-	-	818	<0.85	16.3	21.9
taken before injection	**4/27/09**	-	-	54.6	**7,120**	**6,600**	-	-	*215*	<2.3	-	-	-	<24.2	<32.5	*343*	<9.0	**380**	<13.5	**22.3**	-	<11.2	<16.8	**2,050**	<10.5	<12.0	<20.8	<4.5	<45.0	2,795	-	-	<0.17	-	-	-	114	0.21	3.0	2.0
	5/21/09	-	-	60.7	**4,510**	**5,300**	-	9.8	*211*	<1.7	-	-	-	<19.4	<26	*391*	<7.2	**508**	<10.8	<8.6	-	<9.0	<13.4	**2,230**	<8.4	<9.6	<16.6	<3.6	<36	3,129	-	-	<0.25	-	-	-	111	0.18	1.7	1.6
	6/18/09	-	-	67.1	**2,680**	**1,400**	-	50.7	*221*	<1.7	-	-	-	<19.4	<26	*307*	<7.2	**254**	<10.8	<8.6	-	<9.0	<13.4	**1,520**	<8.4	<9.6	<16.6	<3.6	<36	2,081	-	-	<0.25	-	-	-	52.2	0.91	1.5	2.6
	6/23/09	-	-	-	**1,700**	**1,100**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/15/09	-	-	57.8	**1,330**	**1,400**	-	<4.0	**254**	<1.7	-	-	-	<19.4	<26	*204*	<7.2	**200**	<10.8	<8.6	-	<9.0	<13.4	**1,690**	<8.4	<9.6	<16.6	<3.6	<36	2,094	-	-	<0.25	-	-	-	34.6	1.0	2.1	1.9
	9/23/09	-	-	-	**230**	<2.5	-	-	-	-	-	-	-	<32	<6.4	*430*	<16	**370**	<16	<32	-	<16	<16	**1,900**	<8.0	<6.4	<6.4	<6.4	<16	2,700	-	-	-	-	-	-	-	-	-	-
	2/10/10	-	-	-	*42*	<2.5	-	-	-	-	-	-	-	<25	<5.0	*320*	<12	**270**	<12	<12	-	<12	<12	**1,400**	<6.2	<5.0	<5.0	<5.0	<12	1,990	-	-	-	-	-	-	-	-	-	-
	9/23/10[FB]	-	-	-	**230**	4.4	-	-	-	-	-	-	-	<10	<2.0	*130*	<5.0	**100**	<5.0	<10	-	<2.5	<5.0	**660**	<2.5	<2.0	<2.0	<2.0	<5.0	890	-	-	-	-	-	-	-	-	-	-
	2/17/11[DO]	-	-	-		<3.0	-	-	-	-	-	-	-	<5.0	<1.0	*2.90*	<2.5	**98**	<2.5	<5.0	-	<2.5	<2.5	**330**	<1.3	*1.2*	<1.0	**24**	<2.5	643	-	-	-	-	-	-	-	-	-	-	-
	3/17/11	-	-	-	**103**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/11[BB,GG,JH]	-	-	-	*75*	*9.0*	-	-	-	-	-	-	-	<4.0	<0.80	*100*	<2.0	**71**	<2.0	<4.0	-	<2.0	<2.0	**470**	<1.0	1.9	<0.80	<0.80	<2.0	643	-	-	-	-	-	-	-	-	-	-	-
	9/22/11[YY,ZZ]	-	-	-	*25*	*39*	-	-	-	-	-	-	-	<4.0	<0.80	**1,200**	<2.0	**25**	<2.0	<4.0	-	<2.0	<2.0	21	<1.0	*1.0*	<0.80	**6.0**	<2.0	1,253	-	-	-	-	-	-	-	-	-	-	-
	12/1 2/11[AK]	-	-	-	*36*	<3.0	-	-	-	-	-	-	-	<16	<3.2	**1,400**	<8.0	<8.0	<8.0	<16	-	<8.0	12	<8.0	<4.0	<3.2	<3.2	**5.5**	<8.0	1,418	-	-	-	-	-	-	-	-	-	-	-
	4/4 /12[AM]	-	-	-	**120**	<3.0	-	-	-	-	-	-	-	2.5	<0.25	*100*	<0.28	**95**	<0.14	<0.63	-	<0.22	<0.15	**420**	0.86	*1.4*	<0.23	**1.4**	<0.30	621	-	-	-	-	-	-	-	-	-	-	-
	6/7 /12[AM]	-	-	-	**99**	<0.00.39	-	-	-	-	-	-	-	<4.8	<6.5	*112*	<1.8	**90.8**	<2.7	<.43	-	<0.22	<0.15	**<0.90**	0.86	*1.4*	<0.23	<0.18	<0.30	205	-	-	-	-	-	-	-	-	-	-	-
	9/14/12[AM]	-	-	-	*14*	<0.00.39	-	-	-	-	-	-	-	<4.8	<6.5	*187*	<1.8	**96**	<2.7	<2.2	-	<2.2	<3.4	**392**	<2.1	<2.4	<0.23	**7.0**	<0.30	682	-	-	-	-	-	-	-	-	-	-	-
	3/20/13[AM]	-	-	-	*36*	0.024	-	-	-	-	-	-	-	<3.9	<5.2	*72*	<1.4	**72.8**	<2.2	<1.7	-	<0.80	<2.7	**338**	<1.7	<1.9	<3.3	<0.72	<1.42	482	-	-	-	-	-	-	-	-	-	-	-
	9/26/13[AM]	-	-	-	*42*	<3.4	-	-	-	-	-	-	-	4.6	<3.4	*126*	<2.2	**106**	<2.5	<1.8	-	<2.4	<2.2	**466**	<1.7	2.0	<2.5	1.8	<6.6	706	-	-	-	-	-	-	-	-	-	-	-
	3/13/14	-	-	-	*7.7*	<3.4	-	-	-	-	-	-	-	<1.8	<2.8	*79.1*	<1.9	**64.3**	<2.0	<1.4	-	<1.9	<1.8	**325**	<1.6	<1.5	<2.0	<0.74	<5.3	468	-	-	-	-	-	-	-	-	-	-	-
	6/12/14	-	-	-	**160**	**140**	-	-	-	-	-	-	-	3.8 J	<12.5	*98.0*	<0.84	**131**	<2.5	<1.2	-	<2.5	<2.5	**573**	<0.78	<1.7	<2.5	<0.88	<7.5	802	-	-	-	-	-	-	-	-	-	-	-
	9/17/14	-	-	-	**237**	**130**	-	-	-	-	-	-	-	2.8 J	<12.5	*223*	<0.84	**154**	<2.5	1.3 J	-	<2.5	<2.5	**1,270**	<0.78	2.4 J	<2.5	<0.88	<7.5	1,647	-	-	-	-	-	-	-	-	-	-	-
	11/13/14	-	-	-	**191**	**130**	-	-	-	-	-	-	-	5.9 J	<25.0	*223*	<1.7	**179**	<5.0	<2.3	-	<3.3	<5.0	**1,130**	<1.6	<3.3	<5.0	<1.8	<15.0	1,532	-	-	-	-	-	-	-	-	-	-	-
	3/18/15	-	-	-	*17*	*19*	-	-	-	-	-	-	-	<1.9	<12.5	*202*	<0.84	**105**	<2.5	<1.2	-	<2.5	<2.5	**936**	<0.99	1.7 J	<2.5	<0.88	<7.5	1,243	-	-	-	-	-	-	-	-	-	-	-
Sump B	**9/20/01**	-	-	<5	1.7	<4.2	-	<42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Influent	**10/3/01**	-	-	33	**1,200**	**120**	-	**1,900**	-	-	-	-	-	<0.25	<0.25	5.1	<0.25	*0.9*	<0.25	*1.4*	<0.25	<0.25	<0.1	11	<0.25	<0.25	<0.1	<0.25	<0.25	18	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/7/02	-	-	*150*	<20	<4.2	-	**420**	-	-	-	-	-	<0.25	<0.25	0.32	<0.25	<0.25	<0.25	<0.25	-	<0.25	<0.1	1	<0.25	<0.25	<0.1	<0.25	<0.25	1	-	-	-	-	-	-	-	-	-	-	-
	6/18/02	-	-	38	**4,300**	**3,500**	-	*230*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-
	9/30/02	-	-	-	**7,900**	**9,300**	-	*240*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-
	12/23/02	-	-	-	**8,900**	**9,800**	-	88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-
	3/31/03	-	-	-	*43*	*54*	-	**320**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-
	6/16/03	-	-	57	**7,400**	**6,400**	-	*79*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-
	9/23/03	-	-	38	**7,600**	**7,500**	-	*170*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-
	12/9/03	-	-	39	**6,100**	**7,000**	-	**1,500**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-
	5/19/04	-	-	44	**4,300**	**4,200**	-	**890**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/29/04	-	-	38	**11,000**	**11,000**	-	*28*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/6/04	-	-	46	**2,400**	**6,300**	-	<17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/4/05	-	-	58	**3,700**	**3,700**	-	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/8/05	-	-	97	**3,700**	**3,800**	-	**340**	-	-	-	-	-	<0.97	<0.34	1.6	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	2.9	<0.42	<0.48	<0.83	<0.18	<2.63	4.5	-	-	-	-	-	-	-	-	-	-	-
	6/21/05	-	-	-	**1,600**	**1,600**	-	-	-	-	-	-	-	<0.97	<0.37	1.2	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	2.1	<0.42	<0.48	<0.83	<0.18	<2.63	3.3	-	-	-	-	-	-	-	-	-	-	-
	9/1/05	-	-	-	**1,000**	**1,100**	-	-	-	-	-	-	-	<0.97	<0.37	1.4	<0.36	<0.57	<0.54	<0.43	-	-	<0.67	2.4	<0.42	<0.48	<0.83	<0.18	<2.63	3.8	-	-	-	-	-	-	-	-	-	-	-
	12/20/05	-	-	-	**1,100**	**1,100**	-	-	-	-	-	-	-	<0.97	<0.37	2	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	3.7	<0.42	<0.48	<0.83	<0.18	<2.63	5.7	-	-	-	-	-	-	-	-	-	-	-
	3/6/06	-	-	-	**2,400**	**3,400**	-	-	-	-	-	-	-	<0.97	<0.37	1.2	<0.36	<0.57	<0.54	<0.43	-	<0.48	<0.67	2.1	<0.42	<0.48	<0.83	<0.18	<2.63	3.3	-	-	-	-	-	-	-	-	-	-	-
	03/06/06[D]	-	-	-	**2,400**	**3,700**	-	-	-	-	-	-	-	<0.97	<0.37	1.2	<0.36	<0.57	<0.54	<0.43	-	<0.48	<0.67	2	<0.42	<0.48	<0.83	<0.18	<2.63	3.2	-	-	-	-	-	-	-	-	-	-	-
	6/15/06	-	-	-	**1,500**	**1,600**	-	-	-	-	-	-	-	<0.97	<0.37	1.5	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	2.3	<0.42	<0.48	<0.83	<0.18	<2.63	3.8	-	-	-	-	-	-	-	-	-	-	-
	9/1/06	-	-	-	**1,800**	**1,800**	-	-	-	-	-	-	-	<0.97	<0.37	2.2	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	3.5	<0.42	<0.48	<0.83	<0.18	<2.63	5.7	-	-	-	-	-	-	-	-	-	-	-
	12/11/06	-	-	-	**2,300**	**2,300**	-	-	-	-	-	-	-	<0.97	<0.37	1.3	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	1.9	<0.42	<0.48	<0.83	<0.18	<2.63	3.2	-	-	-	-	-	-	-	-	-	-	-
	3/15/07	-	-	-	**350**	**430**	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
	7/2/07	-	-	-	**320**	**230**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September Samples	**10/2/07**	-	-	-	**620**	**460**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/20/07	-	-	-	**1,700**	**920**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/20/08	-	-	-	**927**	**1,200**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/12/08	-	-	-	**1,860**	**1,900**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	--
	9/10/08	-	-	-	**338**	**260**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/30/08	-	-	-	**774**	**750**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/12/09	-	-	-	**50**	<8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/09	-	-	-	**2,600**	**2,100**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/23/09	-	-	-	**1,000**	*2.4*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/14/09[E]	-	-	-	**2.2**	**870**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/10/10	-	-	-	**910**	**700**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/23/10	-	-	-	**1,500**	**1,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/17/11	-	-	-		*14*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/17/11	-	-	-	**1,390**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/2011[H]	-	-	-	**410**	**260**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/22/11[ZZ]	-	-	-	**6,800**	**2,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/12/11	-	-	-	**1,700**	**1,100**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/21/12[AH]	-	-	-	**330**	**240**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/7 /12[AH]	-	-	-	**878**	**1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/14/12[AH]	-	-	-	51	<0.00.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/20/13[AH]	-	-	-	**164**	**140**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/18/13[AH]	-	-	-	**511**	**410**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/26/13[AH]	-	-	-	**876**	**6,940**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/12/14	-	-	-	**905**	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/17/14	-	-	-	**382**	**360**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/13/14	-	-	-	**673**	**650**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Between Carbon	**6/18/02**	-	-	-	-	-	-	-	-	-	-	-	-	<0.57	<0.75	<0.48	<0.47	<0.85	<0.43	<0.85	-	<0.57	<0.47	<0.69	<0.72	<0.89	<0.52	<0.18	<1.94	--	-	-	-	-	-	-	-	-	-	-
Drums- Unfiltered	**9/30/02**	-	-	-	-	-	-	-	-	-	-	-	-	3.8	<0.45	62	<0.55	<0.56	<0.53	*3.8*	-	<0.63	<0.84	*130*	<0.50	<0.39	<0.64	**0.29**	<1.83	200	-	-	-	-	-	-	-	-	-	-	-
	12/23/02	-	-	-	-	-	-	-	-	-	-	-	-	<4.2	<2.2	*2.20*	<2.8	<2.8	<2.4	**6.7**	-	<3.1	<4.2	**710**	<2.5	<1.9	<3.2	<0.55	<9.1	987	-	-	-	-	-	-	-	-	-	-	-
(a.k.a. Between GAC's)	**3/31/03**	-	-	-	-	-	-	-	-	-	-	-	-	<9.7	<3.7	*5.30*	<3.6	<5.7	<5.4	**11**	-	<4.5	<6.7	**1,400**	<4.2	<4.8	<8.3	<1.8	<26.3	1,941	-	-	-	-	-	-	-	-	-	-	-
	6/16/03	-	-	-	-	-	-	-	-	-	-	-	-	5.5	<0.74	*98*	<0.72	*4.6*	<1.1	**6.5**	-	<0.90	<1.3	**200**	<0.84	<0.96	<1.7	**0.52**	<5.3	315	-	-	-	-	-	-	-	-	-	-	-
	9/23/03	-	-	-	-	-	-	-	-	-	-	-	-	<9.7	<3.7	*530*	<3.6	**15**	<5.4	**5.9**	-	<4.5	<6.7	**1,400**	<4.2	<4.8	<8.3	<1.8	<26.3	1,951	-	-	-	-	-	-	-	-	-	-	-
	12/9/03	-	-	-	-	-	-	-	-	-	-	-	-	<24	<9.2	**900**	<9.0	**120**	<14	<11	-	<11	<17	**3,700**	<10	<12	<21	<4.5	<66	4,720	-	-	-	-	-	-	-	-	-	-	-
	5/19/04	-	-	-	-	-	-	-	-	-	-	-	-	<24	<9.2	*740*	<9.0	**21**	<14	<11	-	<11	<17	**2,100**	<10	<12	<21	<4.5	<66	2,861	-	-	-	-	-	-	-	-	-	-	-
	6/29/04	-	-	-	-	-	-	-	-	-	-	-	-	<19	*<7.4*	*750*	<7.2	**220**	<11	<8.6	-	<9.0	<13	**3,400**	<18	<9.6	<17	<3.6	<53	4,370	-	-	-	-	-	-	-	-	-	-	-
	10/6/04	-	-	-	-	-	-	-	-	-	-	-	-	2.2	<0.37	15	<0.36	<0.57	<0.54	*2.6*	-	<0.45	<0.67	*67*	<0.42	<0.48	<0.83	<0.18	<2.63	86.8	-	-	-	-	-	-	-	-	-	-	-
	1/4/05	-	-	-	-	-	-	-	-	-	-	-	-	*4.7*	<0.37	*390*	*2.2*	**20**	<0.54	**6.2**	-	<0.45	<0.67	**1,600**	<0.42	<0.48	<0.83	**1.1**	<2.63	-	-	-	-	-	-	-	-	-	-	-	-
	3/8/05	-	-	-	-	-	-	-	-	-	-	-	-	<9.7	<3.7	*<7.5*	<3.6	<5.7	<5.4	<4.3	-	<4.5	<6.7	<9	<4.2	<4.8	<8.3	<1.8	<26.3	-	-	-	-	-	-	-	-	-	-	-	-
	6/21/05	-	-	-	-	-	-	-	-	-	-	-	-	5.4	<1.8	*230*	<1.8	<2.8	<2.7	*4.5*	-	<2.2	<3.4	**470**	<2.1	<2.4	<4.1	<0.9	<13.1	700	-	-	-	-	-	-	-	-	-	-	-
	9/12/05	-	-	-	-	-	-	-	-	-	-	-	-	<19	*<7.4*	*690*	<17	<11	<11	<8.6	-	<9.0	<13	**1,700**	<8.4	<9.6	<17	<3.6	<53	2,390	-	-	-	-	-	-	-	-	-	-	-
	12/20/05	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	1.3	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	9.9	<0.42	<0.48	<0.83	<0.18	<2.63	11	-	-	-	-	-	-	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC) Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200											Total Toxic Organics (TTO) < 2,130						NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																							
	3/6/06	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	<0.37	12	<0.36	<0.57	<0.54	1	-	<0.45	<0.67	72	<0.42	<0.48	<0.83	<0.18	<2.63	86	-	-	-	-	-	-	-	-	-	-	-
	6/15/06	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<3.7	460	<3.6	24	<5.4	<4.3	-	<4.5	<6.7	1,300	<4.2	<4.8	<8.3	<1.8	<26.3	1,784	-	-	-	-	-	-	-	-	-	-	-
	6/19/06[U]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<3.7	460	<3.6	22	<5.4	<4.3	-	<4.5	<6.7	1,300	<4.2	<4.8	<8.3	<1.8	<26.3	1,782	-	-	-	-	-	-	-	-	-	-	-
	9/11/06	-	-	-	-	-	-	-	-	-	-	-	-	-	<19	<7.4	450	<7.2	50	<11	<8.6	-	<9.0	<13	1,000	<8.4	<9.6	<17	<3.6	<53	1,500	-	-	-	-	-	-	-	-	-	-	-
	9/11/06[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	<19	<7.4	470	<7.2	52	<11	<8.6	-	<9.0	<13	1,000	<8.4	<9.6	<17	<3.6	<53	1,522	-	-	-	-	-	-	-	-	-	-	-
Between Carbon	12/11/06	-	-	-	-	-	-	-	-	-	-	-	-	-	<9.7	<3.7	470	4	110	<5.4	<4.3	-	<4.5	<6.7	1,400	<4.2	<4.8	<8.3	<1.8	<26.3	1,984	-	-	-	-	-	-	-	-	-	-	-
Drums- Unfiltered	3/15/07	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.63	0	-	-	-	-	-	-	-	-	-	-	-
(a.k.a. Between GAC's)	7/2/07	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<3.7	230	<4.6	<0.57	<5.4	<4.3	-	<4.5	<6.7	660	<4.2	<4.8	<8.3	<1.8	<8.3	890	-	-	-	-	-	-	-	-	-	-	-
	7/20/7[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<3.7	430	<4.6	<0.57	<5.4	<4.3	-	<4.5	<6.7	1,300	<4.2	<4.8	<8.3	<1.8	<8.3	1,730	-	-	-	-	-	-	-	-	-	-	-
	10/03/07[G]	-	-	-	-	-	-	-	-	-	-	-	-	-	<19	<7.4	540	<7.2	14	<11	<8.6	-	<9.0	<13	1,500	<8.4	<9.6	<17	<3.6	<53	2,054	-	-	-	-	-	-	-	-	-	-	-
	10/03/07[GD]	-	-	-	-	-	-	-	-	-	-	-	-	-	<19	<7.4	530	<7.2	15	<11	<8.6	-	<9.0	<13	1,500	<8.4	<9.6	<17	<3.6	<53	2,045	-	-	-	-	-	-	-	-	-	-	-
	12/20/07	-	-	-	-	-	-	-	-	-	-	-	-	-	<19	<7.4	400	<7.2	43	<11	<8.6	-	<9.0	<13	1,400	<8.4	<9.6	<17	<3.6	<53	1,843	-	-	-	-	-	-	-	-	-	-	-
	3/20/08	-	-	-	-	-	-	-	-	-	-	-	-	-	<19	<7.4	376	<7.2	26.4	<11	<8.6	-	<9.0	<13	1,400	<8.4	<9.6	<17	<3.6	<53	1,802	-	-	-	-	-	-	-	-	-	-	-
	6/12/08	-	-	-	-	-	-	-	-	-	-	-	-	-	<19	<7.4	376	<7.2	23.2	<11	<8.6	-	<9.0	<13	1,900	<8.4	<9.6	<17	<3.6	<53	2,568	-	-	-	-	-	-	-	-	-	-	-
	9/19/08	-	-	-	-	-	-	-	-	-	-	-	-	-	<.97	<1.3	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	2.80	<0.42	<0.48	<0.83	<0.18	<2.63	2.80	-	-	-	-	-	-	-	-	-	-	-
	12/30/08	-	-	-	-	-	-	-	-	-	-	-	-	-	<.97	<1.3	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	2.80	<0.42	<0.48	<0.83	<0.18	<2.63	3	-	-	-	-	-	-	-	-	-	-	-
	3/12/09	-	-	-	-	-	-	-	-	-	-	-	-	-	<.97	<1.3	1.4	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	4.80	<0.42	<0.48	<0.83	<0.18	<2.63	6	-	-	-	-	-	-	-	-	-	-	-
	6/23/09	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/23/09[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	<4.0	<0.80	48	<2.0	2.1	<2.0	<4.0	-	<2.0	<2.0	160	<1.0	<0.80	<0.80	<0.80	<2.0	210	-	-	-	-	-	-	-	-	-	-	-
	2/10/10	-	-	-	-	-	-	-	-	-	-	-	-	-	<5.0	<1.0	83	<2.5	<2.5	<2.5	<5.0	-	<2.5	<2.5	240	<1.2	<1.0	<1.0	<1.0	<2.5	323	-	-	-	-	-	-	-	-	-	-	-
	9/23/10[CC]	-	-	-	20	<3	-	-	-	-	-	-	-	-	<1.0	<0.20	1.6	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	2.8	<0.25	<0.20	<0.20	<0.20	<0.50	4.4	-	-	-	-	-	-	-	-	-	-	-
	2/17/11	-	-	-	-	<3.0	-	-	-	-	-	-	-	-	<1.0	<0.20	8.6	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	8.6	-	-	-	-	-	-	-	-	-	-	-
	6/23/11[EE]	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	0.52	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	1.2	<0.25	<0.20	<0.20	<0.20	<0.50	1.72	-	-	-	-	-	-	-	-	-	-	-
	9/22/11[XX]	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	<0.20	3.8	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	5.2	-	-	-	-	-	-	-	-	-	-	-
	12/12/11[AJ]	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6	<0.20	3.0	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	0.21	<0.20	1.1	5.91	-	-	-	-	-	-	-	-	-	-	-
	4/4/12[AN]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.33	<0.25	<0.24	<0.28	<0.29	<0.14	<0.63	-	<0.22	<0.15	<0.26	<0.30	<0.18	<0.23	<0.13	<0.30	0	-	-	-	-	-	-	-	-	-	-	-
	3/20/13[AN]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<1.3	2.0	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.30	<0.18	<0.23	<0.13	<0.30	2	-	-	-	-	-	-	-	-	-	-	-
	9/26/13[AN]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.44	<0.69	27.7	<0.48	<0.43	<0.50	<0.36	-	<0.47	<0.44	5.2	<0.39	<0.36	<0.50	1.1	<1.32	34	-	-	-	-	-	-	-	-	-	-	-
	12/12/13	-	-	-	-	-	-	-	-	-	-	-	-	-	1.3	<0.69	62.0	<0.48	1.0	<0.50	<0.36	-	<0.47	<0.44	7.81	<0.39	<0.36	<0.50	1.0	<1.32	143.4	-	-	-	-	-	-	-	-	-	-	-
	3/13/14	-	-	-	-	-	-	-	-	-	-	-	-	-	0.53 J	<0.69	75.3	<0.48	0.67	<0.50	<0.36	-	<0.47	<0.44	4.80	<0.39	<0.36	<0.50	0.64 J	<1.32	123.94	-	-	-	-	-	-	-	-	-	-	-
	6/12/14	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9	<2.5	107	<0.17	3.0	<0.50	<0.23	-	<0.50	<0.50	142	<0.16	<0.33	<0.50	1.2	<1.50	255.1	-	-	-	-	-	-	-	-	-	-	-
	9/17/14	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3 J	<6.2	134	<0.42	15.6	<1.2	0.94 J	-	<1.2	<1.2	329	<0.39	<0.83	<1.2	0.90 J	<3.7	480.9	-	-	-	-	-	-	-	-	-	-	-
	1/13/14	-	-	-	-	-	-	-	-	-	-	-	-	-	1.7 J	<6.2	154	<0.42	18.2	<1.2	<0.58	-	<1.2	<1.2	394	<0.39	<0.83	<1.2	0.68 J	<3.7	568.58	-	-	-	-	-	-	-	-	-	-	-
	3/18/15	-	-	-	-	-	-	-	-	-	-	-	-	-	2.5	<6.2	352	2.2 J	30.5	<1.2	1.1 J	-	<1.2	<1.2	653	<0.49	<0.83	<1.2	1.9 J	<3.7	1052.2	-	-	-	-	-	-	-	-	-	-	-
Post Carbon Drums	8/21/02	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.6	<0.1	<0.15	<0.12	<0.11	<0.08	<0.24	-	<0.15	<0.08	<0.14	<0.19	<0.13	<0.08	<0.16	<0.34	-	-	-	-	-	-	-	-	-	-	-
Unfiltered	8/28/02	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.6	<0.1	<0.15	<0.12	<0.11	<0.08	<0.44	-	<0.15	<0.08	<0.14	<0.19	<0.13	<0.08	<0.16	<0.34	-	-	-	-	-	-	-	-	-	-	-
	5/19/04	-	-	-	-	-	-	-	-	-	-	-	-	-	2.6	<0.37	1	<0.36	<0.57	<0.54	3.4	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.35	<0.18	<2.63	7	-	-	-	-	-	-	-	-	-	-	-
Effluent (UF)	8/30/01	-	-	59	-	-	-	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.43	<0.25	<0.25	<0.1	<0.25	<0.25	<0.25	<0.1	<0.25	<25	0	-	-	-	-	-	-	-	-	-	-	-
Unfiltered	9/19/01	-	-	62	<4.2	-	<42	-	-	-	-	-	-	-	<0.25	<0.25	1.8	<0.25	<0.25	<0.25	0.53	<0.25	<0.25	<0.1	5.2	<0.25	<0.25	<0.1	<0.25	<25	8	-	-	-	-	-	-	-	-	-	-	-
	10/3/01	-	-	45	140	<4.2	-	170	-	-	-	-	-	-	<0.25	<0.25	3.7	<0.25	0.25	<0.25	1.1	<0.25	<0.25	<0.1	20	<0.25	<0.25	<0.1	<0.25	<25	25	-	-	-	-	-	-	-	-	-	-	-
	10/30/01	-	-	64	95	<4.2	-	69	-	-	-	-	-	-	2.4	<0.25	44	<0.25	6.6	<0.25	2.6	<0.25	<0.25	<0.1	190	<0.25	<0.25	<0.1	<0.25	<25	246	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	80	85	<4.2	-	42	-	-	-	-	-	-	<2.5	<2.5	53	<2.5	7.1	<2.5	3	<2.5	<2.5	<1.0	290	<2.5	<2.5	<1.0	<2.5	<2.5	353	-	-	-	-	-	-	-	-	-	-	-
	11/14/01	-	-	80	85	<4.2	-	42	-	-	-	-	-	-	<2.5	<2.5	51	<2.5	6.9	<2.5	2.9	<2.5	<2.5	<1.0	270	<2.5	<2.5	<1.0	<2.5	<2.5	331	-	-	-	-	-	-	-	-	-	-	-
	3/7/02	-	-	-	600	380	-	-	-	-	-	-	-	-	2.5	<1.0	190	1.8	54	<1.0	<1.0	-	<1.0	<0.4	1,400	<1.0	<1.0	<0.4	<1.0	<1.0	1,648	-	-	-	-	-	-	-	-	-	-	-
	6/18/02	-	-	48	4,600	3,700	6.6	240	-	-	-	17	-	310	<0.57	<0.75	<0.48	<0.47	<0.85	<0.43	<0.85	-	<0.57	<0.47	<0.69	<0.72	<0.89	<0.52	<0.18	<1.94	0	-	-	-	-	7.00	-	-	-	-	-
	9/30/02	-	-	-	790	640	9.4	-	-	-	1.5	30	-	320	<0.84	<0.45	<0.87	<0.55	<0.56	<0.53	0.74	-	<0.63	<0.84	1.7	<0.50	<0.39	<0.64	<0.11	<1.83	2	11	<1.4	<0.12	4.1	<1.0	7.00	-	-	-	-	-
	12/23/02	-	-	-	1,000	2	-	-	-	-	-	-	-	-	1.2	<0.45	<0.87	<0.55	<0.56	<0.53	1.1	-	<0.63	<0.84	1.8	-	<0.39	<0.64	<0.11	<1.83	4	-	-	-	-	-	6.00	-	-	-	-	-
	12/23/02[A]	-	-	-	860	-	33	-	-	-	-	<34	43	-	310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	12	0.13	1.1	30.0	6.40	-	-	-	-
	3/31/03	-	-	-	2,600	270	34	-	-	-	-	0.94	12	-	520	3.5	<0.37	0.99	<0.36	<0.57	<0.54	4.0	-	<0.45	<0.67	1.2	<0.42	<0.48	<0.83	<0.18	<2.63	10	<2.0	5.5	<0.11	<1.3	<6.7	4.00	-	-	-	-
	6/16/03	-	1.0	-	860	91	18	-	-	-	-	<1.3	85	-	320	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	1.4	<0.42	<0.48	<0.83	<0.18	<2.63	1	<2.0	110	<0.12	<1.1	<4.0	7.00	-	-	-	-
	9/23/03	-	<0.53	-	3,700	88	0.96	-	-	-	-	<1.3	12	-	990	2.5	<0.37	1.7	<0.36	<0.57	<0.54	2.6	-	<0.45	<0.67	2.8	<0.42	<0.48	<0.83	<0.18	<2.63	10	<2.0	12	<0.12	<0.99	<2.0	6.50	-	-	-	-
	12/09/03[A]	-	5.5	-	3,400	-	<18	-	-	-	-	<13	<4	5.8	570	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.1	<15	1.5	<1.0	10.4	6.30	-	-	-	-
	12/9/03	-	-	-	-	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/21/04	<0.03	<0.17	-	12	-	3.4	-	-	-	0.14	3.8	0.050	16	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	0.56	-	<0.45	<0.67	<0.90	<0.42	<0.48	-	<0.18	-	<0.37	<20	3.9	<0.054	0.8	<2.0	5.40	-	-	-	-
	6/29/04	<0.028	<0.17	-	850	570	6.0	-	-	-	0.40	11	<0.049	140	<4.8	<1.8	410	<1.8	<2.8	<2.7	6.9	-	<2.2	<3.4	610	<1.0	<2.4	-	1.4	-	1,028.3	<2.0	<1.6	<0.23	<0.57	<2.0	-	-	-	-	-
	10/6/04	<0.028	<0.30	-	1,300	540	5.4	<18	-	-	<1.1	10	<0.76	1,200	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	2.2	<0.42	<0.48	-	<0.18	-	2.2	<2.0	<3.7	<0.23	0.70	<2.0	5.30	-	-	-	-
	11/16/04[A]	<0.092	<5.4	-	220	-	<18	-	-	-	<13	10	<3.3	500	<1.0	<0.20	0.78	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.20	1.3	<0.25	<0.20	<0.20	<0.20	<0.50	2.08	1.3	<7.7	0.04	<1.0	20	6.40	-	-	-	-
	3/8/05	<0.028	<0.3	-	230	<2.7	25	-	-	-	<1.1	20	<0.76	280	<0.97	<0.37	0.99	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	1.4	<0.42	<0.48	<0.83	<0.18	<2.6	2.39	<2	<3.7	<0.23	-	1	-	-	-	-	-
	6/3/05	<0.026	<0.3	-	850	-	26	-	-	-	<1.1	32	<0.76	820	1	<0.37	<0.57	<0.36	<0.57	<0.54	1.8	-	<0.45	<0.67	<0.9	<0.42	<0.48	<0.83	<0.18	<2.6	2.8	<2	<3.7	<0.15	<5.4	3	-	-	-	-	-
	9/12/05	<0.026	<0.28	-	530	-	20	-	-	-	<1.0	12	<1.1	390	2.3	<0.37	11	<0.36	<0.57	<0.54	3.1	-	<0.45	<0.67	3.4	<0.42	<0.48	<0.83	<0.18	<2.6	16.8	<2.0	<0.0037	<0.15	<5.2	1	-	-	-	-	-
	3/3/06	<0.072	<0.74	-	960	-	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.48	<0.67	1.2	<0.42	<0.48	<0.83	<0.18	<2.6	1.2	<2.0	<0.0037	<0.15	<5.2	0.7	-	-	-	-	-
	3/30/06[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	1.1	<0.42	<0.48	<0.83	<0.18	<2.6	1.1	-	-	-	-	-	-	-	-	-	-	-
	6/2/06	<0.072	<0.74	-	330	-	-	-	-	-	<3.4	5.2	<2.6	490	1.9	<0.37	11	<0.36	<0.57	<0.54	1.8	-	<0.45	0.79	27	<0.42	<0.48	<0.83	<0.18	<2.6	40.59	-	<0.0094	0.24	<5.2	51	-	-	-	-	-
	06/02/06[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	<0.36	<0.57	<0.54	1.7	-	<0.45	0.76	27	<0.42	<0.48	<0.83	<0.18	<2.6	41.46	-	-	-	-	-	-	-	-	-	-	-
	9/11/06	<0.072	<0.74	-	1,300	<6.8	55	<50	-	-	<3.4	8.6	<2.6	530	2.2	<0.37	33	<0.36	<0.57	<0.54	2.4	-	<0.45	<0.67	23	<0.42	<0.48	<0.83	<0.18	<2.78	60.6	<2.0	<0.0094	<0.13	<5.1	0.3	-	-	-	-	-
	9/11/06[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1	<0.37	32	<0.36	<0.57	<0.054	2.3	-	<0.45	<0.67	23	<0.42	<0.48	<0.83	<0.18	<2.6	59.4	-	-	-	-	-	-	-	-	-	-	-
	1/24/07	-	-	-	1,100	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/21/07	-	-	-	1,100	<6.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2007 HOTV	3/15/07	<0.072	<0.74	-	1,100	<6.8	31	-	-	-	<3.4	7.8	<2.6	710	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.6	0	<2	<0.0094	<0.13	<5.4	2.8	-	-	-	-	-
	3/15/07[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.6	0	-	-	-	-	-	-	-	-	-	-	-
	4/18/07	-	-	-	380	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2007 HOTV	6/8/07	<0.10	<0.55	-	770	-	15	<50	-	-	<1.6	5.2	<1.0	500	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.6	0	<2.0	<0.0060	<0.17	<5.1	1.9	-	-	-	-	-
	6/08/07[D]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<0.37	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	<0.83	<0.18	<2.6	0	-	-	-	-	-	-	-	-	-	-	-
	7/19/07	-	-	-	1,100	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8/14/07	-	-	-	2,200	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
September 2007 HOTV	10/02/07[D]	<0.10	<0.097	-	260	<3.4	21	-	-	-	0.06	12	<0.11	620	1.7	<0.37	4.4	<0.36	<0.57	<0.54	1.3	-	<0.45	2.5	6.2	<0.42	<0.48	<0.83	<0.18	<2.6	16.1	<2.0	<0.0060	<0.17	<5.3	1.1	-	-	-	-	-
	10/24/07	-	-	-	530	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/07	-	-	-	760	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/20/07	-	-	-	1,200	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/31/08	-	-	-	160	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/28/08	-	-	-	1,050	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2008 HOTV	3/20/08	<0.10	0.17	-	206	<3.4	6.2	-	-	-	<1.4	11	<0.34	237	<0.97	<0.37	0.76	<0.36	<0.57	<0.54	<0.43	<1.2	<0.45	1.1	6.5	<0.42	<0.48	<0.83	<0.18	<2.6	8.36	<2.0	<0.0060	<0.17	1.9	5.8	-	-	-	-	-
	3/20/08	-	-	-	203	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/30/08	-	-	-	104	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/30/08	-	-	-	252	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June 2008 HOTV	6/12/08	<0.10	0.27	-	174	-	15.1	-	-	-	<1.4	4.9	0.41	222	<4.8	<1.8	208	<1.8	<2.8	<2.7	<2.2	<6	<2.2	<3.4	545	<2.1	<2.4	<4.2	<0.9	<13.0	975	<2.0	0.008	<0.17	-	<.31	-	-	-	-	-
	7/25/08	-	-	-	540	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8/7/08	-	-	-	1,160	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sept 2008 HOTV	9/19/08	<0.10	0.32	-	1,500	-	12.4	-	-	-	1.7	7.6	0.47	440	<9.7	<13	201	<3.6	<5.7	<5.4	<4.3	<12	<4.5	<6.7	728	<4.2	<4.8	<8.3	<1.8	<26	929	<2.0	0.0084	<0.17	3.1	<0.36	-	-	-	-	-
	10/31/08	-	-	-	2,470	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/26/08	-	-	-	428	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC) Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other											
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200	Total Toxic Organics (TTO) < 2,130																	NE	1,900	NE	100	NE	5-9						
Sample Location	**Sample Date**																																									
	12/11/08	-	-	-	320	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/30/09	-	-	-	484	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/26/09	-	-	-	238	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/12/09	-	-	-	723	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March 2009 HOT V	3/12/09	<0.10	0.17	-	651	-	32	-	-	-	2.7	2.9	<0.34	223	< .97	<1.3	4.8	<0.36	< .57	<.54	< .43	<1.2	<.45	< .67	14.3	<.42	<.48	<.83	<.18	<2.6	19.1	<2.0	<0.0060	<0.17	1.8	1.4	-	-	-	-	-	-
	6/23/09	<0.065	<1.1	-	340	<2.5	<18	-	-	-	<13	4.3	1.4	40	<1.0	<0.20	0.90	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	1.6	<0.25	<0.20	<0.20	<0.20	<0.50	2.50	<2.0	<0.017	<0.10	1.4	6.0	-	-	-	-	-	-
	9/23/09 [Q]	<0.065	*1.8*	-	510	*16*	34	-	-	-	36	9.3	<1.3	100	<1.0	<0.20	0.59	<0.50	>0.50	<0.50	<1.0	-	<0.50	<0.50	0.67	<0.25	<0.20	<0.20	<0.20	<0.50	1.26	<2.0	<0.017	-	<0.72	11	-	-	-	-	-	-
	3/29/10	-	-	-	500	*1.10*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System Effluent	12/14/09 [f]	-	-	-	220	<2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/10/10	<0.065	<5.0	-	410	<2.5	84	-	-	-	<16	9.1	<3.7	550	<1.0	<0.20	0.59	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	0.59	<2.0	0.063	-	<0.72	7.0	-	-	-	-	-	-
	9/29/10 [PO]	<0.065	<5.0	-	410	<3.0	39	-	-	-	<16	15	<3.7	260	<1.0	<0.20	1.4	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	1.7	<0.25	<0.20	<0.20	<0.20	<0.50	3.1	-	<0.0081	<0.10	1.2	170	-	-	-	-	-	-
	10/7/10	-	-	-	500	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/3/10	-	-	-	1,500	*2.2*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/6/11	-	-	-	3,500	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/17/2011 [BE, HK]	<0.051	<0.25	-	150	*15*	69	-	-	-	*2*	4.5	<0.86	97	<1.0	<0.20	0.72	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	0.66	<0.25	<0.20	<0.20	<0.20	<0.50	1.38	<5.4	4.2	0.019	<1.9	110	-	-	-	-	-	-
	3/17/11 [I]	<0.051	-	-	196	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/14/11	-	-	-	120	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/23/11	-	-	-	560	*6.8*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/11 [MM]	-	-	-	180	*4.6*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/14/11 [H]	-	-	-	390	6.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8/18/11 [LL]	0.070	*1.1*	-	490	280	63	-	-	-	*5.8*	9.5	<0.71	210	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	0	<2.0	<0.0011	<0.019	<1.9	20	-	-	-	-	-	-
	9/22/11 [WW]	<0.070	*1.2*	-	650	7.1	36	-	-	-	*4.2*	15	<0.71	160	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	0	<2.0	0.0017	0.030	<2.0	5.0	-	-	-	-	-	-
Grab Sample	10/6/11 [Y]	-	-	-	690	*11*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grab Sample	11/22/11	-	-	-	410	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/12/11	-	-	-	*92*	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/18/12	-	-	-	850	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/29/12	-	-	-	320	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/21/12 [XO]	<0.070	6.0	-	4,200	*10*	*1,000*	-	-	-	*13*	1,900	<1.1	3,500	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	0	<4.0	0.0022	0.18	<1.8	530	-	-	-	-	-	-
	4/4/12	-	-	-	190	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/7/12	-	-	-	329	<3	48	-	-	-	2.6	3	<2.3	347	-	<1.3	<0.75	<0.36	< .75	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.48	<0.48	-	<0.18	-	-	-	<0.0043	<0.088	<0.94	8	-	-	-	-	-	-
	9/14/12	-	-	-	2,490	4.9	943	-	-	-	58.7	328	<2.3	2,160	<0.97	10.6	<0.75	<0.36	<0.57	<0.54	18.9	-	<0.45	<0.67	<0.90	<0.42	<0.48	-	<0.18	-	3.9	0.011	-	<0.088	167	-	-	-	-	-	-
	2/7/13	-	-	-	2,190	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/20/13	-	0.8	-	222	<3.4	60.6	-	-	-	*2.3*	2.5	<1.4	282	<0.97	<1.3	<0.75	<0.36	<0.57	<0.54	<0.43	-	<0.45	<0.67	<0.90	<0.42	<0.48	-	<0.18	-	2.3	0.0046	<0.088	<1.0	4	-	-	-	-	-	-
	4/11/13	-	-	-	197	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/1/13	-	-	-	379	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/18/13	-	0.64	-	464	<3.4	14.4	-	-	-	<2.7	9.0	<1.7	123	<0.44	<0.69	1.2	<0.48	<0.43	<0.50	0.37	-	<0.47	<0.44	1.1	<0.39	<0.43	-	<0.18	-	-	<2.0	0.0039	<0.052	<1.0	2.0	-	-	-	-	-	-
	7/18/13	-	-	-	1,910	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8/8/13	-	-	-	1,880	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/26/13	-	<0.48	-	296	<3.4	-	-	-	-	<2.7	5.8	<1.7	342	<0.44	<0.69	0.3	<0.48	<0.43	<0.50	<0.36	-	<0.47	<0.44	<0.44	<0.39	<0.36	-	-	-	-	<2.0	0.0087	<0.052	<1.0	0.29	-	-	-	-	-	-
	11/14/13	-	-	-	148	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/10/13	-	-	-	128	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/15/14	-	-	-	789	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/13/14	-	-	-	1,770	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/13/14	<0.10	2.6 J	-	341	<3	28.2	-	-	-	4.2 J	8.9 J	<1.7	357	<0.44	<0.69	2.6	<0.48	<0.43	<0.50	<0.36	-	<0.47	<0.44	4.4	<0.39	<0.36	-	<0.18	-	4.4	<2.0	0.0051 [J]	<0.052	<1.0	2	-	-	-	-	-	-
	04/22/14	-	-	-	101	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/13/14	-	-	-	3,700	*1.2*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/12/14	<0.10	<1.0	-	315	<3.9	91.4	-	-	-	<1.6	9.3 J	<3.2	723	<0.37	<2.5	0.38 [XO]	<0.17	<0.41	<0.50	<0.23	-	<0.50	<0.50	0.53 [XO]	<0.16	<0.33	-	<0.18	-	0.91	<2.0	<0.010	<0.052	<0.85	17.0	-	-	-	-	-	-
System Effluent	08/13/14	-	-	-	*27.1*	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(continued)	09/17/14	<0.10	<1.0	-	*53.2*	4.3	4.6 J	-	-	-	<1.6	6.9 J	<3.2	249	<0.37	<2.5	0.91 J	<0.17	<0.41	<0.50	<0.23	-	<0.50	<0.50	1.5	<0.25	<0.33	-	<0.18	-	2.4	<2.0	<0.010	<0.052	0.86 J	<0.95	-	-	-	-	-	-
	10/16/14	-	-	-	*87.0*	*86*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/13/14	-	-	-	294	310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/12/14	-	-	-	*13.4*	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/12/15	-	-	-	*19.2*	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/04/15	-	-	-	*12.8*	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/15	<0.10	1.2 J	-	*25.2*	*14*	14.2	-	-	-	<1.6	8.6 J	<3.2	160	<0.37	<2.5	0.84 J	<0.17	<0.41	<0.50	<0.23	-	<0.50	<0.50	0.91 J	<0.20	<0.33	-	<0.18	-	1.8	<2.0	0.29	<0.052	<0.84	<0.95	7.4	-	-	-	-	-
	04/15/15	-	-	-	3.6 J	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Between Cation Canisters	12/14/09 [f]	-	-	-	900	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/10/10	-	-	-	1,000	940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/7/10	-	-	-	620	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/3/10	-	-	-	2,000	*17*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/6/11	-	-	-	790	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/17/11	-	-	-	-	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/17/2011 [Y]	-	-	-	398	240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/14/11	-	-	-	120	*49*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/23/11	-	-	-	120	<3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/23/11 [MM]	-	-	-	460	480	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/14/11	-	-	-	740	750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8/18/11	-	-	-	1,400	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/22/11	-	-	-	1,600	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/6/11 [Y]	-	-	-	1,400	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/22/11	-	-	-	1,300	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/12/11 [AJ]	-	-	-	1,300	960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/18/12	-	-	-	1,700	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/29/12	-	-	-	1,400	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/21/12 [XH]	-	-	-	210	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/4/12 [AI]	-	-	-	*70*	*46*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/14/12 [AI]	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.97	<1.3	1.9	<0.36	<0.57	<0.54	<0.43	-	<0.48	<0.67	<.090	<0.42	<0.48	-	<0.18	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/7/13	-	-	-	562	260	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/7/13	-	-	-	712	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/11/13	-	-	-	*49.9*	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/1/13	-	-	-	289	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/18/13	-	-	-	1,910	2,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8/8/13	-	-	-	1,880	2,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/14/13	-	-	-	193	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/10/13	-	-	-	780	780	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/15/14	-	-	-	219	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/13/14	-	-	-	330	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/13/14	-	-	-	341	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/22/14	-	-	-	33.2	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/13/14	-	-	-	52.9	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/12/14	-	-	-	408	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/13/14	-	-	-	253	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/17/14	-	-	-	299	330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/16/14	-	-	-	361	380	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/13/14	-	-	-	685	740	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/12/14	-	-	-	98.0	*94.0*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin / Project #58127047

