Semi-Annual Operation & Maintenance Report

Report #37 (November 2007 – April 2008)

N.W. Mauthe Superfund Site

Prepared for

Wisconsin Department of Natural Resources
Bureau for Remediation & Redevelopment

June 4, 2008

WDNR BRRTS Number 02-45-000127

ENGINEERING • ARCHITECTURE • ENVIRONMENTAL

OMNI ASSOCIATES

ENGINEERING
ARCHITECTURE
ENVIRONMENTAL

engineering innovation
EST.1968 OMNNI ASSOCIATES

OMNNI ASSOCIATES, INC.
ONE SYSTEMS DRIVE
APPLETON, WI 54914-1654
800-571-6677 • 920-735-6900
FAX 920-830-6100
WWW.OMNNI.COM

June 5, 2008

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

RE: Semi-Annual Operation & Maintenance Report, N.W. Mauthe Property,BRRTS ID #02-45-000127.

Dear Ms. Borski:

Enclosed please find three copies of the Semi-Annual Operation & Maintenance Report for the N.W. Mauthe site, located at 725 S. Outagamie Street, Appleton, Wisconsin. The enclosed report outlines the operation and maintenance activities from November 1, 2007 to April 30, 2008.

If you have any questions on the enclosed information, please contact me at 920/830-6141 or by email at bwayner@omnni.com.

Sincerely,
OMNNI Associates, Inc.

Brian D. Wayner

Brian D. Wayner, P.E.
Environmental Manager

Enclosures

Borski, Jennifer - DNR

From: Brian Wayner [Brian.Wayner@omnni.com]
Sent: Thursday, June 05, 2008 3:19 PM
To: Borski, Jennifer - DNR
Subject: Mauthe

Three copies of the Mauthe O&M report will be sent out by UPS today. I am planning on making some changes for the next report, but I already put in about four times what I had in the budget for the report and I also did not want to take any longer getting it to you. I cleaned up the tables, but I think the graphs and figures could use some additional work next time.

The package will also include the monthly status report/invoice, the invoice for the doors, and the invoice for the coordination associated with the doors.

If you have any questions when you receive the package, please contact me.

Brian Wayner, P.E.
Environmental Manager

OMNNI Associates, Inc.
One N. Systems Drive, Appleton, WI 54914-1654
800.571.6677, 920.830-6141 (D), 920.830-6100 (F)
bwayner@omnni.com

Semi-Annual Operation & Maintenance Report

N.W. Mauthe Superfund Site
Conducted For
The Wisconsin Department of Natural Resources

Report #37
(November 2007 – April 2008)

N.W. Mauthe Site
725 S. Outagamie Street
Appleton, Wisconsin 54914-5072

Prepared by:
OMNNI Associates, Inc.
One Systems Drive
Appleton, WI 54914-1654
(T) 920/735-6900
(F) 920/830-6100
www.omnni.com

June 4, 2008

Table of Contents

List of Appendices

Background Information

Site Location

The N. W. Mauthe (Mauthe) property is located at 725 South Outagamie Street, Appleton, Wisconsin 54914-5072. The project is located in the NE¼, NW¼, Section 34, T21N, R17E, Outagamie County. (See Figure 1 – Site Location Map, Appendix 1.)

Site History

The Mauthe site was a former electroplating facility. The facility consisted of a zinc building and a chromium building. Zinc, cadmium, copper, and possibly silver were electroplated in the zinc building from 1978 to 1987. Hard chromium plating was conducted in the chromium building from 1960 to 1976. In 1982, the Wisconsin Department of Natural Resources (WDNR) received a report that yellowish-green water was observed south of the chromium building. Apparently, for several years plating solutions and waste solvents had leaked from holding vats and tanks, and sump pumps allegedly discharged plating tank solutions onto the ground outside the facility.

The WDNR began an investigation of the site in April 1982. A shallow groundwater collection system was installed parallel to the railroad tracks in May 1982, where groundwater and surface water were collected for two years. The Mauthe site was added to the National Priorities List in 1989.

From November 1991 to May 1992, CH2M HILL performed a Remedial Investigation (RI) for the WDNR. The RI showed the greatest concentrations of soil and groundwater contamination in the area around the zinc and chromium buildings. The chemicals most often detected above background levels or state standards included total chromium, hexavalent chromium, zinc, cadmium, cyanide, trichloroethene, 1,1,1-trichloroethane, 1,1-dichloroethene, and toluene. Subsurface soil contamination was detected up to 25 feet deep near the former buildings. Groundwater contamination extended over most of the block bordered by Melvin, Outagamie, and Second Streets.

CH2M HILL conducted a feasibility study for the WDNR. A Record of Decision (ROD) was signed in March 1994. Remedial design/remedial action activities took place at the Mauthe site in a phased approach. Phase I, which took place in 1995, included:

- Demolition and removal of the buildings on the Mauthe property.
- Excavation and off-site treatment of soils with a total chromium concentration of greater than 500 mg/kg.
- Backfilling of the excavation with clean soils, capping the site with 2-feet of clay and topsoil, and the establishment of vegetative cover.
- Installation of groundwater collection trenches and construction and operation of a groundwater treatment facility to contain and/or control groundwater contamination with ultimate compliance with groundwater Applicable or Relevant and Appropriate Requirements (ARAR's).
- Improvement or installation of foundation drain systems and cleaning, painting or sealing of basement walls and floors, as needed, for homes or businesses in the area of the site, to prevent seepage of contaminated water into the buildings.

Phase II, which took place in 1996, involved the construction of a groundwater treatment system, which began operation in February 1997.

Midwest Contract Operations, Inc. (MCO) began operating the groundwater treatment system in February 1997. CH2M Hill, the site engineer and project manager for the United States Environmental Protection Agency (EPA), retained responsibility for the overall site operations and the groundwater monitoring wells associated with the treatment system.

In October 1998, after the first year of operation and maintenance of the remediation system, the WDNR assumed the responsibility from the EPA for all operation and maintenance of the site. MCO was retained by the WDNR for the operation and maintenance of the groundwater treatment system, including the groundwater monitoring wells.

In January 2005, the WDNR requested OMNNI Associates, Inc. (OMNNI) provide an evaluation of the groundwater collection and treatment system at the Mauthe site. The installation of four piezometers (PZ-5, PZ-6, PZ-7 and PZ-8) was part of the evaluation to understand the extent of contaminants in the soil and groundwater. OMNNI installed five additional monitoring wells (MW-109 through MW-113) on May 24, 2006, to further understand the extent of contaminants in the soil and groundwater in the former source area.

The results of the additional investigation conducted show contamination remains in the soil above ch. NR 720 Wis. Adm. Code levels, in the groundwater above ch. NR 140 Wis. Adm. Code enforcement standards, and in the groundwater above the ARARs established for the Mauthe site. Groundwater does not appear to be impacted at depth based on the piezometer groundwater analysis.

Active treatment of collected groundwater ended on April 18, 2006 with approval for direct discharge by the City of Appleton. Collected groundwater is now discharged directly to the sanitary sewer system for treatment at the City of Appleton waste water treatment facility.

On October 13, 2007 MCO discontinued operational responsibilities of the system. OMNNI began operational responsibilities on October 14, 2007.

Site Description

The site is located within the City of Appleton limits in an area of mixed commercial, light industrial and residential properties. The property is approximately one acre in size and triangular in shape. (See Figure 2 – Site Detail Map, Appendix 1.) Melvin Street borders the site to the north, a parking lot owned by Miller Electric and Manufacturing Company is on the west, and railroad tracks are on the southeast. Private residences are located north of Melvin Street and south of the railroad tracks. The former zinc building was located on the northeast portion of the property. The former chromium building was located on the southwest portion of the property. Approximately half of the land immediately surrounding the site contains impervious structures or paved roads and parking areas.

Groundwater Collection System

The groundwater collection system consists of three trenches. The west trench crosses the Miller Electric property to the west of the site and is approximately 200 linear feet in length. The central trench runs south of the site parallel to the railroad and is approximately 280 linear feet in length. The southeast trench runs along Second Street and Outagamie Street and is approximately 600 linear feet in length. (See Figure 2 – Site Detail Map, Appendix 1.)

The groundwater treatment system was designed to capture groundwater containing contaminants at concentrations greater than 1992 ch. NR 140, Wis. Adm. Code preventative action limits (PALs) as

approved in the ROD. The west trench and southeast trench were located outside the estimated extent of the groundwater contamination and are designed to prevent further migration of groundwater contamination. The central trench was designed to collect contaminated groundwater and prevent further migration of the groundwater contamination off-site.

Groundwater enters the trenches based on the head differential between the local water table and the level maintained in the trench. The trenches are backfilled with course sand. A 6-inch perforated high-density polyethylene collection pipe in the bottom of the trench drains water from the trench to manholes where the water is collected and pumped to the groundwater treatment facility.

In normal operation, the water level in the trenches is maintained at or near the bottom of the trench. The trenches can provide storage and continue to act as a hydraulic barrier until the water in the trench rises to the level of the water table. This storage capacity can be taken advantage of if the collection/treatment system needs to be shut down for repair or maintenance for a short period of time.

Three properties south and southeast of the facility have foundation drain systems that are connected to the groundwater collection system via gravity piping (801 S. Outagamie Street, 1410 W. Second Street, and 1414 W. Second Street). Additionally, the sump pump discharge at 1428 W. Second Street is connected to the collection system.

Groundwater collected in the west trench flows by gravity to manhole 1 where the maximum depth of the trench extends approximately 32 feet below ground surface (fbgs). Groundwater in the central and southeast trenches flows by gravity to manhole 2, where the maximum depth of the trench extends approximately 31 fbgs. Groundwater from the manholes is piped to the treatment facility. (See Figure 3 – Site Detail Map, Appendix 1.)

Groundwater Treatment System

From February 1997 through April 18, 2006, the treatment system operated in a manual batch system mode. The groundwater treatment system was designed to be a fully automated batch treatment process designed for control of total chromium. Each batch operation was capable of treating 2,700 gallons of influent groundwater and took approximately six hours to complete a cycle (i.e., from the start of filling the reaction tank to finishing the discharge to the City of Appleton sanitary system). The system was capable of treating 10,800 gallons in a 24-hour period.

Pumps located in the two manholes convey groundwater from the collection trenches into the storage tank. Float switches control water levels in the manholes. The pumps have a pumping capacity of 43 gallons per minute (gpm) each.

A storage tank stores water from the collection system to provide equalization of the groundwater. The storage tank has a 9,000 gallon capacity. A top-mounted, turbine type, constant speed mixer, for mixing the tank contents and keeping solids in suspension, is located on the tank. An ultrasonic level indicator monitors the water level in the tank. The water level of the storage tank is monitored by the programmable logic controller (PLC).

Prior to the start of direct discharge on April 18, 2006, the reaction tank feed pump transferred groundwater from the storage tank to the reaction tank. The reaction tank feed pump is an air

operated, double diaphragm pump with an 86 gpm capacity. The reaction tank feed pump is sized to fill the reaction tank working volume (2,700 gallons) in approximately 30 minutes.

The reaction tank has a capacity of 6,100 gallons. The conical bottom of the tank allows for the collection and transfer of sludge. The volume of water treated during a batch process is approximately 2,700 gallons. Chemical and physical processes for the groundwater treatment occurred in the reaction tank. The water was treated by batch process in the reaction tank as follows: decant, fill, ferrous sulfate addition, caustic addition, aeration, flocculation, settling, and sludge withdrawal.

The above systems are the primary parts in the treatment process. However, there are several other components necessary for the successful treatment of contaminated groundwater. They include: reaction tank mixer, reaction tank level detector, reaction tank air diffuser, reaction tank pH monitor, air compressor, ferrous sulfate feed system, caustic feed system, sludge transfer pump, sludge tank, and tanker truck feed pump. These components were monitored and/or controlled by the PLC in the master control panel. Only the tanker transfer pump and the air compressor are locally controlled. The system was designed to provide continuous batch process treatment if required.

The master control panel includes: failure annunciators, pH strip chart recorder, data access module, autodialer, PLC system, and uninterruptible power supply. The master control panel will also sound an audible alarm if an upset in the process or a failure is detected.

Although the system was designed to be a fully automated batch treatment process, the City of Appleton industrial user permit formerly required treated groundwater to be tested for hexavalent chromium using a Hach hexavalent chromium test kit before discharge to the sanitary sewer system. The existing treatment system (batch treatment and manual discharge) met discharge permit conditions but was labor intensive.

Groundwater brought into the treatment facility has contaminant concentrations below discharge limits. The WDNR received approval from the City of Appleton to perform direct discharge of untreated, collected groundwater beginning April 18, 2006, when influent meets discharge limits listed in the Appleton Industrial User (Wastewater Discharge) Permit No. 06-21. Since April 18, 2006, collected groundwater has been directly discharged without treatment to the City of Appleton sanitary sewer system.

Groundwater Monitoring Network

The groundwater monitoring wells and piezometers were designed to provide information on containment of the groundwater plume and on water quality at the site and adjacent residential properties. The monitoring network is comprised of eleven monitoring wells constructed during the RI and the remedial action (RA) activities (W-2, W-8, W-15, MW-101 through MW-108), five monitoring wells (MW-109 through MW-113) installed in May 2006 and four piezometers (PZ5 through PZ8) installed in May 2005, to evaluate the remaining source area. (See Figure 2 – Site Detail Map, Appendix 1.)

Monitoring wells W-2 and MW-108 are located up-gradient of the site to monitor background conditions.

Monitoring well MW-101, which is located west of the site, is used to monitor the effectiveness of the west trench.

Three down-gradient wells, MW-102, MW-103 and MW-104, are used to monitor changes in groundwater quality down-gradient of the central trench and to monitor hydraulic gradient control.

Four wells, W-8, W-15, MW-105 and MW-106, are used to monitor changes in groundwater quality outside of the southeast trench. Monitoring wells MW-106 and W-15 are also used to monitor hydraulic gradient control of the southeast trench.

Monitoring well MW-107 is used to provide source area groundwater quality data and hydraulic gradient information up-gradient of the central trench.

Five wells (MW-109 through MW-113) installed in May 2006 are located at former source areas identified during the RI:

MW-109 is located at the west edge of the former chromium building between two historic monitoring points (MW25R and MW26R) installed during the RI with significant concentrations of volatile organic compounds (VOCs) and chromium in groundwater.

MW-110 is located on the north edge of the former chromium building adjacent to a nest of three historic monitoring points (MW17, MW18 and MW19) installed during the RI with significant concentrations of VOCs and chromium in groundwater.

MW-111 is located near a historic monitoring point (MW13R) installed during the RI with significant concentrations of chromium in groundwater.

MW-112 is located within the former zinc building at the edge of the former trough adjacent to a historic soil sample (SB3A) installed during the RI with significant concentrations of metals (cadmium, chromium, zinc and cyanide) in soil.

MW-113 is located on the southeast edge of the former chromium building adjacent to a nest of three historic monitoring points (MW14, MW15 and MW16) installed during the RI with significant concentrations of VOCs (MW14 only) and chromium in groundwater.

PZ5 and PZ6 are located on the north side of the central collection trench and PZ7 and PZ8 are located on the south side of the central collection trench to evaluate the vertical extent of groundwater contamination and verify vertical capture of the groundwater plume.

In May 10, 2004, four piezometers (PZ-01, PZ-02, PZ-03 and PZ-04) were abandoned. The bottoms of the piezometers were installed near the elevation of the collection trench piping and were within the trenches. The purpose of the piezometers was to determine whether the trenches were working properly. Since the trenches were functioning properly, the piezometers were abandoned.

Monitoring and Reporting

Prior to Outfall 001[1] sample collection, the discharge valve from the storage tank is closed, typically on a Monday morning. The storage tank is allowed to accumulate pumped water until the sampling event the following day, typically Tuesday morning. The discharge valve is opened and water is allowed to discharge for approximately five minutes. The Outfall 001 sampling port is opened and approximately 10 gallons of water is allowed to discharge from the sampling port prior to collecting a sample. During a monthly event, samples are typically collected the Tuesday of the first full week in the month.

Weekly Monitoring and Reporting

During the month of April, unfiltered weekly samples were collected from Outfall 001. The weekly samples were picked up at OMNNI's office by a courier from Pace Analytical Services, Inc. (Pace). Pace analyzed the samples for hexavalent chromium. Pace provided an electronic report of the analysis to Brian Wayner, OMNNI's project manager, who sent the report to Jennifer Borski, WDNR project manager, and Chris Stempa, City of Appleton Pretreatment and Biosolids Coordinator. pH values were also determined on the samples collected by using a Hach pH Pocket Pal Tester.

During the month of April, unfiltered weekly samples were collected from Manhole No. 1 influent sampling port and from Manhole No. 2 influent sampling port. Manhole No. 1 and No. 2 influent samples were measured with a Hach test kit, model Pocket Colorimeter II, for hexavalent chromium, and pH values were determined by a Hach pH Pocket Pal Tester.

Total flow from Outfall 001, total flow from Manhole No. 1 and total flow from Manhole No. 2 were recorded on an Operator Log Sheet. pH values from Outfall 001, Manhole No. 1 influent and Manhole No. 2 influent and hexavalent chromium analysis from Manhole No. 1 influent and Manhole No. 2 influent were also recorded on the Operator Log Sheet. The original Operator Log Sheets are kept at the facility. A summary of the total flow, pH readings, laboratory analysis and test kit analysis can be found in Table 1. (See Table 1 – Influent and Effluent Summary, Appendix 2.)

Monthly Monitoring and Reporting

During the months of November through March, an unfiltered sample was collected from Outfall 001 to be analyzed by Pace for hexavalent chromium and a filtered sample was collected from Outfall 001 to be analyzed by Pace for total dissolved chromium. Pace provided an electronic report of the analysis to OMNNI's project manager, who sent the report to the WDNR project manager, and the City of Appleton's Pretreatment and Biosolids Coordinator. A pH value from the Outfall 001 sample was also determined on the samples collected by using a Hach pH Pocket Pal Tester.

During the months of November through March, an unfiltered sample was collected from Manhole No. 1 influent sampling port and from Manhole No. 2 influent sampling port. Manhole No. 1 and No. 2 influent samples were measured with a Hach test kit, model Pocket Colorimeter II, for hexavalent chromium, and pH values were determined by a Hach pH Pocket Pal Tester.

Total flow from Outfall 001, total flow from Manhole No. 1 and total flow from Manhole No. 2 were recorded on an Operator Log Sheet. pH values from Outfall 001, Manhole No. 1 Influent and Manhole No. 2 Influent and hexavalent chromium analysis from Manhole No. 1 Influent and Manhole No. 2 Influent were also recorded on the Operator Log Sheet. The original Operator Log Sheets are kept at the

[1] Outfall 001 is the point where the groundwater leaves the facility and enters the City of Appleton sanitary sewer system. There is currently only one outfall.

facility. A summary of the total flow, pH readings, laboratory analysis and test kit analysis can be found in Table 1. (See Table 1 – Influent and Effluent Summary, Appendix 2.)

The WDNR project manager was provided with a monthly status report summarizing operation and maintenance at the site. The monthly status reports include OMNNI's invoice for services from the previous month, a copy of invoices paid during the month, a copy of the Operator Log Sheets, and a copy of the Inspection Sheet.

Quarterly Monitoring and Reporting

Quarterly compliance reports were submitted to the City of Appleton's Pretreatment and Biosolids Coordinator and the WDNR project manager on January 14, 2008 and April 1, 2008. The quarterly compliance reports included total metered discharge readings, pH measurements, and laboratory analysis.

Semi-Annual Monitoring and Reporting

The semi-annual reporting consists of this document, Semi-Annual Operation and Maintenance Report, which is prepared for the WDNR project manager after receiving the laboratory data from the semi-annual groundwater sampling event. The Semi-Annual Operation and Maintenance Report includes the Operation, Maintenance, Monitoring and Optimization Reporting of Soil and Groundwater Remediation Systems, Form 4400-194. (See Operation, Maintenance, Monitoring and Optimization Reporting of Soil and Groundwater Remediation Systems, Form 4400-194, Appendix 4.)

Compliance Sampling

Compliance sampling of the groundwater effluent is conducted twice per year by the City of Appleton at the sampling port for Outfall 001. The effluent is analyzed for the parameters listed in Table 2. (See Table 2 – City of Appleton Compliance Limits, Outfall 001, Appendix 2.) The City of Appleton collected compliance samples on December 4, 2007 and on January 16, 2008.

OMNNI collected one compliance sample from the sampling port of Outfall 001 during the first quarter of the calendar year. OMNNI collected the compliance sample on April 8, 2008. A summary of the compliance sampling was submitted to the City of Appleton's Pretreatment and Biosolids Coordinator and the WDNR project manager on April 18, 2008. There were no exceedances during this reporting period of the Industrial User (Wastewater Discharge) Permit from Outfall 001 based on the monitoring performed.

A summary of the City of Appleton's compliance sampling analysis and OMNNI's annual compliance sampling analysis can be found in Table 2. (See Table 2 – City of Appleton Compliance Limits, Outfall 001, Appendix 2 and laboratory report and chain of custody, Appendix 5.)

In addition to the sampling events listed above, process compliance samples are collected according to the following schedule. Total chromium is analyzed monthly from a sample collected from Outfall 001's sampling port. Samples collected for hexavalent chromium analysis are collected weekly during April through October and monthly during November through March. (See Table 1 – Influent and Effluent Summary, Appendix 2.)

Groundwater Sampling

Groundwater Sampling Procedures

Two reductions to the original monitoring plan have been requested since 1997. On December 3, 1999, Jennifer Huffman with the WDNR requested a reduction to the monitoring plan:

1. Elimination of quarterly sampling for copper, zinc, mercury and cyanide at all site wells.
2. Reduction in VOC sampling frequency from quarterly to annual.
3. Elimination of weekly testing for total suspended solids on the treated effluent.

EPA approved the 1999 request on January 18, 2000.

On March 24, 2003, Jennifer Borski with the WDNR requested a reduction to the monitoring plan:

1. Elimination of quarterly cadmium sampling at all site wells.
2. Reduction in the frequency from quarterly to annual sampling of manganese at all site wells. Manganese detections did not appear to be related to contamination from the plating operations.
3. Reduction in the frequency from quarterly to annual sampling of total dissolved chromium at W-2, W-8, W-15, MW-101, MW-102, MW-105, MW-106 and MW-108.
4. Elimination of annual VOC sampling at W-2, W-8, W-15, MW-101, MW-102, MW-103, MW-104, MW-105, MW-106 and MW-108.

EPA approved the 2003 request on April 17, 2003.

There are 16 groundwater monitoring wells and four piezometers associated with the Mauthe remediation system. (See Figure 2 – Site Detail Map, Appendix 1.)

During the April 16, 2008 sampling event, groundwater elevation measurements were taken from all monitoring wells and piezometers, with the exception of monitoring well W-15, prior to sampling. The north bolt holding down the cover of monitoring well W-15 could not be removed. A summary of the historical groundwater elevations for the site is included in Table 3. (See Table 3 – Groundwater Elevations, Appendix 2.) The groundwater elevation data from the monitoring wells and piezometers were used to develop groundwater contour maps. (See Figure 3 – Groundwater Elevation Contour Map (4/16/2008) and Figure 4 – Piezometric Groundwater Elevation Contour Map (4/16/2008), Appendix 1.) Groundwater flow direction was in the general direction of the collection trenches. Since two of the three collection trenches are near monitoring well MW-102, groundwater elevation at monitoring well MW-102 is likely near the pumping level in manhole 2. If the elevations along the collection trenches were known, the groundwater contours could be portrayed more accurately.

Down-well tubing was installed in monitoring points to be sampled. A peristaltic pump was attached to the down-well tubing and the monitoring point was micro-purged for approximately 15 minutes before collecting the sample(s). The sampling process utilized a flow-through cell where probes measured temperature, conductivity, pH, dissolved oxygen, and oxidation/reduction potential in each well. Flow through the cell was maintained at approximately 300 ml/min. utilizing a resister to control pump flow. Purged water from the monitoring points was collected, taken into the treatment building, and discharged at the Outfall 001 pipe leading to the City of Appleton sanitary sewer system.

Groundwater samples were collected after the monitoring point was purged. Temperature, conductivity, pH, dissolved oxygen, and oxidation/reduction potential were recorded just prior to sampling. The groundwater samples were collected in the order of VOC vials first (if applicable) and metal samples second. The chromium samples were field filtered with a 45 mircon in-line filter. The cyanide samples were not filtered. The laboratory containers were supplied by Pace Analytical. The samples to be analyzed for VOCs were preserved with hydrochloric acid. The samples to be analyzed for (filtered) total chromium were preserved with nitric acid. The samples to be analyzed for total cyanide were preserved with sodium hydroxide. The samples were picked up at OMNNI's office by a courier from Pace.

The groundwater elevations, purged groundwater volume, field testing data, and sample collection time were recorded on a Well Specific Field Sheet. (See Well Specific Field Sheet, Appendix 4.)

Groundwater Sampling Results

During the April 16, 2008 sampling event, field measurements were taken on groundwater samples collected from monitoring wells MW-101 through MW-104, MW-107, and MW-109 through MW-113 for temperature, conductivity, pH, dissolved oxygen, and oxidation/reduction potential. A summary of the field measurements are contained in Table 4. (See Table 4 – Groundwater Geochemical Parameters, Appendix 2.)

Groundwater from monitoring wells MW-101 through MW-104, MW-107, and MW-109 through MW-113 was analyzed for (filtered) total chromium. Groundwater from monitoring wells MW-107 and MW-109 through MW-113 was also analyzed for VOCs. Groundwater from monitoring wells MW-110 through MW-112 was also analyzed for total cyanide. A duplicate groundwater sample was collected from monitoring well MW-112 and analyzed for (filtered) total chromium, VOCs, and total cyanide.

The laboratory analytical results indicate that levels of (filtered) total chromium exceed the 1992 ch. NR 140, Wis. Adm. Code groundwater PAL[2] in monitoring wells MW-103 (380 µg/l), MW-104 (545 µg/l), MW-107 (4,410 µg/l), MW-109 (1,550 µg/l), MW-110 (32,500 µg/l), MW-111 (212 µg/l), MW-112 (88,400 µg/l) and MW-113 (16,400 µg/l). The laboratory analytical results indicate that levels of total cyanide exceed the 1992 ch. NR 140, Wis. Adm. Code groundwater PAL in monitoring wells MW-110 (55 µg/l) and MW-112 (380 µg/l). (See Table 5 – Groundwater Analytical Results / Selected Metals, Appendix 2 and laboratory report and chain of custody, Appendix 5.) An isoconcentration map for (filtered) total chromium concentrations is shown on Figure 5. (See Figure 5 – Isoconcentration Map, Total Chromium (4/16/08), Appendix 1.)

The laboratory analytical results indicate that levels of VOCs (at least one of the following parameters: 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2,-dichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, and trichloroethene) exceed the 1992 ch. NR 140, Wis. Adm. Code groundwater PAL in monitoring wells MW-107 and MW-109 through MW-113. (See Table 6 – Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs), Appendix 2 and laboratory report and chain of custody, Appendix 5.)

[2] "Chemical-specific ARARs are laws and requirements that regulate the release to the environment of materials having certain chemical or physical characteristics or materials containing specific chemical compounds... Therefore, the applicable groundwater remedial action goals at this site are the PALs." – Record of Decision Summary, N.W. Mauthe Site, March 1994, pages 36-37.

Groundwater elevation versus time graphs were prepared for monitoring wells MW-102, MW-103, MW-104, MW-107, and MW-109 through MW-113. (See Graph Set 1 - Groundwater Elevation Versus Time Graphs, Appendix 3.) Chromium concentrations versus time graphs were prepared for monitoring wells MW-102, MW-103, MW-104, MW-107, and MW-109 through MW-113. (See Graph Set 2 - Chromium Versus Time Graphs, Appendix 3.) VOCs versus time graphs were prepared for monitoring wells MW-107, MW-110, and MW-113. (See Graph Set 3 – Volatile Organic Compounds (VOCs) Versus Time Graphs, Appendix 3.)

Routine Operation and Maintenance Activities

Completed Operator Log Sheets and Inspection Sheets are kept on file at the facility. Copies of these forms were also sent to the WDNR project manager with the monthly status reports.

Weekly Operation and Maintenance Activities

General inspection of the building, grounds, and treatment equipment occurred during the weekly sampling events of Outfall 001. The Operator Log Sheet contains a check-off box for the general inspection.

Monthly Operation and Maintenance Activities

The grounds, truck bay, office area, bathroom, treatment process area, and sample preparation area were inspected monthly. The Inspection Sheet contains a listing of items to be checked during the monthly inspection.

Annual Operation and Maintenance Activities

The following annual operation and maintenance activities were conducted during this reporting period.

1. The three facility fire extinguishers were taken into Airgas for their annual inspection on December 3, 2007. The fire extinguishers passed inspection.
2. The cross connection control (backflow preventer) performance test was performed on March 3, 2008, by Ogden Plumbing. The cross connection control device passed. The inspection report was sent to the Wisconsin Department of Commerce.

Periodic Operation and Maintenance Activities

The following operation and maintenance activities were performed on an as-needed basis during the reporting period.

1. The City of Appleton will take over grounds maintenance at the N.W. Mauthe site as soon as the intergovernmental agreement between the City and WDNR is signed. Until that time, OMNNI performed snow removal and lawn maintenance. Snow removal consisted of providing access from the street to the building. Lawn maintenance consisted of lawn mowing, edging, and cut grass removal from streets and parking areas.
2. Outfall 001 flow meter/totalizer operation is checked during site visits. According to the factory representative, there are no operator performed calibration functions for the meter unless a hardware failure occurs.
3. General housekeeping activities included replacing cleaning supplies, bathroom supplies, and minor building components. General housekeeping activities also included keeping the facility and grounds clean and removing accumulated waste.

Significant Operation and Maintenance Activities

The following operation and maintenance activities were performed.

1. Flow totalizers were installed on Manhole #1 and Manhole #2 influent lines. The flow totalizers were installed on April 15, 2008, by Ogden Plumbing and OMNNI. The Operator Log Sheet was modified to reflect the addition of the flow totalizers. Additional documentation on the flow totalizers was provided to the WDNR under a separate cover dated May 5, 2008.
2. Several of the snow stops came off the roof during the past winter. The gutter on the backside of the building was also damaged due to snow sliding off the roof. Keller, Inc. has been contracted to make the necessary repairs. The repair work is anticipated to take place in the next several weeks.

Emergency Operations and Shut Downs

There were no emergency operations or shut-downs during this reporting period.

Public Contacts

Attempts were made to contact property owners whose properties contained monitoring wells and/or piezometers prior to the groundwater sampling event. There were no other public contacts during this reporting period.

Conclusions and Recommendations

The results of the laboratory analysis from the April 16, 2008 sampling event indicate that the groundwater continues to exceed the 1992 ch. NR 140, Wis. Adm. Code groundwater PALs for chromium, cyanide, and several VOCs.

The containment trenches appear to be operating as designed. The groundwater laboratory analysis and the groundwater elevations indicate that the groundwater plume is being controlled horizontally by the groundwater containment trenches.

Approximately 495,942 gallons of groundwater was extracted from the containment trenches from November 1, 2007 to April 30, 2008. The groundwater was discharged to the City of Appleton sanitary sewer system under the Industrial User (Wastewater Discharge) Permit Number 06-21. There were no exceedances of the compliance limits during this reporting period. Approximately 7.3 pounds of chromium was removed from the site during the reporting period.

Based on the laboratory analysis from the April 16, 2008 sampling event and the laboratory analysis from the Outfall 001 during the reporting period, OMNNI recommends continued operation of the groundwater extraction system with direct discharge to the City of Appleton sanitary sewer system.

Standard of Care

The conclusions presented in this report were arrived at using generally accepted hydrogeologic and engineering practices. The conclusions presented herein represent our professional opinions, based on data collected over the reporting period and discussed in this report. Conditions at other locations on the property may be different than described in this report. The scope of this report is limited to the specific project and location described herein.

Prepared By: Brian D. Wayner

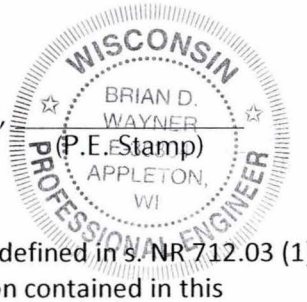
Brian D. Wayner, P.E.
Project Manager

Reviewed By: Don Brittnacher

Don Brittnacher, P.G.
Hydrogeologist

"I, Brian D. Wayner, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with 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 the 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."