		Mercury (ug/L)	Cadmium (ug/L)	Chloride (mg/L)	Total Chromium (ug/L)	Hexavalent Chromium (ug/L)	Copper (ug/l)	Iron (ug/l)	Sulfate Dissolved (mg/l)	Sulfide Dissolved (ug/l)	Lead (ug/l)	Nickel (ug/l)	Silver (ug/l)	Zinc (ug/l)	Chloroethane (ug/L)	Chloroform (ug/L)	1,1-Dichloroethane (ug/L)	1,2-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	Ethylbenzene (ug/L)	Methylene Chloride (ug/L)	Methyl isobutyl ketone (MIBK) (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	Trichloroethene (ug/L)	1,3,5-Trimethylbenzene (ug/L)	Vinyl Chloride (ug/L)	Xylenes (ug/L)	Total VOCs (ug/L)	BOD (mg/L)	Cyanide (mg/L)	Phosphorous, total (mg/L)	Oil & Grease, total (mg/L)	Suspended Solids, total (mg/L)	pH	Conductivity	Manganese (ug/L)	Nitrogen,Nitrate-Dissolved (mg/L)	TOC as NPOC (mg/L)	TOC as NPOC (DOC)-Dissolved (mg/L)
		Metals													Volatile Organic Compounds (VOC)																	Other										
NR 140 PAL		0.5	125	10	10	130	150	125	NE	1.5	20	10	NE	80	0.6	85	0.5	0.7	140	0.5	50	0.5	200	40	0.5	0.5	96	0.02	1,000	NE	NE	40	NE	NE	NE	NE	NE	NE	NE	NE	NE
NR 140 ES		5	250	100	100	1,300	300	250	NE	15	100	50	NE	400	6	850	5	7	700	5	500	5	1,000	200	5	5	480	0.2	10,000	NE	NE	200	NE	NE	NE	NE	NE	NE	NE	NE	NE
HOTV Discharge Limits		300	NE	4,000	NE	4,000	NE			690	4,100	NE	4,200	Total Toxic Organics (TTO) < 2,130																	NE	1,900	NE	100	NE	5-9					
Sample Location	**Sample Date**																																								
	01/12/15	-	-	-	1,040	1,110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/04/15	-	-	-	378	390	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/18/15	-	-	-	*32.7*	*28*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/15/15	-	-	-	3.1 J	<3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cation Tank	**9/12/05**	<0.026	<0.28	-	530	-	20	-	-	-	<1.0	12	<1.1	390	2.3	<0.37	11	<0.36	<0.57	<0.54	*2.9*	-	<0.45	<0.67	3.3	<0.42	<0.48	<0.83	<0.18	2.6	19.8	-	-	-	-	-	-	-	-	-	-
Unfiltered	**9/12/05**	<0.026	-	-	540	<5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/14/05	-	-	-	580	*21*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/12/05	-	-	-	8,200	8,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/14/05	-	-	-	1,400	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/24/07	-	-	-	2,600	2,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/21/07	-	-	-	2,500	2,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/15/07	-	-	-	2,600	2,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/18/07	-	-	-	7,300	8,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/17/07	-	-	-	250	<3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/27/07	-	-	-	12,000	12,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/19/07	-	-	-	11,000	9,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8/14/07	-	-	-	11,000	12,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sept Monthly Sample	**10/2/07**	-	-	-	5,900	6,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/24/07	-	-	-	8,300	7,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/21/07	-	-	-	8,700	8,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/20/07	-	-	-	11,000	13,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cation Tank	**1/31/08**	-	-	-	17,000	16,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unfiltered	**2/28/08**	-	-	-	10,200	11,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(continued)	**3/20/08**	-	-	-	1,360	1,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4/30/08	-	-	-	7,880	7,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5/30/08	-	-	-	11,300	*47*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/12/08	-	-	-	6,600	6,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	7/25/08	-	-	-	9,110	8,300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8/7/08	-	-	-	9,040	9,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/19/08	-	-	-	6,420	6,700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/31/08	-	-	-	1,740	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11/26/08	-	-	-	3,380	2,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/11/08	-	-	-	3,120	3,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1/30/09	-	-	-	1,590	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2/26/08	-	-	-	1,250	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/12/09	-	-	-	872	840	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/23/09	-	-	-	200	*76*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/29/10	-	-	-	190	<2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field Blank	**9/23/09** [P]	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	3.5	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	3.5	-	-	-	-	-	-	-	-	-
	3/29/10 [F,M]	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	0.35	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	*0.78*	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	1.1	-	-	-	-	-	-	-	-	-
	9/23/10	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	3/17/11 [L]	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
Trip Blank	**9/23/09**	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	9/24/09	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	3/29/10	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	9/23/10	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	3/17/11	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	8/18/11	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	9/22/11	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	12/12/11	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-
	3/21/12	-	-	-	-	-	-	-	-	-	-	-	-	-	<1.0	<0.20	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	-	<0.50	<0.50	<0.50	<0.25	<0.20	<0.20	<0.20	<0.50	-	-	-	-	-	-	-	-	-	-

Table 2
Groundwater Analytical Results
Wisconsin Chrome, Kaukauna, Wisconsin Terracon Project No. 58127047

NOTES:
Units reported are micrograms per liter (ug/L) which is approximately equal to parts per billion (ppb) unless otherwise noted. Chloride, BOD, Phosphorus, and Oil and Grease, Suspended Solids, Sulfate Dissolved, Cyanide, and TOC and NPOC (DOC) - Dissolved are reported in units of milligrams per liter (mg/L).
PAL- Preventive Action Limit
ES - Enforcement Standard
HOTV - Heart of the Valley Metropolitan Sewerage District
BOD - Biological Oxygen Demand
NE - Not Established
- Not available or Not analyzed

Bold Date - sampling occurred after treatment system (Sump A - 8/13/01 and Sump B - 9/19/01) operational and ferric chloride injection (8/13/01)
Bold and Highlighted Concentration - compound meets or exceeds ES
Italic - compound meets or exceeds PAL
< - Indicates less than.
* P-4, P-7, P-8, P-9, and P-12 re-named prior to December 2003 sampling event.
[A] - Sample collected by HOTV
[B] - P-6A was not developed prior to sampling on 12/15/03.
[C] - MW-15, MW-16, P-1A, P-2A, P-7A, P-15A, P-16A and P-15B were developed immediately prior to sampling on 12/2003.
[D] - Duplicate Sample
[E] - Benzene was detected at a concentration of 5.4 ug/l in P-2A from the April 24, 2004 sampling event.
[F] - July sample date is actually for June event.
[G] - October sample date is actually for September event.
[H] - Total Chromium analyte was detected in the associated Method Blank.
[I] - Chloroethane and 1,1,2-Tetrachloroethane results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ
[J] - Trichloroethene results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ
[K] - 1,2-Dichloroethane results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ
[L] - 2,3-Dichloropropene was detected at a concentration of 0.78 ug/l and results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ
[M] - Tetrachloroethene and toluene results reported between the Method Detection Limit (MDL) and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ
[N] - 1,1,1-Trichloroethane and 1,1,2-Trichloroethane results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ
[O] - 1,1-Dichloroethene results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ
[P] - Bromodichloromethane was detected at a concentration of 3.0 ug/l. Chlorodibromomethane was detected at a concentration of 0.65 ug/l and results reported between the MDL and LOQ are less certain than results at or above the LOQ.
[Q] - Cadmium, Copper, Lead, Nickel, 1,1-Dichloroethane, and 1,1,1-Trichloroethane results reported between the MDL and LOQ are less certain than results at or above the LOQ .
[R] - Benzene was detected at a concentration of 0.28 ug/l and results reported between the MDL and LOQ are less certain than results at or above the LOQ. Cis-1,2-Dichloroethene was detected at a concentration of 1.8 ug/l.
[S] - Chromium results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ.
[T] - Chloroform and tetrachloroethene results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ
[U] - Bromodichloromethane was detected at a concentration of 0.79 ug/l, bromoform was detected at a concentration of 0.79 ug/l, and chlorodibromomethane was detected at a concentration of 1.2 ug/l.
[V] - Hexavalent chromium sample was received and analyzed past holding time.
[W] - BOD - 5 Day - The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/l. Therefore the reported result is an estimated value only. Cyanide, nickel, and 1,1-dichloroethane results reported between the Method Detection Limit and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ.
[X] - Chloroform, 1,1,2-Trichloroethane, and Trichloroethene results reported between the MDL and LOQ are less certain than results at or above the LOQ.
[Y] - Chloroethane and Trichloroethene results reported between the MDL and LOQ are less certain than results at or above the LOQ.
[Z] - 1,1-Dichloroethane and 1,1-Dichloroethene results reported between the MDL and LOQ are less certain than results at or above the LOQ.
[AA] - Chloroform and cis-1,2-Dichloroethene results reported between the MDL and LOQ are less certain than results at or above the LOQ. cis-1,2-Dichloroethene was detected at a concentration of 1.4 ug/l.
[BB] - Hexavalent chromium results reported between the MDL and LOQ are less certain than results at or above the LOQ.
[CC] - Chromium and 1,1-Dichloroethane results reported between the MDL and LOQ are less certain than results at or above the LOQ.
[DD] - Oil & Grease, Copper, Nickel, 1,1-Dichloroethane and 1,1,1-Trichloroethane results reported between the MDL and LOQ are less certain than results at or above the LOQ.
[EE] - 1,1-Dichloroethane and 1,1,1-Trichloroethane results estimated value. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.
[FF] - Chromium MS and/or MSD were outside control limits.
[GG] - Trichloroethene results estimated value. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.
[HH] - Chromium reported post digestion spike is out of acceptance limits for this analyte.
[II] - Hexavalent chromium results estimated value. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.
[JJ] - Bromodichloromethane detection 0.25; Bromoform detection 0.21;Chlorodibromomethane detection 0.34. Estimated values. Analyte detected at a level less than the RL and greater than or equal to the MDL. The user of this data should be aware that this data is of limited reliability.
[KK] - BOD and TSS analysis-Sample was prepped or analyzed beyond the specified holding time. Cyanide, lead, nickel, and phosphorus as P results are less than the RL but greater than or equal to the MDL and the concentrations are approximate values. Cyanide and lead compounds were found in the blank and sample.
[LL] - Cadmium, nickel, and mercury - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. Mercury and total suspended solids - Compound was found in the blank and sample. Mercury - LCS or LCSD exceeds the control limits, and ICV,CCV,ICB,CCB,ISA, ISB,CRI,CRA,DLCK or MRL standard: Instrument related QC exceeds the control limits.
[MM] - Chromium - Compound was found in the blank and sample.
[NN] - Chloroethane and 1,1,2-trichloroethane - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[OO] - Chloromethane was detected at a concentration of 0.37 µg/l. Chloromethane, 1,1,2-trichloroethane, and trichloroethene result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[PP] - Trichloroethene - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[QQ] - Naphthalene was detected at a concentration of 26 µg/l, and 1,2,4-trimethylbenzene was detected at a concentration of 27 ug/l. Chloroethane, naphthalene, tichloroethene, and 1,2,4 - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[RR] - Chloroethane and trichloroethene - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[SS] - 1,2-Dichloroethane, 1,1,2-trichloroethane, and chromium - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[TT] - 1,1-Dichloroethane and 1,1,1-Trichloroethane - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[UU] - Chromium - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[VV] - Trichloroethene - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[WW] - Chlorobenzene was detected at a concentration of 0.27 ug/l. Chlorobenzene, cadmium, lead, total cyanide, phosphorus, and hexavalent chromium - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[XX] - Chloroethane - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[YY] - Trichloroethene and vinyl chloride - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[ZZ] - Chromium, hexavalent - Sample analysis performed past method-specified holding time.
[AB] - cis-1,2-Dichloroethene was detected at a concentration of 1.0 ug/l. Chloroform, cis-1,2-dichloroethene, methylene chloride, and vinyl chloride - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[AC] - Chloroethane, chloroform, trichloroethene, vinyl chloride, and chromium - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[AD] - 1,1-Dichloroethene and chromium - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[AE] - 1,1-Dichloroethene - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[AF] - 1,1,2-Trichloroethane, 1,2-dichloroethane, chloroethane, chloroform, and methylene chloride - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[AG] - Cyanide and chromium - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. Cyanide and total suspended solids - Compound was found in the blank and sample.
[AH] - Chromium, hexavalent - Sample was prepped or analyzed beyond the specified holding time.
[AI] - Chromium, hexavalent - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[AJ] - n-Butylbenzene was detected at a concentration of 0.23 ug/l. 1,2,4-Trimethylbenzene was detected at 1.4 ug/l. n-Butylbenzene, chloroethane, 1,2,4 and 1,3,5-trimethylbenzene, and xylenes - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[AK] - Naphthalene was detected at a concentration of 18 ug/l. 1,2,4-Trimethylbenzene was detected at 5.6 ug/l. Naphthalene, toluene, 1,2,4-trimethylbenzene, and vinyl chloride - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. Naphthalene - Compound was found in the blank and sample.
[AL] - 1,2 Dichloroethane, chloroform, trichloroethene, and vinyl chloride - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
[AM] - 1,1,2-Trichloroethane - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. 1,2,3-Trichloropropane - LCS or LCSD exceeds the control limits.
[AN] - 1,2,3-Trichloropropane - LCS or LCSD exceeds the control limits.
[AO] = Estimated concentration above the above the adjusted method detection limt and below the below the adjusted reporting limit

1. All samples collected from 1997-2003 were not filtered including metals samples.
2. There was not enough water present in MW-11 and MW-18 during the September 2004 monitoring event to sample.
3. The result is biased very high due to the sample being only partially filtered in the field (filter malfunction). Refer to April, June and October 2004 iron results for recent accurate concentrations.
4. Groundwater extraction system down July 8 and 28, 2010 due to high level alarm on floor sump. Sump filled due to heavy rainfall.
5. Groundwater extraction system down August 5, 2010. Transfer pump failed and flooded floor sump (high alarm). Transfer pump replaced.
6. All data before March 2009 supplied to SCS BT Squared by the WDNR.

Consultant transition to Foth

Sampled after installation of new carbon vessels

Sampled after Sodium Bisulfite Injection
Pre and Post injection Sampling
HOTV Discharge Limits

Prepared by: C Ingram, Terracon 11/5/2014
Checked by: S Hodgson, Terracon 10/1/12

June 2005 Revised Monitoring Program
UF Unfiltered samples

N:\Projects\2012\58127047\Working Files\Tables\[TERRACON - Wis_ Chrome_Tables_120621.xls]Table 2 Notes

Table 3
Flow Meter Summary (Gallons)
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
8/14/01	4,610		4,610	13,161	-8,551	
8/30/01	35,333		35,333	43,630	-8,297	1%
1/23/02	130,130	43,590	173,720	171,780	1,940	8%
2/28/02	134,195	48,330	182,525	179,670	2,855	12%
3/7/02	146,570	48,570	195,140	192,200	2,940	1%
3/13/02	146,570	58,450	205,020	201,990	3,030	1%
3/27/02	158,898	62,854	221,752	218,641	3,111	0%
4/2/02	159,182.8	63,114.4	222,297	218,998.4	3,299	53%
4/9/02	160,636.0	63,454.5	224,091	220,734.0	3,357	3%
5/1/02	162,207.5	64,880.5	227,088.0	223,075.5	4,013	28%
5/3/02	162,412.5	64,880.5	227,293.0	223,250.5	4,043	17%
5/9/02	162,410.0	64,880	227,290.0	223,390.0	3,900	-102%
5/13/02	173,320	64,880	238,200	243,310	-5,110	-45%
5/23/02	173,320	65,230	238,550	243,740	-5,190	-19%
5/28/02	173,320	75,050	248,370	253,440	-5,070	1%
6/5/02	173,970	77,570	251,540	256,640	-5,100	-1%
6/6/02	180,320	81,480	261,800	266,780	-4,980	1%
6/11/02	196,850	93,220	290,070	294,680	-4,610	1%
6/18/02	219,680	113,140	332,820	336,690	-3,870	2%
6/19/02	222,290	115,510	337,800	341,300	-3,500	8%
6/24/02	235,760	130,860	366,620	369,810	-3,190	1%
6/25/02	238,340	133,680	372,020	375,180	-3,160	1%
7/2/02	250,810	144,970	395,780	398,530	-2,750	2%
7/4/02	259,570	148,680	408,250	410,880	-2,630	1%
7/31/02	259,890	149,180	409,070	411,590	-2,520	15%
8/1/02	264,840			420,480		
8/7/02	277,200	159,970	437,170	439,220	-2,050	-11%
8/14/02	284,640	164,650	449,290	451,000	-1,710	3%
8/21/02	291,700	169,080	460,780	462,280	-1,500	2%
8/28/02	299,390	174,920	474,310	475,410	-1,100	3%
9/4/02	305,800	180,400	486,200	487,070	-870	2%
9/11/02	312,680	185,180	497,860	498,430	-570	3%
9/23/02	312,720	185,270	497,990	498,550	-560	8%
9/26/02	319,550	190,430	509,980	510,160	-180	3%
9/30/02	323,240	192,830	516,070	516,040	30	4%
10/3/02	325,260	194,420	519,680	519,570	110	2%
10/11/02	335,050	203,690	538,740	538,020	720	3%
10/13/02	337,260	205,340	542,600	541,730	870	4%
10/14/02	337,660	205,830	543,490	542,570	920	6%
10/28/02	337,790	205,960	543,750	542,830	920	0%
11/4/02	351,490	215,900	567,390	565,600	1,790	4%
11/5/02	352,710	216,250	568,960	567,010	1,950	11%
11/7/02	354,290	217,990	572,280	570,280	2,000	2%
11/11/02	357,330	220,540	577,870	575,580	2,290	5%
11/19/02	362,430	224,680	587,110	584,500	2,610	4%
11/26/02	366,060	227,970	594,030	591,190	2,840	3%
11/27/02	366,610	228,450	595,060	592,150	2,910	7%
12/6/02	370,380	231,710	602,090	598,970	3,120	3%

Table 3
Flow Meter Summary (Gallons)
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
12/10/02	370,430	232,890	603,320	600,110	3,210	8%
12/11/02	370,430	233,110	603,540	600,360	3,180	-12%
12/12/02	370,460	233,160	603,620	600,410	3,210	60%
12/17/02	373,230	234,630	607,860	604,720	3,140	-2%
12/18/02	373,590	235,000	608,590	605,490	3,100	-5%
12/23/02	375,640	237,270	612,910	609,660	3,250	4%
12/30/02	377,780	239,490	617,270	613,720	3,550	7%
1/7/03	379,730	241,540	621,270	617,530	3,740	5%
1/14/03	381,140	243,050	624,190	620,420	3,770	1%
2/14/03	385,390	246,140	631,530	627,330	4,200	6%
2/28/03	386,890	247,040	633,930	629,500	4,430	11%
3/11/03	387,910	247,040	634,950	630,490	4,460	3%
3/19/03	389,450	247,040	636,490	631,890	4,600	10%
3/26/03	391,580	247,040	638,620	633,920	4,700	5%
3/27/03	391,990	247,040	639,030	634,250	4,780	24%
3/28/03	395,230	247,040	642,270	637,400	4,870	3%
3/31/03	400,160	247,040	647,200	642,000	5,200	7%
4/14/03	414,260	247,040	661,300	654,960	6,340	9%
4/28/03	437,770	247,040	684,810	676,470	8,340	9%
4/29/03	440,560	247,190	687,750	680,000	7,750	-17%
5/12/03	458,420	281,570	739,990	729,930	10,060	5%
5/15/03	468,400	286,600	755,000	744,170	10,830	5%
5/20/03	477,820	292,530	770,350	759,120	11,230	3%
5/27/03	482,070	295,740	777,810	766,280	11,530	4%
6/5/03	492,930	305,390	798,320	786,180	12,140	3%
6/13/03	502,120	315,590	817,710	804,980	12,730	3%
6/16/03	505,860	321,430	827,290	817,820	9,470	-25%
6/17/03	506,120	321,860	827,980	818,740	9,240	-25%
6/20/03	509,860	323,890	833,750	824,280	9,470	4%
7/7/03	527,890	336,880	864,770	851,690	13,080	13%
7/8/03	529,150	337,060	866,210	852,980	13,230	12%
7/24/03	529,150	337,060	866,210	852,980	13,230	System off 7/8-7/24
8/1/03	541,620	346,390	888,010	874,190	13,820	3%
8/14/03	563,400	368,890	932,290	917,520	14,770	2%
8/27/03	580,250	377,050	957,300	942,030	15,270	2%
9/5/03	586,640	380,680	967,320	951,670	15,650	4%
9/22/03	608,640	396,440	1,005,080	988,590	16,490	2%
9/23/03	609,640	399,200	1,008,840	992,220	16,620	4%
9/24/03	611,070	399,430	1,010,500	993,930	16,570	-3%
9/29/03	615,660	402,890	1,018,550	1,001,650	16,900	4%
10/4/03	618,170	405,850	1,024,020	1,006,990	17,030	2%
10/7/03	622,700	406,690	1,029,390	1,012,110	17,280	5%
10/22/03	635,130	414,440	1,049,570	1,030,750	18,820	8%
10/27/03	636,070	414,690	1,050,760	1,031,750	19,010	19%
10/28/03	637,970	415,660	1,053,630	1,034,630	19,000	0%
11/12/03	652,630	426,990	1,079,620	1,059,730	19,890	4%
11/20/03	660,070	433,310	1,093,380	1,072,960	20,420	4%
11/28/03	678,310	447,120	1,125,430	1,103,900	21,530	4%

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Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
12/8/03	692,890	454,340	1,147,230	1,125,230	22,000	2%
12/15/03	698,980	461,070	1,160,050	1,137,360	22,690	6%
12/18/03	703,790	463,490	1,167,280	1,144,490	22,790	1%
12/23/03	704,140	464,080	1,168,220	1,145,310	22,910	15%
12/31/03	717,920	470,410	1,188,330	1,164,930	23,400	2%
1/23/04	738,720	480,360	1,219,080	1,194,550	24,530	2%
2/6/04	744,850	482,320	1,227,170	1,202,090	25,080	2%
2/20/04	750,120	484,100	1,234,220	1,208,850	25,370	2%
3/5/04	763,290	494,110	1,257,400	1,230,270	27,130	2%
3/19/04	769,110	519,630	1,288,740	1,286,180	2,560	0%
3/31/04	817,040	539,940	1,356,980	1,325,710	31,270	2%
4/12/04	832,690	552,920	1,385,610	1,352,810	32,800	2%
4/28/04	845,630	562,470	1,408,100	1,374,450	33,650	2%
5/11/04	858,640	574,760	1,433,400	1,398,160	35,240	3%
5/25/04	890,820	606,460	1,497,280	1,457,910	39,370	3%
6/8/04	940,300	635,020	1,575,320	1,530,280	45,040	3%
6/22/04	973,690	659,360	1,633,050	1,583,610	49,440	3%
6/30/04	988,510	668,230	1,656,740	1,605,360	51,380	3%
7/14/04	1,008,780	682,520	1,691,300	1,636,870	54,430	3%
7/28/04	1,023,120	690,920	1,714,040	1,657,680	56,360	3%
8/10/04	1,034,140	697,050	1,731,190	1,673,340	57,850	3%
8/24/04	1,043,950	701,620	1,745,570	1,686,360	59,210	4%
9/7/04	1,052,420	707,650	1,760,070	1,699,440	60,630	4%
10/1/04	1,061,540	710,520	1,772,060	1,710,440	61,620	4%
10/13/04	1,064,900	712,540	1,777,440	1,715,330	62,110	4%
10/27/04	1,069,510	715,700	1,785,210	1,772,510	12,700	1%
11/10/04	1,079,260	725,730	1,804,990	1,740,910	64,080	4%
11/24/04	1,086,000	732,700	1,818,700	1,762,600	56,100	3%
11/30/04	1,090,500	737,710	1,828,210	1,762,600	65,610	4%
12/1/04	0	0	0	0	0	0%
12/15/04	16,230	18,040	34,270	34,160	110	0%
12/31/04	26,420	24,670	51,090	51,100	-10	0%
Monthly Data Only Available to Foth Infrastructure & Environment for January, 2005						
1/15/05	17,550	11,180	28,730	28,630	-100	0%
2/21/05	51,270	46,220	97,490	97,240	250	0%
2/23/05	51,890	47,270	99,160	98,880	280	0%
2/25/05	52,380	47,370	99,750	99,410	340	0%
3/1/05	53,510	48,780	102,290	102,000	290	0%
3/4/05	54,250	50,160	104,410	104,090	320	0%
3/11/05	56,020	53,580	109,600	109,230	370	0%
3/16/05	57,280	55,900	113,180	112,760	420	0%
3/19/05	57,980	56,610	114,590	114,160	430	0%
4/1/05	70,020	66,380	136,400	135,680	720	1%
4/5/05	71,220	76,070	147,290	146,370	920	1%
4/11/05	76,180	82,550	158,730	157,720	1,010	1%
4/15/05	78,830	85,980	164,810	163,690	1,120	1%
4/19/05	81,380	89,050	170,430	169,220	1,210	1%
4/22/05	84,310	92,720	177,030	175,630	1,400	1%

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Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
4/25/05	87,100	95,470	182,570	181,160	1,410	1%
4/28/05	89,910	99,550	189,460	187,860	1,600	1%
5/2/05	93,130	102,530	195,660	193,990	1,670	1%
5/5/05	95,230	104,920	200,150	198,380	1,770	1%
5/11/05	98,640	108,560	207,200	205,190	2,010	1%
5/18/05	103,860	112,350	216,210	214,030	2,180	1%
5/25/05	110,620	115,700	226,320	224,040	2,280	1%
6/3/05	117,390	118,790	236,180	233,720	2,460	1%
6/10/05	122,110	121,180	243,290	240,670	2,620	1%
6/13/05	124,280	122,280	246,560	243,810	2,750	1%
6/24/05	135,600	128,630	264,230	261,100	3,130	1%
7/7/05	144,940	134,540	279,480	275,870	3,610	1%
7/15/05	150,250	138,270	288,520	284,680	3,840	1%
7/22/05	153,470	140,830	294,300	290,350	3,950	1%
7/28/05	158,460	144,010	302,470	298,310	4,160	1%
8/4/05	163,090	147,480	310,570	306,160	4,410	1%
8/11/05	166,830	150,400	317,230	312,620	4,610	1%
8/18/05	171,960	154,460	326,420	321,520	4,900	2%
8/25/05	176,570	158,350	334,920	329,760	5,160	2%
9/1/05	181,790	162,610	344,400	338,880	5,520	2%
9/8/05	189,270	168,250	357,520	351,740	5,780	2%
9/15/05	194,280	172,020	366,300	360,300	6,000	2%
9/29/05	204,400	181,000	385,400	379,110	6,290	2%
10/6/05	210,780	186,720	397,500	390,890	6,610	2%
10/14/05	215,210	190,360	405,570	398,880	6,690	2%
10/20/05	218,230	192,300	410,530	403,690	6,840	2%
11/4/05	226,020	199,350	425,370	418,290	7,080	2%
11/20/05	237,780	212,050	449,830	442,230	7,600	2%
12/1/05	240,310	220,200	460,510	452,800	7,710	2%
12/16/05	251,200	228,890	480,090	472,000	8,090	2%
12/31/05	261,880	237,180	499,060	490,790	8,270	2%
1/11/06	275,540	249,720	525,260	516,580	8,680	2%
1/25/06	281,860	254,720	536,580	527,750	8,830	2%
2/8/06	300,770	272,580	573,350	563,960	9,390	2%
2/23/06	314,750	282,610	597,360	587,570	9,790	2%
3/10/06	323,410	289,140	612,550	602,390	10,160	2%
3/23/06	343,060	304,190	647,250	636,385	10,865	2%
4/6/06	362,710	319,240	681,950	670,380	11,570	2%
4/21/06	380,620	331,760	712,380	700,020	12,360	2%
5/5/06	392,700	338,790	731,490	718,680	12,810	2%
5/18/06	414,320	349,760	764,080	750,390	13,690	2%
6/2/06	441,950	362,550	804,500	790,040	14,460	2%
6/14/06	464,030	370,030	834,060	818,300	15,760	2%
6/29/06	479,290	374,890	854,180	837,860	16,320	2%
7/14/06	488,780	378,580	867,360	850,590	16,770	2%
7/28/06	498,130	382,970	881,100	863,890	17,210	2%
8/10/06	510,250	390,030	900,280	882,480	17,800	2%
8/28/06	518,980	395,380	914,360	896,110	18,250	2%

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Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
9/8/06	522,510	396,880	919,390	900,960	18,430	2%
9/22/06	528,640	400,740	929,380	910,600	18,780	2%
10/6/06	539,540	408,490	948,030	928,650	19,380	2%
10/19/06	547,290	413,920	961,210	941,360	19,850	2%
11/2/06	556,050	420,410	976,460	955,970	20,490	2%
12/11/06	576,130	437,450	1,013,580	991,690	21,890	2%
12/28/06	596,330	456,550	1,052,880	1,029,450	23,430	2%
1/16/07	599,090	461,450	1,060,540	1,036,750	23,790	2%
1/26/07	599,090	467,890	1,066,980	1,042,920	24,060	2%
2/9/07	599,670	471,870	1,071,540	1,047,240	24,300	2%
2/22/07	599,990	472,640	1,072,630	1,048,280	24,350	2%
3/2/07	603,450	472,640	1,076,090	1,051,660	24,430	2%
3/15/07	607,360	473,990	1,081,350	1,056,660	24,690	2%
3/30/07	631,370	496,180	1,127,550	1,102,190	25,360	2%
4/13/07	655,340	518,890	1,174,230	1,148,160	26,070	2%
4/27/07	661,850	524,010	1,185,860	1,159,620	26,240	2%
5/10/07	676,420	538,710	1,215,130	1,188,360	26,770	2%
5/24/07	688,150	550,410	1,238,560	1,211,580	26,980	2%
6/8/07	703,840	561,680	1,265,520	1,238,110	27,410	2%
6/22/07	717,360	574,860	1,292,220	1,264,440	27,780	2%
7/5/07	730,880	588,040	1,318,920	1,290,780	28,140	2%
7/19/07	740,550	594,970	1,335,520	1,307,120	28,400	2%
8/1/07	748,250	601,150	1,349,400	1,320,800	28,600	2%
8/14/07	754,120	603,720	1,357,840	1,329,110	28,730	2%
8/30/07	770,130	619,450	1,389,580	1,360,430	29,150	2%
9/14/07	773,630	621,630	1,395,260	1,365,830	29,430	2%
10/2/07	788,550	632,220	1,420,770	1,391,420	29,350	2%
10/11/07	799,420	643,030	1,442,450	1,412,750	29,700	2%
10/24/07	814,140	659,200	1,473,340	1,443,180	30,160	2%
11/8/07	830,630	670,220	1,500,850	1,470,390	30,460	2%
11/21/07	839,270	676,620	1,515,890	1,484,950	30,940	2%
12/6/07	846,490	680,600	1,527,090	1,495,870	31,220	2%
12/20/07	851,460	681,950	1,533,410	1,502,010	31,400	2%
01/04/08	859,140	689,010	1,548,150	1,516,310	31,840	2%
01/17/08	890,450	710,250	1,600,700	1,567,520	33,180	2%
01/31/08	890,450	710,250	1,600,700	1,567,520	33,180	2%
02/14/08	891,720	710,510	1,602,230	1,568,990	33,240	2%
02/28/08	891,750	710,520	1,602,270	1,569,040	33,230	2%
03/13/08	891,910	710,590	1,602,500	1,569,960	32,540	2%
03/28/08	892,350	728,530	1,620,880	1,588,160	32,720	2%
04/03/08	892,800	746,480	1,639,280	1,606,360	32,920	2%
04/24/08	922,860	762,610	1,685,470	1,652,060	33,410	2%
05/15/08	965,650	762,610	1,728,260	1,694,230	34,030	2%
05/30/08	969,490	762,620	1,732,110	1,698,010	34,100	2%
06/12/08	993,480	784,230	1,777,710	1,743,070	34,640	2%
06/28/08	1,017,860	802,350	1,820,210	1,784,930	35,280	2%
07/11/08	1,039,900	818,950	1,858,850	1,823,160	35,690	2%
07/25/08	1,061,050	835,240	1,896,290	1,860,450	35,840	2%

Table 3
Flow Meter Summary (Gallons)
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
08/07/08	1,074,850	844,480	1,919,330	1,883,350	35,980	2%
08/21/08	1,086,740	852,080	1,938,820	1,902,600	36,220	2%
09/03/08	1,093,870	856,250	1,950,120	1,913,770	36,350	2%
09/19/08	1,102,560	862,370	1,964,930	1,928,280	36,650	2%
10/03/08	1,106,560	864,600	1,971,160	1,934,560	36,600	2%
10/17/08	1,112,490	868,870	1,981,360	1,944,730	36,630	2%
10/31/08	1,116,290	872,170	1,988,460	1,951,690	36,770	2%
11/13/08	1,118,850	874,130	1,992,980	1,956,290	36,690	2%
11/26/08	1,119,800	874,460	1,994,260	1,957,570	36,690	2%
12/11/08	1,125,370	877,950	2,003,320	1,966,470	36,850	2%
12/23/08	1,130,730	882,480	2,013,210	1,976,270	36,940	2%
01/15/09	1,140,130	888,550	2,028,680	1,991,590	37,090	2%
01/30/09	1,144,500	889,790	2,034,290	1,997,130	37,160	2%
02/13/09	1,145,380	890,680	2,036,060	1,998,870	37,190	2%
02/26/09	1,147,290	890,690	2,037,980	2,000,750	37,230	2%
03/12/09	1,149,030	890,690	2,039,720	2,002,350	37,370	2%
03/26/09	1,170,820	894,400	2,065,220	2,027,540	37,680	2%
03/31/09	1,188,770	902,360	2,091,130	2,053,080	38,050	2%
04/22/09	1,206,538	933,867	2,140,405	2,053,080	87,325	4%
05/20/09	1,207,053	942,532	2,149,585	2,053,080	96,505	5%
06/23/09	1,207,694	966,229	2,173,923	2,053,080	120,843	6%
07/13/09	1,215,073	975,004	2,190,077	2,053,080	136,997	7%
08/05/09	1,215,245	986,020	2,201,265	2,053,080	148,185	7%
09/23/09	1,224,755	997,897	2,222,652	2,053,080	169,572	8%
10/08/09	1,225,018	1,000,507	2,225,525	2,053,080	172,445	8%
11/10/09	1,225,019	1,015,122	2,240,141	2,053,080	187,061	9%
12/14/09	1,225,017	1,043,159	2,268,176	2,224,886	43,290	2%
01/13/10	1,225,017	1,056,053	2,281,070	2,237,297	43,773	2%
02/10/10	1,225,094	1,063,325	2,288,419	2,244,318	44,101	2%
03/29/10	1,238,986	1,083,147	2,322,133	2,277,467	44,666	2%
04/15/10	1,243,631	1,104,865	2,348,496	2,303,719	44,777	2%
05/11/10	1,248,820	1,121,123	2,369,943	2,324,171	45,772	2%
06/15/10	1,257,996	1,143,758	2,401,754	2,353,762	47,992	2%
07/08/10	1,264,444	1,149,755	2,414,199	2,364,236	49,963	2%
09/23/10	1,277,524	1,170,368	2,447,892	2,394,689	53,203	2%
10/07/10	1,277,581	1,170,609	2,448,190	2,394,901	53,289	2%
11/03/10	1,280,350	1,176,418	2,456,768	2,401,838	54,930	2%
01/06/11	1,282,570	1,181,420	2,463,990	2,407,570	56,420	2%
02/17/11	1,287,938	1,187,089	2,475,027	2,415,746	59,281	2%
03/17/11	1,299,854	1,197,700	2,497,554	2,432,319	65,235	3%
04/14/11	1,307,876	1,210,345	2,518,221	2,448,084	70,137	3%
05/23/11	1,312,441	1,220,169	2,532,610	2,459,460	73,150	3%
06/23/11	1,321,270	1,249,311	2,570,581	2,494,520	76,061	3%
07/14/11	1,329,190	1,269,019	2,598,209	2,517,690	80,519	3%
08/18/11	1,338,162	1,289,763	2,627,925	2,541,941	85,984	3%
09/22/11	1,339,155	1,305,456	2,644,611	2,556,061	88,550	3%
10/06/11	1,339,155	1,309,381	2,648,536	2,559,407	89,129	3%
11/22/11	1,339,155	1,352,529	2,691,684	2,596,520	95,164	4%

Table 3
Flow Meter Summary (Gallons)
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
12/12/11	1,339,155	1,373,614	2,712,769	2,614,900	97,869	4%
01/18/12	1,339,155	1,395,748	2,734,903	2,634,117	100,786	4%
02/29/12	1,339,306	1,407,427	2,746,733	2,644,225	102,508	4%
03/21/12	1,339,274	1,417,252	2,756,526	2,652,633	103,893	4%
04/04/12	1,346,910	1,420,396	2,767,306	2,660,594	106,712	4%
05/22/12	1,624,598	1,429,160	3,053,758	2,681,564	372,194	14%
06/07/12	1,731,756	1,431,720	3,163,476	2,692,190	471,286	18%
07/05/12	1,734,895	1,431,790	3,166,685	2,692,204	474,481	18%
08/02/12	1,736,045	1,431,812	3,167,857	2,692,708	475,149	18%
09/14/12	1,737,020	1,431,840	3,168,860	2,694,500	474,360	18%
10/04/12	1,750,000	1,433,840	3,183,840	2,696,670	487,170	18%
Flow meters were repaired and faces replaced on January 24, 2013						
01/26/13	4,445	144,177	--	75,841	-	-
01/28/13	-	-	-	406	-	-
01/29/13	1,200	0	1,200	1,096	105	10%
02/04/13	4,654	2,185	6,839	6,433	406	6%
02/07/13	5,859	2,909	8,768	8,238	530	6%
03/07/13	11,425	8,883	20,308	19,289	1,019	5%
03/20/13	18,049	12,372	30,421	28,987	1,434	5%
04/01/13	24,118	13,593	37,711	35,904	1,807	5%
04/11/13	30,746	14,533	45,279	43,110	2,169	5%
05/01/13	32,340	15,133	47,473	44,539	2,934	7%
06/06/13	32,755	38,873	71,628	68,039	3,589	5%
06/18/13	32,755	39,392	72,147	68,532	3,615	5%
06/18/13	32,755	44,875	77,630	73,695	3,935	5%
07/01/13	32,755	61,841	94,596	89,636	4,960	6%
07/18/13	32,755	81,503	114,258	108,142	6,116	6%
08/08/13	32,755	92,049	124,804	117,995	6,809	6%
09/10/13	32,755	94,341	127,096	120,265	6,831	6%
Sump A pump and Sump B discharge hose replaced on September 24, 2013						
09/26/13	35,250	95,333	130,583	123,379	7,204	6%
10/01/13	37,537	96,443	133,980	126,287	7,693	6%
10/18/13	44,925	96,443	141,368	137,269	4,099	3%
11/05/13	45,147	101,098	146,245	137,711	8,534	6%
11/06/13	47,912	101,174	149,086	140,407	8,679	6%
11/14/13	52,801	106,933	159,734	150,525	9,209	6%
12/02/13	74,214	107,600	181,814	171,172	10,642	6%
12/10/13	80,565	119,013	199,578	187,509	12,069	6%
12/20/13	84,155	120,273	204,428	191,809	12,619	7%
12/31/13	84,973	120,278	205,251	192,636	12,615	7%
01/15/14	84,973	120,278	205,251	192,636	12,615	7%
02/13/14	85,330	120,278	205,251	192,636	12,615	7%
03/13/14	85,706	121,293	206,999	194,458	12,541	6%
04/01/14	85,966	121,293	207,259	194,458	12,801	7%
04/12/14	90,237	121,293	211,530	198,400	13,130	7%
04/14/14	94,813	121,293	216,106	202,546	13,560	7%

Table 3
Flow Meter Summary (Gallons)
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent
04/22/14	106,935	121,293	228,228	215,879	12,349	6%
05/13/14	114,120	121,293	235,413	222,567	12,846	6%
06/04/14	119,554	129,122	248,676	232,114	16,562	7%
06/05/14	120,961	129,122	250,083	234,267	15,816	7%
06/12/14	129,616	134,329	263,945	245,815	18,130	7%
07/01/14	158,316	164,438	322,754	298,628	24,126	8%
07/02/14	158,701	164,556	323,257	298,959	24,298	8%
08/05/14	159,447	165,368	324,815	300,373	24,442	8%
08/06/14	159,447	165,392	324,839	300,373	24,466	8%
08/07/14	159,447	167,219	326,666	302,021	24,645	8%
08/13/14	165,583	168,830	334,413	308,936	25,477	8%
08/22/14	173,879	176,422	350,301	323,194	27,107	8%
09/05/14	185,636	183,779	369,415	340,357	29,058	9%
09/17/14	197,841	195,374	393,215	361,652	31,563	9%
09/24/14	203,735	200,534	404,269	371,586	32,683	9%
10/01/14	207,855	205,840	413,695	379,956	33,739	9%
10/16/14	221,123	217,531	438,654	402,237	36,417	9%
11/04/14	236,160	229,321	465,481	426,276	39,205	9%
11/13/14	240,712	234,643	475,355	435,167	40,188	9%
12/08/14	242,571	235,940	478,511	438,078	40,433	9%
12/09/14	243,981	237,347	481,328	440,815	40,513	9%
12/12/14	245,981	239,498	485,479	444,853	40,626	9%
12/31/14	269,423	256,529	525,952	484,590	41,362	9%
01/01/15	270,532	257,650	528,182	486,734	41,448	9%
01/12/15	277,196	262,276	539,472	497,841	41,631	8%
01/31/15	280,334	265,875	546,209	504,392	41,817	8%
02/04/15	280,356	266,652	547,008	505,221	41,787	8%
02/28/15	280,376	266,652	547,028	505,234	41,794	8%
03/01/15	280,376	266,652	547,028	505,234	41,794	8%
03/11/15	280,387	266,652	547,039	505,234	41,805	8%
03/18/15	280,391	266,652	547,043	505,234	41,809	8%
04/07/15	280,499.3	266,652	547,151	505,321	41,830	8%
04/13/15	287,154.3	266,652	553,806	511,876	41,930	8%
04/15/15	293,306.3	266,652	559,958	514,049	45,909	9%
04/22/15	295,729.3	270,842	566,571	524,487	42,084	8%
04/24/15	297,320.3	271,384	568,704	526,526	42,178	8%
04/29/15	300,088.3	271,823	571,911	529,679	42,232	8%
04/30/15	300,541.3	271,855	572,396	530,187	42,209	8%

Notes:

1. The influent and effluent flow meters were replaced by Foth on November 30, 2004.
2. Influent flow meters measure more flow than effluent flow meter when all three flow meters are operating continuously.
3. Consultant transition from Foth to SCS BT Squared in April 2009.
4. SCS BT Squared replaces Sump A flow meter May 20, 2009.
5. SCS BT Squared reported Sump A out of service from January 18, 2012 until March 22, 2012
5. Consultant transition from SCS BT Squared to Terracon in May 2012
6. System remained out of operation from October 2012 until January 27, 2013.

Table 3
Flow Meter Summary (Gallons)
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project No. 58127047

Date	Sump A Influent (gallons)	Sump B Influent (gallons)	Total Influent (gallons)	Total Effluent (gallons)	Total Influent Minus Effluent	Flow Meter Variation as a % of Effluent

7. The three Badger flow meters were repaired and faces replaced on January 24, 2013. January 26, 2013 readings reflect the starting values on the repaired meters. Subsequent readings are the face value minus the January 26, 2013 starting values.
8. Sump A not operational from 6/18//13 through 9/24/2013
9. Sump A pump replaced with a Grundfos SQE5-90 (240 v) submersible pump on 9/24/13
10. Sump B pump discharge hose inside the manhole was replaced on 9/24/13
11. LMI Chemical pump for sodium hydroxide injection was replaced on 6/3/14
12. Transfer pump was replaced on 8/4/14 with a Goulds model 1SV8GC (1 hp)

Created by: N Heim, Terracon
Edited by: S Hodgson, Terracon 4/30/15

Table 4
November 1, 2014 through April 30, 2015
Chromium and VOC Mass Removal Summary
Wisconsin Chrome, Kaukauna, Wisconsin
Terracon Project #58127047

	Concentration		Volume (gal)	Mass (lbs)
	(µg/l)	(lb./gal)		
Sump A				
Total VOCs	1387.5	0.0000116	64,381	0.75
Total Chromium	104	0.0000009	64,381	0.06
Sump B				
Total Chromium	673.0	0.0000056	42,534	0.24

ABBREVIATIONS:

µg/l = micrograms per liter
lb./gal = pound per gallon
gal = gallon
VOCs - Volatile Organic Compounds
lbs = pounds

Notes:

Concentrations are calculated based on averages from sampling events during reporting period

Prepared by: C Ingram, Terracon
Checked by: S Hodgson, Terracon

N:\Projects\2012\58127047\Working Files\Tables\[TERRACON - Wis_Chrome_Tables_120621.xls]Table 4

Appendix B

Laboratory Analytical Reports

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

March 29, 2016

SHARON KOZICKI
Foth Infrastructure & Environment, LLC
2121 Innovation Court
Suite 300
De Pere, WI 54115

RE: Project: 15W029 WI CHROME
Pace Project No.: 40129439

Dear SHARON KOZICKI:
Enclosed are the analytical results for sample(s) received by the laboratory on March 15, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

cc: Nick Glander, Foth Infrastructure & Environment, LLC

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40129439001	**MW-10_20160315**	Water	03/15/16 08:05	03/15/16 16:15
40129439002	**MW-12_20160315**	Water	03/15/16 08:35	03/15/16 16:15
40129439003	**MW-4_20160315**	Water	03/15/16 09:15	03/15/16 16:15
40129439004	**MW-6R_20160315**	Water	03/15/16 10:00	03/15/16 16:15
40129439005	**P-6A_20160315**	Water	03/15/16 10:40	03/15/16 16:15
40129439006	**MW-7R_20160315**	Water	03/15/16 11:20	03/15/16 16:15
40129439007	**P-7A_20160315**	Water	03/15/16 12:00	03/15/16 16:15
40129439008	**P-7B_20160315**	Water	03/15/16 12:35	03/15/16 16:15
40129439009	**P-7C_20160315**	Water	03/15/16 13:10	03/15/16 16:15
40129439010	**MW-20_20160315**	Water	03/15/16 13:45	03/15/16 16:15
40129439011	**MW-21_20160315**	Water	03/15/16 15:20	03/15/16 16:15
40129439012	**MW-22_20160315**	Water	03/15/16 14:40	03/15/16 16:15
40129439013	**MW-DUP1_20160315**	Water	03/15/16 14:40	03/15/16 16:15
40129439014	**TB-1_20160315**	Water	03/15/16 00:00	03/15/16 16:15

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40129439001	**MW-10_20160315**	EPA 6010	DLB	1	PASI-G
40129439002	**MW-12_20160315**	EPA 6010	DLB	1	PASI-G
40129439003	**MW-4_20160315**	EPA 6010	DLB	1	PASI-G
		EPA 8260	LAP	64	PASI-G
40129439004	**MW-6R_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439005	**P-6A_20160315**	EPA 6010	DLB	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439006	**MW-7R_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439007	**P-7A_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439008	**P-7B_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439009	**P-7C_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439010	**MW-20_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439011	**MW-21_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439012	**MW-22_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439013	**MW-DUP1_20160315**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129439014	**TB-1_20160315**	EPA 8260	LAP	64	PASI-G

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40129439001	**MW-10_20160315**					
EPA 6010	Chromium, Dissolved	24.9	ug/L	10.0	03/18/16 18:26	
40129439003	**MW-4_20160315**					
EPA 6010	Chromium, Dissolved	35.6	ug/L	10.0	03/18/16 18:31	
EPA 8260	1,1-Dichloroethane	4.7	ug/L	1.0	03/22/16 00:08	
EPA 8260	1,1-Dichloroethene	2.1	ug/L	1.0	03/22/16 00:08	
EPA 8260	1,1,1-Trichloroethane	29.1	ug/L	1.0	03/22/16 00:08	
40129439004	**MW-6R_20160315**					
EPA 6010	Chromium, Dissolved	24.8	ug/L	10.0	03/22/16 13:44	
EPA 6010	Iron, Dissolved	2950	ug/L	100	03/22/16 13:44	
EPA 6010	Manganese, Dissolved	389	ug/L	5.0	03/22/16 13:44	
EPA 6010	Sodium, Dissolved	22200	ug/L	1000	03/22/16 13:44	
EPA 8260	1,1-Dichloroethane	11.3	ug/L	1.0	03/22/16 00:31	
EPA 8260	1,1-Dichloroethene	5.7	ug/L	1.0	03/22/16 00:31	
EPA 8260	1,1,1-Trichloroethane	30.0	ug/L	1.0	03/22/16 00:31	
EPA 8260	Trichloroethene	0.48J	ug/L	1.0	03/22/16 00:31	
EPA 300.0	Sulfate, Dissolved	39.8	mg/L	4.0	03/21/16 14:28	
40129439005	**P-6A_20160315**					
EPA 6010	Iron, Dissolved	1850	ug/L	100	03/22/16 14:06	
EPA 6010	Manganese, Dissolved	281	ug/L	5.0	03/22/16 14:06	
EPA 6010	Sodium, Dissolved	17300	ug/L	1000	03/22/16 14:06	
EPA 300.0	Sulfate, Dissolved	11.3	mg/L	4.0	03/21/16 14:39	
40129439006	**MW-7R_20160315**					
EPA 6010	Chromium, Dissolved	49600	ug/L	20.0	03/18/16 18:36	
EPA 6010	Manganese, Dissolved	124	ug/L	5.0	03/22/16 14:08	
EPA 6010	Sodium, Dissolved	108000	ug/L	1000	03/22/16 14:08	
EPA 8260	Chloroethane	189	ug/L	100	03/21/16 12:47	
EPA 8260	1,1-Dichloroethane	1490	ug/L	100	03/21/16 12:47	
EPA 8260	1,1-Dichloroethene	2040	ug/L	100	03/21/16 12:47	
EPA 8260	Methylene Chloride	30.7J	ug/L	100	03/21/16 12:47	
EPA 8260	1,1,1-Trichloroethane	8940	ug/L	100	03/21/16 12:47	
EPA 8260	Trichloroethene	64.6J	ug/L	100	03/21/16 12:47	
EPA 8260	Vinyl chloride	18.9J	ug/L	100	03/21/16 12:47	
SM 3500-Cr B (Online)	Chromium, Hexavalent, Dissolved	49.6	mg/L	2.0	03/16/16 08:25	
EPA 300.0	Sulfate, Dissolved	152	mg/L	20.0	03/21/16 14:50	
40129439007	**P-7A_20160315**					
EPA 6010	Chromium, Dissolved	4.0J	ug/L	10.0	03/22/16 14:11	
EPA 6010	Manganese, Dissolved	3.0J	ug/L	5.0	03/22/16 14:11	
EPA 6010	Sodium, Dissolved	34100	ug/L	1000	03/22/16 14:11	
EPA 8260	1,1-Dichloroethane	86.7	ug/L	1.0	03/22/16 00:53	
EPA 8260	1,2-Dichloroethane	0.40J	ug/L	1.0	03/22/16 00:53	
EPA 8260	1,1-Dichloroethene	24.3	ug/L	1.0	03/22/16 00:53	
EPA 8260	Methylene Chloride	0.26J	ug/L	1.0	03/22/16 00:53	
EPA 8260	1,1,1-Trichloroethane	3.8	ug/L	1.0	03/22/16 00:53	
SM 3500-Cr B (Online)	Chromium, Hexavalent, Dissolved	0.0039J	mg/L	0.020	03/16/16 08:25	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40129439007	**P-7A_20160315**					
EPA 300.0	Sulfate, Dissolved	28.4	mg/L	4.0	03/21/16 15:01	
40129439008	**P-7B_20160315**					
EPA 6010	Iron, Dissolved	81.3J	ug/L	100	03/22/16 14:13	
EPA 6010	Manganese, Dissolved	84.3	ug/L	5.0	03/22/16 14:13	
EPA 6010	Sodium, Dissolved	90500	ug/L	1000	03/22/16 14:13	
EPA 8260	1,1-Dichloroethane	3860	ug/L	100	03/21/16 11:39	
EPA 8260	1,1-Dichloroethene	1050	ug/L	100	03/21/16 11:39	
EPA 8260	1,1,1-Trichloroethane	11200	ug/L	100	03/21/16 11:39	
EPA 300.0	Sulfate, Dissolved	168	mg/L	40.0	03/21/16 16:52	
40129439009	**P-7C_20160315**					
EPA 6010	Iron, Dissolved	128	ug/L	100	03/22/16 14:15	
EPA 6010	Manganese, Dissolved	6.9	ug/L	5.0	03/22/16 14:15	
EPA 6010	Sodium, Dissolved	25200	ug/L	1000	03/22/16 14:15	
EPA 8260	1,1-Dichloroethane	1.1	ug/L	1.0	03/22/16 01:16	
EPA 8260	1,1,1-Trichloroethane	0.95J	ug/L	1.0	03/22/16 01:16	
EPA 300.0	Sulfate, Dissolved	4.3	mg/L	4.0	03/21/16 15:46	
40129439010	**MW-20_20160315**					
EPA 6010	Iron, Dissolved	5990	ug/L	100	03/22/16 14:18	
EPA 6010	Manganese, Dissolved	649	ug/L	5.0	03/22/16 14:18	
EPA 6010	Sodium, Dissolved	110000	ug/L	1000	03/22/16 14:18	
EPA 8260	Chloroethane	62.3	ug/L	50.0	03/21/16 12:02	
EPA 8260	1,1-Dichloroethane	637	ug/L	50.0	03/21/16 12:02	
EPA 8260	1,1-Dichloroethene	804	ug/L	50.0	03/21/16 12:02	
EPA 8260	1,1,1-Trichloroethane	6490	ug/L	50.0	03/21/16 12:02	
EPA 8260	Trichloroethene	21.1J	ug/L	50.0	03/21/16 12:02	
EPA 8260	Vinyl chloride	13.6J	ug/L	50.0	03/21/16 12:02	
EPA 300.0	Sulfate, Dissolved	271	mg/L	40.0	03/21/16 17:03	
40129439011	**MW-21_20160315**					
EPA 6010	Chromium, Dissolved	850	ug/L	10.0	03/22/16 14:20	
EPA 6010	Manganese, Dissolved	584	ug/L	5.0	03/22/16 14:20	
EPA 6010	Sodium, Dissolved	35000	ug/L	1000	03/22/16 14:20	
EPA 8260	Chloroethane	4.0	ug/L	1.0	03/22/16 01:38	
EPA 8260	1,1-Dichloroethane	43.7	ug/L	1.0	03/22/16 01:38	
EPA 8260	1,2-Dichloroethane	0.64J	ug/L	1.0	03/22/16 01:38	
EPA 8260	1,1-Dichloroethene	28.3	ug/L	1.0	03/22/16 01:38	
EPA 8260	cis-1,2-Dichloroethene	1.9	ug/L	1.0	03/22/16 01:38	
EPA 8260	1,1,1-Trichloroethane	156	ug/L	1.0	03/22/16 01:38	
EPA 8260	Trichloroethene	2.4	ug/L	1.0	03/22/16 01:38	
EPA 8260	Vinyl chloride	2.1	ug/L	1.0	03/22/16 01:38	
SM 3500-Cr B (Online)	Chromium, Hexavalent, Dissolved	0.86	mg/L	0.10	03/16/16 08:25	
EPA 300.0	Sulfate, Dissolved	128	mg/L	40.0	03/21/16 17:14	
40129439012	**MW-22_20160315**					
EPA 6010	Chromium, Dissolved	2850	ug/L	10.0	03/22/16 14:22	
EPA 6010	Manganese, Dissolved	66.1	ug/L	5.0	03/22/16 14:22	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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SUMMARY OF DETECTION