Brian D. Wayner
(Professional Engineer)



(P.E. Stamp)

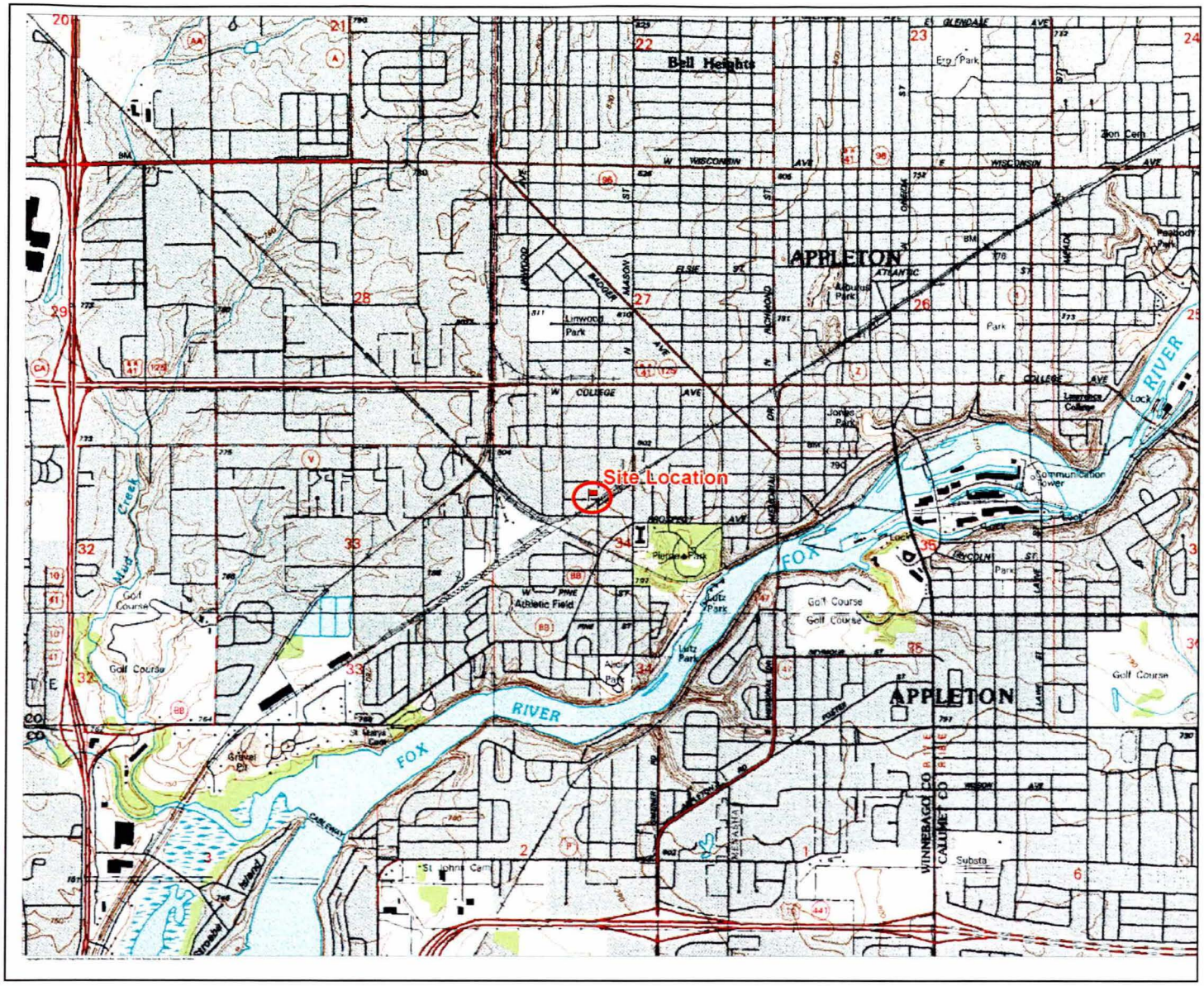
"I, Don Brittnacher, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements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

Don Brittnacher
(Professional Geologist)

(P.G. Stamp)

Distribution

Wisconsin Department of Natural Resources
Bureau of Remediation and Redevelopment
Ms. Jennifer Borski,
Project Manager
625 E. County Road Y, Suite 700
Oshkosh, WI 54901-9731
(Three Copies)



Source: 2000 DeLorme Topo Tools

N

Figure 1
Site Location Map

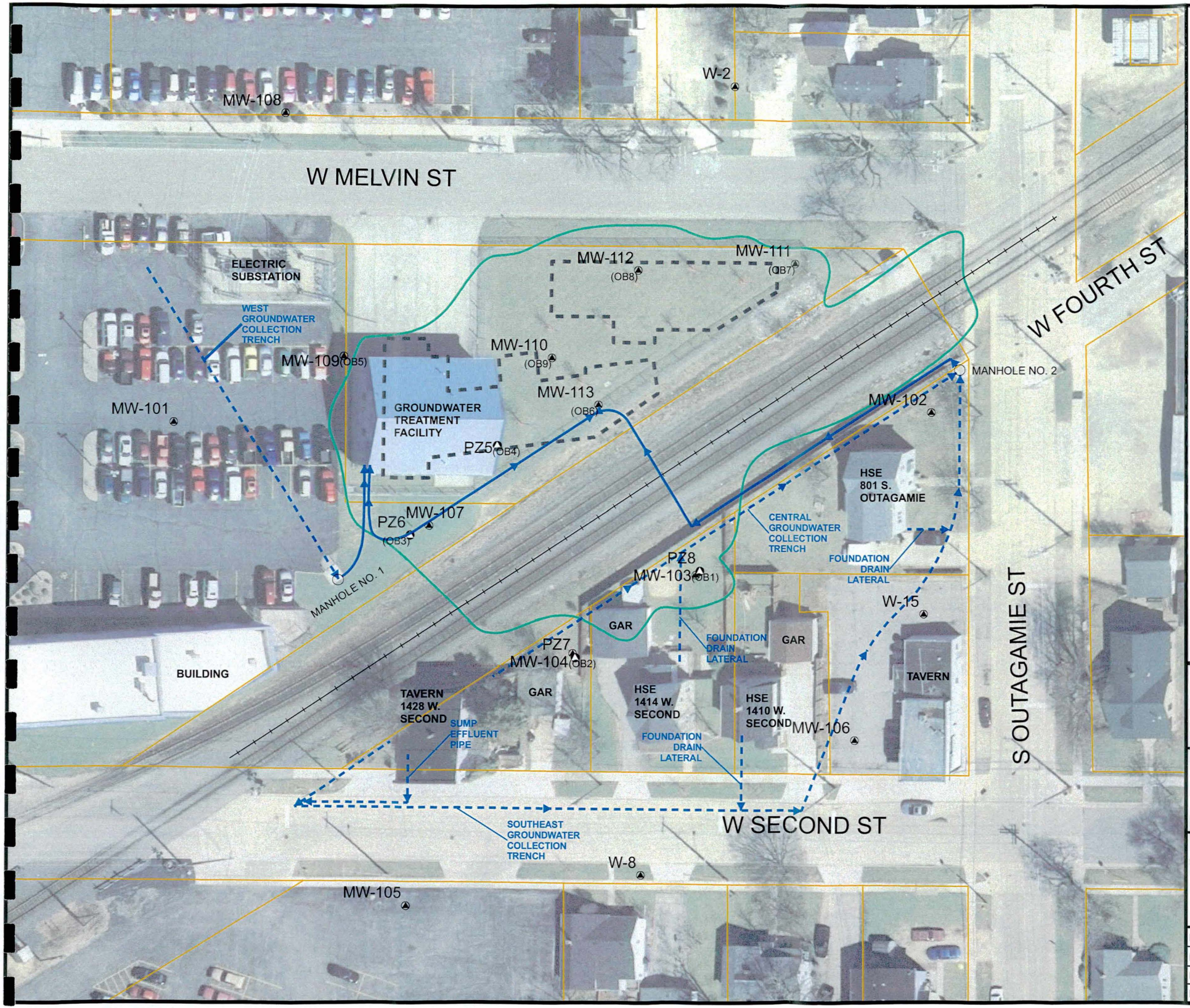
N.W. Mauthe
725 South Outagamie Street
Appleton, Wisconsin 54914-5072

OMNI ASSOCIATES

Project Number:
N1866A05

Date: May 14, 2008

One Systems Drive, Appleton, Wisconsin 54914-1654
Phone: (920) 735-6900 Fax: (920) 830-6100



Legend

- Monitoring Well
- Piezometer
- Collection System
- Pump Discharge
- Railroad Tracks
- Former Building
- Approximate Soil Remediation Limits*
- Property Line

*Approximate Soil Remediation Limits
July 11 - October 27, 1995
(10,834 tons)

N

0 25 50 100 Feet

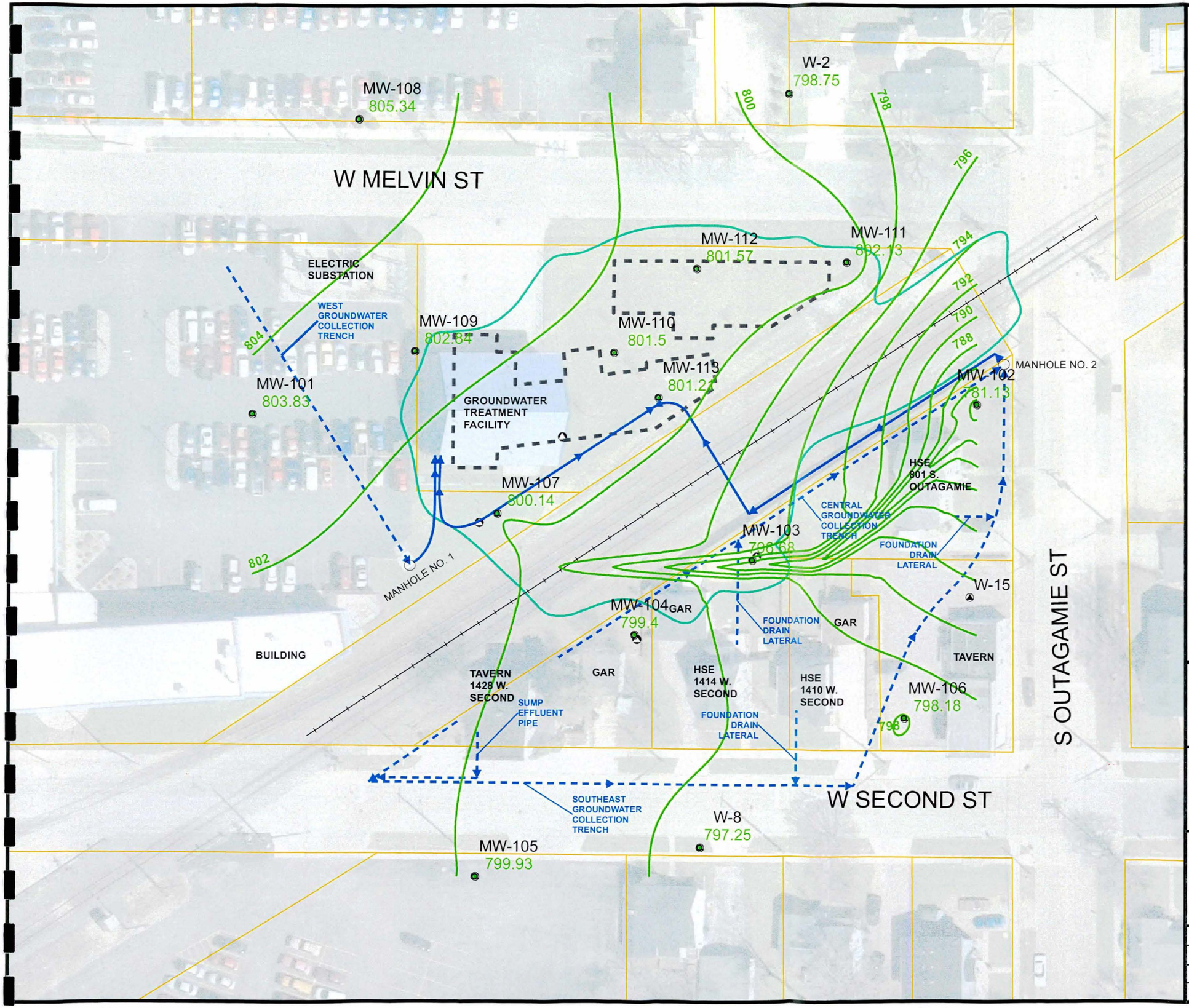
FIGURE 2
SITE DETAIL MAP

N.W. MAUTHE
725 SOUTH OUTAGAMIE STREET
APPLETON, WISCONSIN

OMNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914

PHONE (920) 735-6900
FAX (920) 830-6100

PROJECT MANAGER:	BDW	PROJECT NO:	N1866A05
PROJECT ENGINEER:	BDW	FILE NO:	SITEDET.MXD
DRAWN BY:	JCW	SCALE:	1 " equals 48 '
REVIEWED BY:	BDW	DATE:	5/14/2008



Legend

- Monitoring Well
- Piezometer
- Groundwater Elevation Contour (2 ft)
- Railroad Tracks
- Former Building
- Collection System
- Pump Discharge
- Approximate Soil Remediation Limits*
- Property Line

*Approximate Soil Remediation Limits
July 11 - October 27, 1995
(10,834 tons)

NOTE:
Groundwater contours were drawn assuming no influence by the groundwater collection system.

N

0 25 50 100 Feet

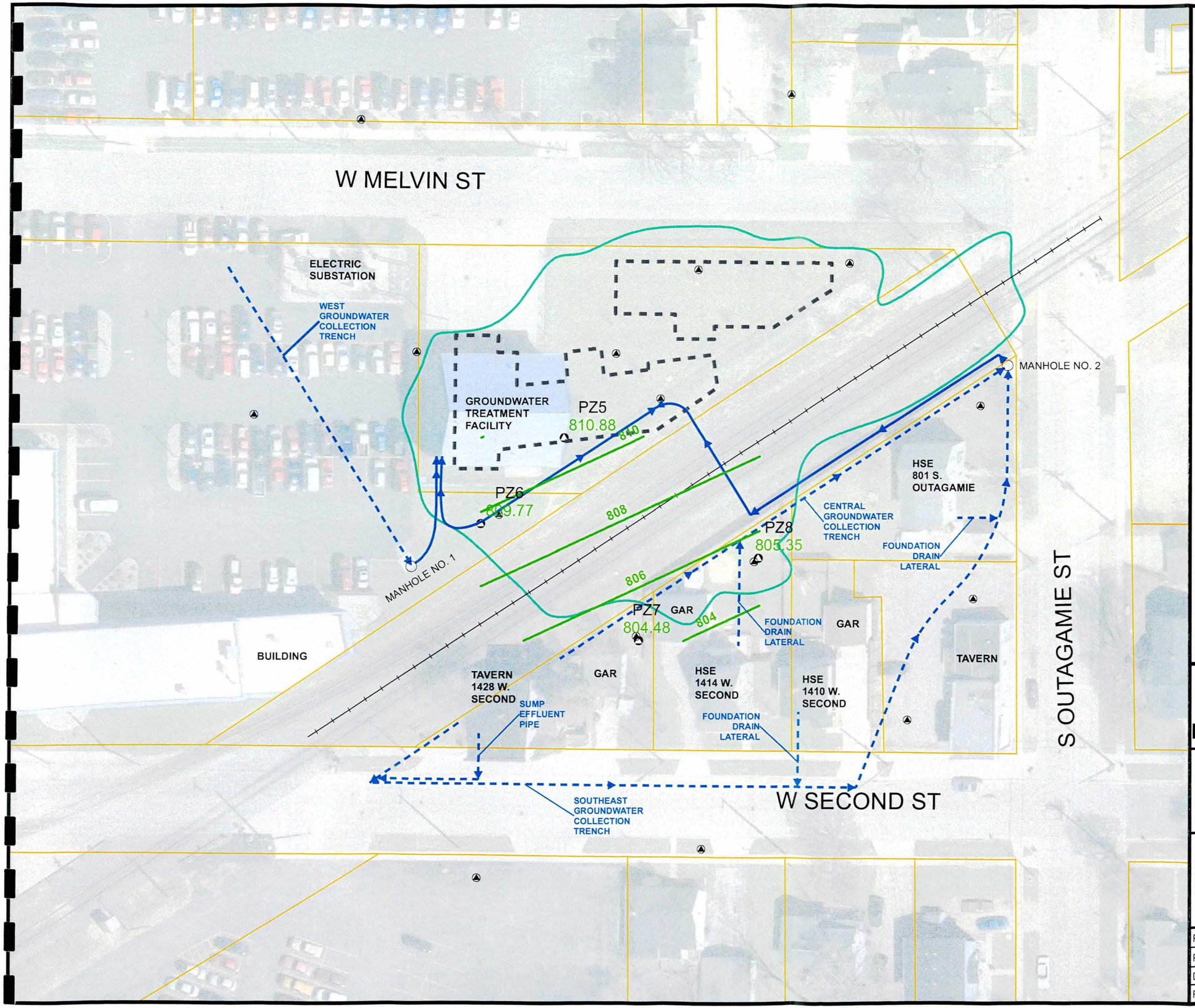
FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP (4/16/2008)

N.W. MAUTHE
725 SOUTH OUTAGAMIE STREET
APPLETON, WISCONSIN

OMNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914

PHONE (920) 735-6900
FAX (920) 830-6100

PROJECT MANAGER:	BDW	PROJECT NO:	N1866A05
PROJECT ENGINEER:	BDW	FILE NO:	WSElev_080416.MXD
DRAWN BY:	JCW	SCALE:	1 " equals 50 '
REVIEWED BY:	BDW	DATE:	6/2/2008



Legend

- Monitoring Well
- Piezometer
- Groundwater Elevation Contour (2 ft)
- Railroad Tracks
- Former Building
- Collection System
- Pump Discharge
- Approximate Soil Remediation Limits*
- Property Line

*Approximate Soil Remediation Limits
July 11 - October 27, 1995
(10,834 tons)

NOTE:
Groundwater contours were drawn assuming no influence by the groundwater collection system.

N

0 25 50 100 Feet

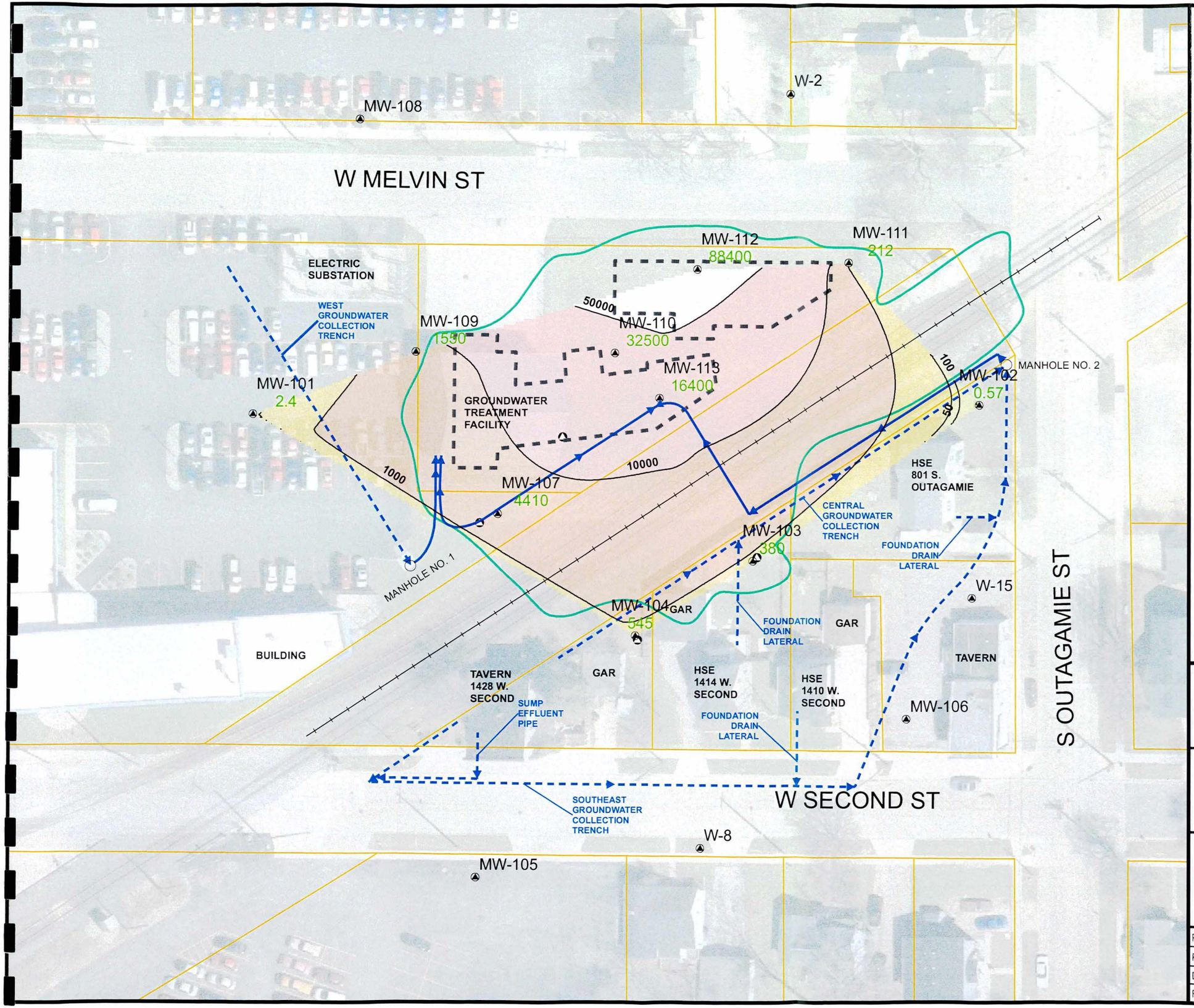
FIGURE 4
PIEZOMETRIC GROUNDWATER ELEVATION CONTOUR MAP (4/16/08)

N.W. MAUTHE
725 SOUTH OUTAGAMIE STREET
APPLETON, WISCONSIN

OMNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914

PHONE (920) 735-6900
FAX (920) 830-6100

PROJECT MANAGER:	BDW	PROJECT NO:	N1866A05
PROJECT ENGINEER:	BDW	FILE NO:	PZElev_080416.MXD
DRAWN BY:	JCW	SCALE:	1 " equals 50 '
REVIEWED BY:	BDW	DATE:	5/14/2008



Legend

- Monitoring Well
- Piezometer
- Groundwater Chromium Concentration (ug/L)
- Railroad Tracks
- Former Building
- Collection System
- Pump Discharge
- Approximate Soil Remediation Limits*
- Property Line

*Approximate Soil Remediation Limits
July 11 - October 27, 1995
(10,834 tons)

N

0 25 50 100 Feet

FIGURE 5
ISOCONCENTRATION MAP
TOTAL CHROMIUM (4/16/2008)

N.W. MAUTHE
725 SOUTH OUTAGAMIE STREET
APPLETON, WISCONSIN

OMNI ASSOCIATES
ONE SYSTEMS DRIVE
APPLETON, WI 54914

PHONE (920) 735-6900
FAX (920) 830-6100

PROJECT MANAGER:	BDW	PROJECT NO:	N1866A05
PROJECT ENGINEER:	BDW	FILE NO:	Cr_080416.MXD
DRAWN BY:	JCW	SCALE:	1 " equals 50 '
REVIEWED BY:	BDW	DATE:	5/14/2008

Table 1 - Influent and Effluent Summary
N.W. Mauthe Superfund Site - Appleton, Wisconsin

	OUTFALL 001							Manhole #1			Manhole #2		
Date Actual	Date For Linear Interpolation	Metered Discharge Reading (gallons)	Gallons Discharged Between Meter Reading	Monthly Discharge (gallons)	pH	Hexavalent Chromium Lab Analysis (mg/L)	Total Chromium Lab Analysis (mg/L)	Flow Totalizer #1 Reading (gallons)	pH	Hexavalent Chromium Hach Test Kit (mg/L)	Flow Totalizer #2 Reading (gallons)	pH	Hexavalent Chromium Hach Test Kit (mg/L)
09/25/07		8,290,363											
	10/01/07	*8,300,685*											
10/01/07		8,301,251	10,888										
10/02/07		8,301,251	0		7.7								
10/15/07		8,324,675	23,424										
10/16/07		8,324,675	0		7.4	1.700			6.93	3.9		7.30	0.60
10/22/07		8,355,957	31,282										
10/23/07		8,355,957	0		7.5	1.500			7.04	3.75		NA	NA
10/29/07		8,370,413	14,456	October									
10/30/07		8,370,413	0	71,891	7.4	1.900			NA	NA		NA	NA
	11/01/07	*8,372,575*											
11/05/07		8,377,912	7,499										
11/06/07		8,377,912	0	November	8.3	1.900	1.300		7.8	4.30		8.2	0.18
11/16/07		8,386,583	8,671	21,587									
	12/01/07	*8,394,162*											
12/03/07		8,395,372	8,789										
12/04/07		8,395,372	0		8.6	3.100	2.500		8.4	4.60		8.6	0.16
12/12/07		8,399,522	4,150	December									
12/21/07		8,402,508	2,986	25,977									
	01/01/08	*8,420,139*											
01/01/08		8,420,868	18,360										
01/02/08		8,420,868	0		8.7	1.300	1.200		8.4	4.50		8.7	0.62
01/02/08		8,421,628	760										
01/10/08		8,459,333	37,705										
01/15/08		8,479,244	19,911	January									
01/25/08		8,497,063	17,819	84,612									
	02/01/08	*8,504,750*											
02/01/08		8,505,562	8,499										
02/03/08		8,507,408	1,846	February									
02/04/08		8,507,408	0	22,861	8.9	1.700	1.600		8.7	2.60		8.8	0.70
	03/01/08	*8,527,611*											
03/02/08		8,528,931	21,523	March	9.0	2.9	2.500		8.7	3.60		8.8	2.50
03/31/08		8,653,211	124,280	128,713									
	04/01/08	*8,656,324*											
04/01/08		8,657,629	4,418		9.0	1.6	1.530		8.7	1.60		8.9	1.45
04/01/08		8,661,298	3,669										
04/04/08		8,682,788	21,490										
04/07/08		8,697,084	14,296										
04/08/08		8,697,084	0		9.1	0.063			8.7	1.40		8.9	0.54
04/14/08		8,790,128	93,044										
04/15/08		8,790,128	0		9.1	0.36			8.7	0.90		8.8	0.17
04/15/08		8,797,710	7,582					Installed			Installed		
04/16/08		8,804,525	6,815					1,074			2,804		
04/16/08		8,806,972	2,447					1,589			3,661		
04/21/08		8,826,834	19,862					5,176			11,176		
04/22/08		8,826,834	0		9.1	0.87		5,649	8.8	0.95	12,292	8.9	0.55
04/28/08		8,860,276	33,442	April				13,291			36,802		
04/29/08		8,860,276	0	212,193	9.1	0.51		14,721	8.8	0.96	40,534	9.1	0.43
	05/01/08	*8,868,517*											

Table 2 - City of Appleton Compliance Limits, Outfall 001
N.W. Mauthe Superfund Site - Appleton, WI

		Aluminum (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Chromium Total (mg/L)	Copper (mg/L)	Cyanide (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Hexavalent Chromium (mg/L)
Permit #06-21 Limits		70	1.0	0.3	7.0	3.5	1.0	2.0	0.002	2.0	10.0	4.5
Sampler	Sample Date											
CH2M Hill	02/20/97	<.02	<.003	<.00050	0.04	<.01	<.00001	<.005	<.0002	<.005	0.0051	<.01
CH2M Hill	03/24/98	0.0152	<.002	<.00004	0.0637	<.0095	<.0017	<.0006	<.000015	<.0095	0.0046	0.1000
Appleton	04/29/98	<.011	<.002	<.005	0.2200	<.05	0.0020	<.1	<.0002	<.04	<.005	NA
Appleton	10/07/98	<.011	<.002	0.0050	0.1700	<.05	<.001	<.1	<.0002	<.04	0.0250	NA
MCO	03/18/99	<.009	<.003	<.00031	NA	.00068****	<.000032	<.0024	<.00005	.00351****	<.012	<.0036
Appleton	03/18/99	<.011	<.002	<.005	<0.05	<.05	0.0010	0.1000	<.00005	0.0400	0.0180	NA
Appleton	09/21/99	<.011	<.002	<.005	<.05	<.05	0.0030	<.1	<.00015	<.04	0.0080	NA
Appleton	02/15/00	<.015	<.0020	<.005	0.0900	<.05	<.001	<.1	<.00013	<.04	0.0280	NA
MCO	03/13/00	<.009	<.003	<.00031	0.1400	<.0006	<.0044	<.0024	<.00005	0.0012	<.012	NA
Appleton	02/21/01	<0.15	<.002	<.005	0.11	<.05	0.001	<.1	<.00013	<.04	0.042	NA
MCO	03/01/01	<.034	<.0027	.012 ****	0.25	.0088 ****	<.0033	<.17	<.00005	.036 ****	0.015	<.0036
Appleton	10/02/01	0.016	<.002	<.005	0.14	<.05	<.001	<.1	<.00013	<.04	0.065	NA
MCO	03/19/02	<.034	<.0027	<.0075	0.36	<.0077	<.0027	<.17	<.00005	<.017	<.012	<.0036
Appleton	05/02/02	<.049	<.012	<.014	0.362	<.015	<.0014	<.060	<.00011	<.011	<.009	NA
Appleton	11/12/02	0.027	<.0082	<.00053	0.23	<.009	<.0007	<.00084	<.000028	0.0044	0.0081	NA
Appleton	02/11/03	<0.027	<.0082	<.00053	0.086	<.0009	<.0014	<.0013	<.000028	0.0036	<.0025	NA
Appleton	03/24/03	<.045	<.0027	<.0088	0.13	0.075	<.0050	<.16	<.000050	<.019	<.0044	<.0036
Appleton	10/23/03	0.0045	0.0013	<0.0001	0.221	<0.0008	<0.005	<0.0006	0.0002	<0.025	<0.010	NA
Appleton	03/24/04	<0.050	<0.0026	<0.010	0.15	<0.0060	<0.0050	<0.16	<0.000025	<0.020	<0.010	NA
Appleton	11/09/04	0.0071	<0.0012	<0.0001	0.04	0.0008	<0.005	<0.008	<0.0002	0.0013	<0.01	NA
MCO	08/08/05	0.023	<0.0035	<0.0003	0.039	0.0019	<0.0037	<0.0011	<0.000026	<0.0044	0.0024	<0.005
Appleton	11/05/06	0.0052	<0.0012	<0.0001	0.088	<0.0005	<0.005	<0.0008	<0.0002	0.0017	<0.010	NA
Appleton	02/23/06	0.0021	<0.0012	<0.0001	0.08	<0.0005	<0.0005	<0.0008	<0.0002	0.0022	<0.010	NA
MCO	03/23/06	<0.20	<0.0076	<0.00074	0.32	0.0018	0.0043	<0.0034	<0.000026	0.0033	<0.020	NA
Appleton	06/27/06	<0.200	<0.0076	<0.00074	0.700	0.0016	<0.0094	<0.0034	<0.000072	0.0021	<0.020	<0.350
Appleton	10/05/06	0.037	<0.00011	<0.0001	4.575	0.0068	0.01	<0.001	<0.0002	0.0026	<0.010	NA
Appleton	03/22/07	<0.07	<0.07	<0.01	1.9	3.5	<0.004	<0.03	<0.0002	<0.04	<0.01	NA
MCO	04/02/07	0.0383	0.00024	0.000086	1.41	0.0041	<0.0094	0.00013	<0.00019	0.0035	0.009	NA
Appleton	12/04/07	<0.07	<0.001	<0.01	3.4	<0.01	0.008	<0.03	<0.0002	<0.04	<0.01	1.5
Appleton	01/16/08	0.21	<0.005	<0.01	<0.03	0.02	0.017	0.06	0.0003	<0.04	0.04	NA
OMNNI	04/08/08	0.0114	0.00043	0.00011	0.864	0.0043	0.014 J	0.000095 J	<0.0001	0.0024	0.0071	0.063

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
W-2	02/01/97	-		798.66
	05/01/97	-		801.01
	09/01/97	-		800.28
	12/01/97	-	804.66	797.69
	03/01/98	-		802.08
	06/01/98	-		799.38
	10/27/98	5.85		798.81
	02/08/99	4.50		800.16
	06/08/99	3.31		801.35
	09/13/99	5.78		798.88
	12/15/99	6.63		798.03
	03/13/00	1.60		803.06
	06/22/00	2.63		802.03
	09/27/00	3.28		801.38
	12/19/00	4.78		799.88
	03/01/01	5.93		798.73
	06/19/01	1.83		802.83
	09/24/01	5.94		798.72
	12/05/01	4.93		799.73
	03/19/02	1.08		803.58
	06/20/02	2.78		801.88
	09/18/02	6.38		798.28
	12/17/02	6.81		797.85
	03/24/03	4.31		800.35
	06/10/03	3.14		801.52
	09/10/03	6.11		798.55
	12/10/03	4.03		800.63
	03/24/04	1.26		803.40
	07/09/04	3.44		801.22
	09/21/04	6.79		797.87
	03/29/05	4.51		800.15
	06/20/05	4.83		799.83
	09/21/05	6.21		798.45
	12/14/05	5.51		799.15
	03/21/06	0.08		804.58
	06/28/06	6.02		798.64
	09/20/06	8.75		795.91
	12/09/06	6.20		798.46
	03/13/07	3.80		800.86
	07/03/07	6.16		798.50
	09/27/07	5.66		799.00
	04/16/08	5.91		798.75

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
W-8	02/01/97	-		797.22
	05/01/97	-		797.66
	09/01/97	-		798.01
	12/01/97	-	803.36	796.52
	03/01/98	-		798.16
	06/01/98	-		797.31
	10/27/98	6.41		796.95
	02/08/99	5.49		797.87
	06/08/99	4.38		798.98
	09/13/99	6.71		796.65
	12/15/99	6.91		796.45
	03/13/00	6.25		797.11
	06/22/00	6.42		797.34
	09/27/00	5.66		797.70
	12/19/00	6.80		796.56
	03/01/01	5.41		797.95
	06/19/01	5.02		798.34
	09/24/01	3.38		799.98
	12/05/01	7.02		796.34
	03/19/02	3.63		799.73
	06/20/02	5.66		797.70
	09/18/02	6.93		796.43
	12/17/02	9.00		794.36
	03/24/03	6.18		797.18
	06/10/03	6.11		797.25
	09/10/03	6.71		796.65
	12/10/03	6.62		796.74
	03/23/04	6.55		796.81
	07/09/04	6.11		797.25
	09/21/04	7.08		796.28
	03/29/05	6.24		797.12
	06/20/05	6.60		796.76
	09/21/05	6.84		796.52
	12/14/05	6.71		796.65
	03/21/06	6.57		796.79
	06/28/06	7.18		796.18
	09/20/06	7.07		796.29
	12/19/06	6.87		796.49
	03/13/07	6.48		796.88
	07/03/07	7.29		796.07
	09/27/07	6.52		796.84
	04/16/08	6.11		797.25

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
W-15	02/01/97	-		793.97
	05/01/97	-		796.92
	09/01/97	-		797.23
	12/01/97	-	803.76	795.52
	03/01/98	-		796.78
	06/01/98	-		796.32
	10/27/98	7.95		795.81
	02/08/99	9.19		794.57
	06/08/99	6.89		796.87
	09/13/99	7.85		795.91
	12/15/99	8.97		794.79
	03/13/00	7.80		795.96
	06/22/00	6.42		797.34
	09/27/00	6.30		797.46
	12/19/00	7.99		795.77
	03/01/01	9.52		794.24
	06/19/01	6.91		796.82
	09/24/01	6.65		797.11
	12/05/01	8.15		795.61
	03/19/02	7.22		796.54
	06/20/02	6.84		796.92
	09/18/02	7.28		796.48
	12/17/02	9.98		793.78
	03/24/03	9.77		793.99
	06/10/03	7.04		796.72
	09/10/03	7.06		796.70
	12/10/03	7.15		796.61
	03/23/04	6.58		797.18
	07/09/04	6.45	803.66 ****	797.21
	09/21/04	7.26		796.40
	03/29/05	7.50		796.16
	06/20/05	6.82		796.84
	09/21/05	7.05		796.61
	12/14/05	7.88		795.78
	03/21/06	6.95		796.71
	06/28/06	6.98	803.42 *****	796.44
	09/20/06	7.13		796.29
	12/19/06	8.02		795.40
	03/13/07	7.22		796.20
	07/03/07	7.00		796.42
	09/27/07	6.67		796.75
	04/16/08	-		-

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-101	02/01/97	-		797.16
	05/01/97	-		799.99
	09/01/97	-		798.67
	12/01/97	-	807.59	798.21
	03/01/98	-		803.43
	06/01/98	-		800.48
	10/27/98	10.26		797.33
	02/08/99	11.91		795.68
	06/08/99	9.79		797.80
	09/13/99	10.35		797.24
	12/15/99	9.01		798.58
	03/13/00	12.67		794.92
	06/22/00	6.28		801.31
	09/27/00	10.41		797.18
	12/19/00	10.73		796.86
	03/01/01	12.61		794.98
	06/19/01	8.43		799.16
	09/24/01	10.50		797.09
	12/05/01	10.98		796.61
	03/19/02	8.10		799.49
	06/20/02	7.08		800.51
	09/18/02	10.23		797.36
	12/17/02	12.47		795.12
	03/24/03	10.00		797.59
	06/10/03	7.41		800.18
	09/10/03	9.53		798.06
	12/10/03	8.31		799.28
	03/23/04	5.95		801.64
	07/09/04	7.84		799.75
	09/21/04	10.50		797.09
	03/29/05	9.00		798.59
	06/20/05	9.28		798.31
	09/21/05	9.64		797.95
	12/14/05	8.93		798.66
	03/21/06	8.10		799.49
	06/28/06	8.88		798.71
	09/20/06	8.90		798.69
	12/19/06	8.95		798.64
	03/13/07	8.73		798.86
	07/03/07	7.39		800.20
	09/27/07	7.31		800.28
	04/16/08	3.76		803.83