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40129439012	**MW-22_20160315**					
EPA 6010	Sodium, Dissolved	63400	ug/L	1000	03/22/16 14:22	
EPA 8260	1,1-Dichloroethane	16.9	ug/L	4.0	03/21/16 12:24	
EPA 8260	1,1-Dichloroethene	34.1	ug/L	4.0	03/21/16 12:24	
EPA 8260	Methylene Chloride	1.3J	ug/L	4.0	03/21/16 12:24	
EPA 8260	1,1,1-Trichloroethane	301	ug/L	4.0	03/21/16 12:24	
EPA 8260	Trichloroethene	8.1	ug/L	4.0	03/21/16 12:24	
SM 3500-Cr B (Online)	Chromium, Hexavalent, Dissolved	2.3	mg/L	0.20	03/16/16 08:25	
EPA 300.0	Sulfate, Dissolved	202	mg/L	40.0	03/21/16 17:47	
40129439013	**MW-DUP1_20160315**					
EPA 6010	Chromium, Dissolved	1790	ug/L	10.0	03/22/16 14:29	
EPA 6010	Manganese, Dissolved	56.0	ug/L	5.0	03/22/16 14:29	
EPA 6010	Sodium, Dissolved	60200	ug/L	1000	03/22/16 14:29	
EPA 8260	Chloroethane	1.0	ug/L	1.0	03/24/16 07:46	
EPA 8260	1,1-Dichloroethane	15.7	ug/L	1.0	03/24/16 07:46	
EPA 8260	1,2-Dichloroethane	0.32J	ug/L	1.0	03/24/16 07:46	
EPA 8260	1,1-Dichloroethene	23.5	ug/L	1.0	03/24/16 07:46	
EPA 8260	Methylene Chloride	0.46J	ug/L	1.0	03/24/16 07:46	
EPA 8260	Tetrachloroethene	0.83J	ug/L	1.0	03/24/16 07:46	L1
EPA 8260	1,1,1-Trichloroethane	293	ug/L	1.0	03/24/16 07:46	
EPA 8260	Trichloroethene	8.5	ug/L	1.0	03/24/16 07:46	
SM 3500-Cr B (Online)	Chromium, Hexavalent, Dissolved	4.4	mg/L	0.50	03/16/16 08:25	
EPA 300.0	Sulfate, Dissolved	230	mg/L	20.0	03/16/16 13:51	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Method: **EPA 6010**
Description: 6010 MET ICP, Dissolved
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 29, 2016

General Information:
13 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Method: **EPA 8260**
Description: 8260 MSV
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 29, 2016

General Information:
11 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/32596

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1307251)
  - Isopropylbenzene (Cumene)
  - Tetrachloroethene

QC Batch: MSV/32606

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1307553)
  - Bromomethane

QC Batch: MSV/32670

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1309424)
  - Isopropylbenzene (Cumene)
  - Tetrachloroethene

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Method: **EPA 8260**
Description: 8260 MSV
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 29, 2016

QC Batch: MSV/32596

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40129308003

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1307844)
  - Isopropylbenzene (Cumene)
- MSD (Lab ID: 1307845)
  - Isopropylbenzene (Cumene)

QC Batch: MSV/32606

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40129425001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1307837)
  - Isopropylbenzene (Cumene)
  - Tetrachloroethene
- MSD (Lab ID: 1307838)
  - Isopropylbenzene (Cumene)
  - Tetrachloroethene

QC Batch: MSV/32670

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40129351001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1310302)
  - Isopropylbenzene (Cumene)
  - Tetrachloroethene
- MSD (Lab ID: 1310303)
  - Isopropylbenzene (Cumene)
  - Tetrachloroethene

Additional Comments:

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PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Method: **SM 3500-Cr B (Online)**
Description: Chromium, Dissolved Hexavalent
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 29, 2016

General Information:
10 samples were analyzed for SM 3500-Cr B (Online). All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WET/24607

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-20_20160315 (Lab ID: 40129439010)
  - Chromium, Hexavalent, Dissolved
- MW-6R_20160315 (Lab ID: 40129439004)
  - Chromium, Hexavalent, Dissolved
- P-6A_20160315 (Lab ID: 40129439005)
  - Chromium, Hexavalent, Dissolved

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PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days,Diss
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 29, 2016

General Information:
10 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32674

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40129159009,40129270008

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1305300)
  - Sulfate, Dissolved
- MSD (Lab ID: 1305301)
  - Sulfate, Dissolved

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-10_20160315 **Lab ID: 40129439001** Collected: 03/15/16 08:05 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**24.9**	ug/L	10.0	2.1	1		03/18/16 18:26	7440-47-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-12_20160315 **Lab ID: 40129439002** Collected: 03/15/16 08:35 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/18/16 18:28	7440-47-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-4_20160315 **Lab ID: 40129439003** Collected: 03/15/16 09:15 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**35.6**	ug/L	10.0	2.1	1		03/18/16 18:31	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:08	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/22/16 00:08	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/22/16 00:08	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:08	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:08	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/22/16 00:08	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/22/16 00:08	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/22/16 00:08	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:08	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:08	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/22/16 00:08	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/22/16 00:08	75-71-8	
1,1-Dichloroethane	**4.7**	ug/L	1.0	0.24	1		03/22/16 00:08	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/22/16 00:08	107-06-2	
1,1-Dichloroethene	**2.1**	ug/L	1.0	0.41	1		03/22/16 00:08	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 00:08	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 00:08	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:08	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/22/16 00:08	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/22/16 00:08	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:08	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 00:08	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/22/16 00:08	98-82-8	L3
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	99-87-6	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:08	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/22/16 00:08	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/22/16 00:08	91-20-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-4_20160315 **Lab ID: 40129439003** Collected: 03/15/16 09:15 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:08	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/22/16 00:08	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	127-18-4	L3
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 00:08	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:08	120-82-1	
1,1,1-Trichloroethane	**29.1**	ug/L	1.0	0.50	1		03/22/16 00:08	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/22/16 00:08	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/22/16 00:08	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:08	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:08	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/22/16 00:08	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:08	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		03/22/16 00:08	460-00-4	
Dibromofluoromethane (S)	98	%	70-130		1		03/22/16 00:08	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		03/22/16 00:08	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-6R_20160315 **Lab ID: 40129439004** Collected: 03/15/16 10:00 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**24.8**	ug/L	10.0	2.1	1		03/22/16 13:44	7440-47-3	
Iron, Dissolved	**2950**	ug/L	100	12.9	1		03/22/16 13:44	7439-89-6	
Manganese, Dissolved	**389**	ug/L	5.0	1.4	1		03/22/16 13:44	7439-96-5	
Sodium, Dissolved	**22200**	ug/L	1000	43.5	1		03/22/16 13:44	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:31	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/22/16 00:31	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/22/16 00:31	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:31	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:31	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/22/16 00:31	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/22/16 00:31	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/22/16 00:31	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:31	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:31	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/22/16 00:31	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/22/16 00:31	75-71-8	
1,1-Dichloroethane	**11.3**	ug/L	1.0	0.24	1		03/22/16 00:31	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/22/16 00:31	107-06-2	
1,1-Dichloroethene	**5.7**	ug/L	1.0	0.41	1		03/22/16 00:31	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 00:31	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 00:31	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:31	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/22/16 00:31	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/22/16 00:31	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:31	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 00:31	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/22/16 00:31	98-82-8	L3
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-6R_20160315 **Lab ID: 40129439004** Collected: 03/15/16 10:00 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:31	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/22/16 00:31	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/22/16 00:31	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:31	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/22/16 00:31	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	127-18-4	L3
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 00:31	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:31	120-82-1	
1,1,1-Trichloroethane	**30.0**	ug/L	1.0	0.50	1		03/22/16 00:31	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/22/16 00:31	79-00-5	
Trichloroethene	**0.48J**	ug/L	1.0	0.33	1		03/22/16 00:31	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:31	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:31	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/22/16 00:31	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:31	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		03/22/16 00:31	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		1		03/22/16 00:31	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		03/22/16 00:31	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**<0.019**	mg/L	0.10	0.019	5		03/16/16 08:25	18540-29-9	D3
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**39.8**	mg/L	4.0	2.0	1		03/21/16 14:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: P-6A_20160315 **Lab ID: 40129439005** Collected: 03/15/16 10:40 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/22/16 14:06	7440-47-3	
Iron, Dissolved	**1850**	ug/L	100	12.9	1		03/22/16 14:06	7439-89-6	
Manganese, Dissolved	**281**	ug/L	5.0	1.4	1		03/22/16 14:06	7439-96-5	
Sodium, Dissolved	**17300**	ug/L	1000	43.5	1		03/22/16 14:06	7440-23-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**<0.019**	mg/L	0.10	0.019	5		03/16/16 08:25	18540-29-9	D3
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**11.3**	mg/L	4.0	2.0	1		03/21/16 14:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-7R_20160315 **Lab ID: 40129439006** Collected: 03/15/16 11:20 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**49600**	ug/L	20.0	4.1	2		03/18/16 18:36	7440-47-3	
Iron, Dissolved	**<12.9**	ug/L	100	12.9	1		03/22/16 14:08	7439-89-6	
Manganese, Dissolved	**124**	ug/L	5.0	1.4	1		03/22/16 14:08	7439-96-5	
Sodium, Dissolved	**108000**	ug/L	1000	43.5	1		03/22/16 14:08	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	71-43-2	
Bromobenzene	**<23.0**	ug/L	100	23.0	100		03/21/16 12:47	108-86-1	
Bromochloromethane	**<34.0**	ug/L	100	34.0	100		03/21/16 12:47	74-97-5	
Bromodichloromethane	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	75-27-4	
Bromoform	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	75-25-2	
Bromomethane	**<243**	ug/L	500	243	100		03/21/16 12:47	74-83-9	
n-Butylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	104-51-8	
sec-Butylbenzene	**<219**	ug/L	500	219	100		03/21/16 12:47	135-98-8	
tert-Butylbenzene	**<18.0**	ug/L	100	18.0	100		03/21/16 12:47	98-06-6	
Carbon tetrachloride	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	56-23-5	
Chlorobenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	108-90-7	
Chloroethane	**189**	ug/L	100	37.5	100		03/21/16 12:47	75-00-3	
Chloroform	**<250**	ug/L	500	250	100		03/21/16 12:47	67-66-3	
Chloromethane	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	74-87-3	
2-Chlorotoluene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	95-49-8	
4-Chlorotoluene	**<21.4**	ug/L	100	21.4	100		03/21/16 12:47	106-43-4	
1,2-Dibromo-3-chloropropane	**<216**	ug/L	500	216	100		03/21/16 12:47	96-12-8	
Dibromochloromethane	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	124-48-1	
1,2-Dibromoethane (EDB)	**<17.8**	ug/L	100	17.8	100		03/21/16 12:47	106-93-4	
Dibromomethane	**<42.7**	ug/L	100	42.7	100		03/21/16 12:47	74-95-3	
1,2-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	95-50-1	
1,3-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	541-73-1	
1,4-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	106-46-7	
Dichlorodifluoromethane	**<22.4**	ug/L	100	22.4	100		03/21/16 12:47	75-71-8	
1,1-Dichloroethane	**1490**	ug/L	100	24.2	100		03/21/16 12:47	75-34-3	
1,2-Dichloroethane	**<16.8**	ug/L	100	16.8	100		03/21/16 12:47	107-06-2	
1,1-Dichloroethene	**2040**	ug/L	100	41.0	100		03/21/16 12:47	75-35-4	
cis-1,2-Dichloroethene	**<25.6**	ug/L	100	25.6	100		03/21/16 12:47	156-59-2	
trans-1,2-Dichloroethene	**<25.7**	ug/L	100	25.7	100		03/21/16 12:47	156-60-5	
1,2-Dichloropropane	**<23.3**	ug/L	100	23.3	100		03/21/16 12:47	78-87-5	
1,3-Dichloropropane	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	142-28-9	
2,2-Dichloropropane	**<48.4**	ug/L	100	48.4	100		03/21/16 12:47	594-20-7	
1,1-Dichloropropene	**<44.1**	ug/L	100	44.1	100		03/21/16 12:47	563-58-6	
cis-1,3-Dichloropropene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	10061-01-5	
trans-1,3-Dichloropropene	**<23.0**	ug/L	100	23.0	100		03/21/16 12:47	10061-02-6	
Diisopropyl ether	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	108-20-3	
Ethylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	100-41-4	
Hexachloro-1,3-butadiene	**<211**	ug/L	500	211	100		03/21/16 12:47	87-68-3	
Isopropylbenzene (Cumene)	**<14.3**	ug/L	100	14.3	100		03/21/16 12:47	98-82-8	L3
p-Isopropyltoluene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-7R_20160315 **Lab ID: 40129439006** Collected: 03/15/16 11:20 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**30.7J**	ug/L	100	23.3	100		03/21/16 12:47	75-09-2	
Methyl-tert-butyl ether	**<17.4**	ug/L	100	17.4	100		03/21/16 12:47	1634-04-4	
Naphthalene	**<250**	ug/L	500	250	100		03/21/16 12:47	91-20-3	
n-Propylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	103-65-1	
Styrene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	100-42-5	
1,1,1,2-Tetrachloroethane	**<18.1**	ug/L	100	18.1	100		03/21/16 12:47	630-20-6	
1,1,2,2-Tetrachloroethane	**<24.9**	ug/L	100	24.9	100		03/21/16 12:47	79-34-5	
Tetrachloroethene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	127-18-4	L3
Toluene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	108-88-3	
1,2,3-Trichlorobenzene	**<213**	ug/L	500	213	100		03/21/16 12:47	87-61-6	
1,2,4-Trichlorobenzene	**<221**	ug/L	500	221	100		03/21/16 12:47	120-82-1	
1,1,1-Trichloroethane	**8940**	ug/L	100	50.0	100		03/21/16 12:47	71-55-6	
1,1,2-Trichloroethane	**<19.7**	ug/L	100	19.7	100		03/21/16 12:47	79-00-5	
Trichloroethene	**64.6J**	ug/L	100	33.1	100		03/21/16 12:47	79-01-6	
Trichlorofluoromethane	**<18.5**	ug/L	100	18.5	100		03/21/16 12:47	75-69-4	
1,2,3-Trichloropropane	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	96-18-4	
1,2,4-Trimethylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	95-63-6	
1,3,5-Trimethylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	108-67-8	
Vinyl chloride	**18.9J**	ug/L	100	17.6	100		03/21/16 12:47	75-01-4	
m&p-Xylene	**<100**	ug/L	200	100	100		03/21/16 12:47	179601-23-1	
o-Xylene	**<50.0**	ug/L	100	50.0	100		03/21/16 12:47	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		100		03/21/16 12:47	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		100		03/21/16 12:47	1868-53-7	
Toluene-d8 (S)	98	%	70-130		100		03/21/16 12:47	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**49.6**	mg/L	2.0	0.39	100		03/16/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**152**	mg/L	20.0	10.0	5		03/21/16 14:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: P-7A_20160315 **Lab ID: 40129439007** Collected: 03/15/16 12:00 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**4.0J**	ug/L	10.0	2.1	1		03/22/16 14:11	7440-47-3	
Iron, Dissolved	**<12.9**	ug/L	100	12.9	1		03/22/16 14:11	7439-89-6	
Manganese, Dissolved	**3.0J**	ug/L	5.0	1.4	1		03/22/16 14:11	7439-96-5	
Sodium, Dissolved	**34100**	ug/L	1000	43.5	1		03/22/16 14:11	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:53	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/22/16 00:53	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/22/16 00:53	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:53	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:53	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/22/16 00:53	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/22/16 00:53	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/22/16 00:53	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:53	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:53	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/22/16 00:53	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/22/16 00:53	75-71-8	
1,1-Dichloroethane	**86.7**	ug/L	1.0	0.24	1		03/22/16 00:53	75-34-3	
1,2-Dichloroethane	**0.40J**	ug/L	1.0	0.17	1		03/22/16 00:53	107-06-2	
1,1-Dichloroethene	**24.3**	ug/L	1.0	0.41	1		03/22/16 00:53	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 00:53	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 00:53	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:53	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/22/16 00:53	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/22/16 00:53	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 00:53	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 00:53	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/22/16 00:53	98-82-8	L3
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: P-7A_20160315 **Lab ID: 40129439007** Collected: 03/15/16 12:00 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**0.26J**	ug/L	1.0	0.23	1		03/22/16 00:53	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/22/16 00:53	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/22/16 00:53	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:53	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/22/16 00:53	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	127-18-4	L3
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 00:53	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 00:53	120-82-1	
1,1,1-Trichloroethane	**3.8**	ug/L	1.0	0.50	1		03/22/16 00:53	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/22/16 00:53	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/22/16 00:53	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:53	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/22/16 00:53	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/22/16 00:53	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 00:53	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		03/22/16 00:53	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		1		03/22/16 00:53	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		03/22/16 00:53	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**0.0039J**	mg/L	0.020	0.0039	1		03/16/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**28.4**	mg/L	4.0	2.0	1		03/21/16 15:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: P-7B_20160315 **Lab ID: 40129439008** Collected: 03/15/16 12:35 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/22/16 14:13	7440-47-3	
Iron, Dissolved	**81.3J**	ug/L	100	12.9	1		03/22/16 14:13	7439-89-6	
Manganese, Dissolved	**84.3**	ug/L	5.0	1.4	1		03/22/16 14:13	7439-96-5	
Sodium, Dissolved	**90500**	ug/L	1000	43.5	1		03/22/16 14:13	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	71-43-2	
Bromobenzene	**<23.0**	ug/L	100	23.0	100		03/21/16 11:39	108-86-1	
Bromochloromethane	**<34.0**	ug/L	100	34.0	100		03/21/16 11:39	74-97-5	
Bromodichloromethane	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	75-27-4	
Bromoform	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	75-25-2	
Bromomethane	**<243**	ug/L	500	243	100		03/21/16 11:39	74-83-9	
n-Butylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	104-51-8	
sec-Butylbenzene	**<219**	ug/L	500	219	100		03/21/16 11:39	135-98-8	
tert-Butylbenzene	**<18.0**	ug/L	100	18.0	100		03/21/16 11:39	98-06-6	
Carbon tetrachloride	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	56-23-5	
Chlorobenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	108-90-7	
Chloroethane	**<37.5**	ug/L	100	37.5	100		03/21/16 11:39	75-00-3	
Chloroform	**<250**	ug/L	500	250	100		03/21/16 11:39	67-66-3	
Chloromethane	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	74-87-3	
2-Chlorotoluene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	95-49-8	
4-Chlorotoluene	**<21.4**	ug/L	100	21.4	100		03/21/16 11:39	106-43-4	
1,2-Dibromo-3-chloropropane	**<216**	ug/L	500	216	100		03/21/16 11:39	96-12-8	
Dibromochloromethane	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	124-48-1	
1,2-Dibromoethane (EDB)	**<17.8**	ug/L	100	17.8	100		03/21/16 11:39	106-93-4	
Dibromomethane	**<42.7**	ug/L	100	42.7	100		03/21/16 11:39	74-95-3	
1,2-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	95-50-1	
1,3-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	541-73-1	
1,4-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	106-46-7	
Dichlorodifluoromethane	**<22.4**	ug/L	100	22.4	100		03/21/16 11:39	75-71-8	
1,1-Dichloroethane	**3860**	ug/L	100	24.2	100		03/21/16 11:39	75-34-3	
1,2-Dichloroethane	**<16.8**	ug/L	100	16.8	100		03/21/16 11:39	107-06-2	
1,1-Dichloroethene	**1050**	ug/L	100	41.0	100		03/21/16 11:39	75-35-4	
cis-1,2-Dichloroethene	**<25.6**	ug/L	100	25.6	100		03/21/16 11:39	156-59-2	
trans-1,2-Dichloroethene	**<25.7**	ug/L	100	25.7	100		03/21/16 11:39	156-60-5	
1,2-Dichloropropane	**<23.3**	ug/L	100	23.3	100		03/21/16 11:39	78-87-5	
1,3-Dichloropropane	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	142-28-9	
2,2-Dichloropropane	**<48.4**	ug/L	100	48.4	100		03/21/16 11:39	594-20-7	
1,1-Dichloropropene	**<44.1**	ug/L	100	44.1	100		03/21/16 11:39	563-58-6	
cis-1,3-Dichloropropene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	10061-01-5	
trans-1,3-Dichloropropene	**<23.0**	ug/L	100	23.0	100		03/21/16 11:39	10061-02-6	
Diisopropyl ether	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	108-20-3	
Ethylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	100-41-4	
Hexachloro-1,3-butadiene	**<211**	ug/L	500	211	100		03/21/16 11:39	87-68-3	
Isopropylbenzene (Cumene)	**<14.3**	ug/L	100	14.3	100		03/21/16 11:39	98-82-8	L3
p-Isopropyltoluene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: P-7B_20160315 **Lab ID: 40129439008** Collected: 03/15/16 12:35 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<23.3**	ug/L	100	23.3	100		03/21/16 11:39	75-09-2	
Methyl-tert-butyl ether	**<17.4**	ug/L	100	17.4	100		03/21/16 11:39	1634-04-4	
Naphthalene	**<250**	ug/L	500	250	100		03/21/16 11:39	91-20-3	
n-Propylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	103-65-1	
Styrene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	100-42-5	
1,1,1,2-Tetrachloroethane	**<18.1**	ug/L	100	18.1	100		03/21/16 11:39	630-20-6	
1,1,2,2-Tetrachloroethane	**<24.9**	ug/L	100	24.9	100		03/21/16 11:39	79-34-5	
Tetrachloroethene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	127-18-4	L3
Toluene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	108-88-3	
1,2,3-Trichlorobenzene	**<213**	ug/L	500	213	100		03/21/16 11:39	87-61-6	
1,2,4-Trichlorobenzene	**<221**	ug/L	500	221	100		03/21/16 11:39	120-82-1	
1,1,1-Trichloroethane	**11200**	ug/L	100	50.0	100		03/21/16 11:39	71-55-6	
1,1,2-Trichloroethane	**<19.7**	ug/L	100	19.7	100		03/21/16 11:39	79-00-5	
Trichloroethene	**<33.1**	ug/L	100	33.1	100		03/21/16 11:39	79-01-6	
Trichlorofluoromethane	**<18.5**	ug/L	100	18.5	100		03/21/16 11:39	75-69-4	
1,2,3-Trichloropropane	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	96-18-4	
1,2,4-Trimethylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	95-63-6	
1,3,5-Trimethylbenzene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	108-67-8	
Vinyl chloride	**<17.6**	ug/L	100	17.6	100		03/21/16 11:39	75-01-4	
m&p-Xylene	**<100**	ug/L	200	100	100		03/21/16 11:39	179601-23-1	
o-Xylene	**<50.0**	ug/L	100	50.0	100		03/21/16 11:39	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		100		03/21/16 11:39	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		100		03/21/16 11:39	1868-53-7	
Toluene-d8 (S)	98	%	70-130		100		03/21/16 11:39	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**<0.0039**	mg/L	0.020	0.0039	1		03/16/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**168**	mg/L	40.0	20.0	10		03/21/16 16:52	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: P-7C_20160315 **Lab ID: 40129439009** Collected: 03/15/16 13:10 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/22/16 14:15	7440-47-3	
Iron, Dissolved	**128**	ug/L	100	12.9	1		03/22/16 14:15	7439-89-6	
Manganese, Dissolved	**6.9**	ug/L	5.0	1.4	1		03/22/16 14:15	7439-96-5	
Sodium, Dissolved	**25200**	ug/L	1000	43.5	1		03/22/16 14:15	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 01:16	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/22/16 01:16	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/22/16 01:16	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 01:16	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:16	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/22/16 01:16	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/22/16 01:16	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/22/16 01:16	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/22/16 01:16	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:16	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/22/16 01:16	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/22/16 01:16	75-71-8	
1,1-Dichloroethane	**1.1**	ug/L	1.0	0.24	1		03/22/16 01:16	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/22/16 01:16	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		03/22/16 01:16	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 01:16	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 01:16	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/22/16 01:16	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/22/16 01:16	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/22/16 01:16	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 01:16	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 01:16	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/22/16 01:16	98-82-8	L3
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: P-7C_20160315 **Lab ID: 40129439009** Collected: 03/15/16 13:10 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/22/16 01:16	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/22/16 01:16	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/22/16 01:16	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:16	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/22/16 01:16	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	127-18-4	L3
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 01:16	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 01:16	120-82-1	
1,1,1-Trichloroethane	**0.95J**	ug/L	1.0	0.50	1		03/22/16 01:16	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/22/16 01:16	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/22/16 01:16	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:16	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:16	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/22/16 01:16	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:16	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		03/22/16 01:16	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		1		03/22/16 01:16	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		03/22/16 01:16	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**<0.0039**	mg/L	0.020	0.0039	1		03/16/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**4.3**	mg/L	4.0	2.0	1		03/21/16 15:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-20_20160315 **Lab ID: 40129439010** Collected: 03/15/16 13:45 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/22/16 14:18	7440-47-3	
Iron, Dissolved	**5990**	ug/L	100	12.9	1		03/22/16 14:18	7439-89-6	
Manganese, Dissolved	**649**	ug/L	5.0	1.4	1		03/22/16 14:18	7439-96-5	
Sodium, Dissolved	**110000**	ug/L	1000	43.5	1		03/22/16 14:18	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	71-43-2	
Bromobenzene	**<11.5**	ug/L	50.0	11.5	50		03/21/16 12:02	108-86-1	
Bromochloromethane	**<17.0**	ug/L	50.0	17.0	50		03/21/16 12:02	74-97-5	
Bromodichloromethane	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	75-27-4	
Bromoform	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	75-25-2	
Bromomethane	**<122**	ug/L	250	122	50		03/21/16 12:02	74-83-9	
n-Butylbenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	104-51-8	
sec-Butylbenzene	**<109**	ug/L	250	109	50		03/21/16 12:02	135-98-8	
tert-Butylbenzene	**<9.0**	ug/L	50.0	9.0	50		03/21/16 12:02	98-06-6	
Carbon tetrachloride	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	56-23-5	
Chlorobenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	108-90-7	
Chloroethane	**62.3**	ug/L	50.0	18.7	50		03/21/16 12:02	75-00-3	
Chloroform	**<125**	ug/L	250	125	50		03/21/16 12:02	67-66-3	
Chloromethane	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	74-87-3	
2-Chlorotoluene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	95-49-8	
4-Chlorotoluene	**<10.7**	ug/L	50.0	10.7	50		03/21/16 12:02	106-43-4	
1,2-Dibromo-3-chloropropane	**<108**	ug/L	250	108	50		03/21/16 12:02	96-12-8	
Dibromochloromethane	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	124-48-1	
1,2-Dibromoethane (EDB)	**<8.9**	ug/L	50.0	8.9	50		03/21/16 12:02	106-93-4	
Dibromomethane	**<21.3**	ug/L	50.0	21.3	50		03/21/16 12:02	74-95-3	
1,2-Dichlorobenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	95-50-1	
1,3-Dichlorobenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	541-73-1	
1,4-Dichlorobenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	106-46-7	
Dichlorodifluoromethane	**<11.2**	ug/L	50.0	11.2	50		03/21/16 12:02	75-71-8	
1,1-Dichloroethane	**637**	ug/L	50.0	12.1	50		03/21/16 12:02	75-34-3	
1,2-Dichloroethane	**<8.4**	ug/L	50.0	8.4	50		03/21/16 12:02	107-06-2	
1,1-Dichloroethene	**804**	ug/L	50.0	20.5	50		03/21/16 12:02	75-35-4	
cis-1,2-Dichloroethene	**<12.8**	ug/L	50.0	12.8	50		03/21/16 12:02	156-59-2	
trans-1,2-Dichloroethene	**<12.8**	ug/L	50.0	12.8	50		03/21/16 12:02	156-60-5	
1,2-Dichloropropane	**<11.7**	ug/L	50.0	11.7	50		03/21/16 12:02	78-87-5	
1,3-Dichloropropane	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	142-28-9	
2,2-Dichloropropane	**<24.2**	ug/L	50.0	24.2	50		03/21/16 12:02	594-20-7	
1,1-Dichloropropene	**<22.1**	ug/L	50.0	22.1	50		03/21/16 12:02	563-58-6	
cis-1,3-Dichloropropene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	10061-01-5	
trans-1,3-Dichloropropene	**<11.5**	ug/L	50.0	11.5	50		03/21/16 12:02	10061-02-6	
Diisopropyl ether	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	108-20-3	
Ethylbenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	100-41-4	
Hexachloro-1,3-butadiene	**<105**	ug/L	250	105	50		03/21/16 12:02	87-68-3	
Isopropylbenzene (Cumene)	**<7.2**	ug/L	50.0	7.2	50		03/21/16 12:02	98-82-8	L3
p-Isopropyltoluene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-20_20160315 **Lab ID: 40129439010** Collected: 03/15/16 13:45 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<11.6**	ug/L	50.0	11.6	50		03/21/16 12:02	75-09-2	
Methyl-tert-butyl ether	**<8.7**	ug/L	50.0	8.7	50		03/21/16 12:02	1634-04-4	
Naphthalene	**<125**	ug/L	250	125	50		03/21/16 12:02	91-20-3	
n-Propylbenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	103-65-1	
Styrene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	100-42-5	
1,1,1,2-Tetrachloroethane	**<9.0**	ug/L	50.0	9.0	50		03/21/16 12:02	630-20-6	
1,1,2,2-Tetrachloroethane	**<12.5**	ug/L	50.0	12.5	50		03/21/16 12:02	79-34-5	
Tetrachloroethene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	127-18-4	L3
Toluene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	108-88-3	
1,2,3-Trichlorobenzene	**<107**	ug/L	250	107	50		03/21/16 12:02	87-61-6	
1,2,4-Trichlorobenzene	**<110**	ug/L	250	110	50		03/21/16 12:02	120-82-1	
1,1,1-Trichloroethane	**6490**	ug/L	50.0	25.0	50		03/21/16 12:02	71-55-6	
1,1,2-Trichloroethane	**<9.9**	ug/L	50.0	9.9	50		03/21/16 12:02	79-00-5	
Trichloroethene	**21.1J**	ug/L	50.0	16.5	50		03/21/16 12:02	79-01-6	
Trichlorofluoromethane	**<9.2**	ug/L	50.0	9.2	50		03/21/16 12:02	75-69-4	
1,2,3-Trichloropropane	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	96-18-4	
1,2,4-Trimethylbenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	95-63-6	
1,3,5-Trimethylbenzene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	108-67-8	
Vinyl chloride	**13.6J**	ug/L	50.0	8.8	50		03/21/16 12:02	75-01-4	
m&p-Xylene	**<50.0**	ug/L	100	50.0	50		03/21/16 12:02	179601-23-1	
o-Xylene	**<25.0**	ug/L	50.0	25.0	50		03/21/16 12:02	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		50		03/21/16 12:02	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		50		03/21/16 12:02	1868-53-7	
Toluene-d8 (S)	98	%	70-130		50		03/21/16 12:02	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**<0.019**	mg/L	0.10	0.019	5		03/16/16 08:25	18540-29-9	D3
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**271**	mg/L	40.0	20.0	10		03/21/16 17:03	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-21_20160315 **Lab ID: 40129439011** Collected: 03/15/16 15:20 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**850**	ug/L	10.0	2.1	1		03/22/16 14:20	7440-47-3	
Iron, Dissolved	**<12.9**	ug/L	100	12.9	1		03/22/16 14:20	7439-89-6	
Manganese, Dissolved	**584**	ug/L	5.0	1.4	1		03/22/16 14:20	7439-96-5	
Sodium, Dissolved	**35000**	ug/L	1000	43.5	1		03/22/16 14:20	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 01:38	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/22/16 01:38	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/22/16 01:38	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 01:38	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:38	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	108-90-7	
Chloroethane	**4.0**	ug/L	1.0	0.37	1		03/22/16 01:38	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/22/16 01:38	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/22/16 01:38	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/22/16 01:38	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:38	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/22/16 01:38	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/22/16 01:38	75-71-8	
1,1-Dichloroethane	**43.7**	ug/L	1.0	0.24	1		03/22/16 01:38	75-34-3	
1,2-Dichloroethane	**0.64J**	ug/L	1.0	0.17	1		03/22/16 01:38	107-06-2	
1,1-Dichloroethene	**28.3**	ug/L	1.0	0.41	1		03/22/16 01:38	75-35-4	
cis-1,2-Dichloroethene	**1.9**	ug/L	1.0	0.26	1		03/22/16 01:38	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 01:38	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/22/16 01:38	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/22/16 01:38	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/22/16 01:38	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 01:38	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 01:38	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/22/16 01:38	98-82-8	L3
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-21_20160315 **Lab ID: 40129439011** Collected: 03/15/16 15:20 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/22/16 01:38	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/22/16 01:38	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/22/16 01:38	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:38	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/22/16 01:38	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	127-18-4	L3
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 01:38	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 01:38	120-82-1	
1,1,1-Trichloroethane	**156**	ug/L	1.0	0.50	1		03/22/16 01:38	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/22/16 01:38	79-00-5	
Trichloroethene	**2.4**	ug/L	1.0	0.33	1		03/22/16 01:38	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 01:38	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	108-67-8	
Vinyl chloride	**2.1**	ug/L	1.0	0.18	1		03/22/16 01:38	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/22/16 01:38	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 01:38	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		03/22/16 01:38	460-00-4	
Dibromofluoromethane (S)	96	%	70-130		1		03/22/16 01:38	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		03/22/16 01:38	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**0.86**	mg/L	0.10	0.019	5		03/16/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**128**	mg/L	40.0	20.0	10		03/21/16 17:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-22_20160315 **Lab ID: 40129439012** Collected: 03/15/16 14:40 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**2850**	ug/L	10.0	2.1	1		03/22/16 14:22	7440-47-3	
Iron, Dissolved	**<12.9**	ug/L	100	12.9	1		03/22/16 14:22	7439-89-6	
Manganese, Dissolved	**66.1**	ug/L	5.0	1.4	1		03/22/16 14:22	7439-96-5	
Sodium, Dissolved	**63400**	ug/L	1000	43.5	1		03/22/16 14:22	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	71-43-2	
Bromobenzene	**<0.92**	ug/L	4.0	0.92	4		03/21/16 12:24	108-86-1	
Bromochloromethane	**<1.4**	ug/L	4.0	1.4	4		03/21/16 12:24	74-97-5	
Bromodichloromethane	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	75-27-4	
Bromoform	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	75-25-2	
Bromomethane	**<9.7**	ug/L	20.0	9.7	4		03/21/16 12:24	74-83-9	
n-Butylbenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	104-51-8	
sec-Butylbenzene	**<8.7**	ug/L	20.0	8.7	4		03/21/16 12:24	135-98-8	
tert-Butylbenzene	**<0.72**	ug/L	4.0	0.72	4		03/21/16 12:24	98-06-6	
Carbon tetrachloride	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	56-23-5	
Chlorobenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	108-90-7	
Chloroethane	**<1.5**	ug/L	4.0	1.5	4		03/21/16 12:24	75-00-3	
Chloroform	**<10.0**	ug/L	20.0	10.0	4		03/21/16 12:24	67-66-3	
Chloromethane	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	74-87-3	
2-Chlorotoluene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	95-49-8	
4-Chlorotoluene	**<0.85**	ug/L	4.0	0.85	4		03/21/16 12:24	106-43-4	
1,2-Dibromo-3-chloropropane	**<8.7**	ug/L	20.0	8.7	4		03/21/16 12:24	96-12-8	
Dibromochloromethane	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	124-48-1	
1,2-Dibromoethane (EDB)	**<0.71**	ug/L	4.0	0.71	4		03/21/16 12:24	106-93-4	
Dibromomethane	**<1.7**	ug/L	4.0	1.7	4		03/21/16 12:24	74-95-3	
1,2-Dichlorobenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	95-50-1	
1,3-Dichlorobenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	541-73-1	
1,4-Dichlorobenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	106-46-7	
Dichlorodifluoromethane	**<0.90**	ug/L	4.0	0.90	4		03/21/16 12:24	75-71-8	
1,1-Dichloroethane	**16.9**	ug/L	4.0	0.97	4		03/21/16 12:24	75-34-3	
1,2-Dichloroethane	**<0.67**	ug/L	4.0	0.67	4		03/21/16 12:24	107-06-2	
1,1-Dichloroethene	**34.1**	ug/L	4.0	1.6	4		03/21/16 12:24	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	4.0	1.0	4		03/21/16 12:24	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	4.0	1.0	4		03/21/16 12:24	156-60-5	
1,2-Dichloropropane	**<0.93**	ug/L	4.0	0.93	4		03/21/16 12:24	78-87-5	
1,3-Dichloropropane	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	142-28-9	
2,2-Dichloropropane	**<1.9**	ug/L	4.0	1.9	4		03/21/16 12:24	594-20-7	
1,1-Dichloropropene	**<1.8**	ug/L	4.0	1.8	4		03/21/16 12:24	563-58-6	
cis-1,3-Dichloropropene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	10061-01-5	
trans-1,3-Dichloropropene	**<0.92**	ug/L	4.0	0.92	4		03/21/16 12:24	10061-02-6	
Diisopropyl ether	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	108-20-3	
Ethylbenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	100-41-4	
Hexachloro-1,3-butadiene	**<8.4**	ug/L	20.0	8.4	4		03/21/16 12:24	87-68-3	
Isopropylbenzene (Cumene)	**<0.57**	ug/L	4.0	0.57	4		03/21/16 12:24	98-82-8	L3
p-Isopropyltoluene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-22_20160315 **Lab ID: 40129439012** Collected: 03/15/16 14:40 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**1.3J**	ug/L	4.0	0.93	4		03/21/16 12:24	75-09-2	
Methyl-tert-butyl ether	**<0.70**	ug/L	4.0	0.70	4		03/21/16 12:24	1634-04-4	
Naphthalene	**<10.0**	ug/L	20.0	10.0	4		03/21/16 12:24	91-20-3	
n-Propylbenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	103-65-1	
Styrene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.72**	ug/L	4.0	0.72	4		03/21/16 12:24	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	4.0	1.0	4		03/21/16 12:24	79-34-5	
Tetrachloroethene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	127-18-4	L3
Toluene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	108-88-3	
1,2,3-Trichlorobenzene	**<8.5**	ug/L	20.0	8.5	4		03/21/16 12:24	87-61-6	
1,2,4-Trichlorobenzene	**<8.8**	ug/L	20.0	8.8	4		03/21/16 12:24	120-82-1	
1,1,1-Trichloroethane	**301**	ug/L	4.0	2.0	4		03/21/16 12:24	71-55-6	
1,1,2-Trichloroethane	**<0.79**	ug/L	4.0	0.79	4		03/21/16 12:24	79-00-5	
Trichloroethene	**8.1**	ug/L	4.0	1.3	4		03/21/16 12:24	79-01-6	
Trichlorofluoromethane	**<0.74**	ug/L	4.0	0.74	4		03/21/16 12:24	75-69-4	
1,2,3-Trichloropropane	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	96-18-4	
1,2,4-Trimethylbenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	95-63-6	
1,3,5-Trimethylbenzene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	108-67-8	
Vinyl chloride	**<0.70**	ug/L	4.0	0.70	4		03/21/16 12:24	75-01-4	
m&p-Xylene	**<4.0**	ug/L	8.0	4.0	4		03/21/16 12:24	179601-23-1	
o-Xylene	**<2.0**	ug/L	4.0	2.0	4		03/21/16 12:24	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		4		03/21/16 12:24	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		4		03/21/16 12:24	1868-53-7	
Toluene-d8 (S)	100	%	70-130		4		03/21/16 12:24	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**2.3**	mg/L	0.20	0.039	10		03/16/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**202**	mg/L	40.0	20.0	10		03/21/16 17:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-DUP1_20160315 **Lab ID: 40129439013** Collected: 03/15/16 14:40 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**1790**	ug/L	10.0	2.1	1		03/22/16 14:29	7440-47-3	
Iron, Dissolved	**<12.9**	ug/L	100	12.9	1		03/22/16 14:29	7439-89-6	
Manganese, Dissolved	**56.0**	ug/L	5.0	1.4	1		03/22/16 14:29	7439-96-5	
Sodium, Dissolved	**60200**	ug/L	1000	43.5	1		03/22/16 14:29	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/24/16 07:46	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/24/16 07:46	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/24/16 07:46	74-83-9	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/24/16 07:46	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/24/16 07:46	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	108-90-7	
Chloroethane	**1.0**	ug/L	1.0	0.37	1		03/24/16 07:46	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/24/16 07:46	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/24/16 07:46	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/24/16 07:46	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/24/16 07:46	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/24/16 07:46	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/24/16 07:46	75-71-8	
1,1-Dichloroethane	**15.7**	ug/L	1.0	0.24	1		03/24/16 07:46	75-34-3	
1,2-Dichloroethane	**0.32J**	ug/L	1.0	0.17	1		03/24/16 07:46	107-06-2	
1,1-Dichloroethene	**23.5**	ug/L	1.0	0.41	1		03/24/16 07:46	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/24/16 07:46	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/24/16 07:46	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/24/16 07:46	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/24/16 07:46	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/24/16 07:46	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/24/16 07:46	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/24/16 07:46	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/24/16 07:46	98-82-8	L3
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: MW-DUP1_20160315 **Lab ID: 40129439013** Collected: 03/15/16 14:40 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**0.46J**	ug/L	1.0	0.23	1		03/24/16 07:46	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/24/16 07:46	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/24/16 07:46	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/24/16 07:46	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/24/16 07:46	79-34-5	
Tetrachloroethene	**0.83J**	ug/L	1.0	0.50	1		03/24/16 07:46	127-18-4	L1
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/24/16 07:46	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/24/16 07:46	120-82-1	
1,1,1-Trichloroethane	**293**	ug/L	1.0	0.50	1		03/24/16 07:46	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/24/16 07:46	79-00-5	
Trichloroethene	**8.5**	ug/L	1.0	0.33	1		03/24/16 07:46	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/24/16 07:46	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/24/16 07:46	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/24/16 07:46	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/24/16 07:46	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		03/24/16 07:46	460-00-4	
Dibromofluoromethane (S)	96	%	70-130		1		03/24/16 07:46	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		03/24/16 07:46	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**4.4**	mg/L	0.50	0.097	25		03/16/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**230**	mg/L	20.0	10.0	5		03/16/16 13:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: TB-1_20160315 **Lab ID: 40129439014** Collected: 03/15/16 00:00 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/23/16 07:40	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/23/16 07:40	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/23/16 07:40	74-83-9	L2
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/23/16 07:40	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/23/16 07:40	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/23/16 07:40	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/23/16 07:40	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/23/16 07:40	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/23/16 07:40	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/23/16 07:40	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/23/16 07:40	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/23/16 07:40	75-71-8	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/23/16 07:40	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/23/16 07:40	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		03/23/16 07:40	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/23/16 07:40	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/23/16 07:40	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/23/16 07:40	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/23/16 07:40	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/23/16 07:40	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/23/16 07:40	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/23/16 07:40	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/23/16 07:40	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	99-87-6	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/23/16 07:40	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/23/16 07:40	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/23/16 07:40	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/23/16 07:40	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Sample: TB-1_20160315 **Lab ID: 40129439014** Collected: 03/15/16 00:00 Received: 03/15/16 16:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/23/16 07:40	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/23/16 07:40	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/23/16 07:40	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/23/16 07:40	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/23/16 07:40	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/23/16 07:40	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/23/16 07:40	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/23/16 07:40	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 07:40	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		03/23/16 07:40	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		1		03/23/16 07:40	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		03/23/16 07:40	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

QC Batch: ICP/11956 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40129439001, 40129439002, 40129439003, 40129439004, 40129439005, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012, 40129439013

METHOD BLANK: 1308273 Matrix: Water
Associated Lab Samples: 40129439001, 40129439002, 40129439003, 40129439004, 40129439005, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012, 40129439013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.1	10.0	03/22/16 13:39	
Iron, Dissolved	ug/L	<12.9	100	03/22/16 13:39	
Manganese, Dissolved	ug/L	<1.4	5.0	03/22/16 13:39	
Sodium, Dissolved	ug/L	43.7J	1000	03/22/16 13:39	

LABORATORY CONTROL SAMPLE: 1308274

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	500	480	96	80-120	
Iron, Dissolved	ug/L	5000	4840	97	80-120	
Manganese, Dissolved	ug/L	500	465	93	80-120	
Sodium, Dissolved	ug/L	5000	4760	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1308275 1308276

Parameter	Units	40129439004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	24.8	500	500	501	492	95	94	75-125	2	20	
Iron, Dissolved	ug/L	2950	5000	5000	7710	7390	95	89	75-125	4	20	
Manganese, Dissolved	ug/L	389	500	500	836	847	90	92	75-125	1	20	
Sodium, Dissolved	ug/L	22200	5000	5000	26400	26400	82	82	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

QC Batch: MSV/32596 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40129439003, 40129439004, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012

METHOD BLANK: 1307250 Matrix: Water
Associated Lab Samples: 40129439003, 40129439004, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	03/21/16 07:31	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	03/21/16 07:31	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	03/21/16 07:31	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	03/21/16 07:31	
1,1-Dichloroethane	ug/L	<0.24	1.0	03/21/16 07:31	
1,1-Dichloroethene	ug/L	<0.41	1.0	03/21/16 07:31	
1,1-Dichloropropene	ug/L	<0.44	1.0	03/21/16 07:31	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	03/21/16 07:31	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	03/21/16 07:31	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	03/21/16 07:31	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	03/21/16 07:31	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	03/21/16 07:31	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	03/21/16 07:31	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	03/21/16 07:31	
1,2-Dichloroethane	ug/L	<0.17	1.0	03/21/16 07:31	
1,2-Dichloropropane	ug/L	<0.23	1.0	03/21/16 07:31	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	03/21/16 07:31	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	03/21/16 07:31	
1,3-Dichloropropane	ug/L	<0.50	1.0	03/21/16 07:31	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	03/21/16 07:31	
2,2-Dichloropropane	ug/L	<0.48	1.0	03/21/16 07:31	
2-Chlorotoluene	ug/L	<0.50	1.0	03/21/16 07:31	
4-Chlorotoluene	ug/L	<0.21	1.0	03/21/16 07:31	
Benzene	ug/L	<0.50	1.0	03/21/16 07:31	
Bromobenzene	ug/L	<0.23	1.0	03/21/16 07:31	
Bromochloromethane	ug/L	<0.34	1.0	03/21/16 07:31	
Bromodichloromethane	ug/L	<0.50	1.0	03/21/16 07:31	
Bromoform	ug/L	<0.50	1.0	03/21/16 07:31	
Bromomethane	ug/L	<2.4	5.0	03/21/16 07:31	
Carbon tetrachloride	ug/L	<0.50	1.0	03/21/16 07:31	
Chlorobenzene	ug/L	<0.50	1.0	03/21/16 07:31	
Chloroethane	ug/L	<0.37	1.0	03/21/16 07:31	
Chloroform	ug/L	<2.5	5.0	03/21/16 07:31	
Chloromethane	ug/L	<0.50	1.0	03/21/16 07:31	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	03/21/16 07:31	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	03/21/16 07:31	
Dibromochloromethane	ug/L	<0.50	1.0	03/21/16 07:31	
Dibromomethane	ug/L	<0.43	1.0	03/21/16 07:31	
Dichlorodifluoromethane	ug/L	<0.22	1.0	03/21/16 07:31	
Diisopropyl ether	ug/L	<0.50	1.0	03/21/16 07:31	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

METHOD BLANK: 1307250 Matrix: Water

Associated Lab Samples: 40129439003, 40129439004, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.50	1.0	03/21/16 07:31	
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	03/21/16 07:31	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	03/21/16 07:31	
m&p-Xylene	ug/L	<1.0	2.0	03/21/16 07:31	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	03/21/16 07:31	
Methylene Chloride	ug/L	<0.23	1.0	03/21/16 07:31	
n-Butylbenzene	ug/L	<0.50	1.0	03/21/16 07:31	
n-Propylbenzene	ug/L	<0.50	1.0	03/21/16 07:31	
Naphthalene	ug/L	<2.5	5.0	03/21/16 07:31	
o-Xylene	ug/L	<0.50	1.0	03/21/16 07:31	
p-Isopropyltoluene	ug/L	<0.50	1.0	03/21/16 07:31	
sec-Butylbenzene	ug/L	<2.2	5.0	03/21/16 07:31	
Styrene	ug/L	<0.50	1.0	03/21/16 07:31	
tert-Butylbenzene	ug/L	<0.18	1.0	03/21/16 07:31	
Tetrachloroethene	ug/L	<0.50	1.0	03/21/16 07:31	
Toluene	ug/L	<0.50	1.0	03/21/16 07:31	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	03/21/16 07:31	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	03/21/16 07:31	
Trichloroethene	ug/L	<0.33	1.0	03/21/16 07:31	
Trichlorofluoromethane	ug/L	<0.18	1.0	03/21/16 07:31	
Vinyl chloride	ug/L	<0.18	1.0	03/21/16 07:31	
4-Bromofluorobenzene (S)	%	97	70-130	03/21/16 07:31	
Dibromofluoromethane (S)	%	100	70-130	03/21/16 07:31	
Toluene-d8 (S)	%	99	70-130	03/21/16 07:31	

LABORATORY CONTROL SAMPLE: 1307251

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.6	115	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	50.1	100	70-130	
1,1,2-Trichloroethane	ug/L	50	55.1	110	70-130	
1,1-Dichloroethane	ug/L	50	53.4	107	70-130	
1,1-Dichloroethene	ug/L	50	54.6	109	70-130	
1,2,4-Trichlorobenzene	ug/L	50	60.6	121	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	48.3	97	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	56.6	113	70-130	
1,2-Dichlorobenzene	ug/L	50	58.4	117	70-130	
1,2-Dichloroethane	ug/L	50	52.1	104	70-131	
1,2-Dichloropropane	ug/L	50	51.4	103	70-130	
1,3-Dichlorobenzene	ug/L	50	60.7	121	70-130	
1,4-Dichlorobenzene	ug/L	50	59.3	119	70-130	
Benzene	ug/L	50	52.9	106	70-130	
Bromodichloromethane	ug/L	50	54.1	108	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

LABORATORY CONTROL SAMPLE: 1307251

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/L	50	50.1	100	68-130	
Bromomethane	ug/L	50	28.3	57	38-137	
Carbon tetrachloride	ug/L	50	59.9	120	70-130	
Chlorobenzene	ug/L	50	59.6	119	70-130	
Chloroethane	ug/L	50	45.6	91	70-136	
Chloroform	ug/L	50	52.9	106	70-130	
Chloromethane	ug/L	50	31.3	63	48-144	
cis-1,2-Dichloroethene	ug/L	50	52.2	104	70-130	
cis-1,3-Dichloropropene	ug/L	50	46.1	92	70-130	
Dibromochloromethane	ug/L	50	52.1	104	70-130	
Dichlorodifluoromethane	ug/L	50	31.5	63	33-157	
Ethylbenzene	ug/L	50	61.3	123	70-132	
Isopropylbenzene (Cumene)	ug/L	50	70.8	142	70-130	L0
m&p-Xylene	ug/L	100	127	127	70-131	
Methyl-tert-butyl ether	ug/L	50	51.5	103	48-141	
Methylene Chloride	ug/L	50	52.9	106	70-130	
o-Xylene	ug/L	50	60.2	120	70-131	
Styrene	ug/L	50	61.3	123	70-130	
Tetrachloroethene	ug/L	50	65.6	131	70-130	L0
Toluene	ug/L	50	58.6	117	70-130	
trans-1,2-Dichloroethene	ug/L	50	55.6	111	70-130	
trans-1,3-Dichloropropene	ug/L	50	46.1	92	70-130	
Trichloroethene	ug/L	50	57.2	114	70-130	
Trichlorofluoromethane	ug/L	50	56.3	113	50-150	
Vinyl chloride	ug/L	50	42.7	85	65-142	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307844 1307845

Parameter	Units	40129308003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	56.4	55.8	113	112	70-130	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	46.9	47.6	94	95	70-130	2	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	53.7	54.0	107	108	70-130	0	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	53.8	52.8	108	106	70-134	2	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	54.6	53.8	109	108	70-139	1	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	60.5	60.4	120	120	70-130	0	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	47.3	47.6	95	95	50-150	1	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	55.1	53.4	110	107	70-130	3	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	56.8	58.2	114	116	70-130	2	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	50.8	51.1	102	102	70-132	1	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	51.0	50.6	102	101	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307844 1307845

Parameter	Units	40129308003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,3-Dichlorobenzene	ug/L	<0.50	50	50	59.1	59.6	118	119	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	57.3	56.0	115	112	70-130	2	20	
Benzene	ug/L	<0.50	50	50	51.8	51.4	104	103	70-130	1	20	
Bromodichloromethane	ug/L	<0.50	50	50	53.1	53.4	106	107	70-132	0	20	
Bromoform	ug/L	<0.50	50	50	50.0	49.5	100	99	68-130	1	20	
Bromomethane	ug/L	<2.4	50	50	32.5	33.3	65	67	38-141	2	20	
Carbon tetrachloride	ug/L	<0.50	50	50	59.6	59.5	119	119	70-130	0	20	
Chlorobenzene	ug/L	<0.50	50	50	58.4	59.0	117	118	70-130	1	20	
Chloroethane	ug/L	<0.37	50	50	43.6	42.9	87	86	66-152	1	20	
Chloroform	ug/L	<2.5	50	50	52.3	52.0	105	104	70-130	0	20	
Chloromethane	ug/L	<0.50	50	50	31.2	30.6	62	61	44-151	2	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	51.1	50.0	102	100	70-130	2	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	46.4	46.7	93	93	70-130	1	20	
Dibromochloromethane	ug/L	<0.50	50	50	51.5	51.6	103	103	70-130	0	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	31.7	30.7	63	61	29-160	3	20	
Ethylbenzene	ug/L	<0.50	50	50	61.0	60.3	122	121	70-132	1	20	
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	70.2	69.7	140	139	70-130	1	20	M0
m&p-Xylene	ug/L	<1.0	100	100	126	124	125	124	70-131	1	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	50.9	50.3	102	101	48-143	1	20	
Methylene Chloride	ug/L	<0.23	50	50	51.9	52.7	104	105	70-130	1	20	
o-Xylene	ug/L	<0.50	50	50	59.9	59.7	120	119	70-131	0	20	
Styrene	ug/L	<0.50	50	50	60.8	61.3	122	123	70-130	1	20	
Tetrachloroethene	ug/L	<0.50	50	50	62.2	62.8	124	126	70-130	1	20	
Toluene	ug/L	<0.50	50	50	57.4	56.8	115	114	70-130	1	20	
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	54.8	54.6	110	109	70-132	0	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	47.8	47.4	96	95	70-130	1	20	
Trichloroethene	ug/L	<0.33	50	50	57.2	57.1	114	114	70-130	0	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	54.5	54.1	109	108	50-153	1	20	
Vinyl chloride	ug/L	<0.18	50	50	43.6	42.0	87	84	60-155	4	20	
4-Bromofluorobenzene (S)	%						99	100	70-130			
Dibromofluoromethane (S)	%						101	99	70-130			
Toluene-d8 (S)	%						100	101	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

QC Batch: MSV/32606
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 40129439014

METHOD BLANK: 1307552
Matrix: Water
Associated Lab Samples: 40129439014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	03/22/16 16:59	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	03/22/16 16:59	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	03/22/16 16:59	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	03/22/16 16:59	
1,1-Dichloroethane	ug/L	<0.24	1.0	03/22/16 16:59	
1,1-Dichloroethene	ug/L	<0.41	1.0	03/22/16 16:59	
1,1-Dichloropropene	ug/L	<0.44	1.0	03/22/16 16:59	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	03/22/16 16:59	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	03/22/16 16:59	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	03/22/16 16:59	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	03/22/16 16:59	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	03/22/16 16:59	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	03/22/16 16:59	
1,2-Dichloroethane	ug/L	<0.17	1.0	03/22/16 16:59	
1,2-Dichloropropane	ug/L	<0.23	1.0	03/22/16 16:59	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	03/22/16 16:59	
1,3-Dichloropropane	ug/L	<0.50	1.0	03/22/16 16:59	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	03/22/16 16:59	
2,2-Dichloropropane	ug/L	<0.48	1.0	03/22/16 16:59	
2-Chlorotoluene	ug/L	<0.50	1.0	03/22/16 16:59	
4-Chlorotoluene	ug/L	<0.21	1.0	03/22/16 16:59	
Benzene	ug/L	<0.50	1.0	03/22/16 16:59	
Bromobenzene	ug/L	<0.23	1.0	03/22/16 16:59	
Bromochloromethane	ug/L	<0.34	1.0	03/22/16 16:59	
Bromodichloromethane	ug/L	<0.50	1.0	03/22/16 16:59	
Bromoform	ug/L	<0.50	1.0	03/22/16 16:59	
Bromomethane	ug/L	<2.4	5.0	03/22/16 16:59	
Carbon tetrachloride	ug/L	<0.50	1.0	03/22/16 16:59	
Chlorobenzene	ug/L	<0.50	1.0	03/22/16 16:59	
Chloroethane	ug/L	<0.37	1.0	03/22/16 16:59	
Chloroform	ug/L	<2.5	5.0	03/22/16 16:59	
Chloromethane	ug/L	<0.50	1.0	03/22/16 16:59	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	03/22/16 16:59	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	03/22/16 16:59	
Dibromochloromethane	ug/L	<0.50	1.0	03/22/16 16:59	
Dibromomethane	ug/L	<0.43	1.0	03/22/16 16:59	
Dichlorodifluoromethane	ug/L	<0.22	1.0	03/22/16 16:59	
Diisopropyl ether	ug/L	<0.50	1.0	03/22/16 16:59	
Ethylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

METHOD BLANK: 1307552 Matrix: Water
Associated Lab Samples: 40129439014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	03/22/16 16:59	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	03/22/16 16:59	
m&p-Xylene	ug/L	<1.0	2.0	03/22/16 16:59	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	03/22/16 16:59	
Methylene Chloride	ug/L	<0.23	1.0	03/22/16 16:59	
n-Butylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	
n-Propylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	
Naphthalene	ug/L	<2.5	5.0	03/22/16 16:59	
o-Xylene	ug/L	<0.50	1.0	03/22/16 16:59	
p-Isopropyltoluene	ug/L	<0.50	1.0	03/22/16 16:59	
sec-Butylbenzene	ug/L	<2.2	5.0	03/22/16 16:59	
Styrene	ug/L	<0.50	1.0	03/22/16 16:59	
tert-Butylbenzene	ug/L	<0.18	1.0	03/22/16 16:59	
Tetrachloroethene	ug/L	<0.50	1.0	03/22/16 16:59	
Toluene	ug/L	<0.50	1.0	03/22/16 16:59	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	03/22/16 16:59	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	03/22/16 16:59	
Trichloroethene	ug/L	<0.33	1.0	03/22/16 16:59	
Trichlorofluoromethane	ug/L	<0.18	1.0	03/22/16 16:59	
Vinyl chloride	ug/L	<0.18	1.0	03/22/16 16:59	
4-Bromofluorobenzene (S)	%	93	70-130	03/22/16 16:59	
Dibromofluoromethane (S)	%	98	70-130	03/22/16 16:59	
Toluene-d8 (S)	%	98	70-130	03/22/16 16:59	

LABORATORY CONTROL SAMPLE: 1307553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.1	100	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	55.8	112	70-130	
1,1,2-Trichloroethane	ug/L	50	56.0	112	70-130	
1,1-Dichloroethane	ug/L	50	45.6	91	70-130	
1,1-Dichloroethene	ug/L	50	50.1	100	70-130	
1,2,4-Trichlorobenzene	ug/L	50	58.9	118	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	59.6	119	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	59.5	119	70-130	
1,2-Dichlorobenzene	ug/L	50	56.6	113	70-130	
1,2-Dichloroethane	ug/L	50	50.8	102	70-131	
1,2-Dichloropropane	ug/L	50	45.5	91	70-130	
1,3-Dichlorobenzene	ug/L	50	57.1	114	70-130	
1,4-Dichlorobenzene	ug/L	50	56.7	113	70-130	
Benzene	ug/L	50	44.2	88	70-130	
Bromodichloromethane	ug/L	50	51.5	103	70-130	
Bromoform	ug/L	50	58.6	117	68-130	
Bromomethane	ug/L	50	9.8	20	38-137	L0

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

LABORATORY CONTROL SAMPLE: 1307553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	51.5	103	70-130	
Chlorobenzene	ug/L	50	54.8	110	70-130	
Chloroethane	ug/L	50	40.0	80	70-136	
Chloroform	ug/L	50	46.2	92	70-130	
Chloromethane	ug/L	50	28.7	57	48-144	
cis-1,2-Dichloroethene	ug/L	50	44.4	89	70-130	
cis-1,3-Dichloropropene	ug/L	50	43.1	86	70-130	
Dibromochloromethane	ug/L	50	55.5	111	70-130	
Dichlorodifluoromethane	ug/L	50	43.7	87	33-157	
Ethylbenzene	ug/L	50	56.2	112	70-132	
Isopropylbenzene (Cumene)	ug/L	50	65.1	130	70-130	
m&p-Xylene	ug/L	100	115	115	70-131	
Methyl-tert-butyl ether	ug/L	50	53.2	106	48-141	
Methylene Chloride	ug/L	50	47.5	95	70-130	
o-Xylene	ug/L	50	56.0	112	70-131	
Styrene	ug/L	50	56.8	114	70-130	
Tetrachloroethene	ug/L	50	61.5	123	70-130	
Toluene	ug/L	50	52.6	105	70-130	
trans-1,2-Dichloroethene	ug/L	50	49.8	100	70-130	
trans-1,3-Dichloropropene	ug/L	50	44.8	90	70-130	
Trichloroethene	ug/L	50	52.7	105	70-130	
Trichlorofluoromethane	ug/L	50	55.2	110	50-150	
Vinyl chloride	ug/L	50	39.7	79	65-142	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307837 1307838

Parameter	Units	40129425001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	53.4	54.1	107	108	70-130	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	47.8	47.6	96	95	70-130	0	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	51.8	52.6	104	105	70-130	1	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	51.7	51.6	103	103	70-134	0	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	54.5	56.2	109	112	70-139	3	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	62.2	62.3	124	125	70-130	0	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	47.5	45.9	95	92	50-150	3	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	56.1	57.0	112	114	70-130	2	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	59.7	58.7	119	117	70-130	2	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	47.7	50.0	95	100	70-132	5	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	46.8	46.2	94	92	70-130	1	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	62.1	61.3	124	123	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	59.8	59.6	120	119	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307837 1307838

Parameter	Units	40129425001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.50	50	50	47.5	47.5	95	95	70-130	0	20	
Bromodichloromethane	ug/L	<0.50	50	50	53.2	52.3	106	105	70-132	2	20	
Bromoform	ug/L	<0.50	50	50	50.9	51.9	102	104	68-130	2	20	
Bromomethane	ug/L	<2.4	50	50	26.9	29.6	54	59	38-141	10	20	
Carbon tetrachloride	ug/L	<0.50	50	50	58.6	59.4	117	119	70-130	1	20	
Chlorobenzene	ug/L	<0.50	50	50	60.3	58.9	121	118	70-130	2	20	
Chloroethane	ug/L	<0.37	50	50	41.7	42.6	83	85	66-152	2	20	
Chloroform	ug/L	<2.5	50	50	49.2	49.1	98	98	70-130	0	20	
Chloromethane	ug/L	0.56J	50	50	29.1	28.9	57	57	44-151	1	20	
cis-1,2-Dichloroethene	ug/L	11.1	50	50	59.1	59.9	96	98	70-130	1	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	42.4	42.7	85	85	70-130	1	20	
Dibromochloromethane	ug/L	<0.50	50	50	53.2	53.8	106	108	70-130	1	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	34.0	35.3	68	71	29-160	4	20	
Ethylbenzene	ug/L	<0.50	50	50	60.6	61.9	121	124	70-132	2	20	
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	71.1	72.0	142	144	70-130	1	20	M1
m&p-Xylene	ug/L	<1.0	100	100	126	127	126	127	70-131	1	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	47.9	48.5	96	97	48-143	1	20	
Methylene Chloride	ug/L	<0.23	50	50	49.8	52.0	100	104	70-130	4	20	
o-Xylene	ug/L	<0.50	50	50	61.4	60.9	123	122	70-131	1	20	
Styrene	ug/L	<0.50	50	50	60.2	59.3	120	119	70-130	2	20	
Tetrachloroethene	ug/L	72.3	50	50	142	140	139	136	70-130	1	20	M1
Toluene	ug/L	1.7	50	50	58.9	59.6	115	116	70-130	1	20	
trans-1,2-Dichloroethene	ug/L	0.43J	50	50	54.3	53.9	108	107	70-132	1	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	45.3	45.4	91	91	70-130	0	20	
Trichloroethene	ug/L	2.6	50	50	58.3	58.6	111	112	70-130	1	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	58.2	59.1	116	118	50-153	2	20	
Vinyl chloride	ug/L	<0.18	50	50	43.4	44.1	87	88	60-155	2	20	
4-Bromofluorobenzene (S)	%						100	104	70-130			
Dibromofluoromethane (S)	%						98	97	70-130			
Toluene-d8 (S)	%						102	100	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

QC Batch: MSV/32670
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 40129439013

METHOD BLANK: 1309423
Matrix: Water
Associated Lab Samples: 40129439013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	03/23/16 17:04	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	03/23/16 17:04	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	03/23/16 17:04	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	03/23/16 17:04	
1,1-Dichloroethane	ug/L	<0.24	1.0	03/23/16 17:04	
1,1-Dichloroethene	ug/L	<0.41	1.0	03/23/16 17:04	
1,1-Dichloropropene	ug/L	<0.44	1.0	03/23/16 17:04	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	03/23/16 17:04	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	03/23/16 17:04	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	03/23/16 17:04	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	03/23/16 17:04	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	03/23/16 17:04	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	03/23/16 17:04	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	03/23/16 17:04	
1,2-Dichloroethane	ug/L	<0.17	1.0	03/23/16 17:04	
1,2-Dichloropropane	ug/L	<0.23	1.0	03/23/16 17:04	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	03/23/16 17:04	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	03/23/16 17:04	
1,3-Dichloropropane	ug/L	<0.50	1.0	03/23/16 17:04	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	03/23/16 17:04	
2,2-Dichloropropane	ug/L	<0.48	1.0	03/23/16 17:04	
2-Chlorotoluene	ug/L	<0.50	1.0	03/23/16 17:04	
4-Chlorotoluene	ug/L	<0.21	1.0	03/23/16 17:04	
Benzene	ug/L	<0.50	1.0	03/23/16 17:04	
Bromobenzene	ug/L	<0.23	1.0	03/23/16 17:04	
Bromochloromethane	ug/L	<0.34	1.0	03/23/16 17:04	
Bromodichloromethane	ug/L	<0.50	1.0	03/23/16 17:04	
Bromoform	ug/L	<0.50	1.0	03/23/16 17:04	
Bromomethane	ug/L	<2.4	5.0	03/23/16 17:04	
Carbon tetrachloride	ug/L	<0.50	1.0	03/23/16 17:04	
Chlorobenzene	ug/L	<0.50	1.0	03/23/16 17:04	
Chloroethane	ug/L	<0.37	1.0	03/23/16 17:04	
Chloroform	ug/L	<2.5	5.0	03/23/16 17:04	
Chloromethane	ug/L	<0.50	1.0	03/23/16 17:04	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	03/23/16 17:04	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	03/23/16 17:04	
Dibromochloromethane	ug/L	<0.50	1.0	03/23/16 17:04	
Dibromomethane	ug/L	<0.43	1.0	03/23/16 17:04	
Dichlorodifluoromethane	ug/L	<0.22	1.0	03/23/16 17:04	
Diisopropyl ether	ug/L	<0.50	1.0	03/23/16 17:04	
Ethylbenzene	ug/L	<0.50	1.0	03/23/16 17:04	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

METHOD BLANK: 1309423 Matrix: Water
Associated Lab Samples: 40129439013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	03/23/16 17:04	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	03/23/16 17:04	
m&p-Xylene	ug/L	<1.0	2.0	03/23/16 17:04	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	03/23/16 17:04	
Methylene Chloride	ug/L	<0.23	1.0	03/23/16 17:04	
n-Butylbenzene	ug/L	<0.50	1.0	03/23/16 17:04	
n-Propylbenzene	ug/L	<0.50	1.0	03/23/16 17:04	
Naphthalene	ug/L	<2.5	5.0	03/23/16 17:04	
o-Xylene	ug/L	<0.50	1.0	03/23/16 17:04	
p-Isopropyltoluene	ug/L	<0.50	1.0	03/23/16 17:04	
sec-Butylbenzene	ug/L	<2.2	5.0	03/23/16 17:04	
Styrene	ug/L	<0.50	1.0	03/23/16 17:04	
tert-Butylbenzene	ug/L	<0.18	1.0	03/23/16 17:04	
Tetrachloroethene	ug/L	<0.50	1.0	03/23/16 17:04	
Toluene	ug/L	<0.50	1.0	03/23/16 17:04	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	03/23/16 17:04	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	03/23/16 17:04	
Trichloroethene	ug/L	<0.33	1.0	03/23/16 17:04	
Trichlorofluoromethane	ug/L	<0.18	1.0	03/23/16 17:04	
Vinyl chloride	ug/L	<0.18	1.0	03/23/16 17:04	
4-Bromofluorobenzene (S)	%	95	70-130	03/23/16 17:04	
Dibromofluoromethane (S)	%	94	70-130	03/23/16 17:04	
Toluene-d8 (S)	%	97	70-130	03/23/16 17:04	