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-102	02/01/97	-		780.72
	05/01/97	-		780.89
	09/01/97	-		780.79
	12/01/97	-	804.45	780.95
	03/01/98	-		780.47
	06/01/98	-		780.72
	10/27/98	24.11		780.34
	02/08/99	23.84		780.61
	06/08/99	23.59		780.86
	09/13/99	23.70		780.75
	12/15/99	24.27		780.18
	03/13/00	24.00		780.45
	06/22/00	23.69		780.76
	09/27/00	23.65		780.80
	12/19/00	24.06		780.39
	03/01/01	26.01		778.44
	06/19/01	23.35		781.10
	09/24/01	23.88		780.57
	12/05/01	24.08		780.37
	03/19/02	23.75		780.70
	06/20/02	23.05		781.40
	09/18/02	24.50		779.95
	12/17/03	25.30		779.15
	03/24/03	23.80		780.65
	06/10/03	23.09		781.36
	09/10/03	23.98	804.37 ***	780.39
	12/10/03	23.22		781.15
	03/23/04	23.56		780.81
	07/09/04	23.52		780.85
	09/21/04	24.65		779.72
	03/29/04	21.24		783.13
	06/20/05	23.81		780.56
	09/21/05	24.71		779.66
	12/14/05	24.25		780.12
	03/21/06	23.39		780.98
	06/28/06	23.95		780.42
	09/20/06	25.15		779.22
	12/19/06	25.26		779.11
	03/13/07	24.41		779.96
	07/03/07	23.89		780.48
	09/27/07	24.38		779.99
	04/16/08	23.20		781.13

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-103	02/01/97	-		795.29
	05/01/97	-		791.83
	09/01/97	-		789.60
	12/01/97	-	803.74	787.78
	03/01/98	-		791.03
	06/01/98	-		789.13
	10/27/98	11.96		791.78
	02/08/99	10.24		793.50
	06/08/99	8.69		795.05
	09/13/99	9.79		793.95
	12/15/99	12.68		791.06
	03/13/00	9.63		794.07
	06/22/00	8.22		795.52
	09/27/00	7.76		795.98
	12/19/00	10.78		792.96
	03/01/01	9.15		794.59
	06/19/01	5.52		798.22
	09/24/01	9.80		793.94
	12/05/01	11.13		792.61
	03/19/02	4.96		798.78
	06/20/02	7.42		796.32
	09/18/02	9.00		794.74
	12/17/02	13.01		790.73
	03/24/03	7.63		796.11
	06/10/03	7.77		795.97
	09/10/03	9.60		794.14
	12/10/03	8.09		795.65
	03/23/04	4.01		797.73
	07/09/04	12.91		790.83
	09/21/04	10.30		793.44
	03/29/05	NR		---
	06/20/05	9.55		794.19
	09/21/05	9.70		794.04
	12/14/05	10.40		793.34
	03/21/06	7.87		795.87
	06/28/06	9.75		793.99
	09/20/06	11.23		792.51
	12/20/06	10.36		793.38
	03/13/07	9.91		793.83
	07/03/07	9.45		794.29
	09/27/07	9.52		794.22
	04/16/08	7.06		796.68

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-104	02/01/97	-		792.94
	05/01/97	-		789.91
	09/01/97	-		798.59
	12/01/97	-	807.28	795.70
	03/01/98	-		799.46
	06/01/98	-		796.60
	10/27/98	10.51		796.77
	02/08/99	9.04		798.24
	06/08/99	7.49		799.79
	09/13/99	10.28		797.00
	12/15/99	10.78		796.50
	03/13/00	9.51		797.77
	06/22/00	8.41		798.88
	09/27/00	8.61		798.67
	12/19/00	10.49		796.79
	03/01/01	8.44		798.84
	06/19/01	7.51		799.71
	09/24/01	10.39		796.89
	12/05/01	10.81		796.47
	03/19/02	7.82		799.46
	06/20/02	8.60		798.68
	09/18/02	12.05		795.23
	12/17/02	12.70		794.58
	03/24/03	12.60		794.68
	06/10/03	8.81		798.47
	09/10/03	11.17		796.11
	12/10/03	8.66		798.62
	03/23/04	7.44		799.84
	09/21/04	15.21		792.07
	03/29/05	11.09		796.19
	06/20/05	9.57		797.71
	09/21/05	18.95		788.33
	12/14/05	9.94		797.34
	03/21/06	8.53		798.75
	06/28/06	11.23		796.05
	09/20/06	12.81		794.47
	12/20/06	24.46		782.82
	03/13/07	12.11		795.17
	07/03/07	13.04		794.24
	09/27/07	21.47		785.81
	04/16/08	7.88		799.40

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-105	02/01/97	-		793.74
	05/01/97	-		800.60
	09/01/97	-		800.37
	12/01/97	-	803.96	799.03
	03/01/98	-		800.08
	06/01/98	-		800.50
	10/27/98	5.41		798.55
	02/08/99	6.46		797.50
	06/08/99	3.04		800.92
	09/13/99	4.60		799.36
	12/15/99	5.28		798.68
	03/13/00	4.97		798.99
	06/22/00	3.06		800.90
	09/27/00	3.38		800.58
	12/19/00	5.28		798.68
	03/01/01	7.24		796.72
	06/19/01	2.43		801.53
	09/24/01	3.87		800.09
	12/05/01	5.55		798.41
	03/19/02	3.94		800.02
	06/20/02	4.08		799.88
	09/18/02	5.40		798.56
	12/17/02	7.34		796.62
	03/24/03	6.81		797.15
	06/10/03	4.27		799.69
	09/10/03	4.88	803.84 ***	798.96
	12/10/03	4.36		799.24
	03/23/04	3.80		800.04
	07/09/04	3.61	803.74 ****	800.13
	09/21/04	4.92		798.82
	03/29/05	3.85		799.89
	06/20/05	4.15		799.59
	09/21/05	4.70		799.04
	12/14/05	5.25		798.49
	03/21/06	4.26		799.48
	06/28/06	4.81	803.54 *****	798.73
	09/20/06	4.51		799.03
	12/19/06	5.40		798.14
	03/13/07	6.46	803.46******	797.08
	07/03/07	4.30		799.16
	09/27/07	3.81		799.65
	04/16/08	3.53		799.93

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-106	02/01/97	-		794.75
	05/01/97	-		797.23
	09/01/97	-		796.91
	12/01/97	-	804.08	795.48
	03/01/98	-		797.37
	06/01/98	-		796.76
	10/27/98	8.12		795.96
	02/08/99	9.75		794.33
	06/08/99	6.72		797.36
	09/13/99	7.88		796.20
	12/15/99	8.71		795.37
	03/13/00	8.72		795.36
	06/22/00	6.87		797.21
	09/27/00	7.41		796.67
	12/19/00	8.55		795.53
	03/01/01	9.54		794.54
	06/19/01	6.30		797.78
	09/24/01	7.57		796.51
	12/05/01	8.72		795.36
	03/19/02	7.64		796.44
	06/20/02	7.21		796.87
	09/18/02	7.88		796.20
	12/17/02	10.49		793.59
	03/24/03	9.98		794.10
	06/10/03	7.54		796.54
	09/10/03	7.35	804.00 ***	796.65
	12/10/03	7.18		796.82
	03/23/04	7.54		796.46
	07/09/04	6.48	803.90 ****	797.42
	09/21/04	8.02		795.88
	03/29/05	8.26		795.64
	06/20/05	7.31		796.59
	09/21/05	7.85		796.05
	12/14/05	8.47		795.43
	03/21/06	7.41		796.49
	06/28/06	7.78	803.83 *****	796.05
	09/20/06	7.90		795.93
	12/19/06	8.39		795.44
	03/13/07	9.08		794.75
	07/03/07	7.35		796.48
	09/27/07	6.92		796.91
	04/16/08	5.65		798.18

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-107	02/01/97	-		788.23
	05/01/97	-		796.60
	09/01/97	-		797.64
	12/01/97	-	809.01	796.49
	03/01/98	-		796.68
	06/01/98	-		796.31
	10/27/98	10.71		798.30
	02/08/99	11.11		797.90
	06/08/99	11.04		797.97
	09/13/99	11.55		797.46
	12/15/99	11.66		797.35
	03/13/00	11.13		797.88
	06/22/00	10.69		798.32
	09/27/00	12.36		796.65
	12/19/00	7.32		799.29
	03/01/01 *	-		-
	06/19/01	10.10	809.06 **	798.96
	09/24/01	11.23		797.88
	12/05/01	11.59		797.47
	03/19/02	9.79		799.27
	06/20/02	10.18		798.88
	09/18/02	11.16		797.90
	12/17/02	12.11		796.95
	03/24/03	12.46		796.60
	06/10/03	10.40		798.66
	09/10/03	11.34		797.72
	12/10/03	10.88		798.18
	03/23/04	9.04		800.02
	07/09/04	11.53		797.53
	09/21/04	12.55		796.51
	03/29/05	10.48		798.58
	06/20/05	11.14		797.92
	09/21/05	11.69		797.37
	12/14/05	11.10		797.96
	03/21/06	10.09		798.97
	06/28/06	11.69		797.37
	09/20/06	12.14		796.92
	12/19/06	11.45		797.61
	03/13/07	10.95		798.11
	07/03/07	11.34		797.72
	09/27/07	10.86		798.20
	04/16/08	8.92		800.14

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-108	02/01/97	-		798.36
	05/01/97	-		793.32
	09/01/97	-		790.53
	12/01/97	-	806.61	788.65
	03/01/98	-		795.59
	06/01/98	-		789.30
	10/27/98	6.98		799.63
	02/08/99	6.72		799.89
	06/08/99	5.80		800.81
	09/13/99	6.68		799.93
	12/15/99	6.87		799.74
	03/13/00	6.84		799.77
	06/22/00	6.28		800.33
	09/27/00	6.31		800.30
	12/19/00	11.42		797.59
	03/01/01	7.04		799.57
	06/19/01	5.87		800.74
	09/24/01	6.52		800.09
	12/05/01	7.70		798.91
	03/19/02	6.25		800.36
	06/20/02	6.43		800.18
	09/18/02	6.72		799.89
	12/17/02	7.78		798.83
	03/24/03	8.69		797.96
	06/10/03	7.00		799.61
	09/10/03	6.91		799.70
	12/10/03	5.18		801.43
	03/23/04	6.24		800.37
	07/09/04	6.12		800.49
	09/21/04	6.91		799.70
	03/29/05	6.64		799.97
	06/20/05	6.78		799.83
	09/21/05	6.66		799.95
	12/14/05	6.68		799.93
	03/21/06	6.71		799.90
	06/28/06	6.82		799.79
	09/20/06	6.75		799.86
	12/19/06	6.90		799.71
	03/13/07	6.75		799.86
	07/03/07	7.53		799.08
	09/27/07	6.55		800.06
	04/16/08	1.27		805.34

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-109	06/21/06	8.98	810.52	801.54
	09/20/06	8.90		801.62
	12/19/06	9.68		800.84
	03/13/07	9.32		801.20
	07/03/07	9.11		801.41
	09/27/07	8.08		802.44
	04/16/08	7.68		802.84
MW-110	06/21/06	10.39	809.81	799.42
	09/20/06	11.09		798.72
	12/19/06	11.06		798.75
	03/13/07	11.04		798.77
	07/03/07	10.60		799.21
	09/27/07	10.33		799.48
	04/16/08	8.31		801.50
MW-111	06/21/06	10.69	807.59	796.90
	09/20/06	13.45		794.14
	12/19/06	14.97		792.62
	03/13/07	9.63		797.96
	07/03/07	9.00		798.59
	09/27/07	8.66		798.93
	04/16/08	5.46		802.13
MW-112	06/21/06	15.70	808.14	792.44
	09/20/06	10.75		797.39
	12/19/06	11.93		796.21
	03/13/07	10.23		797.91
	07/03/07	8.91		799.23
	09/27/07	9.01		799.13
	04/16/08	6.57		801.57
MW-113	06/21/06	9.69	808.24	798.55
	09/20/06	10.27		797.97
	12/19/06	10.03		798.21
	03/13/07	8.93		799.31
	07/03/07	9.75		798.49
	09/27/07	9.67		798.57
	04/16/08	7.03		801.21
PZ-05	07/19/05	37.39	810.88	773.49
	09/21/05	28.56		782.32
	12/19/06	27.98		782.90
	03/13/07	28.61		782.27
	07/03/07	28.00		782.88
	09/27/07	28.06		782.82
	04/16/08	27.83		810.88

Table 3- Groundwater Elevations

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
PZ-06	07/19/05	36.31	809.77	773.46
	09/21/05	29.79		779.98
	12/19/06	29.49		780.28
	03/13/07	29.93		779.84
	07/03/07	30.03		779.74
	09/27/07	29.54		780.23
	04/16/08	28.97		809.77
PZ-07	07/19/05	32.03	804.48	772.45
	09/21/05	27.34		777.14
	12/19/06	29.37		775.11
	03/13/07	24.41		780.07
	07/03/07	23.74		780.74
	09/27/07	25.15		779.33
	04/16/08	23.83		804.48
PZ-08	07/19/05	32.07	804.35	772.28
	09/21/05	24.47		779.88
	12/19/06	28.16		776.19
	03/13/07	21.90		782.45
	07/03/07	23.19		781.16
	09/27/07	22.47		781.88
	04/16/08	21.00		804.35

* Casing for MW-107 was damaged. Groundwater elevation could not be determined.
** Reflects new elevation of MW-107 after repair to well casing.
*** Monitoring wells re-surveyed after casings were shortened.
**** New elevation after the PVC casing was shortened after the March 23, 2004 sampling event.
***** New elevation after the PVC casing was shortened after the March 21, 2006 sampling event.
******New elevation after PVC casing was shortened after the December 19, 2006 sampling event.

Note: Omnni Associates, Inc. collected water level readings from MW-109 to MW-113 on June 21, 2006 and September 20, 2006 and from PZ-5 to PZ-8 on July 19, 2005 and September 21, 2005.

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
W-2	02/20/97	NR	8.00	6.00	750 us	NA	NA	NA	NA
	05/27/97	NR	7.74	10.10	NA	NA	NA	NA	NA
	09/18/97	NR	7.01	14.50	910 us	NA	NA	NA	NA
	12/12/97	NR	7.33	9.50	820 us	NA	NA	NA	NA
	03/25/98	NR	7.96	7.90	1235 us	NA	NA	NA	NA
	06/10/98	NR	6.59	10.20	1057 us	NA	NA	NA	NA
	10/27/98	4.00	7.93	14.80	1278 us	1.40	119.00	12.00	0.00
	02/09/99	4.00	8.47	9.50	1278 us	2.10	146.00	16.00	0.20
	06/08/99	4.00	7.20	14.60	1234 us	1.00	85.00	11.20	1.00
	09/13/99	5.10	7.34	15.00	1254 us	1.90	(136.00)	9.60	0.00
	12/15/99	4.80	7.77	11.80	1199 us	1.50	(231.00)	4.80	0.00
	03/13/00	7.00	6.17	8.90	1278 us	1.30	59.00	7.60	0.00
	06/22/00	4.40	7.86	12.10	1240 us	1.50	59.00	7.60	0.00
	09/27/00	6.60	6.39	16.40	1140 us	1.90	(187.00)	9.60	0.00
	12/19/00	5.00	7.66	9.50	1171 us	1.85	(161.00)	11.20	0.00
	03/01/01	3.50	7.42	10.50	1084 us	1.41	(222.00)	9.20	0.00
	06/19/01	7.00	7.81	15.60	1980 us	1.10	(18.00)	8.40	0.00
	09/24/01	5.00	7.48	13.40	1712 us	0.90	(38.00)	6.60	0.00
	12/05/01	5.00	7.51	10.20	1244 us	1.10	(71.00)	9.60	0.00
	03/19/02	6.00	7.51	10.60	977 us	1.10	(210.00)	13.20	0.00
	06/20/02	6.00	7.40	15.00	1870 us	0.80	(88.00)	8.80	0.00
	09/18/02	5.00	7.18	14.80	1138 us	1.00	(99.00)	10.40	0.00
	12/17/02	4.00	7.34	10.30	1187 us	1.00	(103.00)	9.60	0.00
	03/24/03	4.00	7.30	10.30	1077 us	1.00	(310.00)	10.00	0.00
	06/10/03	6.00	7.21	14.90	1620 us	1.00	(110.00)	12.80	0.00
	09/10/03	4.00	7.09	14.60	1210 us	0.80	(111.00)	8.80	0.00
	03/24/04	4.50	7.30	7.40	1210 us	EM	6.00	NA	0.00
	03/29/05	4.50	7.20	6.30	1182 us	3.40	85.00	NA	0.00
	03/23/06	7.00	6.60	10.50	2470 us	2.65	191.00	NA	0.03
	03/27/07	4.0	7.4	9.0	1240 us	8.0	243	NA	0.04
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
W-8	02/20/97	NR	8.20	7.50	1000 us	NA	NA	NA	NA
	05/27/97	NR	7.30	10.40	NA	NA	NA	NA	NA
	09/18/97	NR	7.07	17.00	1250 us	NA	NA	NA	NA
	12/12/97	NR	7.32	11.20	1090 us	NA	NA	NA	NA
	03/25/98	NR	7.34	7.90	1590 us	NA	NA	NA	NA
	06/10/98	NR	6.95	11.50	1407 us	NA	NA	NA	NA
	10/27/98	5.00	7.42	16.70	1459 us	1.30	97.00	14.40	0.20
	02/09/99	3.90	8.08	11.20	1386 us	1.30	21.00	8.00	2.40
	06/08/99	5.50	7.23	14.80	1283 us	1.80	85.00	14.00	5.60
	09/13/99	5.20	7.12	16.30	1363 us	1.70	(143.00)	14.40	1.60
	12/15/99	5.10	7.25	10.30	1375 us	0.90	(288.00)	14.40	1.20
	03/13/00	5.00	7.06	8.80	1277 us	1.10	(33.00)	8.40	1.00
	06/22/00	4.80	8.58	14.60	1177 us	1.97	(120.00)	6.80	0.00
	09/27/00	6.00	7.60	18.10	1098 us	1.50	(178.00)	10.00	0.00
	12/19/00	4.00	7.67	8.30	1227 us	1.14	(267.00)	11.60	0.00
	03/01/01	5.00	7.51	11.10	1175 us	1.20	(311.00)	11.20	0.00
	06/19/01	6.00	7.93	14.80	1310 us	0.80	(24.00)	6.20	0.00
	09/24/01	6.00	7.37	13.10	1177 us	0.40	4.00	6.40	0.00
	12/05/01	5.00	7.30	10.40	1288 us	1.00	(163.00)	12.40	0.00
	03/19/02	6.00	7.44	10.90	1044 us	1.30	(280.00)	11.20	0.00
	06/20/02	6.00	7.51	14.20	1240 us	0.80	(90.00)	6.20	0.00
	09/18/02	5.00	7.31	15.60	1221 us	1.30	(104.00)	14.60	1.00
	12/17/03	3.00	7.28	10.60	1,155	1.10	(172.00)	12.40	0.40
	03/24/03	5.00	7.18	10.60	1131 us	0.80	(342.00)	11.20	0.00
	06/10/03	4.00	7.30	15.00	1133 us	0.80	(121.00)	8.80	0.00
	09/10/03	5.00	7.22	15.00	1240 us	1.00	(175.00)	11.60	0.80
	03/24/04	4.30	7.40	7.80	755 us	EM	(47.00)	NA	0.00
	03/29/05	4.00	7.10	7.80	1743 us	3.43	87.00	NA	0.00
	03/23/06	4.00	7.20	8.30	2560 us	4.00	227.00	NA	0.00
	03/27/07	3.0	7.3	10.3	1438 us	6.71	237	NA	0.03
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
W-15	02/20/97	NR	8.15	9.00	920 us	NA	NA	NA	NA
	05/27/97	NR	7.66	10.00	NA	NA	NA	NA	NA
	09/18/97	NR	7.22	16.00	1300 us	NA	NA	NA	NA
	12/12/97	NR	7.18	10.40	1180 us	NA	NA	NA	NA
	03/25/98	NR	7.70	8.40	1450 us	NA	NA	NA	NA
	06/10/98	NR	6.46	11.60	1496 us	NA	NA	NA	NA
	10/27/98	4.00	7.27	16.00	1551 us	0.80	137.00	14.40	0.00
	02/09/99	2.60	8.07	10.00	1418 us	1.30	7.00	12.00	0.60
	06/08/99	4.50	7.54	16.70	1465 us	1.50	75.00	12.00	1.40
	09/13/99	3.60	7.18	17.60	1647 us	1.90	(137.00)	10.40	0.80
	12/15/99	3.30	7.52	11.70	1544 us	1.50	(281.00)	12.40	1.00
	03/13/00	4.00	7.14	8.90	1266 us	1.40	(19.00)	7.60	0.40
	06/22/00	3.00	8.22	14.90	1546 us	1.63	36.00	7.30	0.00
	09/27/00	5.00	5.43	17.40	1711 us	1.30	(41.00)	12.40	0.00
	12/19/00	3.00	7.55	8.90	1628 us	3.23	(305.00)	15.20	1.60
	03/01/01	4.00	7.43	10.90	1435 us	2.10	(381.00)	16.00	0.80
	06/19/01	5.00	8.18	14.80	1380 us	1.40	(64.00)	6.00	0.00
	09/24/01	5.00	7.22	12.60	1160 us	1.00	(49.00)	8.00	0.00
	12/05/01	3.00	7.28	9.90	1544 us	2.00	(280.00)	12.80	1.20
	03/19/02	5.00	7.58	10.30	1284 us	1.80	(318.00)	12.20	0.40
	06/20/02	5.00	8.00	14.60	1280 us	1.00	(180.00)	12.40	0.00
	09/18/02	5.00	7.20	16.30	1399 us	1.60	(152.00)	13.60	0.40
	12/17/02	3.00	7.18	10.00	1234 US	2.00	(220.00)	8.80	1.00
	03/24/03	3.00	7.22	10.60	1294 us	1.40	(330.00)	12.40	0.20
	06/10/03	5.00	7.76	14.80	1148 us	1.20	(174.00)	11.20	0.00
	09/10/03	5.00	7.18	15.40	1317 us	1.20	(170.00)	10.40	0.60
	03/24/04	3.70	7.30	8.40	1516 us	EM	(32.00)	NA	0.00
	03/29/05	3.00	7.00	8.20	2240 us	3.81	85.00	NA	0.00
	03/23/06	4.00	7.00	7.50	1952 us	4.40	236.00	NA	0.00
	03/28/07	3.0	7.3	9.0	1420 us	3.28	213	NA	0.01
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-101	02/20/97	NR	7.12	8.00	1400 us	NA	NA	NA	NA
	05/27/97	NR	7.56	12.90	NA	NA	NA	NA	NA
	09/18/97	NR	6.54	14.00	1380 us	NA	NA	NA	NA
	12/12/97	NR	6.64	11.40	1390 us	NA	NA	NA	NA
	03/25/98	NR	7.58	10.50	2142 us	NA	NA	NA	NA
	06/10/98	NR	6.29	11.50	2116 us	NA	NA	NA	NA
	10/27/98	9.00	7.13	14.10	2.27 ms	0.50	116.00	12.00	0.00
	02/09/99	7.00	8.11	12.70	2.11 ms	1.10	165.00	8.80	0.20
	06/08/99	6.00	7.05	15.00	2.17 ms	0.70	161.00	8.00	0.20
	09/13/99	5.90	7.25	14.90	2.12 ms	0.90	(125.00)	13.60	0.00
	12/15/99	6.00	8.71	12.70	2.06 ms	1.00	(262.00)	8.80	0.00
	03/13/00	7.00	6.34	11.60	1939 us	1.10	44.00	8.00	0.00
	06/22/00	5.00	7.73	15.20	2.25 ms	0.96	50.00	8.00	0.00
	09/27/00	8.50	6.80	15.50	2.18 ms	0.70	3.00	12.80	0.00
	12/19/00	10.50	7.12	11.90	2.18 ms	1.48	(233.00)	14.40	0.00
	03/01/01	8.00	7.41	11.00	2.31 ms	1.32	(283.00)	12.20	0.00
	06/19/01	9.00	8.04	13.60	1265 us	1.00	10.00	7.20	0.00
	09/24/01	8.00	7.79	13.40	1304 us	1.00	(11.00)	11.20	0.00
	12/05/01	9.00	7.40	11.20	2240 us	1.20	(304.00)	8.40	0.00
	03/19/02	9.00	7.36	10.80	1984 us	1.40	(210.00)	12.20	0.00
	06/20/02	10.00	7.93	13.80	1190 us	0.80	(30.00)	14.00	0.00
	09/18/02	10.00	7.24	15.00	2248 us	0.80	(113.00)	8.80	0.00
	12/17/02	8.00	7.27	11.40	1988 us	1.60	(334.00)	8.40	0.00
	03/24/03	9.00	7.45	11.10	1033 us	0.60	(190.00)	11.20	0.00
	06/10/03	10.00	7.66	14.00	1121 us	1.00	(61.00)	13.20	0.00
	09/10/03	8.00	7.30	14.80	2104 us	0.80	(124.00)	7.20	0.00
	03/24/04	6.70	6.90	10.10	3160 us	EM	(69.00)	NA	0.00
	03/29/05	6.00	6.60	12.12	4730 us	1.27	83.00	NA	0.00
	03/23/06	7.00	6.60	10.50	2470 us	2.65	191.00	NA	0.03
	03/27/07	5	6.70	13.3	2440 us	3.64	187	NA	0.00
	04/16/08	1.25	6.94	10.5	NA	1.62	309	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-102	02/20/97	NR	8.00	10.50	700 us	NA	NA	NA	NA
	05/27/97	NR	7.47	10.50	NA	NA	NA	NA	NA
	09/18/97	NR	6.99	13.00	810 us	NA	NA	NA	NA
	12/12/97	NR	7.23	8.50	690 us	NA	NA	NA	NA
	03/25/98	NR	7.68	10.20	1145 us	NA	NA	NA	NA
	06/10/98	NR	6.97	10.30	1046 us	NA	NA	NA	NA
	10/27/98	2.00	8.07	13.00	1197 us	1.50	103.00	17.60	0.40
	02/09/99	0.50	7.48	11.00	1164 us	1.00	0.33	14.40	0.00
	06/08/99	0.50	7.89	18.60	1226 us	1.00	151.00	4.80	0.80
	09/13/99	0.50	7.84	13.30	1208 us	1.20	(246.00)	10.00	1.20
	12/15/99	0.50	7.78	9.00	1152 us	1.60	(288.00)	10.80	1.00
	03/13/00	0.50	6.74	9.70	1096 us	1.20	(260.00)	6.80	0.00
	06/22/00	0.50	8.01	12.30	1233 us	0.53	(13.00)	6.00	0.00
	09/27/00	0.50	8.25	12.50	1182 us	1.90	(241.00)	9.20	0.00
	12/19/00	0.50	7.59	8.70	1126 us	1.27	(454.00)	11.60	0.00
	03/01/01	0.50	7.30	10.90	1321 us	1.02	(521.00)	9.20	0.00
	06/19/01	0.50	8.64	13.20	1944 us	0.60	35.00	6.40	0.00
	09/24/01	0.50	7.63	13.40	1622 us	0.80	18.00	7.20	0.00
	12/05/01	0.50	7.59	9.40	1233 us	0.80	(110.00)	12.40	0.00
	03/19/02	0.50	7.41	10.80	1143 us	0.90	(503.00)	9.20	0.50
	06/20/02	0.50	8.18	13.80	1720 us	0.40	4.00	9.60	0.00
	09/18/02	0.50	7.04	13.50	1318 us	1.00	(212.00)	10.80	1.00
	12/17/02	0.50	7.55	10.00	1186 us	0.60	(94.00)	11.20	0.00
	03/24/03	0.50	7.38	10.40	972 us	0.40	(621.00)	8.40	0.00
	06/10/03	0.50	8.01	13.80	1530 us	0.40	(18.00)	8.60	0.00
	09/10/03	0.50	7.10	14.00	1313 us	0.80	(211.00)	8.00	0.80
	03/24/04	2.70	7.20	12.80	1112 us	EM	(26.00)	NA	0.00
	03/29/05	3.00	7.10	12.70	1199 us	2.71	85.00	NA	0.00
	03/23/06	2.00	7.50	9.20	1234 us	5.06	283.00	NA	0.00
	03/27/07	2.0	7.2	12.5	1093 us	1.73	86	NA	0.29
	04/16/08	1.0	7.10	14.1	NA	2.64	179.9	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-103	02/20/97	NR	6.30	6.00	700 us	NA	NA	NA	NA
	05/27/97	NR	7.67	11.60	NA	NA	NA	NA	NA
	09/18/97	NR	7.21	10.50	1030 us	NA	NA	NA	NA
	12/12/97	NR	7.43	9.00	970 us	NA	NA	NA	NA
	03/25/98	NR	7.82	9.40	1441 us	NA	NA	NA	NA
	06/10/98	NR	6.24	9.90	1356 us	NA	NA	NA	NA
	10/27/98	8.00	7.66	12.70	1566 us	0.70	147.00	12.00	0.20
	02/09/99	7.80	7.48	9.90	1443 us	1.40	53.00	11.20	0.80
	06/08/99	9.50	7.42	13.90	1350 us	0.70	109.00	7.20	0.00
	09/13/99	4.10	7.41	12.90	985 us	1.60	(165.00)	12.00	0.00
	12/15/99	4.60	7.82	10.60	2.58 ms	1.40	(294.00)	10.80	0.00
	03/13/00	4.00	6.57	9.40	1292 us	1.00	76.00	8.40	0.40
	06/22/00	4.00	8.43	11.50	1354 us	0.99	(90.00)	6.00	0.00
	09/27/00	11.00	7.48	13.70	1131 us	1.40	(302.00)	7.60	0.00
	12/19/00	9.00	7.90	6.60	1063 us	1.56	(344.00)	9.20	0.40
	03/01/01	8.50	7.68	11.20	1160 us	1.88	(374.00)	8.00	0.60
	06/19/01	13.00	7.81	14.10	1848 us	1.10	(28.00)	7.40	0.00
	09/24/01	2.00	7.32	12.70	1743 us	1.00	(47.00)	12.00	0.00
	12/05/01	11.00	7.18	9.00	1121 us	1.40	(291.00)	10.80	0.60
	03/19/02	11.00	7.60	11.40	1050 us	1.50	(311.00)	10.00	0.40
	06/20/02	12.00	7.47	14.40	1830 us	0.80	(62.00)	10.80	0.00
	09/18/02	10.00	7.18	13.00	748 us	1.40	(170.00)	11.20	0.00
	12/17/02	8.00	7.22	9.60	1134 us	1.20	(284.00)	10.00	0.40
	03/24/03	11.00	7.54	11.00	1262 us	1.20	(320.00)	10.00	0.60
	06/10/03	10.00	7.13	14.10	1644 us	0.60	(80.00)	10.00	0.20
	09/10/03	10.00	7.14	13.20	920 us	1.00	(165.00)	10.40	0.00
	12/10/03	10.00	7.28	10.40	1210 us	0.80	(310.00)	7.80	0.20
	03/24/04	8.60	7.30	10.20	656 us	EM	(126.00)	NA	0.00
	07/09/04	5.00	7.20	14.00	996 us	16.30	283.00	NA	0.00
	09/21/04	1.50	7.10	20.10	1004 us	EM	(19.00)	NA	0.00
	03/29/05	12.00	7.00	10.20	1164 us	1.16	84.00	NA	0.00
	06/21/05	7.00	7.10	13.30	1253 us	1.46	142.00	NA	0.00
	09/21/05	10.00	7.30	13.50	1233 us	3.40	225.00	NA	0.00
	12/14/05	7.00	7.20	9.90	1295 us	1.53	NA	NA	0.00
	03.23/06	7.00	7.00	11.50	1140 us	230.00	252.00	NA	0.00
	06/28/06	5.00	7.10	11.80	746 us	2.75	232.00	NA	0.00
	12/20/06	8.00	7.40	10.80	1207 us	2.89	241.00	NA	0.23
	03/28/07	8.0	7.2	10.8	1075 us	3.09	238.0	NA	0.05
	07/03/07	8.0	7.4	11.3	1154 us	3.54	126.0	NA	0.38
	09/28/07	8.0	7.2	13.7	1294 us	3.14	217.0	NA	0.00
	04/16/08	1.0	7.09	12.0	556 us	0.83	233	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-104	02/20/97	NR	7.43	8.00	1000 us	NA	NA	NA	NA
	05/27/97	NR	8.00	12.00	NA	NA	NA	NA	NA
	09/18/97	NR	7.13	10.50	1030 us	NA	NA	NA	NA
	12/12/97	NR	7.10	9.60	1000 us	NA	NA	NA	NA
	03/25/98	NR	7.94	8.30	1378 us	NA	NA	NA	NA
	06/10/98	NR	6.53	9.70	1101 us	NA	NA	NA	NA
	10/27/98	8.00	7.84	13.20	1272 us	0.90	103.00	16.40	0.40
	02/09/99	9.50	7.66	10.10	1126 us	1.50	193.00	11.20	0.00
	06/08/99	13.00	6.80	15.60	1259 us	1.60	103.00	6.40	0.00
	09/13/99	13.80	7.08	13.90	1334 us	1.80	(146.00)	10.80	0.00
	12/15/99	11.20	7.68	10.80	1172 us	2.00	(232.00)	11.20	0.00
	03/13/00	16.50	6.91	10.20	1121 us	0.40	69.00	11.20	0.60
	06/22/00	11.00	8.65	11.60	1137 us	0.71	(211.00)	6.80	0.00
	09/27/00	8.00	7.24	12.90	1130 us	1.70	(123.00)	13.20	0.00
	12/19/00	8.00	7.75	8.20	1144 us	1.05	(240.00)	12.40	0.00
	03/01/01	9.50	7.72	10.60	1230 us	0.90	(220.00)	12.40	0.20
	06/19/01	13.00	7.91	12.90	1581 us	0.80	(110.00)	6.80	0.00
	09/24/01	8.00	7.18	12.40	1580 us	0.80	(99.00)	9.60	0.20
	12/05/01	7.00	7.22	9.90	1300 us	1.00	(311.00)	9.60	0.00
	03/19/02	10.00	7.70	10.60	1110 us	0.70	(210.00)	11.60	0.20
	06/20/02	10.00	7.53	13.00	1420 us	0.80	(174.00)	12.40	'0.20
	09/18/02	9.00	7.03	14.60	1275 us	1.60	(148.00)	12.40	0.00
	12/17/02	8.00	7.31	10.00	1264 us	0.80	(294.00)	8.80	0.00
	03/24/03	8.00	7.61	10.40	1031 us	0.80	(240.00)	10.80	0.00
	06/10/03	10.00	7.40	15.00	1374 us	0.60	(91.00)	11.20	0.40
	09/10/03	9.00	7.08	14.20	1144 us	1.20	(151.00)	8.80	0.00
	12/01/03	8.00	7.35	10.10	1177 us	0.80	(280.00)	8.80	0.00
	03/24/04	13.60	7.30	9.90	1496 us	EM	(91.00)	NA	0.00
	07/09/04	5.00	7.00	12.00	1648 us	2.90	EM	NA	0.00
	09/21/04	1.00	7.00	13.10	1648 us	EM	1.00	NA	0.00
	03/29/05	6.00	7.00	10.20	1939 us	2.69	86.00	NA	0.00
	06/21/05	7.00	7.10	12.50	1999 us	3.50	125.00	NA	0.00
	09/21/05	7.00	7.10	13.80	1926 us	2.78	213.00	NA	0.00
	12/14/05	7.00	6.90	10.90	2320 us	2.11	253.00	NA	NA **
	03/23/06	10.00	6.90	10.60	2250 us	1.73	209.00	NA	0.00
	06/28/06	5.00	6.80	11.30	2290 us	1.40	215.00	NA	0.26
	12/20/06	8.00	7.10	11.90	2120 us	2.08	248.00	NA	0.00
	03/28/07	8.0	6.9	10.1	2450 us	3.80	226.0	NA	0.07
	07/03/07	6.0	7.1	11.5	2180 us	1.51	247.0	NA	0.61
	09/28/07	6.0	6.9	14.7	2380 us	2.22	266.0	NA	0.05
	04/16/08	1.0	6.96	13.9	853 us	1.74	157.0	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-105	02/20/97	NR	7.70	7.00	1600 us	NA	NA	NA	NA
	05/27/97	NR	7.44	10.50	NA	NA	NA	NA	NA
	09/18/98	NR	6.89	16.00	2150 us	NA	NA	NA	NA
	12/12/97	NR	7.04	12.00	2050 us	NA	NA	NA	NA
	03/25/98	NR	7.35	6.70	2878 us	NA	NA	NA	NA
	06/10/98	NR	6.25	11.10	2695 us	NA	NA	NA	NA
	10/27/98	5.00	7.57	16.80	2.87 ms	0.10	121.00	13.60	0.00
	02/09/99	5.90	7.34	10.60	2.76 ms	0.90	281.00	16.80	1.80
	06/08/99	5.00	7.32	17.80	2.87 ms	0.70	90.00	9.60	0.20
	09/13/99	3.50	7.00	17.20	2.74 ms	1.70	(182.00)	13.20	1.40
	1215/99	3.60	7.36	13.00	2.62 ms	1.60	(255.00)	8.80	1.20
	03/13/00	4.50	6.58	8.40	2430 us	1.30	23.00	9.60	0.80
	06/22/00	3.20	8.44	14.30	2.71 ms	0.88	(304.00)	6.40	0.00
	09/27/00	6.00	6.62	17.90	2.53 ms	1.10	(198.00)	12.80	0.00
	12/19/00	6.00	7.42	9.60	2.32 ms	2.27	(167.00)	12.40	0.00
	03/01/01	5.00	7.24	10.80	2.45 ms	1.89	(184.00)	11.60	0.00
	06/19/01	7.00	8.19	12.80	1877 us	0.60	(200.00)	6.80	0.00
	09/24/01	6.00	7.41	13.80	1809 us	0.80	(183.00)	7.20	0.00
	12/05/01	6.00	7.34	10.00	2148 us	1.80	(188.00)	11.20	0.20
	03/19/02	5.00	6.94	10.20	1984 us	1.80	(169.00)	9.60	0.00
	06/20/02	6.00	8.04	13.00	1400 us	1.00	(310.00)	10.80	0.00
	09/18/02	6.00	7.21	17.20	2800 us	1.60	(183.00)	10.80	1.60
	12/17/02	5.00	7.08	10.40	2008 us	1.40	(194.00)	13.20	0.40
	03/24/03	5.00	7.04	10.60	1477 us	1.40	(99.00)	14.00	0.00
	06/10/03	6.00	7.81	14.80	1344 us	1.20	(280.00)	8.60	0.00
	09/10/03	6.00	7.30	16.40	2626 us	1.20	(177.00)	10.00	1.20
	03/24/04	4.90	6.80	5.90	2220 us	EM	(78.00)	NA	0.00
	03/29/05	4.00	6.80	8.90	2300 us	2.12	87.00	NA	0.00
	03/23/06	4.00	6.90	8.60	2170 us	3.54	256.00	NA	0.22
	03/27/07	4.0	6.8	9.2	2180 us	3.37	296	NA	0.08
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-106	02/20/97	NR	7.75	10.00	1000 us	NA	NA	NA	NA
	05/27/97	NR	7.47	10.10	NA	NA	NA	NA	NA
	09/18/97	NR	7.19	15.00	1310 us	NA	NA	NA	NA
	12/12/97	NR	7.06	11.50	1260 us	NA	NA	NA	NA
	03/25/98	NR	7.61	8.70	1716 us	NA	NA	NA	NA
	06/10/98	NR	7.11	11.60	1604 us	NA	NA	NA	NA
	10/27/98	4.00	7.31	16.80	1824 us	1.20	138.00	12.80	0.00
	02/09/99	2.50	7.33	10.20	1605 us	1.10	197.00	20.80	0.00
	06/08/99	3.50	7.15	15.40	1332 us	0.70	17.00	6.40	0.20
	09/13/99	2.30	7.02	17.40	1357 us	1.00	(168.00)	11.60	0.00
	12/15/99	2.00	8.41	12.10	1445 us	0.80	(266.00)	10.00	0.00
	03/13/00	2.50	6.92	9.10	1513 us	1.60	18.00	10.40	0.00
	06/22/00	1.50	8.18	14.50	1736 us	2.02	38.00	7.20	0.00
	09/27/00	6.00	6.84	19.10	1715 us	1.60	(8.00)	12.00	0.00
	12/19/00	4.00	7.48	10.70	1694 us	1.43	(218.00)	10.80	0.00
	03/01/01	4.00	7.33	10.80	1722 us	1.50	(210.00)	9.20	0.00
	06/19/01	4.00	8.28	13.00	1361 us	1.10	(210.00)	6.40	0.00
	09/24/01	6.00	7.66	14.00	1220 us	0.80	(104.00)	11.20	0.00
	12/05/01	4.00	7.60	10.40	1702 us	0.90	(217.00)	12.80	0.00
	03/19/02	5.00	7.13	10.40	1630 us	1.70	(235.00)	9.20	0.00
	06/20/02	5.00	8.08	12.80	1288 us	1.20	(240.00)	8.80	0.00
	09/18/02	5.00	7.30	17.80	1438 us	1.00	(141.00)	8.80	0.00
	12/17/02	3.00	7.15	10.20	1788 us	0.80	(220.00)	11.20	0.00
	03/24/03	3.00	7.22	10.80	1250 us	1.10	(193.00)	10.00	0.00
	06/10/03	5.00	7.84	13.80	1310 us	1.20	(230.00)	10.20	0.00
	09/10/03	5.00	7.24	16.60	1303 us	0.80	(140.00)	12.00	0.00
	03/24/04	1.80	7.10	8.00	1761 us	EM	(57.00)	NA	0.00
	03/29/05	2.50	6.90	9.00	1995 us	2.24	85.00	NA	0.00
	03/23/06	4.00	7.00	9.40	2160 us	4.14	249.00	NA	0.00
	03/27/07	2.00	7.0	8.5	1887 us	5.04	249	NA	0.00
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-107	02/20/97	NR	7.46	9.00	650 us	NA	NA	NA	NA
	05/27/97	NR	7.12	10.80	NA	NA	NA	NA	NA
	09/18/97	NR	7.07	12.50	700 us	NA	NA	NA	NA
	12/12/97	NR	7.08	10.50	730 us	NA	NA	NA	NA
	03/25/98	NR	7.87	10.20	1081 us	NA	NA	NA	NA
	06/10/98	NR	7.17	10.60	1042 us	NA	NA	NA	NA
	10/27/98	10.00	7.41	12.10	1179 us	1.10	62.00	20.00	10.00
	02/09/99	9.00	8.10	12.00	1189 us	1.30	263.00	7.20	0.40
	06/08/99	9.00	7.48	15.60	1406 us	2.20	163.00	4.80	0.40
	09/13/99	8.00	7.30	12.90	1301 us	2.60	(114.00)	14.00	0.60
	12/15/99	10.00	7.63	11.30	1419 us	2.80	(42.00)	12.40	1.00
	03/13/00	14.50	5.76	10.90	1389 us	1.20	58.00	8.40	0.60
	06/22/00	10.00	8.75	12.40	1574 us	0.62	(120.00)	6.40	0.00
	09/27/00	10.00	7.42	14.20	1505 us	1.60	(114.00)	9.20	0.00
	12/19/00	13.00	7.69	9.50	1524 us	1.21	(38.00)	10.40	0.00
	03/01/01	16.00	7.81	9.90	1704 us	1.31	(93.00)	12.40	0.20
	06/19/01	15.00	7.64	13.40	1221 us	0.80	(80.00)	6.00	0.20
	09/24/01	9.00	7.04	12.40	977 us	0.60	(77.00)	12.00	0.40
	12/05/01	13.00	7.15	9.20	1611 us	0.80	(95.00)	8.40	0.00
	03/19/02	12.00	7.64	10.00	1730 us	1.30	8.00	9.60	0.20
	06/20/02	10.00	7.48	13.60	1304 us	0.60	(110.00)	9.60	0.40
	09/10/02	10.00	7.52	13.10	1403 us	2.00	(104.00)	12.40	0.40
	12/17/02	10.00	7.22	10.40	1593 us	0.80	(110.00)	7.80	0.00
	03/24/03	10.00	7.30	10.30	1362 us	1.00	(48.00)	10.80	0.00
	06/10/03	11.00	7.20	14.00	1277 us	0.80	(200.00)	9.20	1.00
	09/10/03	10.00	7.46	13.30	1121 us	1.30	(99.00)	8.00	0.20
	12/01/03	10.00	7.41	9.80	1360 us	1.00	(98.00)	8.40	0.00
	03/24/04	9.00	7.30	11.10	1704 us	EM	(109.00)	NA	0.00
	07/09/04	6.00	7.30	13.20	1704 us	4.59	166.00	NA	0.00
	09/21/04	3.00	7.10	14.30	1649 us	EM	7.00	NA	0.00
	03/29/05	9.00	7.20	11.50	1749 us	2.83	85.00	NA	0.00
	06/21/05	8.00	7.30	12.70	2010 us	1.85	119.00	NA	0.00
	09/21/05	8.00	7.50	15.20	1594 us	2.92	221.00	NA	0.00
	12/14/05	8.00	7.40	12.30	1708 us	1.80	250.00	NA	0.00
	03/27/06	10.00	7.30	11.90	1726 us	2.65	269.00	NA	0.00
	06/28/06	7.00	7.20	13.40	1696 us	3.76	212.00	NA	0.04
	12/20/06	8.00	7.20	11.80	1655 us	3.83	234.00	NA	0.08
	03/28/07	8.0	7.3	10.4	1599 us	7.14	240	NA	0.01
	07/03/07	7.0	7.5	11.8	1163 us	3.41	258	NA	0.00
	09/28/07	6.0	7.4	13.1	1642 us	2.64	238	NA	0.02
	04/16/08	1.0	7.30	13.5	NA	2.12	197.9	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-108	02/20/97	NR	8.10	10.00	100 us	NA	NA	NA	NA
	05/27/97	NR	6.02	11.40	NA	NA	NA	NA	NA
	09/18/97	NR	6.51	12.00	1160 us	NA	NA	NA	NA
	12/12/97	NR	6.98	10.40	1130 us	NA	NA	NA	NA
	03/25/98	NR	7.64	10.20	1568 us	NA	NA	NA	NA
	06/10/98	NR	6.54	10.70	1525 us	NA	NA	NA	NA
	10/27/98	10.00	7.95	14.30	1696 us	1.40	116.00	12.80	0.20
	02/09/99	8.10	7.51	11.00	1810 us	1.10	(65.00)	10.40	0.40
	06/08/99	12.50	7.60	15.00	1706 us	0.90	173.00	7.20	0.60
	09/13/99	13.50	7.29	13.60	1849 us	1.20	(180.00)	8.00	0.00
	12/15/99	12.80	7.68	11.80	1885 us	1.00	(286.00)	8.40	0.00
	03/13/00	14.00	6.25	10.20	1642 us	1.70	(4.00)	9.20	0.20
	06/22/00	11.50	7.62	14.10	1989 us	1.01	69.00	6.40	0.00
	09/27/00	12.00	7.43	13.10	1983 us	0.40	(73.00)	10.40	0.00
	12/19/00	10.50	7.60	10.10	2.01 ms	2.18	(184.00)	10.80	0.00
	03/01/01	9.00	7.49	11.20	2.38 ms	2.20	(211.00)	11.60	0.00
	06/19/01	8.00	8.20	13.80	1634 us	0.80	(90.00)	7.00	0.00
	09/24/01	9.00	7.59	14.20	1512 us	0.80	(83.00)	9.60	0.00
	12/05/01	10.00	7.49	10.50	2111 us	1.80	(199.00)	9.60	0.00
	03/19/02	12.00	7.30	10.80	2120 us	2.10	(170.00)	11.60	0.00
	06/20/02	12.00	7.92	14.00	1424 us	0.80	(120.00)	12.40	0.00
	09/18/02	12.00	7.13	13.40	1744 us	1.00	(132.00)	11.20	0.00
	12/17/02	10.00	7.36	10.40	1986 us	1.60	(174.00)	8.40	0.00
	03/24/03	10.00	7.31	10.40	2032 us	1.60	(190.00)	8.40	0.00
	06/10/03	11.00	7.64	14.60	1324 us	0.80	(144.00)	9.20	0.00
	09/10/03	11.00	7.15	13.30	1622 us	0.80	(124.00)	10.40	0.00
	03/24/04	10.00	7.70	12.30	1927 us	EM	(156.00)	NA	0.00
	03/29/05	9.00	7.30	10.80	2090 us	2.29	83.00	NA	0.00
	03/27/06	9.00	7.30	9.30	2880 us	1.72	2.69	NA	0.04
	03/27/07	9.0	7.2	12.9	3190 us	5.05	185	NA	0.04
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)
MW-109	06/21/06	2.00	6.42	14.80	1497 us	-	-	-	-
	09/20/06	2.00	6.66	14.60	1429 us	-	-	-	-
	12/20/06	8.00	7.10	11.00	2120 us	2.39	213.00	NA	0.16
	03/29/07	10.0	6.9	9.6	2050 us	7.71	284	NA	***
	07/03/07	9.0	7.2	12.8	2350 us	1.53	192	NA	0.04
	09/28/07	10.0	6.9	18.2	2170 us	9.53	240	NA	0.04
	04/16/08	1.25	7.10	12.4	NA	0.75	248	NA	NA
MW-110	06/21/06	2.00	6.91	12.70	1178 us	-	-	-	-
	09/20/06	2.00	7.00	14.40	1248 us	-	-	-	-
	12/20/06	10.00	7.20	10.60	1757 us	2.07	234.00	NA	0.00
	03/29/07	10.0	7.2	8.1	1806 us	7.03	255	NA	0.03
	07/03/07	8.0	8.3	12.1	1752 us	2.96	227	NA	0.13
	09/28/07	11.0	7.2	15.6	1837 us	5.72	258	NA	0.00
	04/16/08	1.25	7.38	9.5	NA	2.25	285	NA	NA
MW-111	06/21/06	2.00	7.01	12.40	1311 us	-	-	-	-
	09/20/06	1.75	6.99	14.00	1164 us	-	-	-	-
	12/20/06	6.00	7.20	11.00	1478 us	3.95	243.00	NA	0.01
	03/29/07	10.0	7.4	9.2	1908 us	9.29	209	NA	0.01
	07/03/07	6.0	7.4	12.1	1855 us	1.63	263	NA	0.28
	09/28/07	11.0	7.4	13.5	1672 us	6.08	256	NA	0.02
	04/16/08	1.25	7.40	11.6	NA	2.25	244	NA	NA
MW-112	06/21/06	2.00	7.21	12.40	1338 us	-	-	-	-
	09/20/06	2.00	7.28	14.60	1238 us	-	-	-	-
	12/20/06	8.00	7.50	10.70	1817 us	1.94	729.00	NA	0.00
	03/28/07	10.0	7.5	9.5	2050 us	7.93	228	NA	0.00
	07/03/07	9.0	7.6	13.7	1909 us	3.48	234	NA	0.28
	09/28/07	11.0	7.6	13.7	1921 us	6.80	267	NA	0.04
	04/16/08	1.25	7.50	12.9	NA	2.44	270	NA	NA
MW-113	06/21/06	2.00	6.91	12.90	1020 us	-	-	-	-
	09/20/06	2.00	7.11	14.60	900 us	-	-	-	-
	12/20/06	8.00	7.20	10.60	1757 us	2.07	234.00	NA	0.00
	03/29/07	10.0	7.3	8.0	1508 us	9.52	235	NA	***
	07/03/07	7.0	7.6	10.9	1552 us	2.05	262	NA	0.13
	09/28/07	13.0	7.4	14.4	1514 us	6.87	276	NA	0.00
	04/16/08	1.25	7.45	11.8	NA	1.85	267	NA	NA