LABORATORY CONTROL SAMPLE: 1309424

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.2	106	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	42.3	85	70-130	
1,1,2-Trichloroethane	ug/L	50	50.8	102	70-130	
1,1-Dichloroethane	ug/L	50	48.8	98	70-130	
1,1-Dichloroethene	ug/L	50	51.5	103	70-130	
1,2,4-Trichlorobenzene	ug/L	50	59.1	118	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	42.6	85	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	54.8	110	70-130	
1,2-Dichlorobenzene	ug/L	50	56.3	113	70-130	
1,2-Dichloroethane	ug/L	50	47.8	96	70-131	
1,2-Dichloropropane	ug/L	50	44.9	90	70-130	
1,3-Dichlorobenzene	ug/L	50	58.4	117	70-130	
1,4-Dichlorobenzene	ug/L	50	56.8	114	70-130	
Benzene	ug/L	50	43.7	87	70-130	
Bromodichloromethane	ug/L	50	54.9	110	70-130	
Bromoform	ug/L	50	53.4	107	68-130	
Bromomethane	ug/L	50	26.5	53	38-137	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

LABORATORY CONTROL SAMPLE: 1309424

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	58.5	117	70-130	
Chlorobenzene	ug/L	50	58.6	117	70-130	
Chloroethane	ug/L	50	38.8	78	70-136	
Chloroform	ug/L	50	48.0	96	70-130	
Chloromethane	ug/L	50	26.8	54	48-144	
cis-1,2-Dichloroethene	ug/L	50	44.7	89	70-130	
cis-1,3-Dichloropropene	ug/L	50	42.7	85	70-130	
Dibromochloromethane	ug/L	50	54.6	109	70-130	
Dichlorodifluoromethane	ug/L	50	40.5	81	33-157	
Ethylbenzene	ug/L	50	60.2	120	70-132	
Isopropylbenzene (Cumene)	ug/L	50	71.2	142	70-130	L0
m&p-Xylene	ug/L	100	124	124	70-131	
Methyl-tert-butyl ether	ug/L	50	45.1	90	48-141	
Methylene Chloride	ug/L	50	49.3	99	70-130	
o-Xylene	ug/L	50	60.3	121	70-131	
Styrene	ug/L	50	61.7	123	70-130	
Tetrachloroethene	ug/L	50	65.6	131	70-130	L0
Toluene	ug/L	50	56.2	112	70-130	
trans-1,2-Dichloroethene	ug/L	50	51.9	104	70-130	
trans-1,3-Dichloropropene	ug/L	50	45.1	90	70-130	
Trichloroethene	ug/L	50	57.3	115	70-130	
Trichlorofluoromethane	ug/L	50	58.2	116	50-150	
Vinyl chloride	ug/L	50	40.3	81	65-142	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			96	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1310302 1310303

Parameter	Units	40129351001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	54.0	55.4	108	111	70-130	3	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	44.0	43.8	88	88	70-130	0	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	50.2	52.5	100	105	70-130	4	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	49.3	50.6	98	101	70-134	2	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	52.1	53.2	104	106	70-139	2	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	63.1	61.9	125	123	70-130	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	42.2	44.6	84	89	50-150	5	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	53.0	55.4	106	111	70-130	5	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	59.2	58.9	118	118	70-130	0	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	48.8	50.6	98	101	70-132	4	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	43.0	43.3	86	87	70-130	1	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	61.2	60.5	122	120	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	59.1	58.2	118	116	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1310302 1310303

Parameter	Units	40129351001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.50	50	50	44.4	45.0	89	90	70-130	1	20	
Bromodichloromethane	ug/L	<0.50	50	50	53.6	53.4	107	107	70-132	0	20	
Bromoform	ug/L	<0.50	50	50	52.3	52.7	105	105	68-130	1	20	
Bromomethane	ug/L	<2.4	50	50	31.4	32.3	63	65	38-141	3	20	
Carbon tetrachloride	ug/L	<0.50	50	50	58.5	59.9	117	120	70-130	2	20	
Chlorobenzene	ug/L	<0.50	50	50	58.0	60.3	116	120	70-130	4	20	
Chloroethane	ug/L	<0.37	50	50	40.7	42.0	81	84	66-152	3	20	
Chloroform	ug/L	<2.5	50	50	48.6	50.1	97	100	70-130	3	20	
Chloromethane	ug/L	<0.50	50	50	29.4	30.5	59	61	44-151	4	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	45.3	47.3	90	94	70-130	4	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	42.6	42.3	85	85	70-130	1	20	
Dibromochloromethane	ug/L	<0.50	50	50	53.3	54.7	107	109	70-130	3	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	40.0	41.9	80	84	29-160	5	20	
Ethylbenzene	ug/L	<0.50	50	50	59.6	61.5	119	123	70-132	3	20	
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	70.7	72.8	141	146	70-130	3	20	M0
m&p-Xylene	ug/L	<1.0	100	100	122	127	121	126	70-131	4	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	45.9	47.4	92	95	48-143	3	20	
Methylene Chloride	ug/L	<0.23	50	50	48.4	51.3	97	103	70-130	6	20	
o-Xylene	ug/L	<0.50	50	50	59.7	61.4	119	123	70-131	3	20	
Styrene	ug/L	<0.50	50	50	60.9	61.4	122	123	70-130	1	20	
Tetrachloroethene	ug/L	<0.50	50	50	66.0	66.6	132	133	70-130	1	20	M0
Toluene	ug/L	<0.50	50	50	55.1	56.4	110	113	70-130	2	20	
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	51.7	53.4	103	107	70-132	3	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	44.9	45.0	90	90	70-130	0	20	
Trichloroethene	ug/L	0.98J	50	50	56.6	56.1	111	110	70-130	1	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	57.6	60.5	115	121	50-153	5	20	
Vinyl chloride	ug/L	<0.18	50	50	40.1	41.6	80	83	60-155	4	20	
4-Bromofluorobenzene (S)	%						100	100	70-130			
Dibromofluoromethane (S)	%						98	95	70-130			
Toluene-d8 (S)	%						98	100	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

QC Batch: WET/24607 Analysis Method: SM 3500-Cr B (Online)
QC Batch Method: SM 3500-Cr B (Online) Analysis Description: Chromium, Dissolved Hexavalent by 3500
Associated Lab Samples: 40129439004, 40129439005, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012, 40129439013

METHOD BLANK: 1307033 Matrix: Water
Associated Lab Samples: 40129439004, 40129439005, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012, 40129439013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0039	0.020	03/16/16 08:25	

LABORATORY CONTROL SAMPLE: 1307034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.30	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307035 1307036

Parameter	Units	40129439004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	<0.019	1.5	1.5	1.4	1.4	93	93	90-110	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

QC Batch: WETA/32674
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40129439013

METHOD BLANK: 1305296 Matrix: Water
Associated Lab Samples: 40129439013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<2.0	4.0	03/16/16 10:46	

LABORATORY CONTROL SAMPLE: 1305297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.3	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1305298 1305299

Parameter	Units	40129159009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	15.2	20	20	36.1	36.3	105	105	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1305300 1305301

Parameter	Units	40129270008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	31.4	20	20	53.8	54.0	112	113	90-110	0	20	M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129439

QC Batch: WETA/32729 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40129439004, 40129439005, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012

METHOD BLANK: 1307088 Matrix: Water
Associated Lab Samples: 40129439004, 40129439005, 40129439006, 40129439007, 40129439008, 40129439009, 40129439010, 40129439011, 40129439012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<2.0	4.0	03/21/16 11:10	

LABORATORY CONTROL SAMPLE: 1307089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.1	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307090 1307091

Parameter	Units	40129437006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	4.7	20	20	23.4	23.6	94	94	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307092 1307093

Parameter	Units	40129439012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	202	200	200	408	407	103	103	90-110	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 15W029 WI CHROME
Pace Project No.: 40129439

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15W029 WI CHROME
Pace Project No.: 40129439

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40129439001	**MW-10_20160315**	EPA 6010	ICP/11956		
40129439002	**MW-12_20160315**	EPA 6010	ICP/11956		
40129439003	**MW-4_20160315**	EPA 6010	ICP/11956		
40129439004	**MW-6R_20160315**	EPA 6010	ICP/11956		
40129439005	**P-6A_20160315**	EPA 6010	ICP/11956		
40129439006	**MW-7R_20160315**	EPA 6010	ICP/11956		
40129439007	**P-7A_20160315**	EPA 6010	ICP/11956		
40129439008	**P-7B_20160315**	EPA 6010	ICP/11956		
40129439009	**P-7C_20160315**	EPA 6010	ICP/11956		
40129439010	**MW-20_20160315**	EPA 6010	ICP/11956		
40129439011	**MW-21_20160315**	EPA 6010	ICP/11956		
40129439012	**MW-22_20160315**	EPA 6010	ICP/11956		
40129439013	**MW-DUP1_20160315**	EPA 6010	ICP/11956		
40129439003	**MW-4_20160315**	EPA 8260	MSV/32596		
40129439004	**MW-6R_20160315**	EPA 8260	MSV/32596		
40129439006	**MW-7R_20160315**	EPA 8260	MSV/32596		
40129439007	**P-7A_20160315**	EPA 8260	MSV/32596		
40129439008	**P-7B_20160315**	EPA 8260	MSV/32596		
40129439009	**P-7C_20160315**	EPA 8260	MSV/32596		
40129439010	**MW-20_20160315**	EPA 8260	MSV/32596		
40129439011	**MW-21_20160315**	EPA 8260	MSV/32596		
40129439012	**MW-22_20160315**	EPA 8260	MSV/32596		
40129439013	**MW-DUP1_20160315**	EPA 8260	MSV/32670		
40129439014	**TB-1_20160315**	EPA 8260	MSV/32606		
40129439004	**MW-6R_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439005	**P-6A_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439006	**MW-7R_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439007	**P-7A_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439008	**P-7B_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439009	**P-7C_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439010	**MW-20_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439011	**MW-21_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439012	**MW-22_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439013	**MW-DUP1_20160315**	SM 3500-Cr B (Online)	WET/24607		
40129439004	**MW-6R_20160315**	EPA 300.0	WETA/32729		
40129439005	**P-6A_20160315**	EPA 300.0	WETA/32729		
40129439006	**MW-7R_20160315**	EPA 300.0	WETA/32729		
40129439007	**P-7A_20160315**	EPA 300.0	WETA/32729		
40129439008	**P-7B_20160315**	EPA 300.0	WETA/32729		
40129439009	**P-7C_20160315**	EPA 300.0	WETA/32729		
40129439010	**MW-20_20160315**	EPA 300.0	WETA/32729		
40129439011	**MW-21_20160315**	EPA 300.0	WETA/32729		
40129439012	**MW-22_20160315**	EPA 300.0	WETA/32729		
40129439013	**MW-DUP1_20160315**	EPA 300.0	WETA/32674		

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

CHAIN OF CUSTODY

4012943

(Please Print Clearly)	
Company Name:	FOTH
Branch/Location:	DE PERE
Project Contact:	Sharon Kozicki
Phone:	920/496-6737
Project Number:	15W029
Project Name:	WI CHROME
Project State:	WISCONSIN
Sampled By (Print):	Nick Glander
Sampled By (Sign):	
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	Sharon Kozicki
Mail To Company:	
Mail To Address:	Sharon.Kozicki@Foth.com
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Y/N	FILTERED? (YES/NO)	N	Y	Y	Y
					Pick Letter	PRESERVATION (CODE)*	B	D	A	D
					Analyses Requested		VOC	Cr	Hex Cr & SO4	Fe, Mn, JA
001	MW-10_20160315	3/15/16	805	GW				X		
002	MW-12_20160315		835					X		
003	MW-4_20160315		915				X	X		
004	MW-6R_20160315		1000				X	X	X	X
005	P-6A_20160315		1040					X	X	X
006	MW-7R_20160315		1120				X	X	X	X
007	P-7A_20160315		1200				X	X	X	X
008	P-7B_20160315		1235				X	X	X	X
009	P-7C_20160315		1310				X	X	X	X
010	MW-20_20160315		1345				X	X	X	X
011	MW-21_20150315		1520				X	X	X	X
012	MW-22_20160315		1840				X	X	X	X
013	MW DUP1_20160315		—							
014	TB-1_20160315	↓	—	↓						

CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	1-250mlP D	
3-40mlVB		
	1-250mlP A	
	2-40mlVB	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	3/15/16 1615	MaiMcKayPace	3/15/16 1615
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No.
40129439

Receipt Temp = R0i °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

C019a(27Jun2006)

Version 6.0 06/14/06

ORIGINAL

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical™

Client Name: Foth

Project # **WO# : 40129439**

40129439

Courier: ☐ Fed Ex ☐ UPS ☑ Client ☐ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used STC-67 **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: _____ /Corr: _____ **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☑ yes ☐ no

Person examining contents:
Date: 3-15-16
Initials: mm

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: KB 3/15/16	☐Yes (☑No) ☐N/A	12. 012 1 vial date 3/ /16
-Includes date/time/ID/Analysis Matrix: W		KB 3/15/16
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☑Yes ☐No ☐N/A	13. ☑ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 <2; NaOH+ZnAct ≥9, NaOH ≥12)	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☑Yes ☐No	Initial when completed: mm / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	14.
Trip Blank Present:	☑Yes ☐No ☐N/A	15.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 357		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: 014-1 sample label for 2 vials. mm 3/15/16
3-40ml vials returned.

Project Manager Review: JH for TN **Date:** 3-15-16

F-GB-C-031-Rev.03 (9April2015) SCUR Form

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

March 30, 2016

SHARON KOZICKI
Foth Infrastructure & Environment, LLC
2121 Innovation Court
Suite 300
De Pere, WI 54115

RE: Project: 15W029 WI CHROME
Pace Project No.: 40129478

Dear SHARON KOZICKI:
Enclosed are the analytical results for sample(s) received by the laboratory on March 16, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

cc: Nick Glander, Foth Infrastructure & Environment, LLC

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40129475007	**MW-2_20160316**	Water	03/16/16 08:55	03/16/16 13:05
40129475008	**P-2A_20160316**	Water	03/16/16 09:30	03/16/16 13:05
40129475009	**MW-3_20160316**	Water	03/16/16 10:15	03/16/16 13:05
40129475010	**MW-19_20160316**	Water	03/16/16 08:15	03/16/16 13:05
40129475011	**TB-2_20160316**	Water	03/16/16 00:00	03/16/16 13:05
40129475012	**EB-1_20160316**	Water	03/16/16 09:15	03/16/16 13:05

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40129475007	**MW-2_20160316**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129475008	**P-2A_20160316**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129475009	**MW-3_20160316**	EPA 6010	DLB	4	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G
40129475010	**MW-19_20160316**	EPA 6010	DLB	1	PASI-G
40129475011	**TB-2_20160316**	EPA 8260	LAP	64	PASI-G
40129475012	**EB-1_20160316**	EPA 6010	DLB	4	PASI-G
		EPA 8260	LAP	64	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G
		EPA 300.0	HMB	1	PASI-G

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40129475007	**MW-2_20160316**					
EPA 6010	Chromium, Dissolved	376	ug/L	10.0	03/23/16 16:16	
EPA 6010	Manganese, Dissolved	20.9	ug/L	5.0	03/23/16 16:16	
EPA 6010	Sodium, Dissolved	262000	ug/L	10000	03/24/16 14:05	
EPA 8260	1,1-Dichloroethane	5.7	ug/L	1.0	03/23/16 01:38	
EPA 8260	1,1-Dichloroethene	2.4	ug/L	1.0	03/23/16 01:38	
EPA 8260	1,1,1-Trichloroethane	14.3	ug/L	1.0	03/23/16 01:38	
SM 3500-Cr B (Online)	Chromium, Hexavalent, Dissolved	0.39	mg/L	0.10	03/17/16 08:25	
EPA 300.0	Sulfate, Dissolved	598	mg/L	200	03/23/16 16:18	
40129475008	**P-2A_20160316**					
EPA 6010	Iron, Dissolved	32.8J	ug/L	100	03/23/16 16:18	
EPA 6010	Manganese, Dissolved	508	ug/L	5.0	03/23/16 16:18	
EPA 6010	Sodium, Dissolved	208000	ug/L	10000	03/24/16 14:07	
EPA 300.0	Sulfate, Dissolved	123	mg/L	40.0	03/23/16 16:29	
40129475009	**MW-3_20160316**					
EPA 6010	Manganese, Dissolved	8.4	ug/L	5.0	03/23/16 16:21	
EPA 6010	Sodium, Dissolved	5420	ug/L	1000	03/23/16 16:21	
SM 3500-Cr B (Online)	Chromium, Hexavalent, Dissolved	0.0051J	mg/L	0.020	03/17/16 08:25	
EPA 300.0	Sulfate, Dissolved	63.9	mg/L	20.0	03/23/16 16:40	
40129475012	**EB-1_20160316**					
EPA 6010	Sodium, Dissolved	92.8J	ug/L	1000	03/23/16 16:26	B
EPA 8260	Methylene Chloride	1.9	ug/L	1.0	03/22/16 22:38	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Method: **EPA 6010**
Description: 6010 MET ICP, Dissolved
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 30, 2016

General Information:
5 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: ICP/11980

B: Analyte was detected in the associated method blank.

- BLANK for HBN 220159 [ICP/1198 (Lab ID: 1309871)
  - Sodium, Dissolved

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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(920)469-2436

PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Method: **EPA 8260**
Description: 8260 MSV
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 30, 2016

General Information:
4 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/32606

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1307553)
  - Bromomethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/32606

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40129425001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1307837)
  - Isopropylbenzene (Cumene)
  - Tetrachloroethene
- MSD (Lab ID: 1307838)
  - Isopropylbenzene (Cumene)
  - Tetrachloroethene

Additional Comments:

Pace Analytical Services, Inc.
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PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Method: **SM 3500-Cr B (Online)**
Description: Chromium, Dissolved Hexavalent
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 30, 2016

General Information:
4 samples were analyzed for SM 3500-Cr B (Online). All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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PROJECT NARRATIVE

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days,Diss
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: March 30, 2016

General Information:
4 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: MW-2_20160316 **Lab ID: 40129475007** Collected: 03/16/16 08:55 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**376**	ug/L	10.0	2.1	1		03/23/16 16:16	7440-47-3	
Iron, Dissolved	**<12.9**	ug/L	100	12.9	1		03/23/16 16:16	7439-89-6	
Manganese, Dissolved	**20.9**	ug/L	5.0	1.4	1		03/23/16 16:16	7439-96-5	
Sodium, Dissolved	**262000**	ug/L	10000	435	10		03/24/16 14:05	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/23/16 01:38	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/23/16 01:38	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/23/16 01:38	74-83-9	L2
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/23/16 01:38	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/23/16 01:38	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/23/16 01:38	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/23/16 01:38	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/23/16 01:38	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/23/16 01:38	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/23/16 01:38	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/23/16 01:38	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/23/16 01:38	75-71-8	
1,1-Dichloroethane	**5.7**	ug/L	1.0	0.24	1		03/23/16 01:38	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/23/16 01:38	107-06-2	
1,1-Dichloroethene	**2.4**	ug/L	1.0	0.41	1		03/23/16 01:38	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/23/16 01:38	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/23/16 01:38	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/23/16 01:38	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/23/16 01:38	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/23/16 01:38	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/23/16 01:38	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/23/16 01:38	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/23/16 01:38	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: MW-2_20160316 **Lab ID: 40129475007** Collected: 03/16/16 08:55 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/23/16 01:38	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/23/16 01:38	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/23/16 01:38	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/23/16 01:38	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/23/16 01:38	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/23/16 01:38	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/23/16 01:38	120-82-1	
1,1,1-Trichloroethane	**14.3**	ug/L	1.0	0.50	1		03/23/16 01:38	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/23/16 01:38	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/23/16 01:38	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/23/16 01:38	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/23/16 01:38	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/23/16 01:38	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 01:38	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		03/23/16 01:38	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		1		03/23/16 01:38	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		03/23/16 01:38	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**0.39**	mg/L	0.10	0.019	5		03/17/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**598**	mg/L	200	100	50		03/23/16 16:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: P-2A_20160316 **Lab ID: 40129475008** Collected: 03/16/16 09:30 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/23/16 16:18	7440-47-3	
Iron, Dissolved	**32.8J**	ug/L	100	12.9	1		03/23/16 16:18	7439-89-6	
Manganese, Dissolved	**508**	ug/L	5.0	1.4	1		03/23/16 16:18	7439-96-5	
Sodium, Dissolved	**208000**	ug/L	10000	435	10		03/24/16 14:07	7440-23-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/23/16 08:02	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/23/16 08:02	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/23/16 08:02	74-83-9	L2
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/23/16 08:02	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/23/16 08:02	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/23/16 08:02	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/23/16 08:02	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/23/16 08:02	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/23/16 08:02	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/23/16 08:02	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/23/16 08:02	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/23/16 08:02	75-71-8	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/23/16 08:02	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/23/16 08:02	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		03/23/16 08:02	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/23/16 08:02	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/23/16 08:02	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/23/16 08:02	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/23/16 08:02	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/23/16 08:02	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/23/16 08:02	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/23/16 08:02	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/23/16 08:02	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	99-87-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: P-2A_20160316 **Lab ID: 40129475008** Collected: 03/16/16 09:30 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/23/16 08:02	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/23/16 08:02	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/23/16 08:02	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/23/16 08:02	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/23/16 08:02	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/23/16 08:02	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/23/16 08:02	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/23/16 08:02	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/23/16 08:02	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/23/16 08:02	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/23/16 08:02	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/23/16 08:02	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/23/16 08:02	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		03/23/16 08:02	460-00-4	
Dibromofluoromethane (S)	95	%	70-130		1		03/23/16 08:02	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		03/23/16 08:02	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**<0.0039**	mg/L	0.020	0.0039	1		03/17/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**123**	mg/L	40.0	20.0	10		03/23/16 16:29	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: MW-3_20160316 **Lab ID: 40129475009** Collected: 03/16/16 10:15 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/23/16 16:21	7440-47-3	
Iron, Dissolved	**<12.9**	ug/L	100	12.9	1		03/23/16 16:21	7439-89-6	
Manganese, Dissolved	**8.4**	ug/L	5.0	1.4	1		03/23/16 16:21	7439-96-5	
Sodium, Dissolved	**5420**	ug/L	1000	43.5	1		03/23/16 16:21	7440-23-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**0.0051J**	mg/L	0.020	0.0039	1		03/17/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**63.9**	mg/L	20.0	10.0	5		03/23/16 16:40	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: MW-19_20160316 **Lab ID: 40129475010** Collected: 03/16/16 08:15 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/23/16 16:23	7440-47-3	

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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: TB-2_20160316 **Lab ID: 40129475011** Collected: 03/16/16 00:00 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 22:15	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/22/16 22:15	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/22/16 22:15	74-83-9	L2
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	104-51-8	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 22:15	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:15	98-06-6	
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/22/16 22:15	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/22/16 22:15	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	74-87-3	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/22/16 22:15	106-43-4	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/22/16 22:15	96-12-8	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	124-48-1	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:15	106-93-4	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/22/16 22:15	74-95-3	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	95-50-1	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	541-73-1	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	106-46-7	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/22/16 22:15	75-71-8	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/22/16 22:15	75-34-3	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/22/16 22:15	107-06-2	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		03/22/16 22:15	75-35-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 22:15	156-59-2	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 22:15	156-60-5	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/22/16 22:15	78-87-5	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	142-28-9	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/22/16 22:15	594-20-7	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/22/16 22:15	563-58-6	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	10061-01-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 22:15	10061-02-6	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 22:15	87-68-3	
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/22/16 22:15	98-82-8	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	99-87-6	
Methylene Chloride	**<0.23**	ug/L	1.0	0.23	1		03/22/16 22:15	75-09-2	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/22/16 22:15	1634-04-4	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/22/16 22:15	91-20-3	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	103-65-1	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:15	630-20-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: TB-2_20160316 **Lab ID: 40129475011** Collected: 03/16/16 00:00 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/22/16 22:15	79-34-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	108-88-3	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 22:15	87-61-6	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 22:15	120-82-1	
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	71-55-6	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/22/16 22:15	79-00-5	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/22/16 22:15	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:15	75-69-4	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	96-18-4	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	95-63-6	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	108-67-8	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:15	75-01-4	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/22/16 22:15	179601-23-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:15	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		03/22/16 22:15	460-00-4	
Dibromofluoromethane (S)	97	%	70-130		1		03/22/16 22:15	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		03/22/16 22:15	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: EB-1_20160316 **Lab ID: 40129475012** Collected: 03/16/16 09:15 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.1**	ug/L	10.0	2.1	1		03/23/16 16:26	7440-47-3	
Iron, Dissolved	**<12.9**	ug/L	100	12.9	1		03/23/16 16:26	7439-89-6	
Manganese, Dissolved	**<1.4**	ug/L	5.0	1.4	1		03/23/16 16:26	7439-96-5	
Sodium, Dissolved	**92.8J**	ug/L	1000	43.5	1		03/23/16 16:26	7440-23-5	B
8260 MSV	Analytical Method: EPA 8260								
1,1,1,2-Tetrachloroethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:38	630-20-6	
1,1,1-Trichloroethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.25**	ug/L	1.0	0.25	1		03/22/16 22:38	79-34-5	
1,1,2-Trichloroethane	**<0.20**	ug/L	1.0	0.20	1		03/22/16 22:38	79-00-5	
1,1-Dichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/22/16 22:38	75-34-3	
1,1-Dichloroethene	**<0.41**	ug/L	1.0	0.41	1		03/22/16 22:38	75-35-4	
1,1-Dichloropropene	**<0.44**	ug/L	1.0	0.44	1		03/22/16 22:38	563-58-6	
1,2,3-Trichlorobenzene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 22:38	87-61-6	
1,2,3-Trichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	96-18-4	
1,2,4-Trichlorobenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 22:38	120-82-1	
1,2,4-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.2**	ug/L	5.0	2.2	1		03/22/16 22:38	96-12-8	
1,2-Dibromoethane (EDB)	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:38	106-93-4	
1,2-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	95-50-1	
1,2-Dichloroethane	**<0.17**	ug/L	1.0	0.17	1		03/22/16 22:38	107-06-2	
1,2-Dichloropropane	**<0.23**	ug/L	1.0	0.23	1		03/22/16 22:38	78-87-5	
1,3,5-Trimethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	108-67-8	
1,3-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	541-73-1	
1,3-Dichloropropane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	142-28-9	
1,4-Dichlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	106-46-7	
2,2-Dichloropropane	**<0.48**	ug/L	1.0	0.48	1		03/22/16 22:38	594-20-7	
2-Chlorotoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	95-49-8	
4-Chlorotoluene	**<0.21**	ug/L	1.0	0.21	1		03/22/16 22:38	106-43-4	
Benzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	71-43-2	
Bromobenzene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 22:38	108-86-1	
Bromochloromethane	**<0.34**	ug/L	1.0	0.34	1		03/22/16 22:38	74-97-5	
Bromodichloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	75-27-4	
Bromoform	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	75-25-2	
Bromomethane	**<2.4**	ug/L	5.0	2.4	1		03/22/16 22:38	74-83-9	L2
Carbon tetrachloride	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	56-23-5	
Chlorobenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	108-90-7	
Chloroethane	**<0.37**	ug/L	1.0	0.37	1		03/22/16 22:38	75-00-3	
Chloroform	**<2.5**	ug/L	5.0	2.5	1		03/22/16 22:38	67-66-3	
Chloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	74-87-3	
Dibromochloromethane	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	124-48-1	
Dibromomethane	**<0.43**	ug/L	1.0	0.43	1		03/22/16 22:38	74-95-3	
Dichlorodifluoromethane	**<0.22**	ug/L	1.0	0.22	1		03/22/16 22:38	75-71-8	
Diisopropyl ether	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	108-20-3	
Ethylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	100-41-4	
Hexachloro-1,3-butadiene	**<2.1**	ug/L	5.0	2.1	1		03/22/16 22:38	87-68-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Sample: EB-1_20160316 **Lab ID: 40129475012** Collected: 03/16/16 09:15 Received: 03/16/16 13:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Isopropylbenzene (Cumene)	**<0.14**	ug/L	1.0	0.14	1		03/22/16 22:38	98-82-8	
Methyl-tert-butyl ether	**<0.17**	ug/L	1.0	0.17	1		03/22/16 22:38	1634-04-4	
Methylene Chloride	**1.9**	ug/L	1.0	0.23	1		03/22/16 22:38	75-09-2	
Naphthalene	**<2.5**	ug/L	5.0	2.5	1		03/22/16 22:38	91-20-3	
Styrene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	100-42-5	
Tetrachloroethene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	127-18-4	
Toluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	108-88-3	
Trichloroethene	**<0.33**	ug/L	1.0	0.33	1		03/22/16 22:38	79-01-6	
Trichlorofluoromethane	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:38	75-69-4	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:38	75-01-4	
cis-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 22:38	156-59-2	
cis-1,3-Dichloropropene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	10061-01-5	
m&p-Xylene	**<1.0**	ug/L	2.0	1.0	1		03/22/16 22:38	179601-23-1	
n-Butylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	104-51-8	
n-Propylbenzene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	103-65-1	
o-Xylene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	95-47-6	
p-Isopropyltoluene	**<0.50**	ug/L	1.0	0.50	1		03/22/16 22:38	99-87-6	
sec-Butylbenzene	**<2.2**	ug/L	5.0	2.2	1		03/22/16 22:38	135-98-8	
tert-Butylbenzene	**<0.18**	ug/L	1.0	0.18	1		03/22/16 22:38	98-06-6	
trans-1,2-Dichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/22/16 22:38	156-60-5	
trans-1,3-Dichloropropene	**<0.23**	ug/L	1.0	0.23	1		03/22/16 22:38	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		03/22/16 22:38	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		1		03/22/16 22:38	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		03/22/16 22:38	2037-26-5	
Chromium, Dissolved Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent, Dissolved	**<0.0039**	mg/L	0.020	0.0039	1		03/17/16 08:25	18540-29-9	
300.0 IC Anions 28 Days,Diss	Analytical Method: EPA 300.0								
Sulfate, Dissolved	**<2.0**	mg/L	4.0	2.0	1		03/23/16 14:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129478

QC Batch: ICP/11980 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40129475007, 40129475008, 40129475009, 40129475010, 40129475012

METHOD BLANK: 1309871 Matrix: Water
Associated Lab Samples: 40129475007, 40129475008, 40129475009, 40129475010, 40129475012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.1	10.0	03/23/16 15:47	
Iron, Dissolved	ug/L	<12.9	100	03/23/16 15:47	
Manganese, Dissolved	ug/L	<1.4	5.0	03/23/16 15:47	
Sodium, Dissolved	ug/L	161J	1000	03/23/16 15:47	

LABORATORY CONTROL SAMPLE: 1309872

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	500	482	96	80-120	
Iron, Dissolved	ug/L	5000	4850	97	80-120	
Manganese, Dissolved	ug/L	500	472	94	80-120	
Sodium, Dissolved	ug/L	5000	4750	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1309873 1309874

Parameter	Units	40129472017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	<2.1	500	500	478	477	96	95	75-125	0	20	
Iron, Dissolved	ug/L	<12.9	5000	5000	4790	4830	96	97	75-125	1	20	
Manganese, Dissolved	ug/L	<1.4	500	500	469	463	94	92	75-125	1	20	
Sodium, Dissolved	ug/L	6840	5000	5000	11300	11300	90	90	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129478

QC Batch: MSV/32606 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40129475007, 40129475008, 40129475011, 40129475012

METHOD BLANK: 1307552 Matrix: Water
Associated Lab Samples: 40129475007, 40129475008, 40129475011, 40129475012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	03/22/16 16:59	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	03/22/16 16:59	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	03/22/16 16:59	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	03/22/16 16:59	
1,1-Dichloroethane	ug/L	<0.24	1.0	03/22/16 16:59	
1,1-Dichloroethene	ug/L	<0.41	1.0	03/22/16 16:59	
1,1-Dichloropropene	ug/L	<0.44	1.0	03/22/16 16:59	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	03/22/16 16:59	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	03/22/16 16:59	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	03/22/16 16:59	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	03/22/16 16:59	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	03/22/16 16:59	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	03/22/16 16:59	
1,2-Dichloroethane	ug/L	<0.17	1.0	03/22/16 16:59	
1,2-Dichloropropane	ug/L	<0.23	1.0	03/22/16 16:59	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	03/22/16 16:59	
1,3-Dichloropropane	ug/L	<0.50	1.0	03/22/16 16:59	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	03/22/16 16:59	
2,2-Dichloropropane	ug/L	<0.48	1.0	03/22/16 16:59	
2-Chlorotoluene	ug/L	<0.50	1.0	03/22/16 16:59	
4-Chlorotoluene	ug/L	<0.21	1.0	03/22/16 16:59	
Benzene	ug/L	<0.50	1.0	03/22/16 16:59	
Bromobenzene	ug/L	<0.23	1.0	03/22/16 16:59	
Bromochloromethane	ug/L	<0.34	1.0	03/22/16 16:59	
Bromodichloromethane	ug/L	<0.50	1.0	03/22/16 16:59	
Bromoform	ug/L	<0.50	1.0	03/22/16 16:59	
Bromomethane	ug/L	<2.4	5.0	03/22/16 16:59	
Carbon tetrachloride	ug/L	<0.50	1.0	03/22/16 16:59	
Chlorobenzene	ug/L	<0.50	1.0	03/22/16 16:59	
Chloroethane	ug/L	<0.37	1.0	03/22/16 16:59	
Chloroform	ug/L	<2.5	5.0	03/22/16 16:59	
Chloromethane	ug/L	<0.50	1.0	03/22/16 16:59	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	03/22/16 16:59	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	03/22/16 16:59	
Dibromochloromethane	ug/L	<0.50	1.0	03/22/16 16:59	
Dibromomethane	ug/L	<0.43	1.0	03/22/16 16:59	
Dichlorodifluoromethane	ug/L	<0.22	1.0	03/22/16 16:59	
Diisopropyl ether	ug/L	<0.50	1.0	03/22/16 16:59	
Ethylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129478