Table 4 - Groundwater Geochemical Parameters
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (units)	Temperature (degree C)	Conductivity (units as shown)	Dissolved Oxygen (ppm)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/l)

ppm = parts per million
us = microsiemens / centimeter
mV = millivolts
gpg = grains per gallon
EM - Equipment malfunction.
Note: A different meter was used to test ferrous iron beginning on the March 2006 sampling event.
ms = millisiemens / centimeter
NA = not analyzed
NR = not recorded
( ) = Indicates a negative value.
* = Each monitoring well was purged dry twice prior to sampling
The second purging was conducted approximately 3-hrs after initial purging. The volume of purge water collected represents the total of the two well purges. Purge volumes prior to 10/27/98 were not available.
** = Not analyzed due to poor water clarity from recent piezometer installation nearby.
*** = Too cloudy for testing.

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
W-2	02/20/97	NA	15	NA	26	NA	460.0	NA	49
	05/27/97	0.43	8.5	NA	<10	NA	170.0	<.2	30
	09/18/97	0.27	4.5**	NA	9.5**	3**	116.0	<.03	16.9
	12/12/97	.13*	6.2	NA	<9.7	<.8	133.0	.06*	20.4
	03/25/98	0.08	<3.9	NA	<9.5	<1.7	83.8	.007*	18.6
	06/10/98	.31*	16.4	NA	18.6**	<1.7	466.0	.027*	40.8
	10/27/98	.51*	3.60	NA	4.7*	<.0032	69.0	<.05	170
	02/09/99	.46*	<.62	NA	4.0	<.0032	240.0	<0.05	23
	06/08/99	<.31	<.62	NA	1.8*	<.0032	290.0	<0.05	<12
	09/13/99	<.31	2.00	NA	3.2	<.0032	240.0	<.05	<12
	12/15/99	<.31	.72 *	NA	NA	NA	2.8	NA	NA
	03/13/00	<.31	.79 *	NA	NA	NA	7.8	NA	NA
	06/22/00	<.31	<.62	NA	NA	NA	<.42	NA	NA
	09/27/00	2.70	1.1*	NA	NA	NA	17.0	NA	NA
	12/19/00	.24*	.91*	NA	NA	NA	8.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	<2.0	NA	NA
	06/19/01	<.17	.55 *	NA	NA	NA	48.0	NA	NA
	09/24/01	<.17	<.34	NA	NA	NA	52	NA	NA
	12/05/01	<.23	<.57	NA	NA	NA	<2.0	NA	NA
	03/19/02	.27*	<.57	NA	NA	NA	<2.0	NA	NA
	06/20/02	<.23	<.44	NA	NA	NA	61.0	NA	NA
	09/18/02	<.23	<.44	NA	NA	NA	110.0	NA	NA
	12/17/02	<.23	<.44	NA	NA	NA	150.0	NA	NA
	03/24/03	<0.17	<0.43	NA	NA	NA	8.5	NA	NA
	03/24/04	NA	<0.45	5.0	NA	NA	<1.0	NA	NA
	03/29/05	NA	1.2	<2.7	NA	NA	1.3	NA	NA
	03/23/06	NA	0.52	<5.0	NA	NA	4.1	NA	NA
	03/27/07	NA	<1.9	NA	NA	NA	4.7	NA	NA
W-8	02/20/97	NA	17	NA	22	NA	320.0	NA	34
	05/27/97	1.6	37	NA	27	NA	670.0	<.2	54
	09/18/97	0.45	14.4	NA	14.6**	1**	338.0	.11**	31.8
	12/12/97	0.5*	5.7	NA	<9.7	<.8	147.0	.07*	17.1
	03/25/98	0.43	10.1	NA	15**	<1.7	205.0	.007*	21
	06/10/98	0.54	9.9	NA	12.6**	<1.7	264.0	.016*	21.6
	10/27/98	0.80	3.90	NA	4.8*	<.0032	64.0	<.05	85
	02/09/99	<.31	<.62	NA	<60	<.0032	850.0	<.05	12
	06/08/99	<.31	<.62	NA	2.6	<.0032	50.0	<.05	<12
	09/13/99	<.31	1.90	NA	2.7	<.0032	98.0	<.05	29
	12/15/99	<.31	2.80	NA	NA	NA	180.0	NA	NA
	03/13/00	<.31	1.4 *	NA	NA	NA	65.0	NA	NA
	06/22/00	<.31	3.10	NA	NA	NA	74.0	NA	NA
	09/27/00	.27*	.75*	NA	NA	NA	26.0	NA	NA
	12/19/00	<.23	.66*	NA	NA	NA	40.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	23.0	NA	NA
	06/19/01	<.17	1*	NA	NA	NA	100.0	NA	NA
	09/24/01	<.17	<.34	NA	NA	NA	380.0	NA	NA
	12/25/01	<.23	<.57	NA	NA	NA	<2.0	NA	NA
	03/19/02	<.23	<.57	NA	NA	NA	21.0	NA	NA
	06/20/02	<.23	.47*	NA	NA	NA	1400.0	NA	NA
	09/18/02	<.23	<.44	NA	NA	NA	620.0	NA	NA
	12/17/02	<.23	<.44	NA	NA	NA	34.0	NA	NA
	03/24/03	<.17	<.43	NA	NA	NA	27.0	NA	NA
	03/24/04	NA	0.76*	3.8	NA	NA	1.7*	NA	NA
	03/29/05	NA	<0.52	<2.7	NA	NA	9.7	NA	NA
	03/23/06	NA	<0.4	<5.0	NA	NA	5.5	NA	NA
	03/27/07	NA	<1.9	NA	NA	NA	6.0	NA	NA

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
W-15	02/20/97	NA	32	NA	52	NA	430.0	NA	88
	05/27/97	0.27	5.9	NA	15	NA	97.0	<.2	39
	09/18/97	0.31	13.9	NA	18.8**	<.78	325.0	<.03	35.5
	12/12/97	.12*	5.7	NA	9.7**	<.8	80.9	.03*	18.5
	03/25/98	.04*	<3.9	NA	<9.5	<1.7	85.7	.038*	13.7
	06/10/98	.11*	10	NA	13.2**	<1.7	147.0	.016*	18.8
	10/27/98	.41*	6.80	NA	7.40	<.0032	110.0	<.05	100
	02/09/99	<.31	<.62	NA	<.60	<.0032	320.0	<.05	<12
	06/08/99	<.31	2.40	NA	14.00	<.0032	130.0	<.05	66
	09/13/99	<.31	5.30	NA	6.40	<.0032	130.0	<.05	16
	12/15/99	<.31	5.00	NA	NA	NA	90.0	NA	NA
	03/13/00	<.31	7.00	NA	NA	NA	130.0	NA	NA
	06/22/00	<.31	1.80	NA	NA	NA	11.0	NA	NA
	09/27/00	<.23	4.20	NA	NA	NA	24.0	NA	NA
	12/19/00	<.23	1.4*	NA	NA	NA	930.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	<2.0	NA	NA
	06/19/01	<.17	<.34	NA	NA	NA	<2	NA	NA
	09/24/01	<.17	<.34	NA	NA	NA	290.0	NA	NA
	12/05/01	<.23	<.57	NA	NA	NA	2.5	NA	NA
	03/19/02	<.23	<.57	NA	NA	NA	22.0	NA	NA
	06/20/02	.36*	.47*	NA	NA	NA	3.1	NA	NA
	09/18/02	<.23	<.44	NA	NA	NA	110.0	NA	NA
	12/17/02	<.23	<.44	NA	NA	NA	31.0	NA	NA
	03/24/03	<0.17	0.47*	NA	NA	NA	27.0	NA	NA
	03/24/04	NA	1.80	3.8	NA	NA	1.1*	NA	NA
	03/29/05	NA	0.98	<2.7	NA	NA	24.0	NA	NA
	03/23/06	NA	1.60	<5.0	NA	NA	8.0	NA	NA
	03/28/07	NA	<1.9	NA	NA	NA	13	NA	NA
MW-101	02/20/97	NA	36	NA	41	NA	820.0	NA	49
	05/27/97	<.2	10	NA	11	NA	170.0	<.03	18
	09/18/97	.06**	11.9	NA	10.7**	1**	145.0	<.05	18.2
	12/12/97	.06*	12.8	NA	<9.7	<.8	176.0	.05*	20.7
	03/25/98	.04*	20.9	NA	21.6**	<1.7	239.0	.007*	32.7
	06/10/98	.27*	48.2	NA	46.8	<1.7	604.0	.044*	75.9
	10/27/98	<.16	3.20	NA	4.2*	<.0032	24.0	<.05	54
	02/09/99	<.31	<.62	NA	<.60	<.0032	1900.0	<.05	14
	06/08/99	<.31	1.80	NA	8.2	<.0032	380.0	<.05	39
	09/13/99	<.31	2.90	NA	5.1	<.0032	31.0	<.05	<12
	12/15/99	<.31	2.50	NA	NA	NA	9.1	NA	NA
	03/13/00	<.31	2.30	NA	NA	NA	100.0	NA	NA
	06/22/00	<.31	1.4 *	NA	NA	NA	<4.2	NA	NA
	09/27/00	<.23	19.00	NA	NA	NA	37.0	NA	NA
	12/19/00	<.23	7.20	NA	NA	NA	18.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	13.0	NA	NA
	06/19/01	<.17	8.50	NA	NA	NA	9.1	NA	NA
	09/24/01	<.17	.55 *	NA	NA	NA	<2.0	NA	NA
	12/05/01	<.23	.90*	NA	NA	NA	<2.0	NA	NA
	03/19/02	<.23	.66*	NA	NA	NA	<2.0	NA	NA
	06/20/02	<.23	.58*	NA	NA	NA	2.2	NA	NA
	09/18/02	<.23	<.44	NA	NA	NA	13.0	NA	NA
	12/17/02	<.23	<.44	NA	NA	NA	33.0	NA	NA
	03/24/03	<.17	.50*	NA	NA	NA	8.3	NA	NA
	03/24/04	NA	0.79*	<3.6	NA	NA	<1.0	NA	NA
	03/29/05	NA	1.10	<2.7	NA	NA	16.0	NA	NA
	03/23/06	NA	0.55	<5.0	NA	NA	45.0	NA	NA
	03/27/07	NA	<1.9	NA	NA	NA	14.0	NA	NA
	04/16/08	NA	2.4 J	NA	NA	NA	NA	NA	NA

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
MW-102	02/20/97	NA	26	NA	38	NA	570.0	NA	34
	05/27/97	0.21	48	NA	77	NA	920.0	<.2	73
	09/18/97	.08**	<3.92	NA	6.9**	2**	302.0	<.03	8.7
	12/12/97	.04*	<3.9	NA	<9.7	<.8	387.0	.04*	10.9
	03/25/98	.11*	<3.9	NA	9.5**	<1.7	302.0	.007*	7.4*
	06/10/98	.04*	<3.9	NA	<9.8	<1.7	318.0	.018*	9.5
	10/27/98	.27*	.98*	NA	3.2*	<.0032	340.0	<.05	24
	02/09/99	<.31	.73*	NA	<.60	<.0032	670.0	<.05	20
	06/08/99	<.31	1.2*	NA	5.8	<.0032	140.0	<.05	36
	09/13/99	<.31	4.00	NA	15.0	<.0032	160.0	<.05	73
	12/15/99	<.31	1.2 *	NA	NA	NA	550.0	NA	NA
	03/13/00	<.31	1.70	NA	NA	NA	580.0	NA	NA
	06/22/00	<.31	<.62	NA	NA	NA	310.0	NA	NA
	09/27/00	<.23	2.10	NA	NA	NA	130.0	NA	NA
	12/19/00	.33*	2.90	NA	NA	NA	110.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	<2.0	NA	NA
	06/19/01	<.17	<.34	NA	NA	NA	<2	NA	NA
	09/24/01	.48 *	1.40	NA	NA	NA	46.0	NA	NA
	12/05/01	<.23	<.57	NA	NA	NA	100.0	NA	NA
	03/19/02	<.23	<.57	NA	NA	NA	87.0	NA	NA
	06/20/02	<.17	1.80	NA	NA	NA	44.0	NA	NA
	09/18/02	<.23	1.4*	NA	NA	NA	<2.0	NA	NA
	12/17/02	<.23	<.44	NA	NA	NA	38.0	NA	NA
	03/24/03	0.21*	<0.43	NA	NA	NA	3.5	NA	NA
	03/24/04	NA	<0.45	<3.6	NA	NA	65.0	NA	NA
	03/29/05	NA	0.71	<2.7	NA	NA	190.0	NA	NA
	03/23/06	NA	<0.40	<5.0	NA	NA	100.0	NA	NA
	03/27/07	NA	<1.9	NA	NA	NA	230	NA	NA
	04/16/08	NA	<0.57	NA	NA	NA	NA	NA	NA

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
MW-103	02/20/97	NA	1,300	NA	47	NA	800.0	NA	27
	05/27/97	<.2	160.0	NA	31	NA	900.0	<.2	29
	09/18/97	.06**	35.2	NA	13.5**	3**	287.0	<.03	13.7
	12/12/97	.04*	16.3	NA	<9.7	<.8	84.3	.09*	21.4
	03/25/98	.04*	15.5	NA	<9.5	<1.7	83.0	.007*	7.5*
	06/10/98	.15*	57.6	NA	27.5	<1.7	417.0	.02*	33.7
	10/27/98	<.16	6.30	NA	2.3*	<.0032	27.0	<.05	30.0
	06/08/99	<.31	87.00	NA	3.5	<.0032	810.0	<.05	30
	09/13/99	<.31	720.0	NA	5.9	<.0032	83.0	<.05	15
	12/15/99	<.31	260.0	NA	NA	NA	160.0	NA	NA
	03/13/00	<.31	600.0	NA	NA	NA	79.0	NA	NA
	06/22/00	<.31	130.0	NA	NA	NA	180.0	NA	NA
	09/27/00	<.23	280.0	NA	NA	NA	230.0	NA	NA
	12/19/00	<.23	180.0	NA	NA	NA	170.0	NA	NA
	03/01/01	<.23	49.0	NA	NA	NA	240.0	NA	NA
	06/19/01	<.17	11.0	NA	NA	NA	350.0	NA	NA
	09/24/01	<.17	12.0	NA	NA	NA	280.0	NA	NA
	12/05/01	<.23	2.9	NA	NA	NA	230.0	NA	NA
	03/19/02	<.23	73.0	NA	NA	NA	7.9	NA	NA
	06/20/02	<.23	14.0	NA	NA	NA	630.0	NA	NA
	09/18/02	<.23	6.5	NA	NA	NA	560.0	NA	NA
	12/17/02	<.23	6.2	NA	NA	NA	3.7	NA	NA
	03/24/03	.26*	350.0	NA	NA	NA	48.0	NA	NA
	06/10/03	NA	150.0	NA	NA	NA	NA	NA	NA
	09/10/03	NA	9.10	NA	NA	NA	NA	NA	NA
	12/10/03	NA	7.70	NA	NA	NA	NA	NA	NA
	12/15/03	NA	NA	<3.6	NA	NA	NA	NA	NA
	03/24/04	NA	5.60	6.3	NA	NA	7.6	NA	NA
	07/09/04	NA	11.00	16.0	NA	NA	NA	NA	NA
	12/09/04	NA	1.20	<3.6	NA	NA	NA	NA	NA
	03/29/05	NA	220.0	350.0	NA	NA	82.0	NA	NA
	06/22/05	NA	240.0	250.0	NA	NA	NA	NA	NA
	09/21/05	NA	110.0	69.0	NA	NA	NA	NA	NA
	12/15/05	NA	120.0	150.0	NA	NA	NA	NA	NA
	03/23/06	NA	16.0	270.0	NA	NA	8.4	NA	NA
	06/28/06	NA	40.0	29.0	NA	NA	NA	NA	NA
	09/20/06	NA	45.0	35.0	NA	NA	NA	NA	NA
	12/20/06	NA	15.0	NA	NA	NA	NA	NA	NA
	03/28/07	NA	31	NA	NA	NA	38	NA	NA
	07/03/07	NA	90	NA	NA	NA	NA	NA	NA
	09/28/07	NA	78	NA	NA	NA	NA	NA	NA
	04/16/08	NA	380	NA	NA	NA	NA	NA	NA

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
MW-104	02/20/97	NA	5.9	NA	15	NA	550.0	NA	6.9
	05/27/97	<.02	6.9	NA	11	NA	470.0	<.2	5.2
	09/18/97	<.04	35.6	NA	5**	3**	235.0	<.03	4.74
	12/12/97	.04*	61.8	NA	9.8**	<.8	279.0	.05*	14
	03/25/98	.04*	66.8	NA	<9.5	<1.7	73.6	.008*	7.4*
	06/10/98	.04*	219.0	NA	<9.8	<1.7	107.0	.016*	12.8
	10/27/98	.29*	150.0	NA	2.3*	<.0032	25.0	<.05	30
	02/09/99	<.31	94.0	NA	1.4*	<.0032	1000.0	<.05	<12
	06/08/99	1*	62.0	NA	12.0	<.0032	620.0	<.05	17
	09/13/99	<.31	80.0	NA	3.2	<.0032	9.2	<.05	<12
	12/15/99	<.31	170.0	NA	NA	NA	1.6	NA	NA
	03/13/00	<.31	300.0	NA	NA	NA	13.0	NA	NA
	06/22/00	<.31	210.0	NA	NA	NA	41.0	NA	NA
	09/27/00	<.23	510.0	NA	NA	NA	3.9	NA	NA
	12/19/00	<.23	790.0	NA	NA	NA	<2	NA	NA
	03/01/01	<.23	840.0	NA	NA	NA	<2	NA	NA
	06/19/01	<.17	680.0	NA	NA	NA	2.3	NA	NA
	09/24/01	<.17	310.0	NA	NA	NA	17.0	NA	NA
	12/05/02	<.23	390.0	NA	NA	NA	2.2	NA	NA
	03/19/02	<.23	430.0	NA	NA	NA	<2.0	NA	NA
	06/20/02	<.23	490.0	NA	NA	NA	14.0	NA	NA
	09/18/02	<.23	410.0	NA	NA	NA	27.0	NA	NA
	12/17/02	<.23	240.0	NA	NA	NA	8.9	NA	NA
	03/24/03	<.17	180.0	NA	NA	NA	4.2	NA	NA
	06/10/03	NA	420.0	NA	NA	NA	NA	NA	NA
	09/10/03	NA	1200.0	NA	NA	NA	NA	NA	NA
	12/10/03	NA	790.0	NA	NA	NA	NA	NA	NA
	12/15/03	NA	NA	700.0	NA	NA	NA	NA	NA
	03/24/04	NA	550.0	580.0	NA	NA	<1.0	NA	NA
	07/09/04	NA	370.0	380.0	NA	NA	NA	NA	NA
	09/22/04	NA	87.0	33.0	NA	NA	NA	NA	NA
	12/09/04	NA	56.0	57.0	NA	NA	NA	NA	NA
	03/29/05	NA	260.0	260.0	NA	NA	1.0	NA	NA
	06/22/05	NA	280.0	230.0	NA	NA	NA	NA	NA
	09/21/05	NA	17.0	25.0	NA	NA	NA	NA	NA
	12/15/05	NA	95.0	110.0	NA	NA	NA	NA	NA
	03/23/06	NA	66.0	200.0	NA	NA	6.3	NA	NA
	06/28/06	NA	76.0	58.0	NA	NA	NA	NA	NA
	09/20/06	NA	2.8	<6.8	NA	NA	NA	NA	NA
	12/20/06	NA	8.4	NA	NA	NA	NA	NA	NA
	03/28/07	NA	160	NA	NA	NA	130	NA	NA
	07/03/07	NA	97	NA	NA	NA	NA	NA	NA
	09/28/07	NA	11.0	NA	NA	NA	NA	NA	NA
	04/16/08	NA	545	NA	NA	NA	NA	NA	NA

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
MW-105	02/20/97	NA	21	NA	22	NA	1100.0	NA	23
	05/27/97	<.2	5	NA	<10	NA	120.0	<.2	12
	09/18/97	.14**	29.5	NA	28.3	1**	532.0	<.03	46
	12/12/97	.36*	15.8	NA	12.5**	<.8	297.0	.03*	27.1
	03/25/98	.04*	30.8	NA	27.6	<1.7	518.0	.064*	44
	06/10/98	.048*	13.7	NA	15.3**	<1.7	217.0	.016*	22.1
	10/27/98	.29*	8.80	NA	8.20	<.0032	150.0	<.05	70
	02/09/99	<.31	1.3*	NA	4.30	<.0032	2000.0	<.05	19
	06/08/99	<.31	1*	NA	18.00	<.0032	1300.0	<.05	66
	09/13/99	<.31	.64*	NA	24.00	<.0032	1700.0	<.05	30
	12/15/99	<.31	<.62	NA	NA	NA	860.0	NA	NA
	03/13/00	<.31	4.80	NA	NA	NA	660.0	NA	NA
	06/22/00	<.31	1.0 *	NA	NA	NA	600.0	NA	NA
	09/27/00	<.23	1.2*	NA	NA	NA	700.0	NA	NA
	12/19/00	<.23	<.4	NA	NA	NA	230.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	43.0	NA	NA
	06/19/01	<.17	.75*	NA	NA	NA	230.0	NA	NA
	09/24/01	<.17	.73*	NA	NA	NA	530.0	NA	NA
	12/05/01	<.23	<.57	NA	NA	NA	<2.0	NA	NA
	03/19/02	<.23	<.57	NA	NA	NA	22.0	NA	NA
	06/20/02	<.23	.60*	NA	NA	NA	1400.0	NA	NA
	09/18/02	<.23	<.44	NA	NA	NA	600.0	NA	NA
	12/17/02	<.23	<.44	NA	NA	NA	58.0	NA	NA
	03/24/03	.21*	<.43	NA	NA	NA	86.0	NA	NA
	03/24/04	NA	3.80	6.3	NA	NA	89.0	NA	NA
	03/29/05	NA	<0.52	<2.7	NA	NA	82.0	NA	NA
	03/23/06	NA	0.42	<5.0	NA	NA	43.0	NA	NA
	03/27/07	NA	<1.9	NA	NA	NA	23	NA	NA
MW-106	02/20/97	NA	21	NA	24	NA	320.0	NA	26
	05/27/97	<.02	40	NA	35	NA	590.0	<.2	68
	09/18/97	.05**	5.5	NA	6.2**	1**	56.9	<.03	35.6
	12/12/97	.04*	9.2	NA	9.7**	<.08	155.0	.03*	18.4
	03/25/98	NA	13.40	NA	14.4**	<1.7	150.0	.007*	18.5
	06/10/98	.04*	<3.9	NA	10.2**	<1.7	10.0	.016*	10.9
	10/27/98	.27*	3.20	NA	4.3*	<.0032	38.0	<.05	88
	02/09/99	<.31	<.62	NA	1.1*	<.0032	760.0	<.05	22
	06/08/99	<.31	.79*	NA	2.3	<.0032	900.0	<.05	<12
	09/13/99	<.31	1.80	NA	4.7	<.0032	1100.0	<.05	30
	12/15/99	<.31	1.3 *	NA	NA	NA	130.0	NA	NA
	03/31/00	<.31	2.30	NA	NA	NA	270.0	NA	NA
	06/22/00	<.31	.73 *	NA	NA	NA	<4.2	NA	NA
	09/27/00	<.23	.88*	NA	NA	NA	50.0	NA	NA
	12/19/00	<.23	.77*	NA	NA	NA	22.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	45.0	NA	NA
	06/19/01	.21*	.39*	NA	NA	NA	57.0	NA	NA
	09/24/01	<.17	<.34	NA	NA	NA	950.0	NA	NA
	12/05/01	<.23	<.57	NA	NA	NA	310.0	NA	NA
	03/19/02	<.23	<.57	NA	NA	NA	92.0	NA	NA
	06/20/02	<.23	<.44	NA	NA	NA	270.0	NA	NA
	09/18/02	<.23	<.44	NA	NA	NA	420.0	NA	NA
	12/17/02	<.23	<.44	NA	NA	NA	41.0	NA	NA
	03/24/03	<0.17	<.43	NA	NA	NA	2.1	NA	NA
	03/24/04	NA	<0.45	3.8	NA	NA	190.0	NA	NA
	03/29/05	NA	1.10	<2.7	NA	NA	15.0	NA	NA
	03/23/06	NA	0.45	<5.0	NA	NA	30.0	NA	NA
	03/27/07	NA	<1.9	NA	NA	NA	15	NA	NA

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
MW-107	02/20/97	NA	2,000	NA	13	NA	190.0	NA	6.9
	05/27/97	<.2	3,600	NA	<10	NA	91.0	<.2	10
	09/18/97	<.04	2,670	NA	<8.1	1**	59.3	<.03	33.5
	12/12/97	.04*	2,310	NA	<9.7	<.8	48.4	.1*	6.7
	03/25/98	.04*	11,200*	NA	12.1**	<1.7	68.2	.041*	9.3*
	06/10/98	.11*	6,240	NA	13.8**	<1.7	161.0	.027*	17.3*
	10/27/98	<.16	7,100	NA	1.2*	<.0032	28.0	<.05	94
	02/09/99	<.31	3,200	NA	1.9*	<.0032	49.0	<.05	<12
	06/08/99	<.31	5,800	NA	3.0	<.0032	25.0	<.05	<12
	09/13/99	<.31	4,000	NA	1.9*	<.0032	18.0	<.05	<12
	12/15/99	<.31	14,000	NA	NA	NA	.83 *	NA	NA
	03/13/00	<.31	8,100	NA	NA	NA	22.0	NA	NA
	06/22/00	<.31	14,000	NA	NA	NA	<42	NA	NA
	09/27/00	<.23	11,000	NA	NA	NA	4.9	NA	NA
	12/19/00	<.23	10,000	NA	NA	NA	2.4	NA	NA
	03/01/01	<.23	5,000	NA	NA	NA	2.2	NA	NA
	06/19/01	<.17	8,200	NA	NA	NA	<2	NA	NA
	09/24/01	<17	5,300	NA	NA	NA	270.0	NA	NA
	12/05/01	<.23	6,200	NA	NA	NA	10.0	NA	NA
	03/19/02	<.23	7,000	NA	NA	NA	<20	NA	NA
	06/20/02	<2.3	7,000	NA	NA	NA	<20	NA	NA
	09/18/02	<.17	4,300	NA	NA	NA	24.0	NA	NA
	12/17/02	<.17	3,700	NA	NA	NA	15.0	NA	NA
	03/24/03	<10	3,800	NA	NA	NA	7.7	NA	NA
	06/10/03	NA	5,900	NA	NA	NA	NA	NA	NA
	09/10/03	NA	5,200	NA	NA	NA	NA	NA	NA
	12/10/03	NA	5,200	NA	NA	NA	NA	NA	NA
	12/15/03	NA	NA	5,500	NA	NA	NA	NA	NA
	03/24/04	NA	3,900	4,100	NA	NA	1.2*	NA	NA
	07/09/04	NA	3,400	5,000	NA	NA	NA	NA	NA
	09/22/04	NA	4,100	4,400	NA	NA	NA	NA	NA
	12/14/04	NA	6,300	5,800	NA	NA	NA	NA	NA
	03/29/05	NA	3,600	4,100	NA	NA	1.9	NA	NA
	06/22/05	NA	3,300	2,900	NA	NA	NA	NA	NA
	09/21/05	NA	2,500	2,500	NA	NA	NA	NA	NA
	12/15/05	NA	2,400	2,700	NA	NA	NA	NA	NA
	03/23/06	NA	3,200	3,600	NA	NA	1.90	NA	NA
	06/28/06	NA	3,600	3,000	NA	NA	NA	NA	NA
	09/20/06	NA	4,100	4,200	NA	NA	NA	NA	NA
	12/19/06	NA	2,700	NA	NA	NA	NA	NA	NA
	03/28/07	NA	4,200	NA	NA	NA	1.7	NA	NA
	07/03/07	NA	2,800	NA	NA	NA	NA	NA	NA
	09/28/07	NA	2,000	NA	NA	NA	NA	NA	NA
	04/16/08	NA	4,410	NA	NA	NA	NA	NA	NA

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
MW-108	02/20/97	NA	25	NA	23	NA	490.0	NA	31
	05/27/97	<.2	11	NA	13	NA	210.0	<.2	15
	09/18/97	.14**	27.4	NA	22.4**	1**	462.0	<.03	36.6
	12/12/97	.04*	5.6	NA	<9.7	<.8	74.8	.03*	27.9
	03/25/98	.04*	9.4	NA	10.4**	<1.7	142.0	.007*	13.8
	06/10/98	.14*	28.4	NA	25.5	<1.7	478.0	.021*	40.5
	10/27/98	.26*	8.90	NA	7.40	<.0032	88.0	<0.5	44
	02/09/99	<.31	1.70	NA	3.90	<.0032	560.0	<.05	30
	06/08/99	<.31	3.10	NA	1.4*	<.0032	450.0	<.05	54
	09/13/99	<.31	4.50	NA	5.30	<.0032	100.0	<.05	<12
	12/15/99	<.31	6.10	NA	NA	NA	79.0	NA	NA
	03/13/00	<.31	3.6	NA	NA	NA	41.0	NA	NA
	06/22/00	<.31	6.5	NA	NA	NA	<4.2	NA	NA
	09/27/00	<.23	2.9	NA	NA	NA	29.0	NA	NA
	12/19/00	<.23	3.0	NA	NA	NA	22.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	<2.0	NA	NA
	06/19/01	<.17	2.40	NA	NA	NA	110.0	NA	NA
	09/24/01	<.17	<.34	NA	NA	NA	40.0	NA	NA
	12/05/01	<.23	<.57	NA	NA	NA	7.4	NA	NA
	03/19/02	<.23	<.57	NA	NA	NA	3.4	NA	NA
	06/20/02	<.23	.85*	NA	NA	NA	39.0	NA	NA
	09/18/02	<.23	<.44	NA	NA	NA	150.0	NA	NA
	12/17/02	<.23	.67*	NA	NA	NA	34.0	NA	NA
	03/24/03	<.17	.67*	NA	NA	NA	3.3	NA	NA
	03/24/04	NA	0.79*	<36	NA	NA	83.0	NA	NA
	03/29/05	NA	0.65	<2.7	NA	NA	2.6	NA	NA
	03/27/06	NA	<0.40	<5.0	NA	NA	6.2	NA	NA
	03/27/07	NA	<1.9	NA	NA	NA	1.4	NA	NA
MW-109	6/21/06****	<0.92	1,300	1,400	2.4*	<9.4	480.0	<0.072	<20
	9/20/06****	NA	450	NA	-	<9.4	430.0	NA	<20
	12/19/06	NA	550	NA	NA	NA	NA	NA	NA
	03/29/07	NA	2,700	NA	NA	0.94	15	NA	<20
	07/03/07	NA	2,200	NA	NA	NA	NA	NA	NA
	09/28/07	NA	1,300	NA	NA	NA	NA	NA	NA
	04/16/08	NA	1,550	NA	NA	NA	NA	NA	NA
MW-110	6/21/06****	<0.92	24,000	26,000	2.9*	40	290.0	<0.072	<20
	9/20/06****	NA	15,000	NA	NA	41	260.0	NA	<20
	12/19/06	NA	15,000	NA	NA	53	NA	NA	NA
	03/29/07	NA	47,000	NA	NA	6.6	84	NA	<20
	07/03/07	NA	3,200	NA	NA	79	NA	NA	NA
	09/28/07	NA	51,000	NA	NA	71	NA	NA	NA
	04/16/08	NA	32,500	NA	NA	55	NA	NA	NA
MW-111	6/21/06****	<0.92	1,400	1,400	3.3*	27	190.0	<0.072	<20
	9/20/06****	NA	22	NA	-	20*	210.0	NA	<20
	12/19/06	NA	6.7	NA	NA	NA	NA	NA	NA
	03/29/07	NA	2,300	NA	NA	31	11	NA	<20
	07/03/07	NA	41	NA	NA	NA	NA	NA	NA
	09/28/07	NA	340	NA	NA	NA	NA	NA	NA
	04/16/08	NA	212	NA	NA	16 J	NA	NA	NA
MW-112	6/21/06****	<0.92	130,000	140,000	5.3	140	180.0	<0.072	34,000
	9/20/06****	NA	69,000	NA	NA	84	130.0	NA	<20
	12/19/06	NA	55,000	NA	NA	88	NA	NA	<200
	03/28/07	NA	140,000	NA	NA	450	110	NA	<20
	07/03/07	NA	100,000	NA	NA	35	NA	NA	<200
	09/28/07	NA	150,000	NA	NA	320	NA	NA	34
	04/16/08	NA	88,400	NA	NA	380	NA	NA	NA

Table 5 - Groundwater Analytical Results / Selected Metals
N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Cadmium (ug/l)	Chromium (ug/l)	Hexavalent Chromium (ug/l)	Copper (ug/l)	Cyanide (ug/l)	Manganese (ug/l)	Mercury (ug/l)	Zinc (ug/l)
Max Contaminant Level (MCL)		5	100	100***	100	200	50.0	2	5,000
1992 ES NR 140		10	50	50	1,000	200	50.0	2	5,000
1992 PAL NR 140		1.0	5	5***	500	40	25.0	0.2	2,500
MW-113	6/21/06****	<0.92	25,000	26,000	3.4*	11	170.0	<0.072	<20
	9/20/06****	NA	31,000	NA	NA	12*	85.0	NA	<20
	12/19/06	NA	21,000	NA	NA	NA	NA	NA	NA
	03/29/07	NA	11,000	NA	NA	<0.94	3.2	NA	<20
	07/03/07	NA	21,000	NA	NA	NA	NA	NA	NA
	09/28/07	NA	55,000	NA	NA	NA	NA	NA	NA
	04/16/08	NA	16,400	NA	NA	NA	NA	NA	NA
PZ-5	07/19/05****	NA	1.3*	<5.0	NA	NA	NA	NA	NA
	09/21/05****	NA	0.41*	<5.0	NA	NA	NA	NA	NA
PZ-6	07/19/05****	NA	1.2*	<5.0	NA	NA	NA	NA	NA
	09/21/05****	NA	<0.40	<5.0	NA	NA	NA	NA	NA
PZ-7	07/19/05****	NA	<0.52	<5.0	NA	NA	NA	NA	NA
	09/21/05****	NA	0.55*	<5.0	NA	NA	NA	NA	NA
PZ-8	07/19/05****	NA	1.1*	<5.0	NA	NA	NA	NA	NA
	09/21/05****	NA	<0.40	<5.0	NA	NA	NA	NA	NA

EXPLANATION:

Samples collected prior to 10/27/98 were collected by CH2M Hill.

* = Analyte detected between limit of detection and limit of quantitation.

** = Compound was found in sample and blank.

*** = Standard is for Total Chromium.

**** = Omnni Associates, Inc. collected groundwater samples from PZ-5 to PZ-8 on July 19, 2005 and September 21, 2005 and MW-109 to MW-113 on June 21, 2006 and September 20, 2006 using a peristaltic pump and dedicated tabing.

ND = Not detected above the analytical laboratories method detection limit

NA = Not Analyzed

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MW-104 = Was tested for Aluminum, Nickel, Arsenic & Lead. No quantifiable detections were noted for any of the analytes.

ug/L = Microgram/Liter

mg/L = Milligram / Liter

Indicates an exceedance of the 1992 NR 140 Groundwater Quality Enforcement Standard (ES)

Indicates Exceedance of the 1992 NR 140 Groundwater Preventive Action Limit (PAL)

NOTE: The EPA Record of Decision establishes the 1992 PALS as the cleanup goals for the site.

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

		Detected Volatile Organic Compounds (µg/L)												
		Benzene	Chloroform	1,1-Dichloro ethane	1,1-Dichloro ethene	cis-1,2,-Dichloro ethene	Trans-1,2,-Dichloro ethene	Ortho-Xylene	Toluene	1,1,1-Trichloro ethane	1,1,2-Trichloro ethane	Trichloro ethene	Meta, para Xylene	Total Xylenes
1992 US EPA MCL		5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140		5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140		0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124
W-2	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<85	<.7	<7	<7	<124	<68	<40	<.5	<.5	<124	-
	12/12/97	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	03/25/98	<.5	<.6	<85	<.7	<7	<7	<.4	<68	<40	<.5	<.5	.4**	-
	06/10/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.27	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	.15*	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	06/08/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	<.14	<.15	<.16	<.17	***	.13*	<.14	<.15	<.14	***	<37
	03/13/00	<.32	<.28	<.36	<.35	<.15	<.39	***	<.37	<.33	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	<.37	<.42	<.32	<.42	***	<.43
W-8	02/20/97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<85	<40	<7	<7	<124	<68	<40	<.5	<.5	<124	-
	12/12/97	<.5	<.6	<85	<40	<7	<7	<.4	<68	<40	<.5	<.5	.4**	-
	03/25/98	<.5	<.6	<85	<40	<7	<7	<.3	<68	<40	<.5	<.5	.3**	-
	06/10/98	<.5	<.6	<85	<40	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.27	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	.19*	<.15	<.15	<.15	<.16	<.17	***	.15*	<.14	<.15	<.15	***	<.37
	06/08/99	<.13	<.15	<.14	<.15	<.16	<.17	***	0.13	<.14	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	03/13/00	<.32	<.28	<.36	<.35	<.15	<.39	***	<.37	<.33	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	<.37	<.42	<.32	<.42	***	<.43

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

		Detected Volatile Organic Compounds (µg/L)												
		Benzene	Chloroform	1,1-Dichloro ethane	1,1-Dichloro ethene	cis-1,2,-Dichloro ethene	Trans-1,2,-Dichloro ethene	Ortho-Xylene	Toluene	1,1,1-Trichloro ethane	1,1,2-Trichloro ethane	Trichloro ethene	Meta, para Xylene	Total Xylenes
1992 US EPA MCL		5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140		5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140		0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124
W-15	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	0.22	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<85	<.7	<7	<7	<124	<68	<40	<.5	<.5	<124	-
	12/12/97	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	03/25/98	<.5	<.6	<85	<.7	<7	<7	<.4	<68	<40	<.5	<.5	.4**	-
	06/10/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.27	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	06/08/99	.16*	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	03/13/00	<.32	<.28	<.36	<.35	<.15	<.39	***	<.37	<.33	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	<.50*	<.42	<.32	<.42	***	<.43
MW-101	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	.491*	.353*	<7	<7	<124	<68	3.03	<.5	3.31	<124	-
	12/12/97	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	03/25/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	06/10/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.27	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	<.13	<.15	<.14	<.15	<.16	<.17	***	0.91	<.14	<.15	<.14	***	<.37
	06/08/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	03/13/00	<.32	<.28	<.36	<.35	<.15	<.39	***	<.37	<.33	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	<.40*	<.42	<.32	<.42	***	<.43

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

		Detected Volatile Organic Compounds (µg/L)												
		Benzene	Chloroform	1,1-Dichloro ethane	1,1-Dichloro ethene	cis-1,2,-Dichloro ethene	Trans-1,2,-Dichloro ethene	Ortho-Xylene	Toluene	1,1,1-Trichloro ethane	1,1,2-Trichloro ethane	Trichloro ethene	Meta, para Xylene	Total Xylenes
1992 US EPA MCL		5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140		5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140		0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124
MW-102	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<.85	<85	<7	<7	<124	<68	<40	<.5	<.5	<124	-
	12/12/97	<.5	<.6	<85	<85	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	03/25/98	<.5	<.6	<85	<85	<7	<7	<.4	<68	<40	<.5	<.5	.4*	-
	06/10/98	<.5	<.6	<85	<85	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.27	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	<.13	<.15	<.14	<.15	<.16	<.17	***	0.65	<.14	<.15	<.14	***	<.37
	06/08/99	<.13	<.15	<.14	<.15	<.16	<.17	***	.21*	<.14	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	03/13/00	<.32	<.28	<.36	<.35	<.15	<.39	***	<.37	<.33	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	<.37	<.42	<.32	<.42	***	<.43
MW-103	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<85	<.7	<7	<7	<124	<68	<40	<.5	<.5	<124	-
	12/12/97	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	03/25/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	06/10/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.27	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	<.13	<.15	<.14	<.15	<.16	<.17	***	.15*	<.14	<.15	<.14	***	<.37
	06/08/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	03/13/00	<.32	<.28	<.36	<.35	<.15	<.39	***	<.37	<.33	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	.23*	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.39	***	<.37	<.42	<.32	<.42	***	<.42

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

		Detected Volatile Organic Compounds (µg/L)												
		Benzene	Chloroform	1,1-Dichloro ethane	1,1-Dichloro ethene	cis-1,2,-Dichloro ethene	Trans-1,2,-Dichloro ethene	Ortho-Xylene	Toluene	1,1,1-Trichloro ethane	1,1,2-Trichloro ethane	Trichloro ethene	Meta, para Xylene	Total Xylenes
1992 US EPA MCL		5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140		5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140		0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124
MW-104	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<85	<.7	<7	<7	<124	<68	.324*	<.5	<.5	<124	-
	12/12/97	<.5	<.6	0.4	<.7	<7	<7	<120	<68	1*	<.5	0.9	<120	-
	03/25/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	.8*	<.5	<.5	<120	-
	06/10/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	2*	<.5	<.5	<120	-
	10/27/98	<.24	<.23	.35*	<.28	<.27	<.26	<.17	<.21	1.8	<.23	<.29	<.36	-
	02/09/99	<.13	<.15	.38*	<.15	<.16	<.17	***	.17*	1.5	<.15	<.14	***	<.37
	06/08/99	<.13	<.15	.34*	<.15	<.16	<.17	***	.14*	1.4	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	.38*	<.15	<.16	<.17	***	.27*	1.6	<.15	<.14	***	<.37
	03/13/00	<.32	<.28	.38 *	<.35	<.15	<.39	***	<.37	1.6	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	2.8	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	2.4	<.25	<.23	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	<.37	1.3*	<.32	<.42	***	<.43
MW-105	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<85	<.7	<7	<7	<124	<68	<40	<.5	<.5	<124	-
	12/12/97	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	03/25/98	<.5	<.6	<85	<.7	<7	<7	<.4	<68	<40	<.5	<.5	.4*	-
	06/10/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.27	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	.16*	<.15	<.14	<.15	<.16	<.17	***	.3*	<.14	<.15	<.14	***	<.37
	06/08/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13*	<.14	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	03/13/00	<.32	<.28	<.36	<.35	<.15	<.39	***	<.37	<.33	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	****	<.17	<.17	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	0.64*	<.42	<.32	<.42	***	<.43

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

		Detected Volatile Organic Compounds (µg/L)												
		Benzene	Chloroform	1,1-Dichloro ethane	1,1-Dichloro ethene	cis-1,2,-Dichloro ethene	Trans-1,2,-Dichloro ethene	Ortho-Xylene	Toluene	1,1,1-Trichloro ethane	1,1,2-Trichloro ethane	Trichloro ethene	Meta, para Xylene	Total Xylenes
1992 US EPA MCL		5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140		5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140		0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124
MW-106	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<85	<.7	<7	<7	<124	<68	2.73*	<.5	<.5	<124	-
	12/12/97	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	03/25/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	06/10/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.27	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	.18*	<.15	<.14	<.15	<.16	<.17	***	<.17	<.14	<.15	<.14	***	<.37
	06/08/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	<.14	<.15	<.16	<.17	***	<.13	<.14	<.15	<.14	***	<.37
	03/13/00	<.32	<.28	<.36	<.35	<.15	0.39	***	<.37	<.33	<.11	<.34	***	<.71
	03/01/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	5.7	<.42	<.32	<.42	***	<.43
MW-107	02/20/97	<.5	0.3	11	8.4	0.7	<.7	<.5	<.5	81	0.6	50	<.5	-
	05/27/97	0.09	1.10	36	40	3.1	<3.1	<.5	0.34	390	3.5	420	<.5	-
	09/18/97	<10	<12	47.6*	22.1	2.61*	<2.61	<2480	<68	265*	2.83	295	<2480	-
	12/12/97	<10	<12	56*	23	3*	<3	<2500	<68	280	3	290	<2500	-
	03/25/98	<25	<30	61*	69	5*	<5	<17	<68	720	5	620	17*	-
	06/10/98	<12	<15	59*	58	<3	<3	<3100	63*	340*	4*	390	<3100	-
	10/27/98	<.24	1.4	62	46*	3.6	.51*	<.17	<.21	550	4.9	640	<.36	-
	02/09/99	<3.2	<3.8	48	24	<4.0	<4.2	***	<3.2	220	<.38	250	***	<9.2
	06/08/99	<2.6	<3.0	42	20	<3.2	<3.4	***	<2.6	200	<3.0	310	***	<7.4
	09/13/99	<.26	<3.0	34	19	<.32	<3.4	***	<2.6	180	<.3.0	320	***	<.7.4
	12/15/99	<3.2	<3.8	37	56	4.6 *	<4.2	***	<3.2	570	4.5 *	880	***	<9.2
	03/13/00	<26	<23	50 *	32 *	<12	<31	***	<30	340	<.90	630	***	<57
	06/22/00	<26	<23	<29	50 *	<12	<31	***	<30	540	<9	850	***	<57
	09/27/00	<26	<23	35*	54*	<12	<31	***	<30	560	<9	870	***	<57
	12/19/00	<6.4	<5.6	36	53	4.5*	<7.8	***	<7.5	480	4.1*	790	***	<20
	03/01/01	<6.0	<7.4	<32	<6.7	<14	<6.5	***	<8.7	420	<13	760	***	<28
	06/25/01	<6.5	<15	26	35	<9	<6.1	***	<6.2	360	<6.5	620	***	<32

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

		Detected Volatile Organic Compounds (µg/L)												
		Benzene	Chloroform	1,1-Dichloro ethane	1,1-Dichloro ethene	cis-1,2,-Dichloro ethene	Trans-1,2,-Dichloro ethene	Ortho-Xylene	Toluene	1,1,1-Trichloro ethane	1,1,2-Trichloro ethane	Trichloro ethene	Meta, para Xylene	Total Xylenes
1992 US EPA MCL		5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140		5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140		0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124
	09/24/01	<6.5	<15	36	50	<9	<6.1	***	<6.2	480	<6.5	760	***	<32
MW-107	12/05/01	<6.5	<15	40	50	<9	<6.1	***	<6.2	500	<6.5	810	***	<32
(cont.)	03/19/02	<6.0	<7.5	37*	43	<14	<6.5	***	<8.7	440	<13	740	***	<28
	06/20/02	<7.9	<11	31	39	<7.2	<8.9	***	<7.6	410	<6.8	690	***	<14
	09/18/02	<7.9	<11	34	39	<7.2	<8.9	***	<7.6	430	<6.8	710	***	<14
	12/17/02	<7.9	<11	40	43	<7.2	<8.9	***	<7.6	470	<6.8	850	***	<14
	03/24/03	<.17	<.18	33*	37*	<19	<19	***	<19	390	<16	640	***	<22
	06/10/03	<5.7	<8.0	<5.3	39	<11	<8.2	***	<7.2	400	<9.0	680	***	<17
	09/10/03	<17	<18	36*	41*	<19	<19	***	<19	430	<16	730	***	<22
	12/10/03	<17	<18	25*	31*	<19	<19	***	<19	380	<16	740	***	<22
	03/24/04	<7.5	<7.0	<7.1	22	<6.8	<6.0	***	<7.6	220	<8.1	370	***	<19
	07/29/04	<2.0	<1.8	29	25	<4.1	<4.4	***	<3.4	310	3.4	510	***	<13.1
	09/22/04	<7.5	<7.0	28	34	<6.8	<6.0	***	<7.6	270	<8.1	570	***	<19
	12/14/04	<7.5	<7.0	33	40	<6.8	<6.0	***	<7.6	410	<8.1	800	***	<19
	03/29/05	<2.0	<1.8	39	20	<4.1	<4.4	***	<3.4	200	0.21	330	***	<13.1
	06/22/05	<1.0	<0.92	18	8.2	<2.1	<2.2	***	<1.7	82	<1.0	160	***	<6.6
	09/21/05	<2.0	<1.8	39	18.0	<4.1	<4.4	***	<3.4	220	<2.1	470	***	<13.1
	12/15/05	<2.0	<1.8	42	26.0	<4.1	<4.4	***	<3.4	250	<2.1	490	***	<13.1
	03/23/06	<2.0	<1.8	31	16.0	<4.1	<4.4	***	<3.4	150	<2.1	330	***	<13.1
	06/28/06	<2.0	<1.8	37	28.0	<4.1	<4.4	***	<3.4	270	<2.1	550	***	<13.1
	09/20/06	<4.1	<3.7	32	31.0	<8.3	<8.9	***	<6.7	330	<4.2	700	***	<26.3
	12/19/06	<2.0	<1.8	52	30	<4.1	<4.4	***	<3.4	280	3.3*	580	***	<13.1
	03/28/07	<0.82	<0.74	19	18	2.1	<1.8	***	<1.3	190	1.7	340	***	<5.3
	07/03/07	<1.0	<0.92	30	15	2.3	<2.2		<1.7	160	1.5	350	***	<6.6
	09/28/07	<2.0	<1.8	35	19	<4.1	<4.4	***	<3.4	210	2.4*	420	***	<13.1
	04/16/08	<2.0	<1.8	20.8	21.8	<4.2	<4.4	***	<3.4	257	2.7 J	550	***	<13.2

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

		Detected Volatile Organic Compounds (µg/L)												
		Benzene	Chloroform	1,1-Dichloro ethane	1,1-Dichloro ethene	cis-1,2,-Dichloro ethene	Trans-1,2,-Dichloro ethene	Ortho-Xylene	Toluene	1,1,1-Trichloro ethane	1,1,2-Trichloro ethane	Trichloro ethene	Meta, para Xylene	Total Xylenes
1992 US EPA MCL		5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140		5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140		0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124
MW-108	02/20/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	05/27/97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	-
	09/18/97	<.5	<.6	<85	<.7	<7	<7	<124	<68	<40	<.5	<.5	<124	-
	12/12/97	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	03/25/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<40	<.5	<.5	<120	-
	06/10/98	<.5	<.6	<85	<.7	<7	<7	<120	<68	<44	<.5	<.5	<120	-
	10/27/98	<.24	<.23	<.22	<.28	<.27	<.26	<.17	<.21	<.26	<.23	<.29	<.36	-
	02/09/99	<.13	<.15	<.14	<.15	<.16	<.17	***	0.83	<.14	<.15	<.14	***	<.37
	06/08/99	<.13	<.15	<.14	<.15	<.16	<.17	***	.15*	<.14	<.15	<.14	***	<.37
	09/13/99	<.13	<.15	<.14	<.15	<.16	<.17	***	0.84	<.14	<.15	<.14	***	<.32
	03/13/00	<.32	<.28	<.36	<.35	<.15	<.39	***	<.37	<.33	<.11	<.36	***	<.71
	03/31/01	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<56
	03/19/02	<.12	<.15	<.64	<.13	<.28	<.13	***	<.17	<.17	<.25	<.13	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.37	***	<.37	<.42	<.32	<.42	***	<.43
MW-109	06/21/06	-	0.40*	1.3*	1.9	<0.83	<0.89	***	-	37	0.45*	46	***	-
	09/20/06	-	0.39*	1.7*	2.2	<0.83	<0.89	***	-	37	0.45*	51	***	-
	12/19/06	<0.41	0.44*	2.7	1.1*	<0.83	<0.89	***	-	33	0.52*	42	***	<2.63
	03/29/07	<0.41	<0.37	0.85	1.3	<0.83	<0.89	***	<13	27	<0.42	37	***	<2.63
	07/03/07	<0.41	0.38*	1.7	1.3	<0.83	<0.89	***	<0.67	34	0.54	47	***	<2.63
	09/28/07	<0.41	<0.37	<0.75	1.1*	<0.83	<0.89	***	<0.67	22	<0.42	35	***	<2.63
	04/16/08	<0.41	0.39 J	1.9	1.9	<0.83	<0.89	***	<0.67	31.9	0.45 J	39.4	***	<2.63
MW-110	06/21/06	-	<3.7	310	340	56	19	***	-	1,500	<4.2	27	***	-
	09/20/06	-	<3.7	260	300	57	28*	***	-	1,100	<4.2	30	***	-
	12/19/06	<4.1	<3.7	230	240	55	16*	***	<6.7	910	<4.2	23	***	<2.63
	03/29/07	<8.2	<7.4	250	340	59	24	***	<13	1,500	<8.4	32	***	<53
	07/03/07	<8.2	<7.4	270	230	59	18	***	<13	1,300	<8.4	26	***	<53
	09/28/07	<10	<9.2	380	350	67*	23*	***	<17	1,600	<10	32*	***	<2.63
	04/16/08	<8.2	<7.4	206	195	55.9	<17.8	***	<13.4	918	<8.4	28.2	***	<52.6

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

		Detected Volatile Organic Compounds (µg/L)												
		Benzene	**Chloroform**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**cis-1,2,-Dichloro ethene**	**Trans-1,2,-Dichloro ethene**	**Ortho-Xylene**	**Toluene**	**1,1,1-Trichloro ethane**	**1,1,2-Trichloro ethane**	**Trichloro ethene**	**Meta, para Xylene**	**Total Xylenes**
1992 US EPA MCL		5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140		5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140		0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124
MW-111	06/21/06	-	0.59*	2.7	11	<0.83	<0.89	***	-	78	0.71	180	***	-
	09/20/06	-	<0.37	3.2	7.7	<0.83	<0.89	***	-	36	<0.42	97	***	-
	12/19/06	<0.41	<0.37	2.0*	1.5*	<0.83	<0.89	***	<0.67	7.9	<0.42	21	***	<2.63
	03/29/07	<0.41	0.77	1.7	7.3	<0.83	<0.89	***	<0.67	52	<0.42	120	***	<2.63
	07/03/07	<0.41	<0.37	<0.36	1.8	<0.83	<0.89	***	<0.67	14	<0.42	37	***	<2.63
	09/28/07	<0.41	<0.37	2.4*	2.8	<0.83	<0.89	***	<0.67	22	<0.42	55	***	<2.63
	04/16/08	<0.41	1.2	1.6	2.7	<0.83	<0.89	***	<0.67	20.3	<0.42	52.9	***	<2.63
MW-112	06/21/06	-	<1.8	<3.7	<3.8	<4.1	<4.4	***	-	7.9*	<2.1	450	***	-
	09/20/06	-	<0.37	<7.5	<5.7	<8.3	<8.9	***	-	<9.0	<4.2	540	***	-
	12/19/06	<2.0	<1.8	<3.8	<2.8	<4.1	<4.4	***	<3.4	<4.5	<2.1	240	***	<13.1
	03/29/07	<4.1	<3.7	<7.5	<5.7	<8.3	<8.9	***	<6.7	20	<4.2	940	***	<26.3
	07/03/07	<2.0	<1.8	<3.8	<2.8	<4.1	<4.4	***	<3.4	11	<2.1	750	***	<13.1
	09/28/07	<4.1	<3.7	<7.5	<5.7	<8.3	<8.9	***	<6.7	13*	<4.2	820	***	<2.63
	04/16/08	<4.1	<3.7	<7.5	<5.7	<8.3	<8.9	***	<6.7	20.1	<4.2	1130	***	<26.3
MW-113	06/21/06	-	<0.74	37	44	4.4*	<1.8	***	-	240	<0.84	92	***	-
	09/20/06	-	<0.37	22	19	3.6	1.3*	***	-	120	0.82*	81	***	-
	12/19/06	<2.0	<1.8	28	16	5.2*	<4.4	***	<3.4	120	<2.1	91	***	<13.1
	03/29/07	<0.41	<0.37	10	11	1.6	<0.89	***	<0.67	77	<0.42	46	***	<2.63
	07/03/07	<2.0	<1.8	21	8.1	4.9	<4.4	***	<13.1	79	<2.1	61	***	<13.1
	09/28/07[A]	<0.41	0.57	35	17	8.9	<0.89	***	<0.67	130	1.5	97	***	<2.63
	04/16/08	<0.41	<0.37	20.5	15.3	3.7	<0.89	***	<0.67	99.7	0.44 J	62.4	***	<2.63
PZ-5	07/19/05	<0.37	<0.75	<0.57	<0.83	<0.89	NA	NA	1.7*	<0.42	<0.48	NA	NA	N
	09/21/05	<0.37	<0.75	<0.57	<0.83	<0.89	NA	NA	<0.90	<0.42	<0.48	NA	NA	NA
PZ-6	07/19/05	<0.37	<0.75	<0.57	<0.83	<0.89	NA	NA	<0.90	<0.42	<0.48	NA	NA	NA
	09/21/05	<0.37	<0.75	<0.57	<0.83	<0.89	NA	NA	<0.90	<0.42	<0.48	NA	NA	NA

Table 6 - Groundwater Analytical Results / Detected Volatile Organic Compounds (VOCs)
N.W. Mauthe Superfund Site - Appleton, Wisconsin

	Detected Volatile Organic Compounds (µg/L)												
	Benzene	**Chloroform**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**cis-1,2,-Dichloro ethene**	**Trans-1,2,-Dichloro ethene**	**Ortho-Xylene**	**Toluene**	**1,1,1-Trichloro ethane**	**1,1,2-Trichloro ethane**	**Trichloro ethene**	**Meta, para Xylene**	**Total Xylenes**
1992 US EPA MCL	5.0	100	-	7.0	70	100	10,000	1,000	200	5.0	5.0	10,000**	10,000
1992 ES NR 140	5	6	850	7	100	100	620**	343	200	0.6	5	620**	620
1992 PAL NR 140	0.067	0.6	85	0.024	10	20	124**	68.6	40	0.06	0.18	124**	124

EXPLANATION:

Results prior to 10/27/98 for cis-1,2,-Dichloroethene and Trans-1,2 Dichloroethene were listed as Total Dichloroethene and were placed in this table under the heading cis-1,2,-Dichloroethene.
Results prior to 10/27/98 for Ortho Xylene and Meta, para Xylene were listed as Total Xylenes and were placed in this table under the heading Meta, para Xylene.