METHOD BLANK: 1307552 Matrix: Water
Associated Lab Samples: 40129475007, 40129475008, 40129475011, 40129475012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	03/22/16 16:59	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	03/22/16 16:59	
m&p-Xylene	ug/L	<1.0	2.0	03/22/16 16:59	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	03/22/16 16:59	
Methylene Chloride	ug/L	<0.23	1.0	03/22/16 16:59	
n-Butylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	
n-Propylbenzene	ug/L	<0.50	1.0	03/22/16 16:59	
Naphthalene	ug/L	<2.5	5.0	03/22/16 16:59	
o-Xylene	ug/L	<0.50	1.0	03/22/16 16:59	
p-Isopropyltoluene	ug/L	<0.50	1.0	03/22/16 16:59	
sec-Butylbenzene	ug/L	<2.2	5.0	03/22/16 16:59	
Styrene	ug/L	<0.50	1.0	03/22/16 16:59	
tert-Butylbenzene	ug/L	<0.18	1.0	03/22/16 16:59	
Tetrachloroethene	ug/L	<0.50	1.0	03/22/16 16:59	
Toluene	ug/L	<0.50	1.0	03/22/16 16:59	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	03/22/16 16:59	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	03/22/16 16:59	
Trichloroethene	ug/L	<0.33	1.0	03/22/16 16:59	
Trichlorofluoromethane	ug/L	<0.18	1.0	03/22/16 16:59	
Vinyl chloride	ug/L	<0.18	1.0	03/22/16 16:59	
4-Bromofluorobenzene (S)	%	93	70-130	03/22/16 16:59	
Dibromofluoromethane (S)	%	98	70-130	03/22/16 16:59	
Toluene-d8 (S)	%	98	70-130	03/22/16 16:59	

LABORATORY CONTROL SAMPLE: 1307553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.1	100	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	55.8	112	70-130	
1,1,2-Trichloroethane	ug/L	50	56.0	112	70-130	
1,1-Dichloroethane	ug/L	50	45.6	91	70-130	
1,1-Dichloroethene	ug/L	50	50.1	100	70-130	
1,2,4-Trichlorobenzene	ug/L	50	58.9	118	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	59.6	119	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	59.5	119	70-130	
1,2-Dichlorobenzene	ug/L	50	56.6	113	70-130	
1,2-Dichloroethane	ug/L	50	50.8	102	70-131	
1,2-Dichloropropane	ug/L	50	45.5	91	70-130	
1,3-Dichlorobenzene	ug/L	50	57.1	114	70-130	
1,4-Dichlorobenzene	ug/L	50	56.7	113	70-130	
Benzene	ug/L	50	44.2	88	70-130	
Bromodichloromethane	ug/L	50	51.5	103	70-130	
Bromoform	ug/L	50	58.6	117	68-130	
Bromomethane	ug/L	50	9.8	20	38-137	L0

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129478

LABORATORY CONTROL SAMPLE: 1307553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	51.5	103	70-130	
Chlorobenzene	ug/L	50	54.8	110	70-130	
Chloroethane	ug/L	50	40.0	80	70-136	
Chloroform	ug/L	50	46.2	92	70-130	
Chloromethane	ug/L	50	28.7	57	48-144	
cis-1,2-Dichloroethene	ug/L	50	44.4	89	70-130	
cis-1,3-Dichloropropene	ug/L	50	43.1	86	70-130	
Dibromochloromethane	ug/L	50	55.5	111	70-130	
Dichlorodifluoromethane	ug/L	50	43.7	87	33-157	
Ethylbenzene	ug/L	50	56.2	112	70-132	
Isopropylbenzene (Cumene)	ug/L	50	65.1	130	70-130	
m&p-Xylene	ug/L	100	115	115	70-131	
Methyl-tert-butyl ether	ug/L	50	53.2	106	48-141	
Methylene Chloride	ug/L	50	47.5	95	70-130	
o-Xylene	ug/L	50	56.0	112	70-131	
Styrene	ug/L	50	56.8	114	70-130	
Tetrachloroethene	ug/L	50	61.5	123	70-130	
Toluene	ug/L	50	52.6	105	70-130	
trans-1,2-Dichloroethene	ug/L	50	49.8	100	70-130	
trans-1,3-Dichloropropene	ug/L	50	44.8	90	70-130	
Trichloroethene	ug/L	50	52.7	105	70-130	
Trichlorofluoromethane	ug/L	50	55.2	110	50-150	
Vinyl chloride	ug/L	50	39.7	79	65-142	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307837 1307838

Parameter	Units	40129425001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	53.4	54.1	107	108	70-130	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	47.8	47.6	96	95	70-130	0	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	51.8	52.6	104	105	70-130	1	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	51.7	51.6	103	103	70-134	0	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	54.5	56.2	109	112	70-139	3	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	62.2	62.3	124	125	70-130	0	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	47.5	45.9	95	92	50-150	3	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	56.1	57.0	112	114	70-130	2	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	59.7	58.7	119	117	70-130	2	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	47.7	50.0	95	100	70-132	5	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	46.8	46.2	94	92	70-130	1	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	62.1	61.3	124	123	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	59.8	59.6	120	119	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129478

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307837 1307838

Parameter	Units	40129425001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.50	50	50	47.5	47.5	95	95	70-130	0	20	
Bromodichloromethane	ug/L	<0.50	50	50	53.2	52.3	106	105	70-132	2	20	
Bromoform	ug/L	<0.50	50	50	50.9	51.9	102	104	68-130	2	20	
Bromomethane	ug/L	<2.4	50	50	26.9	29.6	54	59	38-141	10	20	
Carbon tetrachloride	ug/L	<0.50	50	50	58.6	59.4	117	119	70-130	1	20	
Chlorobenzene	ug/L	<0.50	50	50	60.3	58.9	121	118	70-130	2	20	
Chloroethane	ug/L	<0.37	50	50	41.7	42.6	83	85	66-152	2	20	
Chloroform	ug/L	<2.5	50	50	49.2	49.1	98	98	70-130	0	20	
Chloromethane	ug/L	0.56J	50	50	29.1	28.9	57	57	44-151	1	20	
cis-1,2-Dichloroethene	ug/L	11.1	50	50	59.1	59.9	96	98	70-130	1	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	42.4	42.7	85	85	70-130	1	20	
Dibromochloromethane	ug/L	<0.50	50	50	53.2	53.8	106	108	70-130	1	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	34.0	35.3	68	71	29-160	4	20	
Ethylbenzene	ug/L	<0.50	50	50	60.6	61.9	121	124	70-132	2	20	
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	71.1	72.0	142	144	70-130	1	20	M1
m&p-Xylene	ug/L	<1.0	100	100	126	127	126	127	70-131	1	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	47.9	48.5	96	97	48-143	1	20	
Methylene Chloride	ug/L	<0.23	50	50	49.8	52.0	100	104	70-130	4	20	
o-Xylene	ug/L	<0.50	50	50	61.4	60.9	123	122	70-131	1	20	
Styrene	ug/L	<0.50	50	50	60.2	59.3	120	119	70-130	2	20	
Tetrachloroethene	ug/L	72.3	50	50	142	140	139	136	70-130	1	20	M1
Toluene	ug/L	1.7	50	50	58.9	59.6	115	116	70-130	1	20	
trans-1,2-Dichloroethene	ug/L	0.43J	50	50	54.3	53.9	108	107	70-132	1	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	45.3	45.4	91	91	70-130	0	20	
Trichloroethene	ug/L	2.6	50	50	58.3	58.6	111	112	70-130	1	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	58.2	59.1	116	118	50-153	2	20	
Vinyl chloride	ug/L	<0.18	50	50	43.4	44.1	87	88	60-155	2	20	
4-Bromofluorobenzene (S)	%						100	104	70-130			
Dibromofluoromethane (S)	%						98	97	70-130			
Toluene-d8 (S)	%						102	100	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129478

QC Batch: WET/24626 Analysis Method: SM 3500-Cr B (Online)
QC Batch Method: SM 3500-Cr B (Online) Analysis Description: Chromium, Dissolved Hexavalent by 3500
Associated Lab Samples: 40129475007, 40129475008, 40129475009, 40129475012

METHOD BLANK: 1307889 Matrix: Water
Associated Lab Samples: 40129475007, 40129475008, 40129475009, 40129475012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0039	0.020	03/17/16 08:25	

LABORATORY CONTROL SAMPLE: 1307890

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.30	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1307891 1307892

Parameter	Units	40129475007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	0.39	1.5	1.5	1.9	1.8	100	94	90-110	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15W029 WI CHROME
Pace Project No.: 40129478

QC Batch: WETA/32760 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions,Dissolved
Associated Lab Samples: 40129475007, 40129475008, 40129475009, 40129475012

METHOD BLANK: 1308207 Matrix: Water
Associated Lab Samples: 40129475007, 40129475008, 40129475009, 40129475012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<2.0	4.0	03/23/16 09:41	

LABORATORY CONTROL SAMPLE: 1308208

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.3	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1308209 1308210

Parameter	Units	40129472007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	52.9	100	100	151	152	98	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1308211 1308212

Parameter	Units	40129515003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	69.0	100	100	169	168	100	99	90-110	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 15W029 WI CHROME
Pace Project No.: 40129478

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15W029 WI CHROME
Pace Project No.: 40129478

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40129475007	**MW-2_20160316**	EPA 6010	ICP/11980		
40129475008	**P-2A_20160316**	EPA 6010	ICP/11980		
40129475009	**MW-3_20160316**	EPA 6010	ICP/11980		
40129475010	**MW-19_20160316**	EPA 6010	ICP/11980		
40129475012	**EB-1_20160316**	EPA 6010	ICP/11980		
40129475007	**MW-2_20160316**	EPA 8260	MSV/32606		
40129475008	**P-2A_20160316**	EPA 8260	MSV/32606		
40129475011	**TB-2_20160316**	EPA 8260	MSV/32606		
40129475012	**EB-1_20160316**	EPA 8260	MSV/32606		
40129475007	**MW-2_20160316**	SM 3500-Cr B (Online)	WET/24626		
40129475008	**P-2A_20160316**	SM 3500-Cr B (Online)	WET/24626		
40129475009	**MW-3_20160316**	SM 3500-Cr B (Online)	WET/24626		
40129475012	**EB-1_20160316**	SM 3500-Cr B (Online)	WET/24626		
40129475007	**MW-2_20160316**	EPA 300.0	WETA/32760		
40129475008	**P-2A_20160316**	EPA 300.0	WETA/32760		
40129475009	**MW-3_20160316**	EPA 300.0	WETA/32760		
40129475012	**EB-1_20160316**	EPA 300.0	WETA/32760		

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

40129478

(Please Print Clearly)	
Company Name:	FOTH
Branch/Location:	DE PERE
Project Contact:	Sharon Kozicki
Phone:	920/496-6737
Project Number:	15W029
Project Name:	WI Chrome
Project State:	WISCONSIN
Sampled By (Print):	Nick Glander
Sampled By (Sign):	
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	Sharon Kozicki
Mail To Company:	
Mail To Address:	Sharon.Kozicki@Foth.com
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SL = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: VOC	Cr	Fe, Mn, NA	Alk, Cl, SO4	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	B	D	D	D	A			
007	MW-2_20160316	3/16/16	855			X	X	X	X		3-40mlV B	2-250mlP AC	
008	P-2A_20160316		930			X	X	X	X				
009	MW-3_20160316		1015				X	X	X			1-250mlP D	
010	MW-19_20160316		815				X						
011	TB-2_20160316					X					2-40mlV B		
012	EB-1_20160316		915			X	X	X	X	X	3-40mlV B	2-250mlP AD	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	3/16/16 1305	Kate Schramm PACE	3/16/16 1305
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No.
40129475 AMH 3/16/16

Receipt Temp = 0.5 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

ORIGINAL

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Project #: **WO# : 40129478**

40129478

Client Name: Foth

Courier: ☐ Fed Ex ☐ UPS ☒ Client ☐ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used SR#4 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 0.5 /Corr: 0.5 **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☒ yes ☐ no

Person examining contents:
Date: 3/16/16
Initials: TL

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

				Comments:
Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☒Yes	☐No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	7.
Sufficient Volume:	☒Yes	☐No	☐N/A	8.
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
-Pace IR Containers Used:	☐Yes	☐No	☒N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☒Yes	☐No	☐N/A	11.
Sample Labels match COC:	☐Yes	☒No	☐N/A	12 004 all containers collect time 1135 3/16/16 TL
-Includes date/time/ID/Analysis Matrix: W				
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☒Yes	☐No	☐N/A	13. ☒HNO3 ☒H2SO4 ☒NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☒Yes	☐No	☐N/A	
exceptions: (VOA) coliform, TOC, TOX, TOH, (R&G) WIDROW, Phenolics, OTHER:	☒Yes	☐No		Initial when completed: TL / Lab Std #ID of preservative: / Date/Time:
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	14.
Trip Blank Present:	☒Yes	☐No	☐N/A	15.
Trip Blank Custody Seals Present	☒Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased): 357				

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: AMH for TL **Date:** 3/16/16

F-GB-C-031-Rev.03 (9April2015) SCUR Form

Appendix C

Updated O&M Form 4400-194

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Remediation Site Operation, Maintenance, Monitoring & Optimization Report

GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM: Completion of this form is required under s. NR 724.13(3), Wis. Adm. Code. A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Failure to submit this form as required is a violation of s. NR 724.13(3), Wis. Adm. Code, and is subject to the penalties in s. 292.99, Wis. Stats. This form must be submitted every six months for soil or groundwater remediation projects that report operation and maintenance progress in accordance with s. NR 724.13(3), Wis. Adm. Code.

Note: Long-term monitoring results submitted in accordance with s. NR 724.17(3), Wis. Adm. Code are required to be submitted within 10 business days of receiving sampling results and are not required to be submitted using this form. However, portions of this form require monitoring data summary information that may be based on information previously submitted in accordance with s. NR 724.17(3), Wis. Adm. Code.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if this form is required to be submitted at sites responded to under the Federal Comprehensive Environmental Response and Compensation Act (commonly known as Superfund) or an equivalent State lead Superfund response.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if any of the information required in this form may be omitted or changed and obtain prior written approval for any omissions or changes.

Submittal of this form is not a substitute for reporting required by Department programs such as Waste Water or Air Management. Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by the Bureau for Remediation and Redevelopment.

Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.). Unless otherwise noted, all citations refer to Wisconsin Administrative Code.

Note: There is a separate semi-annual report required under s. NR 700.11(1), Wis. Adm. Code. Reporting under that provision is through an internet-based form:

http://dnr.wi.gov/topic/Brownfields/documents/regs/NR700progreport.pdf

Section GI - General Site Information

A. General Information

1. Site name

Wisconsin Chrome

2. Reporting period from:	11/01/2015	To:	04/30/2016	Days in period:	182

3. Regulatory agency (enter DNR, DATCP and/or other)	4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific)
DNR	02-45-000225

5. Site location

Region	County	Address
Northeast Region	Outagamie	2101 Hyland Avenue

Municipality name ◯ City ◯ Town ◯ Village	Township	Range ◉E ◯W	Section	¼	¼ ¼
Kaukauna	21 N	18	13	NE	NE

6. Responsible party	7. Consultant
Name: Outagamie County (Paul Farrell)	☐ Select if the following information has changed since the last submittal
Mailing address: 410 S. Elm Street, Appleton, WI 54911	Company name: Foth Infrastructure & Environment, LLC
Phone number: (920) 832-1855	Mailing address: P.O. Box 5126, De Pere, WI 54115
	Phone number: (920) 496-3767

8. Contaminants

Chromium and volatile organic compounds

9. Soil types (USCS or USDA)

SM, ML, CL

10. Hydraulic conductivity(cm/sec):	11. Average linear velocity of groundwater (ft/yr)
We do not have site investigation data for this site	We do not have site investigation data for this site

12. If soil is treated ex situ, is the treatment location off site? ◯ Yes ◉ No

If yes, give location: Region	County

Municipality name ◯ City ◯ Town ◯ Village	Township	Range ◯E ◯W	Section	¼	¼ ¼
	N				

B. Remediation Method

Only submit sections that apply to an individual site. Check all that apply:

- [x] Groundwater extraction (submit a completed Section GW-1).
- [ ] Free product recovery (submit a completed Section GW-1).
- [ ] In situ air sparging (submit a completed Section GW-2).
- [ ] Groundwater natural attenuation (submit a completed Section GW-3).
- [ ] Other groundwater remediation method (submit a completed Section GW-4).
- [ ] Soil venting (including soil vapor extraction building venting and bioventing submit a completed Section IS-1).
- [ ] Soil natural attenuation (submit a completed Section IS-2).
- [ ] Other in situ soil remediation method (submit a completed Section IS-3).
- [ ] Biopiles (submit a completed Section ES-1).
- [ ] Landspreading/thinspreading of petroleum contaminated soil (submit a completed Section ES-2).
- [ ] Other ex situ remediation method (submit a completed Section ES-3).
- [ ] Site is a landfill (submit a completed Section LF-1).

C. General Effectiveness Evaluation for All Active Systems

If the remediation is active (not natural attentuation), complete this subsection.

1. Is the system operating at design rates and specifications? ○ Yes ◉ No
   If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.
   Yes, however the pump in Trench B has been turned off since July 15, 2015.

2. Are modifications to the system warranted to improve effectiveness ○ Yes ◉ No
   If yes, explain:

3. Is natural attenuation an effective low cost option at this time? ○ Yes ◉ No
4. Is closure sampling warranted at this time? ○ Yes ◉ No
5. Are there any modifications that can be made to the remediation to improve cost effectiveness? ◉ Yes ○ No
   If yes, explain:
   Directly address VOC contamination to reduce operation time of the groundwater extraction system.

D. Economic and Cost Data to Date

1. Total investigation cost: _____
2. Implementation costs (design, capital and installation costs, excluding investigation costs: _____
3. Total costs during the previous reporting period: $14,332.00
4. Total costs during this reporting period: _____
5. Total anticipated costs for the next reporting period: $17,000.00
6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? ○ Yes ◉ No
   If yes, explain:

7. If closure is anticipated within 12 months, estimated costs for project closeout: _____

E. Name(s), Signature(s) and Date of Person(s) Submitting Form

Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form for sites with any ongoing active remediation, monitoring or an investigation. Other persons may sign this form for sites with no response activities during the six month reporting period.

Registered Professional Engineers:

I hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Brian Symons	Senior Technology Manager
Signature Brian Symons	Date 5-13-2016

Hydrogeologists:

I hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Signature	Date

Scientists:

I hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Signature	Date

Other Persons:

Print name	Title
Signature	Date

Professional Seal(s), if applicable:

Section GW-1, Groundwater Pump and Treat Systems and Free Product Recovery Systems

A. Groundwater Extraction System Operation:

1. Total number of groundwater extraction wells or trenches available: 2 and the number in use during period: 1

2. Number of days of operation (only list the number of days the system actually operated, if unknown explain:
182, The system was operable during entire reporting time, however has been Sump B offline since July 15, 2015.

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:
100

4. Quantity of groundwater extracted during this time period: 201,022 gallons

5. Average groundwater extraction rate: 0.77 gpm

6. Quantity of dissolved phase contaminants removed during this time period in pounds: _____ lbs

B. Free Product Recovery System Operation

1. Is free product (nonaqueous phase liquid) being recovered at this site? ◯ Yes ◯ No
If yes, explain:

2. Quantity of free product extracted during this time period (enter none if none): _____ gallons

3. Average free product extraction rate: _____ gpm

C. System Effectiveness Evaluation

1. Is a contaminated groundwater plume fully contained in the capture zone? ◯ Yes ◉ No
If no, explain:
Both total chromium and VOCs extend east and west of Trench A capture zone. The Total chromium plume is being addressed via chemical injection. There will be future remedial action to address the VOCs

2. If free product is present, is the free product fully contained in capture zone? ◯ Yes ◯ No
If no, explain:

3. If free product is present in any wells at the site, but free product was not recovered during reporting period, explain:

4. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in C.4.a.

a. Contaminant: 1,1-dichloroethene

b. Percent reduction necessary to reach ch. NR 140 ES and PAL: 99.99 %

c. Maximum contaminant concentration level in any monitoring well of that contaminant: 2,040 µg/L

d. Maximum contaminant concentration level in any extraction well of that contaminant: 129 µg/L

e. If the maximum concentration in a monitoring well is more that one order of magnitude above the concentration measured in an extraction well, explain why the extracted groundwater contamination levels are significantly less than the levels at other locations within the aquifer.

D. Additional Attachments

Attach the following to this form:

- Most recent report to the DNR Wastewater Program, if applicable.
- Groundwater contour map with capture zone indicated.
- Groundwater contaminant distribution map (may be combined with contour map).
- Graph of cumulative contaminant removal, if both free product recovery and ground water extraction are used, provide separate graphs.
- Time versus groundwater contaminant concentration graphs for the contaminant listed in C.4.a. (above), as follows:
  - -- Graph of contaminant concentrations versus time for each extraction well in use during the period.
  - -- Graph of contaminant concentrations versus time for the monitoring well with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- System operational data table.

Section GW-2, In Situ Air Sparging Systems

A. In Situ Air Sparging System Operation

1. Number of air injection wells at the site and the number actually in use during the period: _____
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain):

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:

B. System Effectiveness Evaluation

1. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in B.1.a.

   a. Contaminant: _____

   b. Percent reduction necessary to reach ch. NR 140 ES and PAL: _____ %

   c. Maximum contaminant concentration level in any monitoring well: _____ µg/L

2. Is there any evidence that air is short circuiting through natural or man-made pathways? ◯ Yes ◯ No
   If yes, explain:

3. Is the size of the plume: ◯ Increasing ◯ Stabalized ◯ Decreasing ?
   If increasing, explain:

C. Additional Attachments

Attach the following to this form:

- Groundwater contour map.
- Groundwater contaminant distribution map (may be combined with contour map).
- When contaminants are aerobically biodegradable, attach a dissolved oxygen in groundwater map (dissolved oxygen may be combined with the contaminant data on a single map).
- Site map with all air injection wells and groundwater monitoring points.
- Graph of contaminant concentrations versus time for the contaminant listed in B.1.a. (above) for the monitoring point with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- System operational data table.

Section GW-3, Natural Attenuation (Passive Bioremediation) in Groundwater

A. Effectiveness Evaluation

1. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in A.1.a

   a. Contaminant: _____

   b. Percent reduction necessary to reach ch. NR 140 ES and PAL: _____ %

   c. Maximum contaminant concentration level in any monitoring well of that contaminant: _____ µg/L

2. Aquifer parameters:

   a. Hydraulic conductivity: _____ cm/sec

   b. Groundwater average linear velocity: _____ ft/yr

3. Is there a downgradient monitoring well that meets ch. NR 140 standards? ◯ Yes ◯ No

4. Based on water chemistry results, is the plume: ◯ Expanding ◯ Stabalized ◯ Contracting ?

5. If the answer in 4. (above) is "expanding," is natural attenuation still the best option? ◯ Yes ◯ No
   If yes, explain:

6. Biodegradation parameters:

   a. Upgradient (or other site specific background) DO level: _____ µg/L

   b. DO levels in the part of the plume that is most heavily contaminated _____ µg/L

7. Is site closure a viable option within 12 months from the date of this form? ◯ Yes ◯ No

8. Are there any modifications that can improve cost effectiveness? ◯ Yes ◯ No
   If yes, explain:

9. Have groundwater table fluctuations changed the contaminant level trends over time? ◯ Yes ◯ No
   If yes, explain:

10. Has the direction of groundwater flow changed during the reporting period? ◯ Yes ◯ No
    If yes, approximate change in degrees: _____

B. Additional Attachments

Attach the following:

- Groundwater contour map.
- Groundwater contaminant distribution map (may be combined with contour map).
- When contaminants are aerobically biodegradable, attach a dissolved oxygen in groundwater map (dissolved oxygen may be combined with the contaminant data on a single map).
- Graph of contaminant concentrations versus time for the contaminant listed in A.1.a. (above) for the monitoring point with the greatest level of contamination.
  Note: This is the minimum required graph; however, it is recommended that multiple time versus contamination concentration graphs as described in the instructions on page 24 for Natural Attenuation of Groundwater be submitted.
- Graph of contaminant concentrations versus distance.
- Groundwater contaminant chemistry table.
- Groundwater biological parameters.
- Groundwater elevations table.

Section GW-4, Other Groundwater Remediation Methods

A. Effectiveness Evaluation

1. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in A.1.a.

   a. Contaminant: _____

   b. Percent reduction necessary: _____ %

   c. Maximum contaminant concentration level in any monitoring well: _____ µg/L

2. Is the size of the plume: ◯ Increasing ◯ Stabalized ◯ Decreasing ?

3. Describe the method used to remediate groundwater at the site:

4. List any additional information required by the DNR for this method for this site:

B. Additional Attachments

Attach the following:

- Groundwater contour map.
- Groundwater contaminant distribution map (may be combined with contour map).
- When contaminants are aerobically biodegradable, attach a dissolved oxygen in groundwater map (dissolved oxygen may be combined with the contaminant data on a single map).
- Graph of contaminant concentrations versus time for the contaminant listed in A.1.a. (above) for the monitoring point with the greatest level of contamination.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- Any other attachments required by the DNR for this remediation method.

Section IS-1, Soil Venting (Including Soil Vapor Extraction, Building Venting and Bioventing)

A. Soil Venting Operation

Note: This form is not required for building vapor mitigation systems that are installed proactively to protect building occupants/users and are not considered part of ongoing active soil remediation.

1. Number of air extraction wells available and number of wells actually in use during the period: _____
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain):

_____

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:

_____

4. Average depth to groundwater: _____ gpm

B. Building Basement/Subslab Venting System Operation

1. Number of venting points available and number of points actually in use during the period: _____
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain):

_____

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:

C. Effectiveness Evaluation

1. Average contaminant removal rate for the entire system: _____ pounds per day
2. Average contaminant removal rate per well or venting point: _____ pounds per day
3. If the average contaminant removal rate is less than one pound per day for the entire system, or if the average contaminant removal rate per well is less than one tenth of a pound per day, evaluate the following:
   a. If contaminants are aerobically biodegradable and confirmation borings have not been drilled in the past year:
      i. Oxygen levels in extracted air: _____ percent
      ii. Methane levels in extracted air (ppm_V) If over 10 ppm_V, explain:

      _____

      iii. If methane is not present above 10 ppm_V and if oxygen is greater than 20 percent in extracted air, you should either:
      - Drill confirmation borings during the next reporting period, if the entire site should be considered for closure.
      - Or, perform an in situ respirometry test in a zone of high contamination. Do not perform the test in an air extraction well, use a gas probe or water table well. If a zero order rate of decay based on oxygen depletion is less than 2 mg/kg per day, then you should drill confirmation borings, if the entire site should be considered for closure. If the rate of decay is between 2 and 10 mg/kg, operate for one more reporting period before evaluating further. If the zero order rate of decay is greater than 10 mg/kg total hydrocarbons, continue operating the system in a manner than maximizes aerobic biodegradation.

   b. If contaminants are not aerobically biodegradable and confirmation borings have not been recently drilled during the past year, you should drill confirmation borings during the next reporting period if the entire site should be considered for closure.
   c. If soil borings were drilled during the past year and soil contamination remains above acceptable levels, explain if the system effectiveness can be increased and/or if other options need to be considered to achieve cleanup criteria.

D. Additional Attachments

Attach the following to this form:

- Well and soil sample location map indicating all air extraction wells. If forced air injection wells are also in use, identify those wells.
- If water table monitoring wells are present at the site, a map of well locations.
- Time versus vapor phase contaminant concentration graph.
- Time versus cumulative contaminant removal graph.
- Groundwater elevations table, if water table wells are present at the site; also list screen lengths and elevations.
- Table of soil contaminant chemistry data.
- Soil gas data, if gas probes are used to monitor subsurface conditions in locations other than where air is extracted.
- System operational data table.

Section IS-2, Natural Attenuation (Passive Bioremediation) in Soil

A. Effectiveness Evaluation

1. Soil gas information in the soil that is most contaminated from a permanently installed gas probe(s) or water table monitoring well(s).
   a. Hydrocarbon levels: _____ ppm, with an FID
   b. Oxygen levels: _____ percent
   c. Carbon dioxide levels(specify ppm or percent): _____
   d. Methane levels: _____ ppm
2. Soil gas information in background (uncontaminated soil) from permanently installed gas probe(s)or water table monitoring well(s):
   a. Hydrocarbon levels: _____ ppm, with an FID
   b. Oxygen levels: _____ percent
   c. Carbon dioxide levels(specify ppm or percent): _____
   d. Methane levels: _____ ppm
3. List the results of the single boring that had the highest levels of soil contamination during the last round of soil sampling, and the date those samples were collected. Since soil borings are only drilled periodically, list the most recent data even if the data is prior to this reporting period. Since this data is used to assess progress based on the most recent soil sampling event, do not list data from prior sampling events.
   a. Total hydrocarbons (Specify if GRO and/or DRO): _____ µg/kg
   b. Specific compounds (µg/kg):
      i. Benzene: _____ µg/kg
      ii. 1,2 Dichloroethane: _____ µg/kg
      iii. Ethylbenzene: _____ µg/kg
      iv. Toluene: _____ µg/kg
      v. Total xylenes: _____ µg/kg
4. Is there any evidence that contaminants are leaching into groundwater? ◯ Yes ◯ No
   If the answer is yes and if groundwater quality is not being monitored, explain:
5. Is site closure a viable option within 12 months from the date of this form? ◯ Yes ◯ No
6. Are there any modifications that can be made to the remediation to improve cost effectiveness? ◯ Yes ◯ No
   If yes, explain:

B. Additional Attachments

Attach the following to this form:

- Well and soil sample location map.
- Cross sections showing the water table, soil sampling locations, screened intervals for gas probes or water table wells, geologic contacts, and any former excavation boundaries.
- Graphs of contaminant concentrations, oxygen, carbon dioxide and methane levels over time.
- Groundwater elevations table, if water table wells are present at the site.
- Table of soil contaminant chemistry.
- Table of soil gas readings.

Section IS-3, Other In Situ Soil Remediation Methods

A. Effectiveness Evaluation

1. Describe the method used to remediate soil at the site:

2. List all information required by the DNR for this remediation method for this site:

B. Additional Attachments

Attach the following to this form:

- Any other attachments required by the DNR for this remediation method.

Section ES-1, Ex Situ Soil Treatment Using Biopiles

A. Effectiveness Evaluation

1. Volume of soil in the biopile (if multiple biopiles, list number of piles and total volume):

2. Monitoring used to assess progress and verify optimal conditions for biodegradation.
   a. Vapor phase measurements of gases (average of all readings from most recent sampling event):
      i. VOCs by FID: _____ ppm
      ii. Oxygen: _____ percent
      iii. Carbon dioxide: _____ percent
      iv. Methane: _____ ppm
   b. Soil temperature: _____ °F
   c. Soil moisture sensors, if used: _____ percent
3. Treatment amendments added to the soil during construction:
   a. Artificial nutrients, excluding manure.
      i. Types and total pounds added:

      ii. Nitrogen and phosphorous content of the added amendment: _____ percent
   b. Manure: _____ total pounds
   c. Natural organic materials (straw, wood chips, etc.)(type and total pounds):

4. Forced air biopiles only answer the following:
   a. Total air flow rate of the ventilation system: _____ scfm
   b. Average contaminant removal rate: _____ pounds per day
   c. Average biodegradation rate based on oxygen utilization: _____ pounds per day
5. If soil samples have been taken to monitor progress, list results. Only list the most recent results. If none collected enter NA.
   a. Total hydrocarbons. Specify if GRO and/or DRO: _____ µg/kg
   b. Specific compounds (µg/kg):
      i. Benzene: _____ µg/kg
      ii. 1,2 Dichloroethane: _____ µg/kg
      iii. Ethylbenzene: _____ µg/kg
      iv. Toluene: _____ µg/kg
      v. Total xylenes: _____ µg/kg

B. Additional Attachments

Attach the following to this form:

- Figure showing the construction details of the biopile and any sampling locations within the biopile.
- Table of soil contaminant chemistry data.
- Table of operational data.

Section ES-2, Ex Situ Soil Treatment Using Landspreading/Thinspreading

A. Effectiveness Evaluation

1. Method used: ◯ landspreading ◯ thinspreading

Note: For purposes of this form, "landspreading" is the placement of contaminated soil on native topsoil, incorporation of that soil into the native soil and planting crops or other plants on it. The term "thinspreading" refers to placing contaminated soil on an impervious base for aeration.

2. Was any progress monitoring using field screening on soil conducted during this reporting period? ◯ Yes ◯ No

3. If the answer to A.2. (above) is yes:

i. List monitoring method:

_____

ii. List monitoring results:

_____

4. Is there any evidence of soil erosion at the landspreading/thinspreading location? ◯ Yes ◯ No

5. Spreading thickness: _____ inches

6. Type of crop planted (if thinspreading with no crop planted, so state):

_____

7. Confirmation sampling date: _____ Anticipated confirmation sampling date: _____

8. Most recent soil sample results, if soil samples for laboratory analysis have been collected to monitor progress. Only list the highest result of the most recent sampling round. If no samples have been collected, enter NA.

a. Total hydrocarbons. Specify if GRO and/or DRO: _____ µg/kg

b. Specific compounds (µg/kg):

i. Benzene: _____ µg/kg

ii. 1,2 Dichloroethane: _____ µg/kg

iii. Ethylbenzene: _____ µg/kg

iv. Toluene: _____ µg/kg

v. Total xylenes: _____ µg/kg

B. Additional Attachments

Attach the following to this form:

- Map of the landspreading/thinspreading area. If soil samples have been collected, specify locations of samples and dates of sampling.
- Table of soil contaminant chemistry data.
- Table of any field screening results with dates of sample collection.

Section ES-3, Landfills

Note: Reporting forms or reporting requirements in a Department approved Operation and Maintenance Plan for a landfill may take the place of this form.

Specific Inspection Items	Potential Problem Areas	Status	Notes
Perimeter Security Fencing	Broken or missing wood slats, torn chain link fabric, barbed wire, other - list		
Entrance Gate and Locking Mechanism	Lock broken/missing, mechanism inoperative.		
Monitoring Wells and Wellhead Covers	Signs of tampering, casing damaged, lock missing.		
Final Cover Vegetation	Bare spots, stressed vegetation, deep rooted vegetation.		
Final Cover Slope (explain below)	Gullies, lack of vegetation, subsidence, ponding.		
Evidence of Burrowing Animals	Damage to final cover, evidence of waste.		
Stormwater Drainage Channels	Gullies, erosion, debris, culvert blocked.		
Passive Landfill Gas Venting System	Damaged or blocked vent risers, stressed vegetation.		
Active Landfill Gas Extraction System	Damaged or blocked piping, cleanouts, other blower flare, knockouts, etc.		
Leachate Collection System	Pumps, connection piping, collection system piping, extraction wells, collection tanks, tanker truck loading system or sanitary sewer discharge piping.		
Access Road Cover Mowing; Tall Vegetation Removal	Ponding, rutting, erosion, cracked or damaged pavement. Mowing and tall vegetation removal done to specified vegetation.		

Summary of Deficiencies and/or Corrective Actions:

B. Additional Attachments

Attach the following to this form:

- Any photographs documenting problems and maintenance activities.
- Maps, drawings showing site features requiring maintenance.
- Records for leachate pumping/discharge/hauling.
- Records for active gas extraction volumes.