* = Analyte detected between limit of detection and limit of quantitation.
J = Estimated Concentration above the adjusted method detection limit and below the sdjusted reporting limit.
** = Standard includes Ortho-, Meta, para-Xylenes
*** = As of 02/09/99 Xylene results are listed as "Total Xylenes".
WM Equipment Malfunction, no accurate measurement.
NOTE: The EPA Record of Decision establishes the 1992 PAL's as the clean-up goals for the site.
A = 1,2-Dichloroethane was detected at 0.87 ug/l.
ND = Not Detected
NA = Not Analyzed
MCL = Maximum Contaminant Levels
ug/l = Microgram/Liter
= Indicates an exceedance of the 1992 NR 140 Groundwater Quality Enforcement Standards (ES)
= Indicates an exceedance of the 1992 NR 140 Groundwater Quality Preventive Action Limits (PAL)

State of Wisconsin
Department of
Natural Resources

OPERATION, MAINTENANCE, MONITORING AND OPTIMIZATION REPORTING OF SOIL AND GROUNDWATER REMEDIATION SYSTEMS

PURPOSE AND APPLICABILITY OF THIS FORM: Completion of this form is required under s. NR 724.13(e), Wis. Adm. Code. Use of this form is mandatory. Failure to submit this form as require is a violation of s. NR 724.13, Wis. Adm. Code, and is subject to the penalties in s. 144.99, Wis. Stats. This form must be submitted every six months for active soil and groundwater remediation projects and every twelve months for passive (natural attenuation) remediation projects that are regulated under the NR 700 series of Wis. Adm. Code. Specifically, for sites meeting any of the following criteria:

- Soil or groundwater remediation projects that report progress in accordance with s. NR 700.11(1), Wis. Adm. Code.
- Soil or groundwater remediation projects that report progress in accordance with s. NR 724.13(3), Wis. Adm. Code. (Note: s. NR 724.13(3) requires progress reports for operation and maintenance of active systems to be submitted every three months however the Department considers submittal of this form every six months to satisfy the requirements of the rules, unless otherwise directed by the Department on a site specific basis.)
- Soil or groundwater remediation projects that report progress in accordance with s. NR 724.17(3), Wis. Adm. Code. (Note: s. NR 724.17(3) requires progress reports every time that samples are collected however the Department considers submittal of this form every twelve months to satisfy the requirements of the rules for monitoring natural attenuation, unless otherwise directed by the Department on a site specific basis.)

Submittal of this form is not a substitute for reporting required by Department programs such as Wastewater 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.

Please refer to the instructions that are attached to the back of these forms starting on page INS-1. In all cases, when asked to "explain," those explanations are to be included on separate sheets of paper. Explanations must include a title that refers to the page and item number, for example: Page GI-2, C.1.a.

A. GENERAL INFORMATION:

1. Site name: N.W. Mauthe Superfund Site
2. Reporting period from: November 1, 2007 To: April 30, 2008 Days in period: 182
3. Regulatory agency (enter DNR, DCOM, DATCP and/or other): WDNR and USEPA
4. DNR issued site number: 02-45-000127
5. State reimbursement fund claim number and fund name (if not applicable, enter NA): NA
6. Site location:
   a. DNR region and county: Northeast, Outagamie
   b. Street address and municipality: 725 South Outagamie Street, Appleton, WI 54914
   c. Township, range, section and quarter quarter section: T21N, R17E, Section 34, NE1/4, NW1/4
7. Responsible party:
   a. Name: Carol Mauthe
   b. Mailing address: c/o Jennifer Borski, WDNR, 625 East County Road Y, Suite 700
      Oshkosh, WI 54901-9731
   c. Phone number: (920) 424-7887
8. Consultant:
   a. Company name: OMNNI Associates, Inc.
   b. Mailing address: One Systems Drive, Appleton, WI 54914-1654
   c. Phone number: (920) 735-6900
9. Contaminants: Chromium, cyanide, and chlorinated solvents
10. Soil types (USCS or USDA): LEAN CLAY W/SAND, reddish brown (CL)
11. Hydraulic conductivity (cm/sec): 3.90E-07 12. Average linear velocity of groundwater (ft/yr): 1.17

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: N.W. Mauthe Superfund Site

Reporting period from: November 1, 2007 To: April 30, 2008 Days in period: 182

A. GENERAL INFORMATION (CONTINUED):

13. If soil is treated ex situ, is the treatment location off site? (Y/N) If yes, give location:

a. DNR region and county: NA

b. Township, range, section and quarter quarter section: _____

B. REMEDIATION METHOD: Only submit pages that apply to an individual site. Check all that apply:

- ✓ Groundwater extraction (submit a completed page GW-1).
- _____ Free product recovery (submit a completed page GW-1).
- _____ In situ air sparging (submit a completed page GW-2).
- _____ Groundwater natural attenuation (submit a completed page GW-3).
- _____ Other groundwater remediation method (submit a completed page GW-4).
- _____ Soil venting (including soil vapor extraction and bioventing, submit a completed page IS-1).
- _____ Soil natural attenuation (submit a completed page IS-2).
- _____ Other in situ soil remediation method (submit a completed page IS-3).
- _____ Biopiles (submit a completed page ES-1).
- _____ Landspreading/thinspreading of petroleum contaminated soil (submit a completed page ES-2).
- _____ Other ex situ soil remediation method (submit a completed page ES-3).

C. GENERAL EFFECTIVENESS EVALUATION FOR ALL ACTIVE SYSTEMS: If the remediation is active (not natural attenuation), complete this subsection.

1. Is the system operating at design rates and specifications? (Y/N): Yes
   If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.
2. Are modifications to the system warranted to improve effectiveness? (Y/N) If yes, explain: No
3. Is natural attenuation an effective low cost option at this time? (Y/N): No
4. Is closure sampling warranted at this time? (Y/N): No
5. Are there any modifications that can be made to the remediation to improve cost effectiveness? (Y/N) If yes, explain: Not at this time

D. ECONOMIC AND COST DATA TO DATE:

1. Total investigation costs ($): Superfund site, EPA has cost information
2. Implementation costs (design, capital and installation costs, excluding investigation costs) ($): Superfund site, EPA has cost information
3. Total costs during the previous reporting period ($): $12,675
4. Total costs during this reporting period ($): $15,149.82
5. Total anticipated costs for the next reporting period ($): $21,800
6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? (Y/N) If yes explain: *
7. If close out is anticipated within 12 months, estimated costs for project closeout ($): Close out not anticipated within 12 months

* Flow Totalizers were installed on Manhole #1 and Manhole #2 influent lines. Operation & Maintenance contractor changeover costs. Field sampling equipment upgrades.

GENERAL SITE INFORMATION, CONTINUED

SITE NAME AND REPORTING PERIOD:

Site name: N.W. Mauthe Superfund Site

Reporting period from: November 1, 2007 To: April 30, 2008 Days in period: 182

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.

Registered Professional Engineers:

I (print name) Brian Wayner, 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.

Signature, title, P.E. number and date: Brian D. Wayner June 4, 2008

Hydrogeologists:

I (print name) Don Brittnacher, 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.

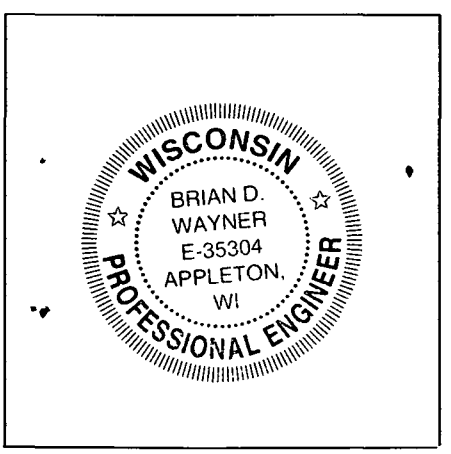
Signature, title and date: Don Brittnacher June 4, 2008

Scientists:

I (print name) _____, 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.

Signature, title and date: _____

Professional Seal(s), if applicable:



State of Wisconsin
Department of
Natural Resources

OPERATION, MAINTENANCE, MONITORING AND OPTIMIZATION REPORTING OF SOIL AND GROUNDWATER REMEDIATION SYSTEMS

Form 4400-194
7-96
Page GW-1

GROUNDWATER PUMP AND TREAT SYSTEMS AND FREE PRODUCT RECOVERY SYSTEMS

SITE NAME AND REPORTING PERIOD:

Site name: N.W. Mauthe Superfund Site

Reporting period from: November 1, 2007 To: April 30, 2008 Days in period: 182

Date that the system was first started up: February 1997

A. GROUNDWATER EXTRACTION SYSTEM OPERATION:

1. Total number of groundwater extraction wells or trenches available and the number in use during period: Three trenches available/used
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): 182
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 (gallons): 495,942
5. Average groundwater extraction rate (gpm): 1.9
6. Quantity of dissolved phase contaminants removed during this time period in pounds: 7.3

B. FREE PRODUCT RECOVERY SYSTEM OPERATION:

1. Is free product (nonaqueous phase liquid) being recovered at this site? (Y/N) If yes, list method: No
2. Quantity of free product extracted during this time period (gallons, enter none if none): Not applicable
3. Average free product extraction rate (gpd): Not applicable

C. SYSTEM EFFECTIVENESS EVALUATION:

1. Is a contaminated groundwater plume fully contained in the capture zone? (Y/N) If no, explain: Yes
2. If free product is present, is the free product fully contained in capture zone? (Y/N) If no, explain: Not applicable
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: Chromium; MW-112; 88,400 µg/L
   b. Percent reduction necessary to reach ch. NR 140 ES and PAL: ES - 99.94%, PAL - 99.99%
   c. Maximum contaminant concentration level in any monitoring well of that contaminant (µg/L): 88,400 (MW-112)
   d. Maximum contaminant concentration level in any extraction well of that contaminant (µg/L): 2,500 (Outfall 001)
   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. System designed for containment, not treatment.

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.

Well Specific Field Sheets

Facility Name: N.W. Mauthe
Date: April 16, 2008
Weather Conditions: Partly sunny, 48-65°F, southwest wind 20+mph
Person(s) Sampling: Brian Wayner
Sampling Equipment: Solonist 101 water level meter, Peristaltic pump - micro purge, DO probe, ORP (Oakton 300 pH meter), pH/Conductivity (Oakton pH/Con. 10 meter)

Well Name	W-2	W-8	W-15	MW-101	MW-102
WI Unique Well No.					
Top of PVC Casing Elevation (MSL)	804.66	803.36	803.42	807.59	804.37
Ground Surface Elevation (MSL)					
Depth to Bottom of Well (ft)					
Screen Top (MSL)					
Screen Bottom (MSL)					
Screen Length (ft)					
Water Elevation (MSL)	798.75	797.25	803.42	803.83	781.13
Water Elevation (ft from ground surface)	-798.75	-797.25	-803.42	-803.83	-781.13
Measured Depth to Water (ft)	5.91	6.11		3.76	23.2
Micro Purge Pump Setting	–	–	–	3.0	4.0
Time Purging Begun	–	–	–	6:44 PM	1:37 PM
Time Purging Completed	–	–	–	6:59 PM	1:52 PM
Amount Purged (gal)	–	–	–	~1.25	~1
Purged Dry? (Y/N)	–	–	–	N	N
Temperature (°C)	–	–	–	10.5	14.1
Conductivity (µS)	–	–	–	–	–
pH (std. units)	–	–	–	6.94	7.1
DO Reading (mg/L)	–	–	–	1.62	2.64
ORP (mV)	–	–	–	309	179.9
Ferrous Iron (mg/L)	–	–	–	–	–
Color (Y/N)	–	–	–	N	N
Odor (Y/N)	–	–	–	N	N
Turbidity (Y/N)	–	–	–	N	N
Sampling Parameters	n/a	n/a	n/a	Filtered Cr	Filtered Cr
Time Sample Withdrawn	–	–	–	7:00 PM	1:53 PM
Sample field filtered? (Y/N)	n/a	n/a	n/a	Y	Y
Time filtered	–	–	–	7:00 PM	1:53 PM
Well secured? (Y/N)	Y	Y	Y	Y	Y

Purge 2" Well = (Depth to Bottom of Well - Measured Depth to Water) x 0.163 x 4

Well Specific Field Sheets

Facility Name: N.W. Mauthe
Date: April 16, 2008
Weather Conditions: Partly sunny, 48-65°F, southwest wind 20+mph
Person(s) Sampling: Brian Wayner
Sampling Equipment: Solonist 101 water level meter, Peristaltic pump - micro purge, DO probe, ORP (Oakton 300 pH meter), pH/Conductivity (Oakton pH/Con. 10 meter)

Well Name	MW-103	MW-104	MW-105	MW-106	MW-107
WI Unique Well No.					
Top of PVC Casing Elevation (MSL)	803.74	807.28	803.46	803.83	809.06
Ground Surface Elevation (MSL)					
Depth to Bottom of Well (ft)					
Screen Top (MSL)					
Screen Bottom (MSL)					
Screen Length (ft)					
Water Elevation (MSL)	796.68	799.40	799.93	798.18	800.14
Water Elevation (ft from ground surface)	-796.68	-799.40	-799.93	-798.18	-800.14
Measured Depth to Water (ft)	7.06	7.88	3.53	5.65	8.92
Micro Purge Pump Setting	4.0	4.0	–	–	3.0
Time Purging Begun	12:25 PM	11:46 AM	–	–	2:44 PM
Time Purging Completed	12:40 PM	12:01 PM	–	–	2:59 PM
Amount Purged (gal)	~1	~1	–	–	~1
Purged Dry? (Y/N)	N	N	–	–	N
Temperature (°C)	12.0	13.9	–	–	13.5
Conductivity (µS)	556	853	–	–	–
pH (std. units)	7.09	6.96	–	–	7.3
DO Reading (mg/L)	0.83	1.74	–	–	2.12
ORP (mV)	233	157.0	–	–	197.9
Ferrous Iron (mg/L)	–	–	–	–	–
Color (Y/N)	N	N	–	–	yellow hue
Odor (Y/N)	N	N	–	–	N
Turbidity (Y/N)	N	N	–	–	N
Sampling Parameters	Filtered Cr	Filtered Cr	n/a	n/a	Filtered Cr, VOCs
Time Sample Withdrawn	12:41 PM	12:03 PM	–	–	3:00 PM
Sample field filtered? (Y/N)	Y	Y	n/a	n/a	Y-Cr
Time filtered	12:41 PM	12:03 PM	–	–	3:00 PM
Well secured? (Y/N)	Y	Y	Y	Y	Y

Purge 2" Well = (Depth to Bottom of Well - Measured Depth to Water) x 0.163 x 4

Well Specific Field Sheets

Facility Name: N.W. Mauthe
Date: April 16, 2008
Weather Conditions: Partly sunny, 48-65°F, southwest wind 20+mph
Person(s) Sampling: Brian Wayner
Sampling Equipment: Solonist 101 water level meter, Peristaltic pump - micro purge, DO probe, ORP (Oakton 300 pH meter), pH/Conductivity (Oakton pH/Con. 10 meter)

Well Name	MW-108	MW-109	MW - 110	MW - 111	MW - 112
WI Unique Well No.		PI420	PI424	PI422	PI423
Top of PVC Casing Elevation (MSL)	806.61	810.52	809.81	807.59	808.14
Ground Surface Elevation (MSL)		807.41	807.03	805.05	805.51
Depth to Bottom of Well (ft)		22.78	22.48	22.60	22.76
Screen Top (MSL)		802.74	802.33	799.99	800.38
Screen Bottom (MSL)		787.74	787.33	784.99	785.38
Screen Length (ft)		15	15	15	15
Water Elevation (MSL)	805.34	802.84	801.50	802.13	801.57
Water Elevation (ft from ground surface)	-805.34	4.57	5.53	2.92	3.94
Measured Depth to Water (ft)	1.27	7.68	8.31	5.46	6.57
Micro Purge Pump Setting	–	3.0	3.0	3.0	3.0
Time Purging Begun	–	3:33 PM	6:07 PM	4:13 PM	4:48 PM
Time Purging Completed	–	3:48 PM	6:22 PM	4:28 PM	5:03 PM
Amount Purged (gal)	–	~1.25	~1.25	~1.25	~1.25
Purged Dry? (Y/N)	–	N	N	N	N
Temperature (°C)	–	12.4	9.5	11.6	12.9
Conductivity (µS)	–	–	–	–	–
pH (std. units)	–	7.10	7.38	7.40	7.50
DO Reading (mg/L)	–	0.75	2.25	2.25	2.44
ORP (mV)	–	248	285	244	270
Ferrous Iron (mg/L)	–	–	–	–	–
Color (Y/N)	–	N	yellow	N	yellow
Odor (Y/N)	–	N	N	N	N
Turbidity (Y/N)	–	N	N	N	N
Sampling Parameters	n/a	Filtered Cr, VOCs	Filtered Cr, Cyanide,VOCs	Filtered Cr, Cyanide,VOCs	Filtered Cr, Cyanide,VOCs
Time Sample Withdrawn	–	3:49 PM	6:22 PM	4:29 PM	5:04 PM
Sample field filtered? (Y/N)	n/a	Y-Cr	Y-Cr	Y-Cr	Y-Cr
Time filtered	–	3:49 PM	6:22 PM	4:29 PM	5:04 PM
Well secured? (Y/N)		Y	Y	Y	Y

Purge 2" Well = (Depth to Bottom of Well - Measured Depth to Water) x 0.163 x 4

Well Specific Field Sheets

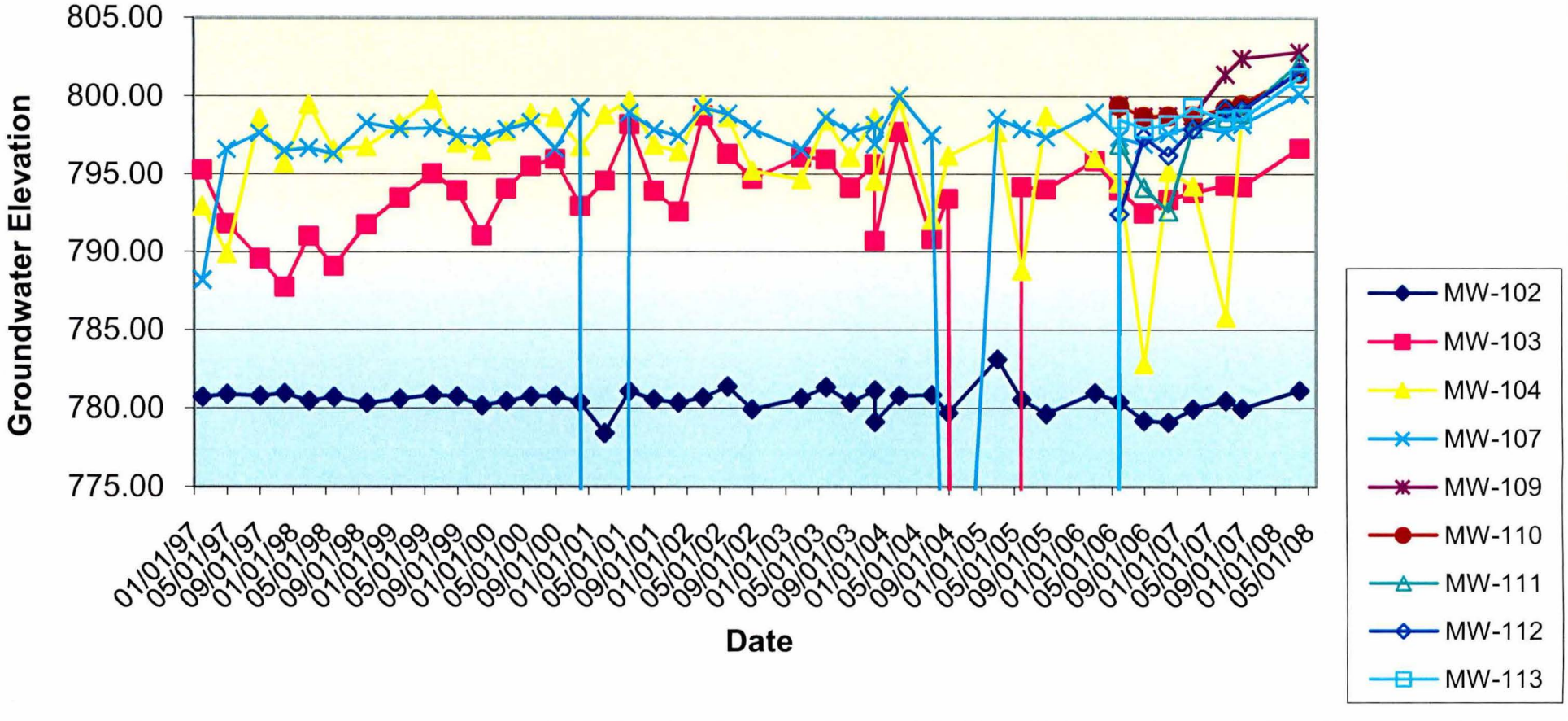
Facility Name: N.W. Mauthe
Date: April 16, 2008
Weather Conditions: Partly sunny, 48-65°F, southwest wind 20+mph
Person(s) Sampling: Brian Wayner
Sampling Equipment: Solonist 101 water level meter, Peristaltic pump - micro purge, DO probe, ORP (Oakton 300 pH meter), pH/Conductivity (Oakton pH/Con. 10 meter)

Well Name	MW - 113	PZ-5	PZ-6	PZ-7	PZ-8
WI Unique Well No.	PI421	PI412	PI411	PI410	PI409
Top of PVC Casing Elevation (MSL)	808.24	810.88	809.77	804.48	804.35
Ground Surface Elevation (MSL)	805.62	807.83	806.97	804.60	804.52
Depth to Bottom of Well (ft)	22.57	43.00	43.08	35.28	36.31
Screen Top (MSL)	800.67	772.88	771.69	774.20	773.04
Screen Bottom (MSL)	785.67	767.88	766.69	769.20	768.04
Screen Length (ft)	15	5	5	5	5
Water Elevation (MSL)	801.21	810.88	809.77	804.48	804.35
Water Elevation (ft from ground surface)	4.41	-3.05	-2.80	0.12	0.17
Measured Depth to Water (ft)	7.03	27.83	28.97	23.83	21.00
Micro Purge Pump Setting	3.0	–	–	–	–
Time Purging Begun	5:35 PM	–	–	–	–
Time Purging Completed	5:50 PM	–	–	–	–
Amount Purged (gal)	~1.25	–	–	–	–
Purged Dry? (Y/N)	N	–	–	–	–
Temperature (°C)	11.8	–	–	–	–
Conductivity (µS)	–	–	–	–	–
pH (std. units)	7.45	–	–	–	–
DO Reading (mg/L)	1.85	–	–	–	–
ORP (mV)	267	–	–	–	–
Ferrous Iron (mg/L)	–	–	–	–	–
Color (Y/N)	yellow hue	–	–	–	–
Odor (Y/N)	N	–	–	–	–
Turbidity (Y/N)	N	–	–	–	–
Sampling Parameters	Filtered Cr, VOCs	n/a	n/a	n/a	n/a
Time Sample Withdrawn	17:50	–	–	–	–
Sample field filtered? (Y/N)	Y-Cr	n/a	n/a	n/a	n/a
Time filtered	17:50	–	–	–	–
Well secured? (Y/N)	Y	Y	Y	Y	Y

Purge 2" Well = (Depth to Bottom of Well - Measured Depth to Water) x 0.163 x 4

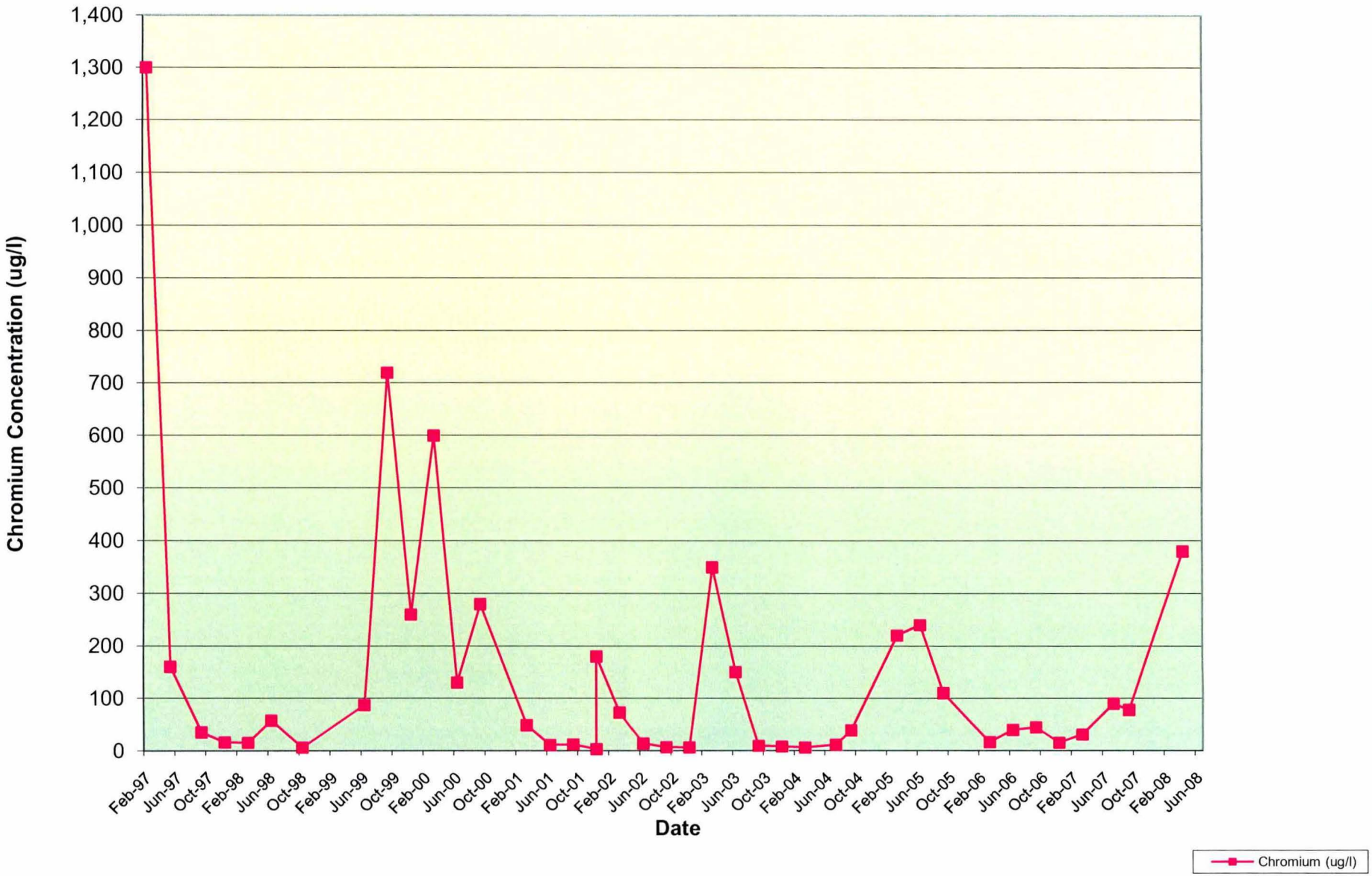
Graph Set 1
Groundwater Elevations Versus Time Graphs
(MW-102, MW-103, MW-104, MW-107, and MW-109 through MW-113)