Section INS- 1, Section by Section Instructions and Information

Specific Section by Section Instructions for This Form. The site name and reporting period is listed on every page. Then if the pages are inadvertently separated, that information can be used to determine which pages form the report.

General Site Information

-- A.1. List the name as it appears on the DNR tracking system. If the person filling out the form does not know what the name on the tracking system is, use the name that the DNR used in the most recent correspondence.

-- A.2. The reporting period should be either from January 1 to June 30 or July 1 to December 31 for active systems. For passive systems, use a calendar year basis. If however the report covers a newly installed system, list the actual startup date instead of January 1 or July 1. For new passive systems, use the first date that monitoring data is available as the date of startup.

-- A.3. Enter all regulatory agencies that regulate the site.

-- A.4. This form is a DNR form. For that reason, list the DNR site number. If there are other agencies regulating the site, listing identification numbers for other agencies is also recommended, but not mandatory, unless specified by those other agencies.

-- A.5. If the information listed for the site location is not sufficient information for a person to use to drive to a site (example: no street address in a rural area), also include a map that is sufficient for a person to use to drive to the site. A U.S. G.S. topographic map that shows the site location may be used.

-- A.8. List the contaminants that have at one time exceeded the PALs or Table Values in ch. NR 720. If GRO and/or DRO exceed the ch. NR 720 standards, also list GRO and/or DRO. Do not list other contaminants that have never exceeded state standards at the site. If more room is necessary, write "SEE ATTACHED SHEETS" and list all contaminants on a separate sheet.

-- A.9. List the predominant soil types that are contaminated. If there is both contaminated soil and groundwater at the site, list soil types both above and below the water table. If only some soil is contaminated, do not list the soil types that are uncontaminated. If the site soils meet soil cleanup criteria, but groundwater is contaminated, so state that. Specify if the USCS or USDA system is used for soil descriptions. This line specifies soil because the vast majority of contaminated sites do not have contaminated bedrock. If bedrock is contaminated, also list that bedrock type.

-- A.10. If the groundwater meets ch. NR 140 standards, enter "NA - NO NR 140 EXCEEDANCES". Otherwise, list the estimated hydraulic conductivity and the method used to estimate it (bail-down tests, calculations based on grain size, pumping test, etc.) If the hydraulic conductivity has not been determined, state when the tests are to be conducted. When a number of test results are available, list the range of results and the geometric mean. If however some results have a low level of accuracy and some results have a high level of accuracy, you should only list the most accurate results. See the Section on aquifer testing in the *Guidance on Design, Installation and Operation of Ground Water Extraction and Product Recovery Systems* for more information.

-- A.11. If the groundwater meets ch. NR 140 standards, enter "NA - NO NR 140 EXCEEDANCES". Otherwise, enter groundwater average linear velocity as a function of hydraulic conductivity, effective porosity and the groundwater gradient. You should use the geometric mean from A.11. (above) and the most representative value for the gradient at the site. Estimate the effective porosity based on soil types and geologic origin of the soil. If there are reasons to believe that the average liner velocity estimate is less than the actual rate at the site, so state that reason. Secondary porosity effects, flow through submerged utility trenches, widespread contaminant distribution in low permeability soils, etc., are reasons to assume that the actual migration rate is much greater than the predicted average linear velocity. In such cases, you should explain the reasoning for doubting the predicted average linear velocity.

-- A.12. If the information listed for the soil treatment location is not sufficient information for a person to use to drive to a site, also include a map that is sufficient for a person to use to drive to the site. A U.S.G.S. topographic map or a plat map that shows the site location may be used.

-- B. Check all methods used at a site. For example, if groundwater extraction, free product recovery and soil venting are used, check all three methods and submit the additional pages for those methods. If dual-phase or bioslurping are used, these methods extract both air and groundwater, check boxes for and attach additional pages for both soil venting and pump and treat.

-- C. Remediation systems that use any form of enhancement are considered "active" and sites where there are no enhancements of any kind are considered "passive" forms of remediation. For purposes of these forms, natural attenuation (also called naturally occurring bioremediation) is "passive" and all other remediation methods are "active" methods.

-- C.1. Design flow rates refers to flow rates such as gallons per minute extracted by a ground water extraction system, standard cubic feet per minute extracted by a soil venting system, standard cubic feet per minute injected by an in situ air sparging system, etc. If the actual flow rate is within 80 percent of the rate predicted in the design, consider that as meeting the design specification.

-- D. The cost data in this section is used by DNR staff to evaluate whether or not the selected remedy is the most cost effective remedy and whether or not system modifications may be warranted to improve efficiency and/or cost effectiveness. Responsible parties and consultants are encouraged to submit cost information so that DNR staff may assist responsible parties and consultants accomplish environmental cleanups in the most cost effective manner.

Total costs for past costs are all costs to date. This information is for all costs that were incurred to investigate and/ or remediate the site. These costs include but are not limited to: consulting labor and supplies, laboratory testing, transportation, equipment, etc. If the consultant does not pass all costs through the consulting firm, the consultant will need to contact their client for other non-consulting costs to determine total costs. Exceptions include costs for attorney fees, accounting, claim assistance in preparing claims to state reimbursement funds, or other indirect expenses that are not essential to remediating the site.

-- D.2. The initial implementation costs are all costs that are incurred to start implementing a remedy at a site. Costs for the investigation however are excluded because those costs are incurred prior to remedy selection. Since costs for treatability and/or pilot testing are used to procure data for remedial design and are specific to different remediation methods, these costs should be included in implementation costs and not investigation costs. Startup or shakedown costs are also considered implementation costs and should not be considered operation and maintenance costs.

-- D.3. Costs for implementation or investigation should not be repeated here or they will be double counted.

-- D.4. Costs for implementation or investigation should not be repeated here or they will be double counted.

-- D.5. Costs for implementation or investigation should not be repeated here or they will be double counted.

-- D.6. Examples of one-time or unusual costs include the following:
- Replacing a burned out motor on a pump.
- Replacement of a well that was destroyed by a snowplow.
- Confirmation sampling to determine if the site meets closeout criteria. This type of cost is considered an unusual cost because this type of sampling is not conducted during most reporting periods.

-- D.7. This estimate of costs is for all costs to close out a site minus the salvage value of any remediation equipment. Pertinent costs include items such as well abandonment, equipment removal from the site, consulting costs associated with these items, etc. Do not include any costs that will not be paid by a state reimbursement fund, such as repaving.

Section GW-1, Groundwater Extraction and Product Recovery

-- A.1. List two numbers, the total number of extraction wells at the site and the number that were in actual use during the period. If all wells were in use, state that on the form.

-- A.2. The number of days of operation are the number of days that the system was actually operated. If the system was shut down for reasons such as: repairs were necessary, piping froze, shut down to provide time for subsurface conditions to equilibrate before sampling, etc., do not list those days as being in operation.

-- A.3. System utilization is a measure of the amount of time that the system operated relative to the amount of time that it could have operated.

-- A.5. The average is for the entire site, not per well or trench. For purposes of determining the average ground water extraction rate, calculate the average based on the total volume of groundwater extracted divided by the time of the reporting period. For example, if the system operated at 10 gallons per minute for one month, the amount of water extracted would be approximately 432,000 gallons. If the reporting period was six months long, then the time period is approximately 260,000 minutes. Therefore, the average flow rate over six months is 432,000 divided by 260,000 minutes for an average flow rate of 1.67 gallons per minute (gpm).

-- A.6. Calculate the total dissolved contaminants removed in pounds. If the estimate is a sum of BTEX and not based on a total hydrocarbon test (GRO and/or DRO), so state that on the form.

-- B.3. The average should be based on the entire site over the entire reporting period. See instructions above for A.5. List the free product recovery rate as gallons per day (gpd), not gallons per minute (gpm).

-- C.1. To answer this question, a thorough evaluation of water levels and chemical analyses in all monitoring points at the site is necessary.

-- C.2. If the capture zone has not been determined mathematically, it will need to be determined to answer this question. See the *Guidance on Design, Installation and Operation of Ground Water Extraction and Product Recovery Systems* for and any recent update or errata sheets for more information on plume capture.

-- C.4. When free product is present, line C.4.a. should state "FREE PRODUCT" and lines C.4.b. through C.4.d. are left blank. Otherwise, complete the following calculations.
There typically are several compounds at most contaminated sites that exceed the standards in ch. NR 140. The purpose of this question is to focus on the single contaminant that requires the most treatment to achieve groundwater quality standards on a percent reduction basis. For example, the most recent round of sampling at an example site demonstrated the highest levels of contaminants were 1,000 µg/L benzene and 1,000 µg/L toluene in the most heavily contaminated monitoring well. The ES and PAL for benzene is 5 µg/L and 0.5 µg/L (respectively) and for toluene the ES and PAL is 343 µg/L and 68.6 µg/L (ES and PAL data as of August 1995). Therefore the percent reduction to meet the ES and PAL for benzene is 99.5 and 99.95 percent and for toluene it is 65.7 and 93.14 percent. For that reason, the single contaminant that is most critical to reaching state groundwater standards is benzene. Therefore benzene is entered on line a. In this example, 99.5 and 99.95 percent is entered on line b. In this example, 1,000 µg/L is entered on line c. In this example, benzene is the driving factor, therefore enter the maximum benzene level in the single most heavily contaminated extraction well during the most recent sampling period on line d.

-- D. See the generic discussion at the end of the instructions (below) for figures, graphs and tables, starting on page INS-2.

Section GW-2, In Situ Air Sparging

-- B.1. See instructions for Section GW-1, Item C.4.

-- C. See the generic discussion at the end of the instructions (below) for figures, graphs and tables, starting on page INS-2.

Section GW-3, Natural Attenuation in Groundwater

-- A.1. See instructions for Section GW-1, Item C.4.

-- A.2.a. List the estimated hydraulic conductivity that was listed on line A.11 in Section GI-1.

-- A.2.b. List the groundwater average linear velocity that was listed on line A.12 in Section GI-1.

-- A.3. Assess the monitoring well network to determine if there is a down gradient well that has not been impacted by the contaminants. Consider the possibility of a submerged (or diving) plume in that assessment. If all evidence indicates that the plume does not extend to the farthest "clean" downgradient well, indicate "YES" on the form. Otherwise indicate "NO" on the form. If there are not plans to install such a well, explain.

-- A.4. Based on the contaminant distribution, evaluate whether or not the plume is expanding, stabilized, or contracting. When making this determination, consider the contaminant that requires the greatest percent reduction to achieve ch. NR 140 standards.

-- A.5. If the plume is expanding and a justification is necessary, add additional sheets justifying why natural attenuation is still the appropriate remedy. If it is not, further describe in the explanation the plans to use a different remedy.

-- A.6.a. Enter the upgradient dissolved oxygen (DO) level(s). If however there are contaminants measured in the upgradient well, it is not a true background measurement. In that case enter "UNKNOWN" on the form.

-- A.6.b. Enter the range of DO values measured in wells within the plume.

-- B. See the generic discussion at the end of the instructions (below) for figures, graphs and tables, starting on page INS-2.

Section GW-4, Other Groundwater Remediation Methods

-- A.1. See instructions for Section GW-1, Item C.4.
-- A.2. Self explanatory.
-- A.3-4. Enter the information specified by the DNR for this method at this site.

Section IS-1, Soil Venting (Including both Soil Vapor Extraction and Bioventing)

-- B.3. This subsection is used as a trigger for determining if the system requires an evaluation for future activities, such as improvements, converting the site to monitoring for natural attenuation, closure, etc. If an in situ respiration test must be performed, see Hinchee, R.E. and Ong, S.K. 1992. A Rapid In Situ Respiration Test for Measuring Aerobic Biodegradation Rates of Hydrocarbons in Soil. *Journal of the Air and Waste Management Association.* Volume 42, Number 10. Pages 1305 to 1312 for general procedures. For a discussion of methane monitoring, see the instructions for Section IS-2, item A.1.d., below. If the contaminant extraction rate in B.3. is greater than the trigger levels, leave lines B.3.a.i. and B.3.a.ii. blank.

-- C. See the generic discussion at the end of the instructions (below) for figures, graphs and tables, starting on page INS-2.

Section IS-2, Natural Attenuation in Soil

-- A.1. This data is used to assess subsurface conditions based on soil gas data. Whenever possible, a permanently installed gas probe should be used. If at all possible, the gas probe should be located in the part of the site that is most heavily contaminated, since that is the part of the site that is likely to take the longest amount of time to meet ch. NR 720 standards. Water table wells that have screen exposed above the water table are also good measuring points. When installing permanent gas probes, you should install the screen deep enough that a true measure of the most heavily contaminated soil is possible, but install the screen shallow enough to assure that it is not submerged by groundwater table fluctuations. In some situations where the depth of contamination is variable, consideration should be given to using nested gas probes instead of only using probes at a single depth. Measuring points that should not be used include temporary gas probes because these points are less repeatable from one monitoring event to the next. Also, if there has been an active soil venting system in use at the site, the air extraction wells should not be used because these wells are in locations that have had much more aggressive treatment than the rest of the site.

-- A.1.a. A flame ionization detector (FID) is specified instead of a photo ionization detector (PID) because PIDs often read inaccurately in moist oxygen deficient/carbon dioxide rich atmospheres. Also, PIDs do not detect some petroleum compounds.

-- A.1.d. Methane readings are used to measure for anaerobic conditions. When the original product that is lost is a refined petroleum product (not crude oil), there should not be any methane within the product. Methane however may be produced under very anaerobic conditions. Any method may be used for measuring methane provided that the detection limit is less than a few ppm_V. One convenient method is to use an FID that is equipped with a granular activated carbon filter to filter out non-methane components. Some instrument manufacturers make these filters available as options. In some cases an FID will flame out due to an oxygen deficiency. Some instrument manufacturers offer a dilution device as an accessory that is designed to prevent flameouts and also raises the upper limit of measurement to 10,000 ppm_V or higher. If the meter "pegs" at 10,000 ppm_V (or one percent), enter ">10,000 ppm_V."

-- A.2. The background monitoring point is predominantly used to measure natural oxygen and carbon dioxide levels in soil over time. For this reason, the background monitoring point should be reasonably close to the site, but not so close that the conditions are no longer representative. Considerable variations over time can occur, this background point should be measured during every sample event. Considerations for determining if a background point is representative include:
- If an on-site background point has minor levels of VOCs in it due to gas phase diffusion, that is acceptable, but if the levels are high, it may not be representative of true background conditions.
- Background oxygen and carbon dioxide levels vary with soil type and natural organic carbon content. For this reason, if at all possible, the soil types should be identical within the screened interval of all gas probes.
- The same depths should be used for all gas probes to allow comparison from one location to the next. If the depth to water varies greatly across the site, a certain amount of confusion in the data is likely. In this case, use professional judgement to provide the best data possible at a reasonable cost.

-- A.3. Enter this data for petroleum fuel sites. For other sites, provide the data that is most appropriate for the situation.

-- B. Cross sections are self explanatory, see the generic discussion at the end of the instructions (below) for other attachments.

Section IS-3, Other In Situ Soil Treatment Methods

-- A.2. Enter the information specified by the DNR for this method at this site.

Section ES-1, Ex Situ Soil Treatment Using Biopiles

-- A.3.a. The term "artificial nutrients" essentially means agricultural fertilizers or any other fertilizer products.

-- A.3.a.i. The types of fertilizers that are added should be listed here by chemical names, not by vendor trade names.

-- A.3.a.ii. List nitrogen content as N, list phosphorous content as phosphoric acid (P_2O_5). Note: Fertilizer ratings are based not on actual content of N, P and K, but on nitrogen (as N), phosphorous (as P_2O_5) and potassium (as K_2O).

-- A.4.c. See example calculations at the end of this set of instructions.

-- A.5. Enter this data for petroleum fuel sites. For other sites, provide the data that is most appropriate for the situation.

-- B. The figure is self explanatory. See the generic discussion at the end of the instructions (below) for instructions for the tables.

Section ES-2, Ex Situ Soil Treatment Using Landspreading/Thinspreading

-- B. A map to scale of the landspreading location including and landmarks or benchmarks. When samples have been collected, the distances to any landmarks or benchmarks should be indicated.

Section ES-3, Other Ex Situ Soil Treatment Methods

-- A.2. Enter the information specified by the DNR for this method at this site.

Section INS- 2, Figures, Graphs and Tables

When figures and graphs are specified, they should at a minimum contain the following information, or an explanation as to why the information is not necessary.

Maps. All maps should include the applicable information specified in s. NR 724.11(6), Wis. Adm. Code. In most cases, all information can be combined into a single map. There are times that a single map will have so much data that it is essentially unreadable. The consultant should use professional judgement when determining if a single map or multiple maps best portray the information necessary.

- Groundwater Contour Map Guidelines.

  -- List groundwater elevations for each measuring point on the map.
  -- Use the most recent data available.
  -- For water table maps, do not use data from deeper piezometers. If piezometer data is shown, use a different symbol for the piezometers than used for water table wells.
  -- If any wells are dry, indicate that on the map.
  -- If free product is present at site, shade the area where free product is estimated to be present.
  -- If groundwater is extracted with a pump and treat system, also denote plume capture zone.
  -- If in situ air sparging or soil venting is in use, specify on the map if the system was operating or shut down during the water level measurements. See the Subsection on water table maps in the *Guidance on Design, Installation and Operation of Ground Water Extraction and Product Recovery Systems* for more information on this topic.

- Groundwater Contaminant Distribution Map Guidelines.

  -- Only contaminants that exceed the ch. NR 140 ES or PAL should be shown on the map. When contaminants are above the PAL or ES at some data points and below the PAL or ES at other data points, list the data for all locations to portray which areas of the site meet ch. NR 140 groundwater quality standards.
  -- If a well is not sampled due to the presence of free product indicate "FREE PRODUCT" at those data points.
  -- If more than five contaminants exceed ch. NR 140 ES, only the five contaminants that require the greatest percent reduction to achieve ch. NR 140 ES or PAL should be shown on the map.
  -- Drawing isoconcentration lines is optional, unless specified for the site on a site specific basis.
  -- If the contamination has crossed the property line, that property line should be clearly denoted on the map.
  -- If in situ air sparging is used, water samples from ch. NR 141 type monitoring wells may not represent aquifer water quality as a whole. For that reason, groundwater data should be obtained from driven probes with no filter pack. If there are no driven probes and conventional ch. NR 141 monitoring wells are used, shut down the air injection system at least two weeks prior to collecting groundwater samples. See the *Guidance on Design, Installation and Operation of In Situ Air Sparging Systems* and the August 1995 update sheets for more information on this topic.

- Dissolved Oxygen Map Guidelines.

  -- Dissolved oxygen data may be shown on the contaminant concentration graphs or on a separate graph.
  -- Dissolved oxygen maps are optional for ground water extraction and product recovery systems.
  -- When in situ air sparging is used, monitoring points may not represent aquifer water quality as a whole. For that reason, groundwater data should be obtained from driven probes with no filter pack. If there are no driven probes and conventional ch. NR 141 monitoring wells are used, shut down the air injection system at least two weeks prior to collecting groundwater samples for DO. See the *Guidance on Design, Installation and Operation of In Situ Air Sparging Systems* and the August 1995 update sheets for more information on this topic.

- Well and Soil Sample Location Map Guidelines. Well and sample location maps for all methods should clearly indicate the location(s) of the release or the area where soil contamination historically has been highest. Also, if part of the contamination has been excavated, the pit boundaries.

  The recommended documentation for each remedial method is as follows:

  -- Groundwater Extraction and Product Recovery - separate well location maps should not be provided, instead the wells should be indicated on the groundwater contour and contaminant distribution maps.
  -- In Situ Air Sparging - the map should indicate all air injection wells, soil venting extraction wells, and all groundwater monitoring points.

Maps (Continued).

-- Natural Attenuation in Groundwater - separate well location maps should not be provided, instead the wells should be indicated on the groundwater contour maps.
-- Soil Venting - indicate all air extraction wells. If any gas probes are used to assess subsurface conditions in either contaminated zones or background locations, also indicate those data points with a different symbol. If soil samples have been collected recently to track progress, indicate those locations with the date of sampling noted on the map.
-- Natural Attenuation in Soil - show all monitoring points. Indicate which data points are background measuring points. If soil samples have been collected recently to track progress, indicate those locations with the date of sampling noted on the map. If the site was previously treated by soil venting, the locations of former air extraction wells should also be shown since these are areas where aggressive treatment has been applied. Also show area(s) of paved and unpaved ground surface. If pavement is significantly broken to allow significant water infiltration and air diffusion, map that area as broken pavement.

Graphs. All graphs that show time versus contaminant concentration or cumulative contaminant removal should be based on total time, not only operation time. All graphs that denote cumulative removal should use pounds of contaminant removed. Graphs should accurately show the time period(s) when the system was not operating. Plot time on the X axis, concentration or cumulative removal data on the Y axis.

- Time Versus Cumulative Removal. The recommended documentation for each remedial method is as follows:

  -- Groundwater Extraction and Product Recovery - separate graphs should be used for free product recovery and dissolved phase recovery. A single graph for each phase is adequate, per well graphs are only necessary when specified by the Department on a site specific basis.
  -- In Situ Air Sparging - no graph is necessary (removal data is shown on the graphs for the soil venting system).
  -- Natural Attenuation in Groundwater - no graph is necessary.
  -- Soil Venting - provide a graph of cumulative removal for total VOCs for the total system.
  -- Natural Attenuation in Soil - no graph is necessary.
  -- Ex Situ Soil Treatment Using Biopiles - Provide two graphs, one showing cumulative removal of total VOCs and a second graph showing total contaminant biodegradation over time.
  -- Ex Situ Soil Treatment Using Landspreading/Thinspreading - no graphs are needed.

- Time Versus Contamination Concentration Graphs. Create graphs with contamination level on the y axis (semilog scale) and time on the x axis (linear scale). If free product is present, time versus contamination concentration graphs are not necessary.

  The recommended documentation for each remedial method is as follows:

  -- Groundwater Extraction and Product Recovery - graph the contaminant level over time for the groundwater that is extracted by the extraction system. List all compounds that exceed ch. NR 140 ES or PAL. If over five contaminants exceed ch. NR 140 ES or PAL, only list the five contaminants that exceed ch. NR 140 standards by the greatest percent.
  -- In Situ Air Sparging - provide a graph for the single monitoring well that is most heavily contaminated. If over five contaminants exceed ch. NR 140 ES or PAL, only list the five contaminants that exceed ch. NR 140 standards by the greatest percent.
  -- Natural Attenuation in Groundwater - provide a graph for all monitoring wells that contain any compounds that exceed ch. NR 140 standards. If over five contaminants exceed ch. NR 140 ES or PAL, only list the five contaminants that exceed ch. NR 140 standards by the greatest percent.
  -- Soil Venting - provide a graph of contaminant concentration over time for the entire system for total VOCs. If any gas probes are used to assess subsurface conditions in either contaminated zones, also provide a graph with the data from the most heavily contaminated gas probe.
  -- Natural Attenuation in Soil - provide a graph of contaminant concentration over time for total vapor phase VOCs as measured with an FID, oxygen, carbon dioxide and methane in an gas probe.
  -- Ex Situ Soil Treatment Using Biopiles - no graph is necessary.
  -- Ex Situ Soil Treatment Using Landspreading/Thinspreading - no graphs are needed.

Graphs (Continued).

- Graph of Contaminant Concentrations Versus Distance. If free product is present, a graph of contaminant concentrations versus distance is not necessary.

The recommended documentation for each remedial method is as follows:

-- Groundwater Extraction and Product Recovery - no graph is necessary.
-- In Situ Air Sparging and Natural Attenuation in Groundwater - plot a graph with distance (on the x axis, linear scale) and contaminant concentrations (y axis, log scale) from the upgradient measurement point to the farthest downgradient data point along the centerline of the plume. List the same contaminants as shown on the Time Versus Contaminant Concentration Graphs. Clearly show the source area on the graph. If free product has been present, label the data points that previously contained free product. For in situ air sparging, see comments above about samples collected from conventional monitoring wells with filter packs versus driven probes.

Tables. Whenever possible, data over the life of the project should be listed.

The recommended documentation for each type of table is as follows:

- Groundwater Contaminant Chemistry Data.

List:
-- Contamination levels for all contaminants that exceed ch. NR 140 standards.
-- Dissolved oxygen levels if applicable.
-- Other biological parameters, if applicable (nitrogen, phosphorous, manganese, sulphate, iron, dissolved methane, redox potential, pH, microbial population size, etc.). See instructions for page GW-3 for more information on these parameters. Also, list the dates the samples were collected and the standard methods used to analyze the samples.

- Groundwater Biological Parameters.

For natural attenuation in groundwater only, these measurements should be listed (if known) to provide information on biodegradation. This table is not necessary for free product extraction, groundwater extraction or in situ air sparging.

Provide a table that includes any results of tests conducted for dissolved oxygen, nitrate, manganese, iron, sulphate, methane, redox potential, heterotrophic and/or hydrocarbon degrading microorganism populations. Identify on the table if the monitoring locations are upgradient, side gradient, downgradient, or within the plume, dates of sampling, and the analytical methods used for those parameters. Include all data for the life of the project. Since some of these tests are only conducted once, or periodically - enter "NS" in the table for not sampled for any parameters that were not sampled during a particular round of sampling.

When asked to list the standard methods, list the method if a standard method exists. There are however some tests (for example dissolved methane) where there are no official standard laboratory or field methods. In this case the laboratory will have to create their own standard procedures. In these cases list the name of the laboratory and that laboratory's name for that test.

Specific considerations for each parameter are as follows:

-- Dissolved oxygen (mg/L). The most efficient mechanism for natural or enhanced biodegradation of petroleum compounds is aerobic biodegradation.
-- Nitrate (mg/L as N). Nitrate (NO_3^{-1}) is a potential electron acceptor for denitrification and also serves as a nutrient for heterotrophic microbial populations to enhance aerobic biodegradation. Decreasing nitrate levels from background wells to wells within the plume are an indication of either aerobic or anaerobic biodegradation.
-- Manganese as Mn^{+2} (mg/L). Manganese as Mn^{+4} is converted to soluble manganese as Mn^{+2} under anaerobic biodegradation. For this reason, total manganese analysis is not appropriate, only soluble manganese as Mn^{+2}. When the levels of soluble manganese are higher in wells within the plume than in background wells, that is an indication of anaerobic biodegradation.
-- Iron as Fe^{+2} (mg/L). Iron as Fe^{+3} is converted to soluble iron as Fe^{+2} under anaerobic biodegradation. For this reason, total iron analysis is not appropriate, only soluble iron as Fe^{+2}. When the levels of soluble iron are higher in wells within the plume than in background wells, that is an indication of anaerobic biodegradation.

Tables (Continued).

- -- Dissolved sulphate (SO_4^{-2}, mg/L). Sulphate (SO_4^{-2}) is a potential electron acceptor. Decreasing sulphate levels from background wells to wells within the plume are an indication of anaerobic biodegradation.
- -- Dissolved methane (mg/L). Methane is produced under anaerobic conditions. Since background methane levels can usually be assumed to be zero, in most cases only measurements within the plume are used. Exceptions are when the natural soils have very high levels of TOC (for example peat), background methane levels are also warranted. When the contaminant is crude oil instead of a refined petroleum product, methane measurements may however cause erratic results. Significant amounts of methane may be created when other electron acceptors (NO_3^{-1}, Mn^{+4}, Fe^{+3} and SO_4^{-2}) are exhausted. For this reason, significant levels of methane are indicative of very very anaerobic conditions.
- -- Redox potential (millivolts, include + or - sign). Redox potential is another measure of the level of aerobic/anaerobic conditions, however it is a much more sensitive measurement than DO at very low levels of DO.
- -- Heterotrophic and hydrocarbon degrading microorganism populations (CFU/mL). Heterotrophic and specific hydrocarbon degrader population sizes should be listed for both background locations and locations within the plume, if there is information available. There is disagreement by many of the experts within the field as to the merits of sampling for this parameter. Refer to other DNR guidance documents on natural attenuation (or passive bioremediation) for more information on this topic.

- Soil Gas Data.

The recommended documentation for each remedial method is as follows:

- -- When natural attenuation in soil is used, provide a graph of all soil gas readings over time for every data point.
- -- When soil venting is used, if a gas probe is used to assess subsurface conditions over time in a location where air is not extracted, provide that data in a table.

- System Operational Data.

The recommended documentation for each remedial method is as follows:

- -- Groundwater Extraction and Product Recovery:
  - Well by well flow rates in gpm for each extraction well. If a well is off line, list flow rate as "ZERO." Clearly denote on the table periods of system shutdown.
- -- In Situ Air Sparging:
  - Air pressure and injection flow rates in scfm for each well. If a well is off line, list flow rate as "ZERO." Clearly denote on the table periods of system shutdown.
- -- Natural Attenuation in Groundwater - no table needed.
- -- Soil Venting:
  - Vacuum readings and extraction rates in scfm for each well. If a well is off line, list flow rate as "ZERO." Clearly denote on the table periods of system shutdown.
  - Air concentrations in ppm_V or in mg/L for total VOCs.
  - Total system contaminants removed in pounds and the pounds per day removal rate.
- -- Natural Attenuation in Soil - no table needed.

Tables (Continued).

-- Ex Situ Soil Treatment Using Biopiles:

- If forced air ventilation is used:
  - System extraction rates in scfm.
  - Air concentrations in ppm_v for total VOCs.
  - Total system contaminants removed in pounds and the pounds per day removal rate.
  - Temperature.
- If passive ventilation is used, a table of temperatures.

-- Ex Situ Soil Treatment Using Landspreading/Thinspreading - no table is needed.

Acronyms and Abbreviations:

CFU/mL	colony forming units per milliliter
cm/sec	centimeters per second
DATCP	Department of Agriculture, Trade and Consumer Protection
DCOM	Department of Commerce
DNR	Department of Natural Resources
DO	Dissolved Oxygen
DRO	Diesel Range Organics
ES	Enforcement Standards in NR 140
FID	Flame Ionization Detector
ft/yr	feet per year
gpd	gallons per day
gpm	gallons per minute
GRO	Gasoline Rage Organics
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NR	prefix for rules established by the DNR
P.E.	Registered Professional Engineer
P.G.	Registered Professional Geologist
PAL	Preventative Action Limit in NR 140
PECFA	the state sponsored cleanup fund for certain petroleum contaminated sites
ppm_v	parts per million by volume (vapor phase only)
scfm	standard cubic feet per minute
TOC	Total Organic Carbon
USCS	Unified Soil Classification System
USDA	United States Department of Agriculture
µg/kg	micrograms per kilogram
µg/mL	micrograms per milliliter
VOC	Volatile Organic Compounds
Y/N	Yes or No

Section INS-3, Example Calculations for Determining the Biodegradation Rate on Forced Air Biopiles

Important Note: This page uses a nonproportional font and characters that are unique to WordPerfect. If the user received this document electronically, this page may need to be converted to a different font for the formulas to print correctly. The original font used for this page was prestige elite with 16.67 characters per inch.

Assumptions:

- The measurements at the stack are as follows:
  - -- Average flow rate is 20 scfm.
  - -- Average oxygen level extracted from biopile is 14.0 percent by volume.
  - -- Average carbon dioxide level extracted from biopile is 3.5 percent by volume or 35,000 ppm_V.
- Atmospheric air contains 21 percent oxygen by volume and 400 ppm_V (or 0.04 percent) carbon dioxide. (Note: On each site visit, the consultant should check atmospheric air to assure that the instrument is spanned correctly.)
- Atmospheric air weight 0.0763 pounds per cubic foot at standard temperature and pressure (Gibbs, 1971).
- Average molecular weight of air is 28.97 (Gibbs, 1971) which is rounded off to 29, molecular weight of O_2 is 32, molecular weight of CO_2 is 44.
- For every pound of contaminants biodegraded, 3.3 pounds of oxygen is utilized and up to 3.2 pounds of carbon dioxide is generated.
  - -- The stoichiometry of aerobic benzene biodegradation can be described as follows:

    $$C_6H_6 + 7.5\ O_2 \text{ -- -- -->} 6\ CO_2 + 3\ H_2O$$

    Based on this, benzene biodegradation requires that 3.07 pounds of oxygen are utilized to fully oxidize one pound of benzene, assuming no electron acceptors other than oxygen are used. Assuming no biomass is produced and no geochemical reactions consume carbon dioxide, 3.38 pounds of carbon dioxide is generated from one pound of benzene.
  - -- The stoichiometry of aerobic hexane biodegradation can be described as follows:

    $$C_6H_{14} + 9.5\ O_2 \text{ -- -- -->} 6\ CO_2 + 7\ H_2O$$

    Based on the above assumptions, hexane biodegradation requires 3.52 pounds of oxygen and generates up to 3.06 pounds of carbon dioxide.

  Other hydrocarbons also require a similar ratio of oxygen for aerobic biodegradation. For purposes of this guidance it is assumed that a pound of petroleum contamination requires 3.3 pounds of oxygen and generates up to 3.2 pounds of carbon dioxide and 1.1 pounds of water in the biodegradation reaction.

Calculations:

Oxygen utilization rate:

$$(0.21 - 0.14) * \frac{32}{29} * 0.0763 \frac{\text{pounds}}{\text{ft}^3} * 20 \frac{\text{ft}^3}{\text{min}} * 60 \frac{\text{min}}{\text{hour}} * \frac{\text{pounds}}{\text{hour}} = 7.07$$

Carbon dioxide production rate:

$$(0.035 - 0.0004) * \frac{44}{29} * 0.0763 \frac{\text{pounds}}{\text{ft}^3} * 20 \frac{\text{ft}^3}{\text{min}} * 60 \frac{\text{min}}{\text{hour}} * \frac{\text{pounds}}{\text{hour}} = 4.81$$

Calculations (Continued):

Biodegradation rate based on oxygen:

7.07 / 3.3 = 2.1 pounds per hour

Biodegradation rate based on carbon dioxide:

4.81 / 3.2 = 1.5 pounds per hour

Since the biodegradation rate is based on oxygen utilization and/or carbon dioxide generation, it is a measure of the overall biodegradation rate of all carbon sources, including natural organic carbon and any organic materials that were added. For this reason, the biodegradation rate is not specific to hydrocarbons and it is likely that the measured biodegradation rate will overestimate the rate of contaminant reduction.

Commonly the measured biodegradation rate based on carbon dioxide generation is less than the rate estimated with oxygen. Because of geochemical interferences and biomass formation, estimates based on carbon dioxide measurements are often low. If however the biodegradation rate estimate based on carbon dioxide is significantly greater than the estimate based on oxygen, it is likely that there is a measurement or calculation error. In this way, the carbon dioxide measurements can be used to double check the oxygen measurements and calculations.