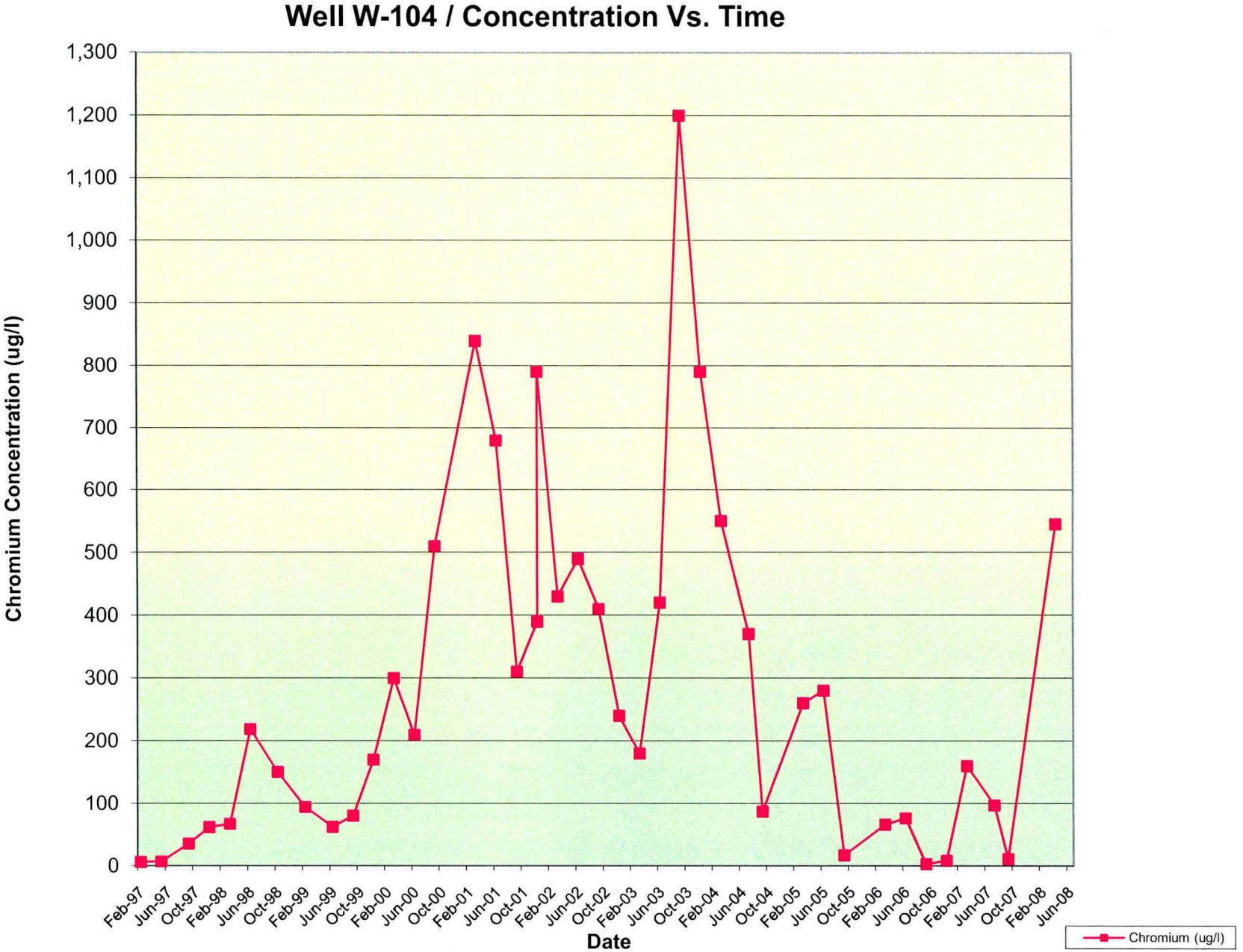
GROUNDWATER ELEVATIONS VS. TIME GRAPHS

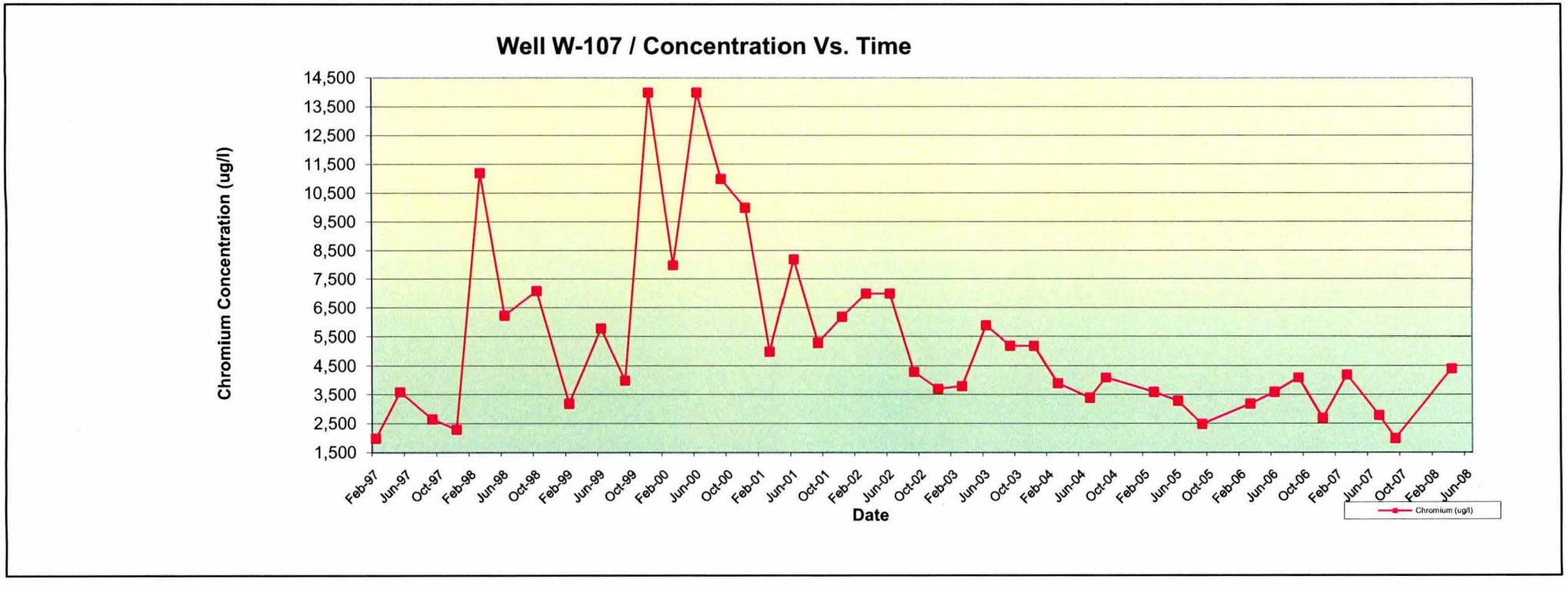


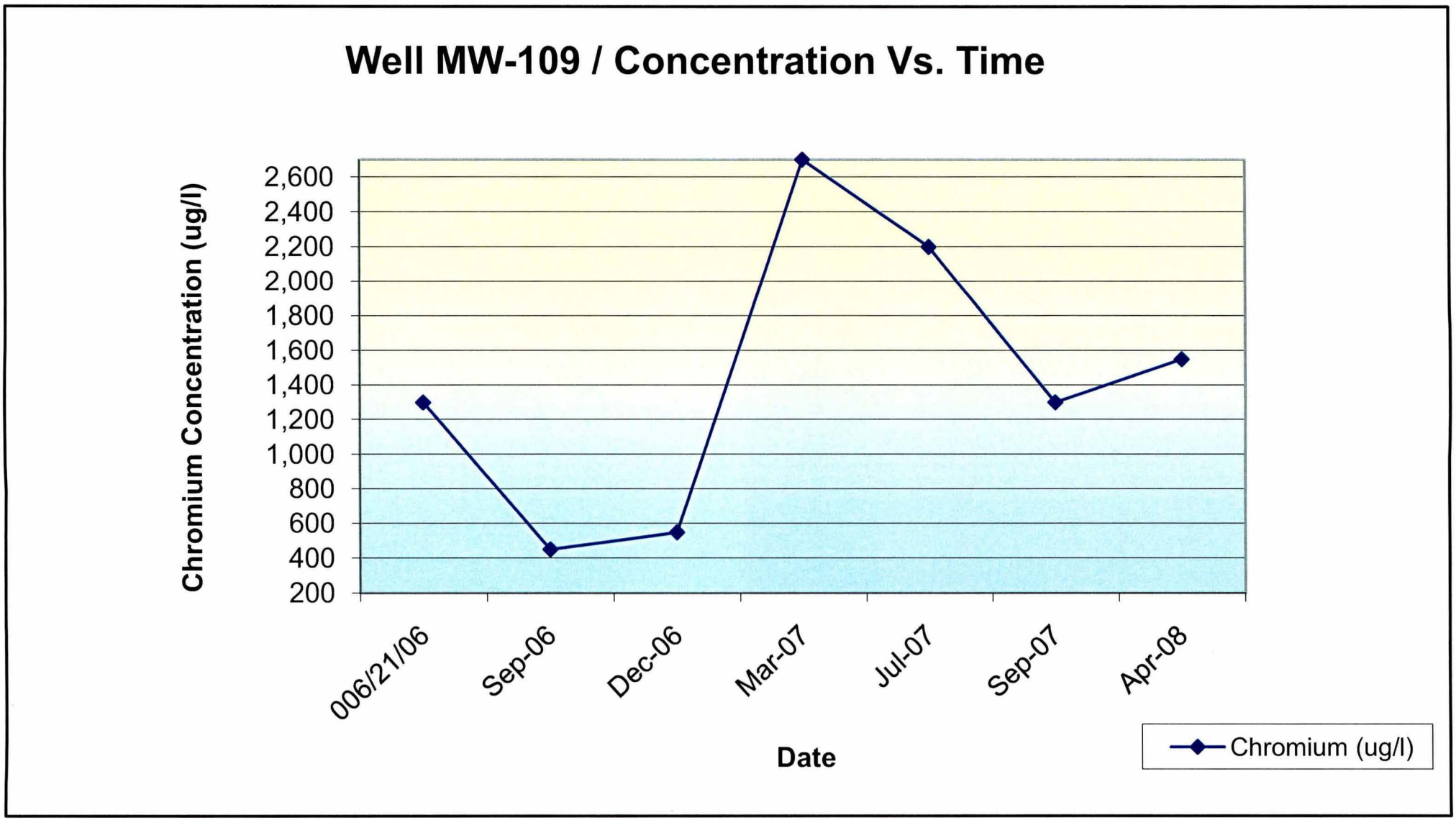
Graph Set 2
Chromium Versus Time Graphs
(MW-103, MW-104, MW-107, and MW-109 through MW-113)

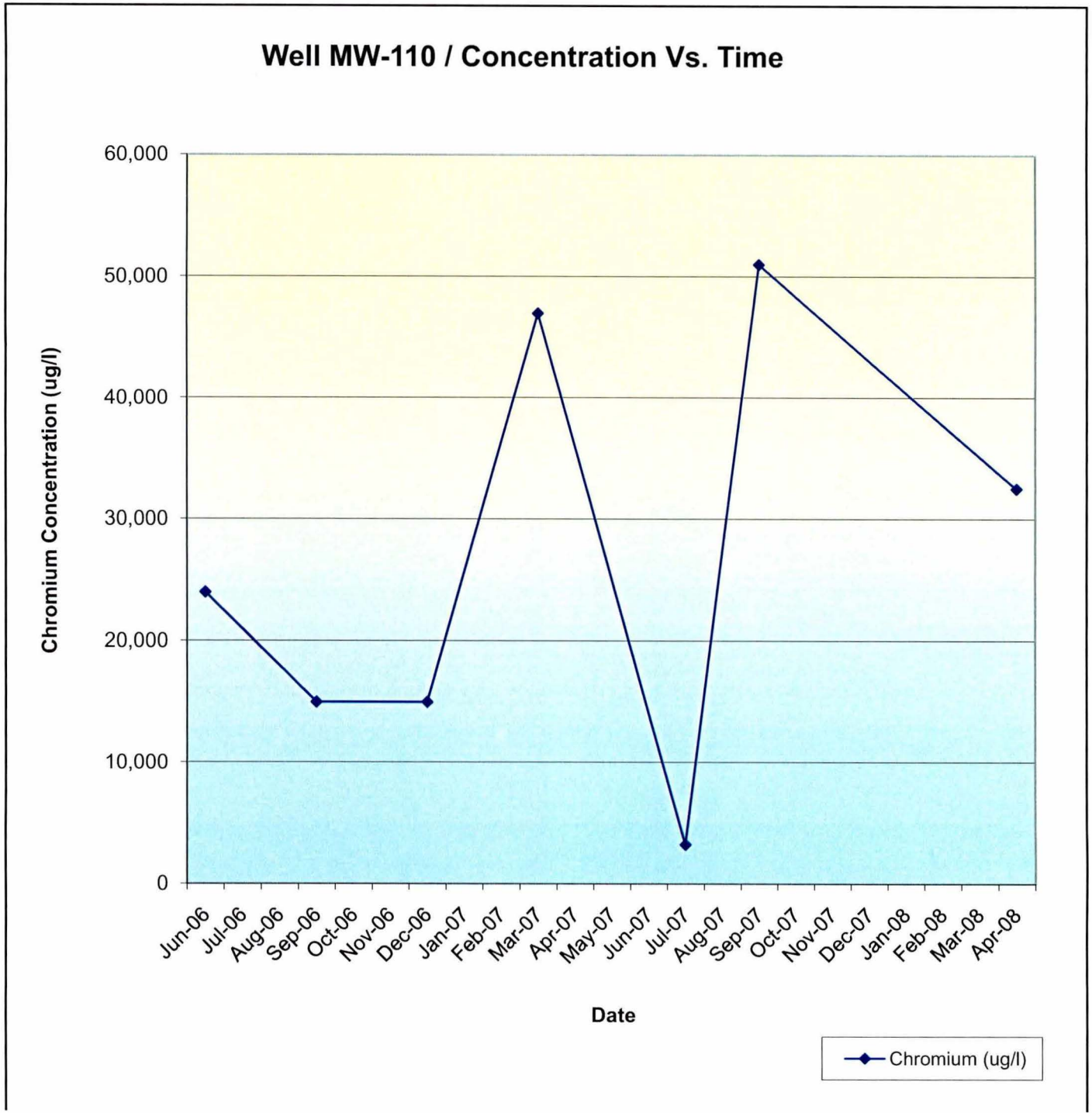
Well W-103 / Concentration Vs. Time

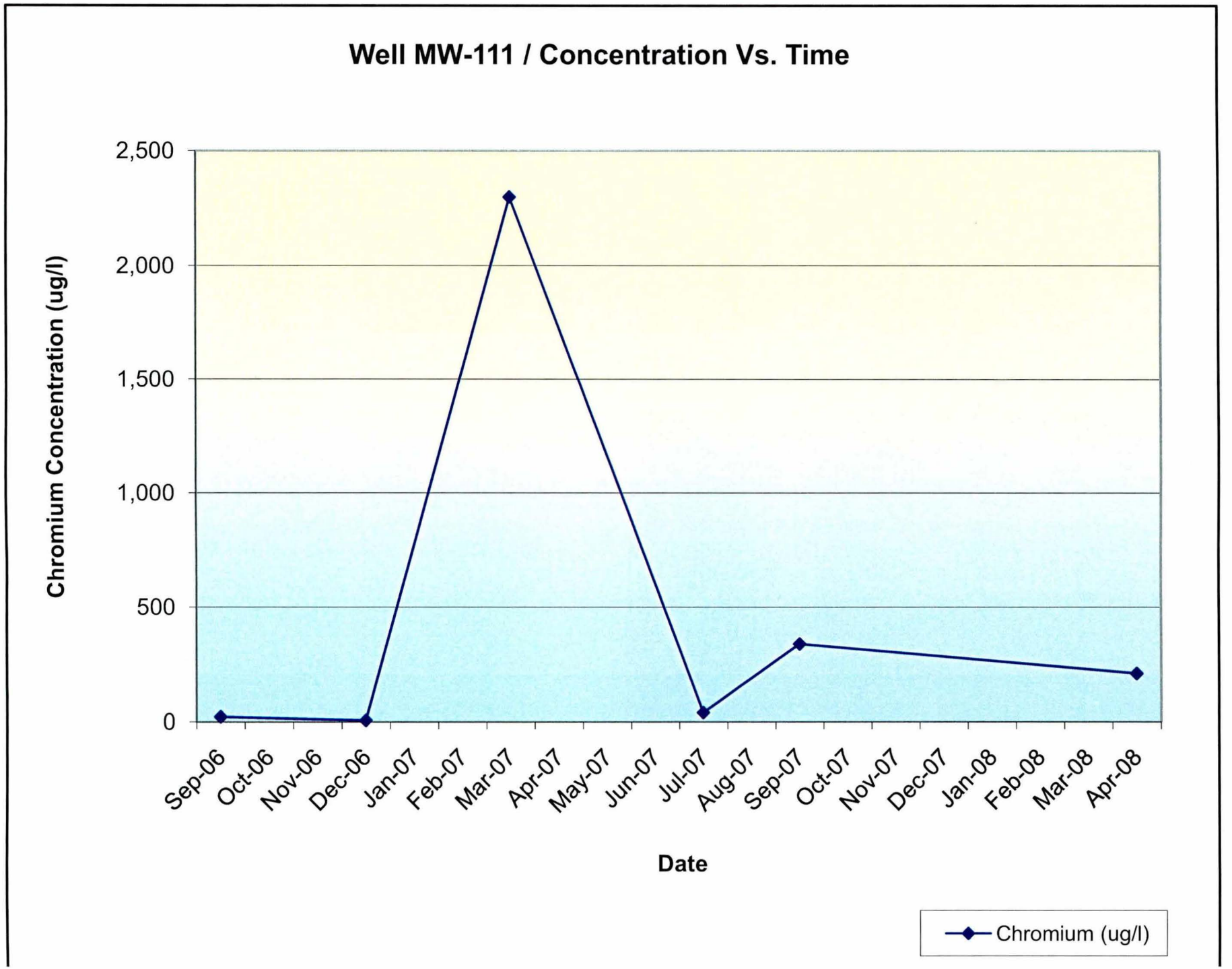


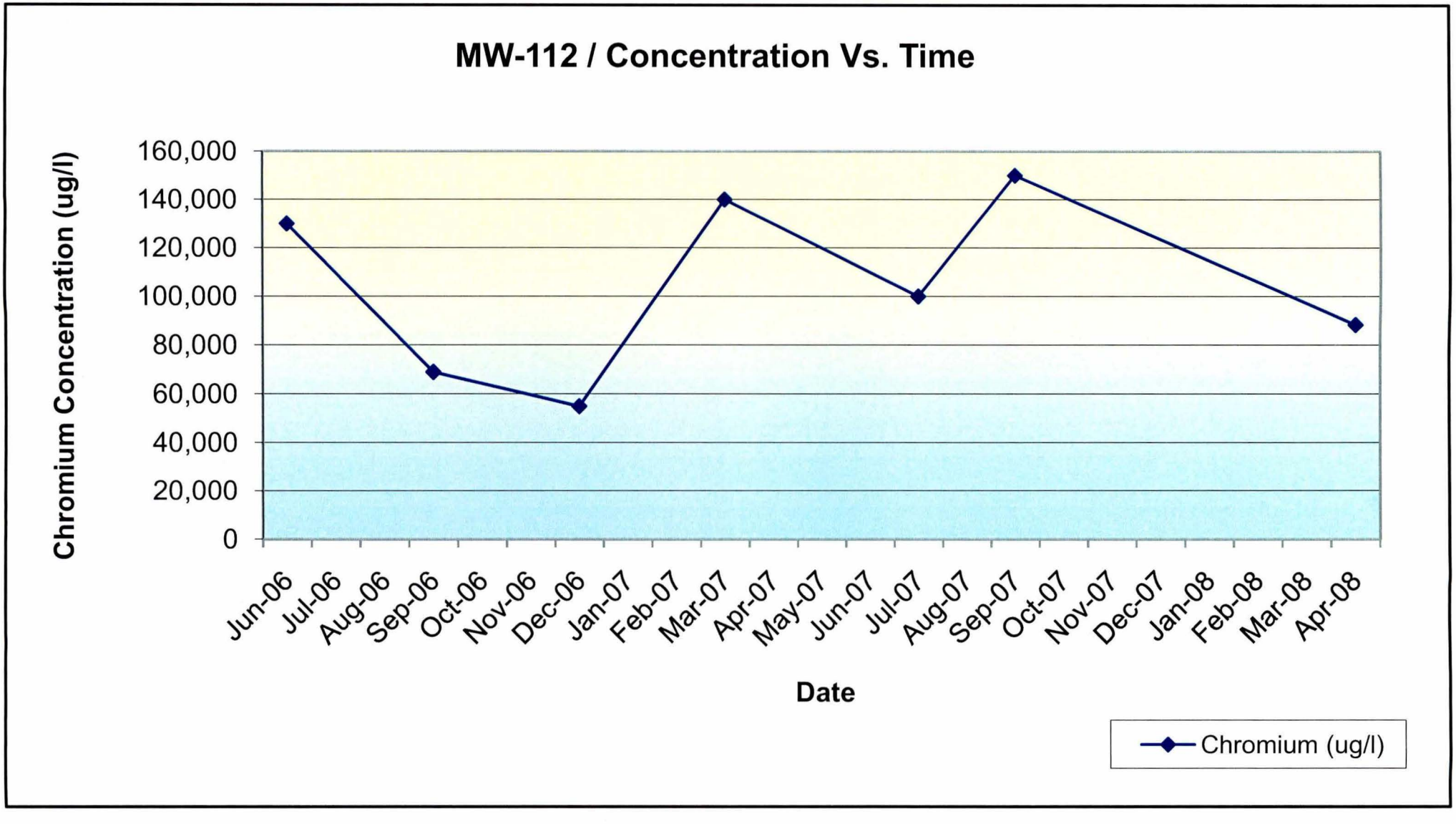

Well W-104 / Concentration Vs. Time
Chromium Concentration (ug/l)
1,300
1,200
1,100
1,000
900
800
700
600
500
400
300
200
100
0
Feb-97
Jun-97
Oct-97
Feb-98
Jun-98
Oct-98
Feb-99
Jun-99
Oct-99
Feb-00
Jun-00
Oct-00
Feb-01
Jun-01
Oct-01
Feb-02
Jun-02
Oct-02
Feb-03
Jun-03
Oct-03
Feb-04
Jun-04
Oct-04
Feb-05
Jun-05
Oct-05
Feb-06
Jun-06
Oct-06
Feb-07
Jun-07
Oct-07
Feb-08
Jun-08
Date
Chromium (ug/l)

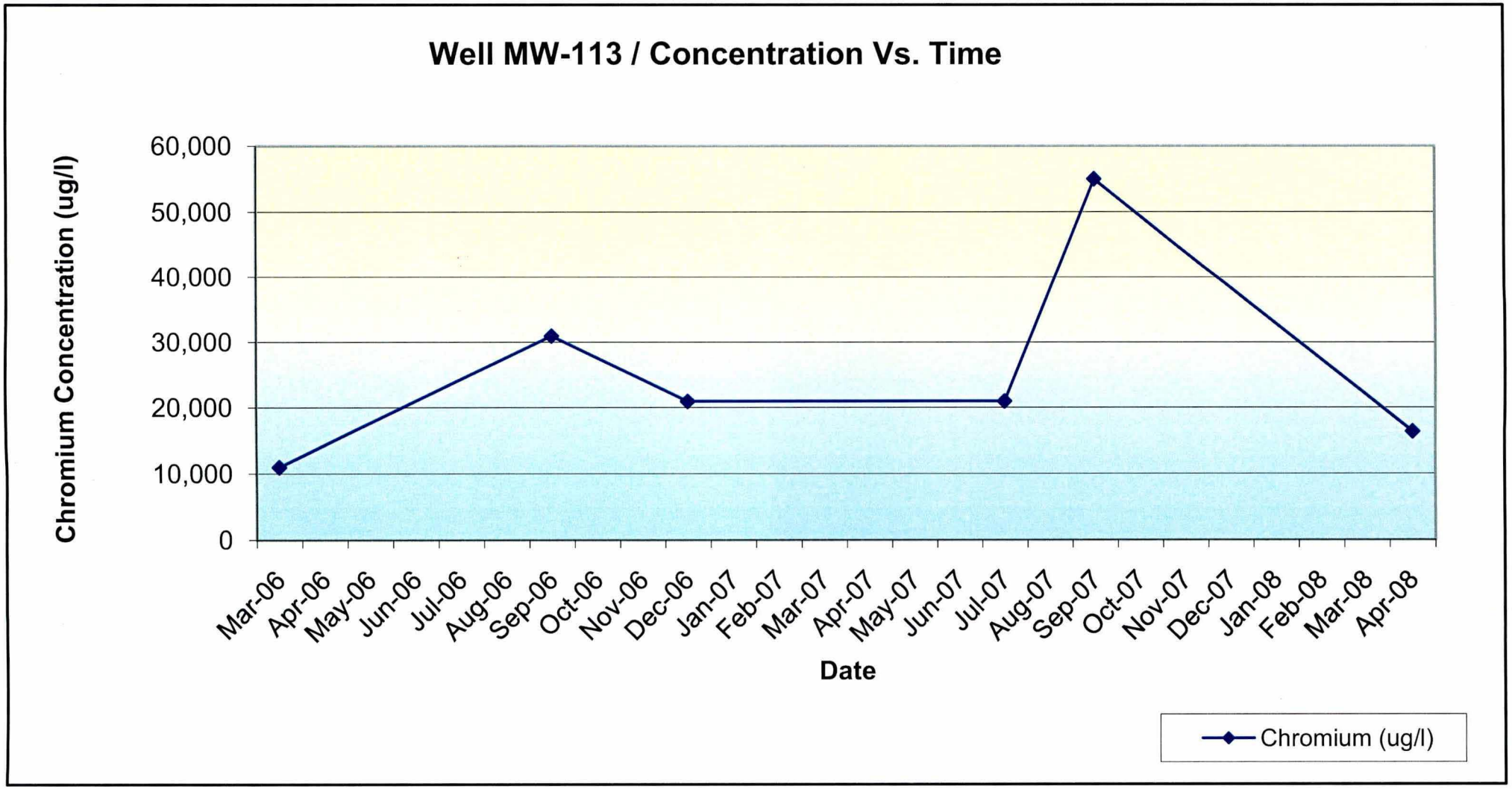

Well W-107 / Concentration Vs. Time
Chromium Concentration (ug/l)
14,500
13,500
12,500
11,500
10,500
9,500
8,500
7,500
6,500
5,500
4,500
3,500
2,500
1,500
Feb-97
Jun-97
Oct-97
Feb-98
Jun-98
Oct-98
Feb-99
Jun-99
Oct-99
Feb-00
Jun-00
Oct-00
Feb-01
Jun-01
Oct-01
Feb-02
Jun-02
Oct-02
Feb-03
Jun-03
Oct-03
Feb-04
Jun-04
Oct-04
Feb-05
Jun-05
Oct-05
Feb-06
Jun-06
Oct-06
Feb-07
Jun-07
Oct-07
Feb-08
Jun-08
Date
Chromium (ug/l)


Well MW-109 / Concentration Vs. Time
Chromium Concentration (ug/l)
2,600
2,400
2,200
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
006/21/06
Sep-06
Dec-06
Mar-07
Jul-07
Sep-07
Apr-08
Date
Chromium (ug/l)


Well MW-110 / Concentration Vs. Time
Chromium Concentration (ug/l)
60,000
50,000
40,000
30,000
20,000
10,000
0
Jun-06
Jul-06
Aug-06
Sep-06
Oct-06
Nov-06
Dec-06
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
Jan-08
Feb-08
Mar-08
Apr-08
Date
Chromium (ug/l)

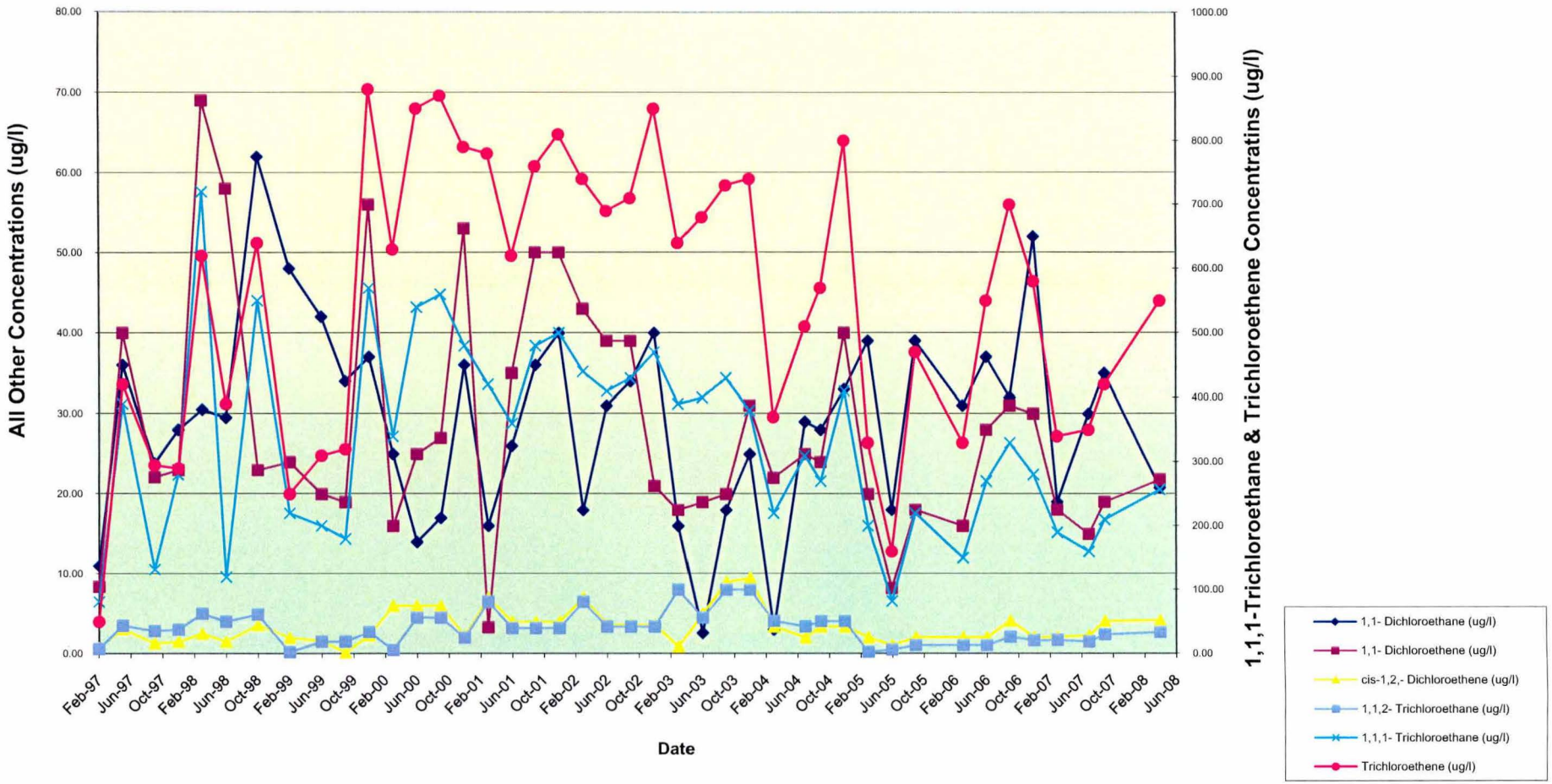

Well MW-111 / Concentration Vs. Time
Chromium Concentration (ug/l)
2,500
2,000
1,500
1,000
500
0
Sep-06
Oct-06
Nov-06
Dec-06
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
Jan-08
Feb-08
Mar-08
Apr-08
Date
Chromium (ug/l)

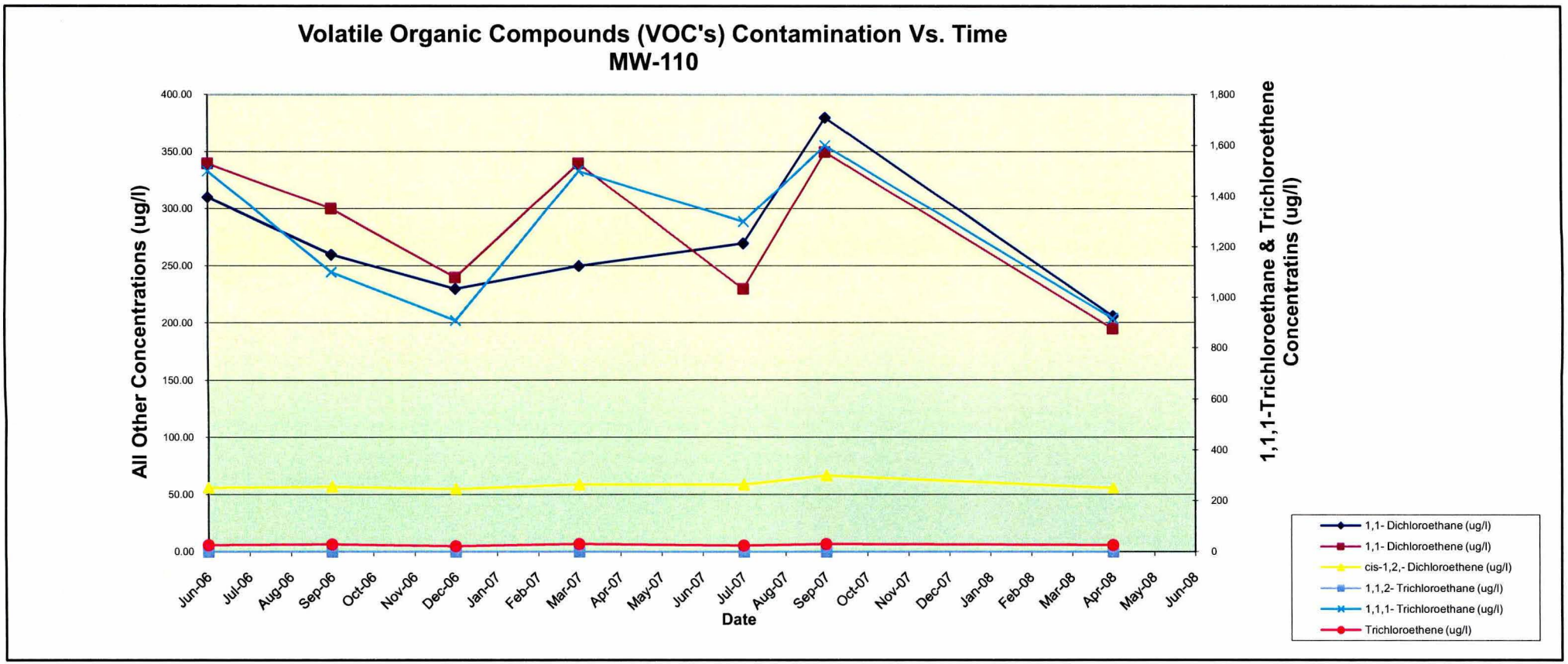

MW-112 / Concentration Vs. Time
Chromium Concentration (ug/l)
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
Jun-06
Jul-06
Aug-06
Sep-06
Oct-06
Nov-06
Dec-06
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
Jan-08
Feb-08
Mar-08
Apr-08
Date
Chromium (ug/l)

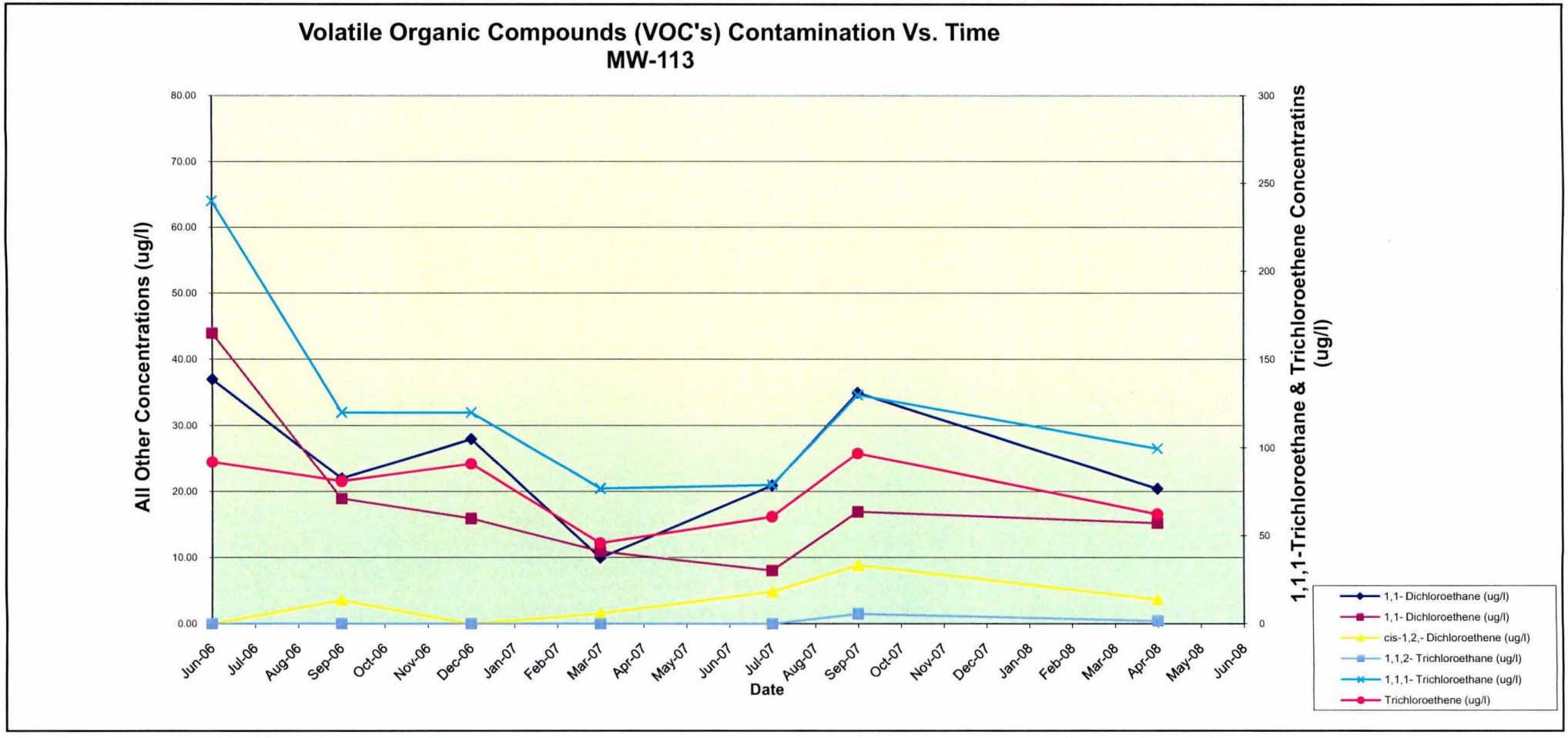

Well MW-113 / Concentration Vs. Time
Chromium Concentration (ug/l)
60,000
50,000
40,000
30,000
20,000
10,000
0
Mar-06
Apr-06
May-06
Jun-06
Jul-06
Aug-06
Sep-06
Oct-06
Nov-06
Dec-06
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
Jan-08
Feb-08
Mar-08
Apr-08
Date
Chromium (ug/l)

Graph Set 3
Volatile Organic Compounds (VOCs) Versus Time Graphs
(MW-107, MW-110 & MW-113)

Volatile Organic Compounds (VOC's) Contamination Vs. Time
MW-107




Volatile Organic Compounds (VOC's) Contamination Vs. Time
MW-110
All Other Concentrations (ug/l)
1,1,1-Trichloroethane & Trichloroethene Concentratins (ug/l)
Date
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
Jun-06
Jul-06
Aug-06
Sep-06
Oct-06
Nov-06
Dec-06
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
Jan-08
Feb-08
Mar-08
Apr-08
May-08
Jun-08
1,1- Dichloroethane (ug/l)
1,1- Dichloroethene (ug/l)
cis-1,2,- Dichloroethene (ug/l)
1,1,2- Trichloroethane (ug/l)
1,1,1- Trichloroethane (ug/l)
Trichloroethene (ug/l)


Volatile Organic Compounds (VOC's) Contamination Vs. Time
MW-113
All Other Concentrations (ug/l)
1,1,1-Trichloroethane & Trichloroethene Concentratins (ug/l)
Date
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
300
250
200
150
100
50
0
Jun-06
Jul-06
Aug-06
Sep-06
Oct-06
Nov-06
Dec-06
Jan-07
Feb-07
Mar-07
Apr-07
May-07
Jun-07
Jul-07
Aug-07
Sep-07
Oct-07
Nov-07
Dec-07
Jan-08
Feb-08
Mar-08
Apr-08
May-08
Jun-08
1,1- Dichloroethane (ug/l)
1,1- Dichloroethene (ug/l)
cis-1,2,- Dichloroethene (ug/l)
1,1,2- Trichloroethane (ug/l)
1,1,1- Trichloroethane (ug/l)
Trichloroethene (ug/l)

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 889757

Client: OMNNI ASSOCIATES, INC.
Lab Contact: Brian Basten

Project Name: MAUTHE

Project Number: N1866A05/003

Lab Sample Number	Field ID	Matrix	Collection Date
889757-001	OUTFALL 001	WATER	10/16/07 07:41

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

Approval Signature

10-18-07
Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 889757

Client : OMNNI ASSOCIATES, INC.
Project Name : MAUTHE
Project Number : N1866A05/003
Field ID : OUTFALL 001

Matrix Type : WATER
Collection Date : 10/16/07
Report Date : 10/17/07
Lab Sample Number : 889757-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chromium, Hexavalent	1700	42	140		1	ug/L	H	10/17/07 08:30 AM	SM 3500 Cr-B	SM 3500 Cr-B
								Prep Date/Time: 10/17/07 08:30 AM		Anl By: DEY

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

Lab Number	TestGroupID	Field ID	Comment
889757-001	W-CR+6-W	OUTFALL 001	H - Analysis performed one hour past holding time.

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Test Group Name	889757-001
CHROMIUM, HEXAVALENT	B

Code	WI Certification
B	405132750 / DATCP: 105-444

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

QC Summary

Batch: 889757
Lab Section: WETCHEM
QC Batch Number: 25748
Prep Method: SM 3500 Cr-B
Analytical Method: SM 3500 Cr-B

QC Type	Client Sample ID	Lab Sample ID
MB	WCG2270-064MB	WCG2270-064MB
LCS	WCG2270-064MBLCS	WCG2270-064MBLCS
MS	OUTFALL 001MS	889757-001MS
MSD	OUTFALL 001MSD	889757-001MSD

Client Sample ID	Lab Sample ID	MB ID	Client Sample ID	Lab Sample ID	MB ID
OUTFALL 001	889757-001	MB			

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Recovery C	LCSD Spiked Conc	LCSD Recovery Conc	LCSD Recovery %	LCSD Recovery C	LCS/LCSD RPD %	LCS/LCSD RPD C	LCS/LCSD Control Limits LCL %	LCS/LCSD Control Limits UCL %	LCS/LCSD Control Limits RPD %	Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery Conc	MS Recovery %	MS Recovery C	MSD Spiked Conc	MSD Recovery Conc	MSD Recovery %	MSD Recovery C	MS/MSD RPD %	MS/MSD RPD C	MS/MSD Control Limits LCL %	MS/MSD Control Limits UCL %	MS/MSD Control Limits RPD %
Chromium, Hexavalent	< 3.4	300.00	303.9	101.3		---	---	---		---		90	110	20	889757-001	1662.6	3750.0	5600.1	105.0		3750.0	5460.5	101.3		2.5		90	110	20

Conc = ug/L unless otherwise noted
C = QC Code, see Qualifer Sheet
Parent Result is reported down to MDL in order to allow Validation of this worksheet
The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form.

Report Date: 10/17/2007
QC Batch Number: 25748

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNNI ASSOC Project # 889757

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

Tracking #: _____

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

Optional: Proj. Due Date: Proj. Name:

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

Thermometer Used N/A Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature ROI Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C Comments:

Date and Initials of person examining contents: 10/16/07 KJL 10/16/07 AG

Chain of Custody Present:	☒Yes	☐No	☐N/A
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☒Yes	☒No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A
Sufficient Volume:	☒Yes	☐No	☐N/A
Correct Containers Used:	☒Yes	☐No	☐N/A
-Pace Containers Used:	☐Yes	☒No	☐N/A
Containers Intact:	☒Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A
Sample Labels match COC:	☒Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix: W			
All containers needing preservation have been checked.	☐Yes	☐No	☒N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☒N/A
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No	
Samples checked for dechlorination:	☐Yes	☐No	☒N/A
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A
Trip Blank Present:	☐Yes	☐No	☒N/A
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A
Pace Trip Blank Lot # (if purchased): _____			

1.	
2.	
3.	
4.	
5.	
6.	HEX CHROMIUM
7.	
8.	
9.	
10.	
11.	
12.	
13.	
Initial when completed	Lot # of added preservative
14.	
15.	
16.	

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10-17-07

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

CHAIN OF CUSTODY / Analytical Request Document

Pace Analytical®

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

0981538

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: OMNNI ASSOCIATES	Report To: BRIAN WAYNER	Attention: BRIAN WAYNER
Address: ONE SYSTEMS DRIVE	Copy To:	Company Name: OMNNI
APPLETON, WI 54914		Address:
Email To: bwayner@omnni.com	Purchase Order No.:	Pace Quote Reference: MAUTHE
Phone: 920/830-6141 Fax: 920/830-6100	Project Name: MAUTHE	Pace Project Manager: B. BASTIAN
Requested Due Date/TAT:	Project Number: N186A05/003	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ Other_____

SITE LOCATION ☐GA ☐IL ☐IN ☐MI ☐MN ☐NC ☐OH ☐SC ☒WI ☐OTHER _____

Section D Required Client Information

SAMPLE ID

One Character per box. (A-Z, 0-9 / -) Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Requested Analysis: HEX CHROMIUM N	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D
1	OUTFALL 001 001	WW	G	10/4/07	7:41				1	X									4		889757 1-250 mL Poly
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
B. Wayner	10/4/07	8:30	B Kempen	10/4/07	0920
B Kempen	10/16/07	1410	K Buchholz	10/16	1410

SAMPLE CONDITION

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
ROT	(Y) N	(Y) N	(Y) N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: BRIAN WAYNER

SIGNATURE of SAMPLER: _____ DATE Signed (MM / DD / YY)

SEE REVERSE SIDE FOR INSTRUCTIONS

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 890024

Client: OMNNI ASSOCIATES, INC.
Lab Contact: Brian Basten
Project Name: MAUTHE
Project Number: N1866A05-003

Lab Sample Number	Field ID	Matrix	Collection Date
890024-001	OUTFALL 001	WATER	10/23/07 06:10

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

ACCREDITED IN ACCORDANCE WITH nelac

Approval Signature

10-25-07
Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 890024

Client : OMNNI ASSOCIATES, INC.
Project Name : MAUTHE
Project Number : N1866A05-003
Field ID : OUTFALL 001

Matrix Type : WATER
Collection Date : 10/23/07
Report Date : 10/24/07
Lab Sample Number : 890024-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chromium, Hexavalent	1500	42	140		1	ug/L		10/23/07 04:30 PM	SM 3500 Cr-B	SM 3500 Cr-B
								Prep Date/Time:		Anl By: DEY

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Test Group Name	890024-001
CHROMIUM, HEXAVALENT	B

Code	WI Certification
B	405132750 / DATCP: 105-444

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

QC Summary

Batch: 890024
Lab Section: WETCHEM
QC Batch Number: 25946
Prep Method: SM 3500 Cr-B
Analytical Method: SM 3500 Cr-B

QC Type	Client Sample ID	Lab Sample ID
MB	WCG2270-068MB	WCG2270-068MB
LCS	WCG2270-068MBLCS	WCG2270-068MBLCS
MS	OUTFALL 001MS	890024-001MS
MSD	OUTFALL 001MSD	890024-001MSD

Client Sample ID	Lab Sample ID	MB ID	Client Sample ID	Lab Sample ID	MB ID
OUTFALL 001	890024-001	MB			

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Recovery C	LCSD Spiked Conc	LCSD Recovery Conc	LCSD Recovery %	LCSD Recovery C	LCS/LCSD RPD %	LCS/LCSD RPD C	LCS/LCSD Control Limits LCL %	LCS/LCSD Control Limits UCL %	LCS/LCSD Control Limits RPD %	Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery Conc	MS Recovery %	MS Recovery C	MSD Spiked Conc	MSD Recovery Conc	MSD Recovery %	MSD Recovery C	MS/MSD RPD %	MS/MSD RPD C	MS/MSD Control Limits LCL %	MS/MSD Control Limits UCL %	MS/MSD Control Limits RPD %
Chromium, Hexavalent	< 3.4	300.00	295	98.3		---	---	---		---		90	110	20	890024-001	1474.1	3750.0	5167.2	98.5		3750.0	5299.9	102.0		2.5		90	110	20

Conc = ug/L unless otherwise noted
C = QC Code, see Qualifer Sheet
Parent Result is reported down to MDL in order to allow Validation of this worksheet
The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form.

Report Date: 10/24/2007
QC Batch Number: 25946

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNI Project # 890024

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

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

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

Thermometer Used N/A Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature ROI Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C Comments:

Date and Initials of person examining contents: 10/23/07 KJL 10/23/07

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.	
Short Hold Time Analysis (<72hr):	☒Yes ☐No ☐N/A	6.	HEXA CHROME
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		
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.	
-Includes date/time/ID/Analysis Matrix: W			
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.	
Trip Blank Present:	☐Yes ☐No ☒N/A	16.	
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A		
Pace Trip Blank Lot # (if purchased): _____			

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10-24-07

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Pace Analytical®
www.pacelabs.com

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

Page 1 of 1

COC No. 029592

CHAIN OF CUSTODY

*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 #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	
Invoice To Phone:	920/830-6141

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	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: HEXAVALENT CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	OUTFALL 001	10/23/07	6:10	GW	N	A	X		1-250 mL Poly	
Ø										

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:
Brian D. Wayner	10/23/07 7:10	D. Mielke	10/23/07 8:45
D. Mielke	10/23/07 14:05	[signature]	10/23/07 1405

PACE Project No.
890024

Receipt Temp = ROI °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 890301

Client: OMNNI ASSOCIATES, INC.
Lab Contact: Brian Basten

Project Name: MAUTHE

Project Number: N1866A05/003

Lab Sample Number	Field ID	Matrix	Collection Date
890301-001	OUTFALL 001	WATER	10/30/07 06:25

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

Approval Signature

11-1-07
Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 890301

Client : OMNNI ASSOCIATES, INC.
Project Name : MAUTHE
Project Number : N1866A05/003
Field ID : OUTFALL 001

Matrix Type : WATER
Collection Date : 10/30/07
Report Date : 11/01/07
Lab Sample Number : 890301-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chromium, Hexavalent	1900	42	140		1	ug/L		10/30/07 02:40 PM	SM 3500 Cr-B	SM 3500 Cr-B
								Prep Date/Time: 10/30/07 02:40 PM	Anl By:	DEY

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Test Group Name	8903011-001
CHROMIUM, HEXAVALENT	B

Code	WI Certification
B	405132750 / DATCP: 105-444

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

QC Summary

Batch: 890301
Lab Section: WETCHEM
QC Batch Number: 26187
Prep Method: SM 3500 Cr-B
Analytical Method: SM 3500 Cr-B

QC Type	Client Sample ID	Lab Sample ID
MB	WCG2270-072MB	WCG2270-072MB
LCS	WCG2270-072MBLCS	WCG2270-072MBLCS
MS	OUTFALL 001MS	890301-001MS
MSD	OUTFALL 001MSD	890301-001MSD

Client Sample ID	Lab Sample ID	MB ID	Client Sample ID	Lab Sample ID	MB ID
OUTFALL 001	890301-001	MB			

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Recovery C	LCSD Spiked Conc	LCSD Recovery Conc	LCSD Recovery %	LCSD Recovery C	LCS/LCSD RPD %	LCS/LCSD RPD C	LCS/LCSD Control Limits LCL %	LCS/LCSD Control Limits UCL %	LCS/LCSD Control Limits RPD %	Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery Conc	MS Recovery %	MS Recovery C	MSD Spiked Conc	MSD Recovery Conc	MSD Recovery %	MSD Recovery C	MS/MSD RPD %	MS/MSD RPD C	MS/MSD Control Limits LCL %	MS/MSD Control Limits UCL %	MS/MSD Control Limits RPD %
Chromium, Hexavalent	< 3.4	300.00	307.8	102.6		---	---	---		---		90	110	20	890301-001	1900.0	3750.0	5635	99.6		3750.0	5481.4	95.5		2.8		90	110	20

Conc = ug/L unless otherwise noted
C = QC Code, see Qualifer Sheet
Parent Result is reported down to MDL in order to allow Validation of this worksheet
The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form.

Report Date: 11/1/2007
QC Batch Number: 26187

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNNI Assoc Project # 890301

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

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

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

Thermometer Used N/A **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature ROI **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: cf 10/30/07 cf

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC:	☑Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix: W			
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No	
Samples checked for dechlorination:	☐Yes	☐No	☑N/A
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A
Trip Blank Present:	☐Yes	☐No	☑N/A
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A
Pace Trip Blank Lot # (if purchased):			

1.
2.
3.
4.
5.
6. HEXA CHROME
7.
8.
9.
10.
11.
12.
13.

Initial when completed	Lot # of added preservative

14.
15.
16.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10-31-07

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Pace Analytical®
www.pacelabs.com

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

COC No. 031264

CHAIN OF CUSTODY

*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

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Quote #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
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	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: HEXAVALENT CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
001	OUTFALL 001	10/30/07	6:25	GW	N	A	X		1-250 mL POLY

Profile #

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:
Brian D. Wayner	10/30/07 6:45am	B Kempen	10/30/07 0845
B Kempen	10/30/07 1400	K Stahn	10/30 1400

PACE Project No. 890301

Receipt Temp = RAF °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present

Intact / Not Intact

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 890575

Client: OMNNI ASSOCIATES, INC.
Lab Contact: Brian Basten
Project Name: MAUTHE
Project Number: N1866A05/003

Lab Sample Number	Field ID	Matrix	Collection Date
890575-001	OUTFALL 001	WATER	11/06/07 07:31

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

ACCREDITED IN ACCORDANCE WITH nelac

Approval Signature

11-30-07
Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 890575

Client : OMNNI ASSOCIATES, INC.
Project Name : MAUTHE
Project Number : N1866A05/003
Field ID : OUTFALL 001

Matrix Type : WATER
Collection Date : 11/06/07
Report Date : 11/30/07
Lab Sample Number : 890575-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chromium - Dissolved	1300	0.43	1.4		1	ug/L		11/28/07 07:00 AM	SW846 3020A	SW846 6020
								Prep Date/Time: 11/27/07 09:05 AM	**Anl By:** MSB	
Chromium, Hexavalent	1900	34	110		1	ug/L		11/07/07 07:10 AM	SM 3500 Cr-B	SM 3500 Cr-B
								Prep Date/Time: 11/07/07 07:10 AM	**Anl By:** DDY	

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Test Group Name	890575-001
CHROMIUM - DISSOLVED	B
CHROMIUM, HEXAVALENT	B

Code	WI Certification
B	405132750 / DATCP: 105-444

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

QC Summary

Batch: 890575
Lab Section: METALS
QC Batch Number: 26928
Prep Method: SW846 3020A
Analytical Method: SW846 6020

QC Type	Client Sample ID	Lab Sample ID
MB	MBDMTG2324-31	MBDMTG2324-31
LCS	LCSDMTG2324-31	LCSDMTG2324-31
MS	891196-001MS	891196-001MS
MSD	891196-001MSD	891196-001MSD

Client Sample ID	Lab Sample ID	MB ID	Client Sample ID	Lab Sample ID	MB ID
OUTFALL 001	890575-001	MB			

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Recovery C	LCSD Spiked Conc	LCSD Recovery Conc	LCSD Recovery %	LCSD Recovery C	LCS/LCSD RPD	LCS/LCSD RPD C	LCS/LCSD Control Limits LCL %	LCS/LCSD Control Limits UCL %	LCS/LCSD Control Limits RPD %	Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery Conc	MS Recovery %	MS Recovery C	MSD Spiked Conc	MSD Recovery Conc	MSD Recovery %	MSD Recovery C	MS/MSD RPD %	MS/MSD RPD C	MS/MSD Control Limits LCL %	MS/MSD Control Limits UCL %	MS/MSD Control Limits RPD %
Chromium - Dissolved	< 0.43	200.0	186.1	93.1		---	---	---		---		75	125	20	891196-001	1.020	200.0	172.6	85.8		200.0	182.8	90.9		5.7		75	125	20

Conc = ug/L unless otherwise noted
C = QC Code, see Qualifer Sheet
Parent Result is reported down to MDL in order to allow Validation of this worksheet
The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form.

Report Date: 11/30/2007
QC Batch Number: 26928

Pace Analytical Services, Inc.

QC Summary

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

Batch: 890575
Lab Section: WETCHEM
QC Batch Number: 26398
Prep Method: SM 3500 Cr-B
Analytical Method: SM 3500 Cr-B

QC Type	Client Sample ID	Lab Sample ID
MB	WCG2270-076MB	WCG2270-076MB
LCS	WCG2270-076MBLCS	WCG2270-076MBLCS
MS	OUTFALL 001MS	890575-001MS
MSD	OUTFALL 001MSD	890575-001MSD

Client Sample ID	Lab Sample ID	MB ID	Client Sample ID	Lab Sample ID	MB ID
OUTFALL 001	890575-001	MB			

Test Name	Method Blank Result Conc		LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Recovery C	LCSD Spiked Conc	LCSD Recovery Conc	LCSD Recovery %	LCSD Recovery C	LCS/LCSD RPD %	LCS/LCSD RPD C	LCS/LCSD Control Limits LCL %	LCS/LCSD Control Limits UCL %	LCS/LCSD Control Limits RPD %	Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery Conc	MS Recovery %	MS Recovery C	MSD Spiked Conc	MSD Recovery Conc	MSD Recovery %	MSD Recovery C	MS/MSD RPD %	MS/MSD RPD C	MS/MSD Control Limits LCL %	MS/MSD Control Limits UCL %	MS/MSD Control Limits RPD %
Chromium, Hexavalent	<	3.4	300.00	324	108.0		---	---	---		---		90	110	20	890575-001	1894.2	3000.0	4949.2	101.8		3000.0	4882.2	99.6		1.4		90	110	20

Conc = ug/L unless otherwise noted
C = QC Code, see Qualifer Sheet
Parent Result is reported down to MDL in order to allow Validation of this worksheet
The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form.

Report Date: 11/30/2007
QC Batch Number: 26398

Sample Condition Upon Receipt

Pace Analytical

Client Name: Omni Assoc Project # 890575

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

Tracking #: _____

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

Optional: Proj. Due Date: Proj. Name:

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

Thermometer Used — **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature RoT **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 11-6-07 CG

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.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. CRHO
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	
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.
-Includes date/time/ID/Analysis Matrix: GW		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed CG / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 11-7-07

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical®
www.pacelabs.com

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

Page 1 of 1

COC No. 031265

CHAIN OF CUSTODY

*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

(Please Print Clearly)	
Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/063
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Quote #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	
Invoice To Phone:	920/830-6141

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, SI = 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: HEXAVALENT CHROMIUM	Analyses Requested: CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	A					
					Y	D					
001	OUTFALL 001	11/6/07	7:31	GW			X	X		2-250ml p A+D	

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:
Brian D Wayner	11/6/07 9:20am	Kimberly Burkey	11/6/07 0920
Kimberly Burkey	11/6/07 1030		

PACE Project No. 890575

Receipt Temp = 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 891464

Client: OMNNI ASSOCIATES, INC.
Lab Contact: Brian Basten

Project Name: MAUTHE

Project Number: N1866A05/003

Lab Sample Number	Field ID	Matrix	Collection Date
891464-001	OUTFALL 001	WATER	12/04/07 08:21

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

ACCREDITED IN ACCORDANCE WITH nelac

Approval Signature

12-11-07
Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 891464

Client : OMNNI ASSOCIATES, INC.
Project Name : MAUTHE
Project Number : N1866A05/003
Field ID : OUTFALL 001

Matrix Type : WATER
Collection Date : 12/04/07
Report Date : 12/11/07
Lab Sample Number : 891464-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chromium - Dissolved	2500	0.43	1.4		1	ug/L		12/07/07 05:16 PM	SW846 3020A	SW846 6020
								Prep Date/Time: 12/07/07 08:50 AM	**Anl By:** MSB	
Chromium, Hexavalent	3100	42	140		1	ug/L		12/05/07 07:25 AM	SM 3500 Cr-B	SM 3500 Cr-B
								Prep Date/Time: 12/05/07 07:25 AM	**Anl By:** DDY	

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

Lab Number	TestGroupID	Field ID	Comment
891464	M-*-D	All Samples	X - Internal standard limits of 30-140% used. All QC within limits.

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Test Group Name	891464-001
CHROMIUM - DISSOLVED	B
CHROMIUM, HEXAVALENT	B

Code	WI Certification
B	405132750 / DATCP: 105-444

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNNI ASSOC Project # 8914164

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ KC Client ☐ Commercial ☑ Pace Other _____

Tracking #: _____

Optional: Proj Due Date: Proj Name:

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

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

Thermometer Used N/A **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature Rcd **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:**

Date and Initials of person examining contents: 12/4/07 KJR LIT 12/4/07

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.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. HEXAcetRome
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	
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.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed KSL / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 12-4-07

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Pace Analytical®
www.pacelabs.com

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

COC No. 031266

CHAIN OF CUSTODY

*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

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	
Regulatory Program:	

Quote #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	
Invoice To Phone:	920/830-6141

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, SI = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

FILTERED? (YES/NO) — Y/N: N, Y
PRESERVATION (CODE)* — Pick Letter: A, D

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: HEXAVALENT CHROMIUM (A)	CHROMIUM (D)	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	OUTFALL 001	12/4/07	8:21am	GW	X	X		2-250 mL Poly	

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 [redacted] pricing [redacted] base of [redacted]

Relinquished By:	Date/Time:	Received By:	Date/Time:
Brian D. Wayner	12/4/07 9:30am	D. Mielke	12/4/07 11:45
D. Mielke	12/4/07 15:30	KJ Hahn	12/4/07 1230

PACE Project No. 891464

Receipt Temp = ROI °C

Sample Receipt pH (OK) / Adjusted

Cooler Custody Seal
Present / Not Present
Intact / Not Intact

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 892246

Client: OMNNI ASSOCIATES, INC.
Lab Contact: Steve Mleczko
Project Name: MAUTHE
Project Number: N1866A05/003

Lab Sample Number	Field ID	Matrix	Collection Date
892246-001	OUTFALL 001	WATER	01/02/08 06:50

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

ACCREDITED IN ACCORDANCE WITH nelac

Approval Signature

1/10/2008
Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 892246

Client : OMNNI ASSOCIATES, INC.
Project Name : MAUTHE
Project Number : N1866A05/003
Field ID : OUTFALL 001

Matrix Type : WATER
Collection Date : 01/02/08
Report Date : 01/09/08
Lab Sample Number : 892246-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chromium - Dissolved	1200	0.57	1.9		1	ug/L		01/09/08 09:33 AM	SW846 6010B	SW846 6010B
								Prep Date/Time: 01/04/08		Anl By: DLB
Chromium, Hexavalent	1300	42	140		1	ug/L		01/02/08 11:00 AM	SM 3500 Cr-B	SM 3500 Cr-B
								Prep Date/Time: 01/02/08 11:00 AM		Anl By: DDY

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302

Analysis Summary by Laboratory

Test Group Name	892246-001
CHROMIUM - DISSOLVED	B
CHROMIUM, HEXAVALENT	B

Code	WI Certification
B	405132750 / DATCP: 105-444

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

QC Summary

Batch: 892246
Lab Section: METALS
QC Batch Number: 28020
Prep Method: SW846 6010B
Analytical Method: SW846 6010B

QC Type	Client Sample ID	Lab Sample ID
MB	MBWMTG2363-12	MBWMTG2363-12
MB	MBDMTG2363-12	MBDMTG2363-12
LCS	LCSWMTG2363-12	LCSWMTG2363-12
LCS	LCSDMTG2363-12	LCSDMTG2363-12
MS	892262-001MS	892262-001MS
MSD	892262-001MSD	892262-001MSD

Client Sample ID	Lab Sample ID	MB ID	Client Sample ID	Lab Sample ID	MB ID
OUTFALL 001	892246-001	MB			

Test Name	Method Blank Result Conc	LCS Spiked Conc	LCS Recovery Conc	LCS Recovery %	LCS Recovery C	LCSD Spiked Conc	LCSD Recovery Conc	LCSD Recovery %	LCSD Recovery C	LCS/LCSD RPD %	LCS/LCSD RPD C	LCS/LCSD Control Limits LCL %	LCS/LCSD Control Limits UCL %	LCS/LCSD Control Limits RPD %	Parent Sample Number	Parent Result Conc	MS Spiked Conc	MS Recovery Conc	MS Recovery %	MS Recovery C	MSD Spiked Conc	MSD Recovery Conc	MSD Recovery %	MSD Recovery C	MS/MSD RPD %	MS/MSD RPD C	MS/MSD Control Limits LCL %	MS/MSD Control Limits UCL %	MS/MSD Control Limits RPD %
Chromium - Dissolved	< 0.57	500.0	546.4	109.3		---	---	---		---		80	120	20	892262-001	< 0.57	500.0	555.5	111.1		500.0	550.2	110.0		1.0		75	125	20

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

QC Summary

Batch: 892246
Lab Section: WETCHEM
QC Batch Number: 27935
Prep Method: SM 3500 Cr-B
Analytical Method: SM 3500 Cr-B

QC Type	Client Sample ID	Lab Sample ID
MB	WCG2379-013MB	WCG2379-013MB
LCS	WCG2379-013MBLCS	WCG2379-013MBLCS
MS	OUTFALL 001MS	892246-001MS
MSD	OUTFALL 001MSD	892246-001MSD

Client Sample ID	Lab Sample ID	MB ID	Client Sample ID	Lab Sample ID	MB ID
OUTFALL 001	892246-001	MB			

Test Name	Method Blank Result	Conc	LCS Spiked Conc	LCS Recovery Conc	%	C	LCSD Spiked Conc	LCSD Recovery Conc	%	C	LCS/LCSD RPD %	C	LCS/LCSD Control Limits LCL %	UCL %	RPD %	Parent Sample Number		Parent Result Conc	MS Spiked Conc	MS Recovery Conc	%	C	MSD Spiked Conc	MSD Recovery Conc	%	C	MS/MSD RPD %	C	MS/MSD Control Limits LCL %	UCL %	RPD %
Chromium, Hexavalent	J	3.4	300.00	331.3	110.4		---	---	---		---		90	110	20	892246-001		1313.5	3750.0	5216.1	104.1		3750.0	5397.6	108.9		3.4		90	110	20

Conc = ug/L unless otherwise noted
C = QC Code, see Qualifer Sheet
Parent Result is reported down to MDL in order to allow Validation of this worksheet
The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form.

Report Date: 1/9/2008
QC Batch Number: 27935

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNI Assoc Project # 8922246

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

Optional: Proj. Due Date: Proj. Name:

Tracking #: _____

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

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

Thermometer Used – Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature ROT Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 1-2-08 CJ 11:28

Temp should be above freezing to 6°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.
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A	6. CRTL6
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	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☑Yes	☐No	☐N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: GW	☑Yes	☐No	☐N/A	12.
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No		Initial when completed CJ / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☑No	☐N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased): _____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 1/2/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Pace Analytical®
www.pacelabs.com

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

Page 1 of 1

COC No. 031267

CHAIN OF CUSTODY

*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

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Quote #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	
Invoice To Phone:	920/830-6141

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	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: HEXAVALENT CHROMIUM	Analyses Requested: TOTAL CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	A					
					Y	D					
001	OUTFALL 001	1/2/08	6:50	GW			X	X		2-250ml p A+D	

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:
Brian D. Wayner	1/2/08 8:10am	D. Mielk	1/2/08 9:14
D Mielk	1/2/08 10:05	C. [illegible] Pace	1/2/08 10:05

PACE Project No. 892246

Receipt Temp = ROT °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present

Intact / Not Intact

Pace Analytical®

1241 Bellevue Street, Suite 9
Green Bay, WI 54302
920-469-2436, Fax: 920-469-8827

Analytical Report Number: 893057

Client: OMNNI ASSOCIATES, INC.
Lab Contact: Steve Mleczko

Project Name: MAUTHE

Project Number: N1866A05-003

Lab Sample Number	Field ID	Matrix	Collection Date
893057-001	OUTFALL 001	WATER	02/04/08 06:55

I certify that the data contained in this Final Report has been generated and reviewed in accordance with approved methods and Laboratory Standard Operating Procedure. Exceptions, if any, are discussed in the accompanying sample comments. Release of this final report is authorized by Laboratory management, as is verified by the following signature. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc. The sample results relate only to the analytes of interest tested.

Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

REPORT OF LABORATORY ANALYSIS

Approval Signature

2/15/2008
Date

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436

Analytical Report Number: 893057

Client : OMNNI ASSOCIATES, INC.
Project Name : MAUTHE
Project Number : N1866A05-003
Field ID : OUTFALL 001

Matrix Type : WATER
Collection Date : 02/04/08
Report Date : 02/15/08
Lab Sample Number : 893057-001

INORGANICS

Test	Result	LOD	LOQ	EQL	Dil.	Units	Code	Anl Date/Time	Prep Method	Anl Method
Chromium - Dissolved	1600	6.2	21		1	ug/L	N	02/15/08 11:09 AM	EPA 3020	EPA 6020
								Prep Date/Time: 02/13/08 11:20 AM	**Anl By:** PCM	
Chromium, Hexavalent	1700	34	110		1	ug/L		02/04/08 02:30 PM	SM 3500 Cr-B	SM 3500 Cr-B
								Prep Date/Time: 02/04/08 02:30 PM	**Anl By:** DEY	

Qualifier Codes

Flag	Applies To	Explanation
A	Inorganic	Analyte is detected in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
B	Inorganic	The analyte has been detected between the method detection limit and the reporting limit.
B	Organic	Analyte is present in the method blank. Method blank criteria is evaluated to the laboratory method detection limit. Additionally, method blank acceptance may be based on project specific criteria or determined from analyte concentrations in the sample and are evaluated on a sample by sample basis.
C	All	Elevated detection limit.
D	All	Analyte value from diluted analysis or surrogate result not applicable due to sample dilution.
E	Inorganic	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%. The sample concentration is greater than 50 times the IDL for analysis done on the ICP or 100 times the IDL for analysis done on the ICP-MS. The result was flagged with the E qualifier to indicate that a physical interference was observed.
E	Organic	Analyte concentration exceeds calibration range.
F	Inorganic	Due to potential interferences for this analysis by Inductively Coupled Plasma techniques (SW-846 Method 6010), this analyte has been confirmed by and reported from an alternate method.
F	Organic	Surrogate results outside control criteria.
G	All	The result is estimated because the concentration is less than the lowest calibration standard concentration utilized in the initial calibration. The method detection limit is less than the reporting limit specified for this project.
H	All	Preservation, extraction or analysis performed past holding time.
HF	Inorganic	This test is considered a field parameter, and the recommended holding time is 15 minutes from collection. The analysis was performed in the laboratory beyond the recommended holding time.
J	All	Concentration detected equal to or greater than the method detection limit but less than the reporting limit.
K	Organic	Detection limit may be elevated due to the presence of an unrequested analyte.
L	All	Elevated detection limit due to low sample volume.
M	Organic	Sample pH was greater than 2
N	All	Spiked sample recovery not within control limits.
O	Organic	Sample received overweight.
P	Organic	The relative percent difference between the two columns for detected concentrations was greater than 40%.
Q	All	The analyte has been detected between the limit of detection (LOD) and limit of quantitation (LOQ). The results are qualified due to the uncertainty of analyte concentrations within this range.
S	Organic	The relative percent difference between quantitation and confirmation columns exceeds internal quality control criteria. Because the result is unconfirmed, it has been reported as a non-detect with an elevated detection limit.
U	All	The analyte was not detected at or above the reporting limit.
V	All	Sample received with headspace.
W	All	A second aliquot of sample was analyzed from a container with headspace.
X	All	See Sample Narrative.
Z	Organics	This compound was separated in the CCV standard but it did not meet the resolution criteria as set forth in SW846.
&	All	Laboratory Control Spike recovery not within control limits.
*	All	Precision not within control limits.
+	Inorganic	The sample result is greater than four times the spike level: therefore, the percent recovery is not evaluated.
<	All	The analyte was not detected at or above the reporting limit.
1	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses passed QC based on precision criteria.
2	Inorganic	Dissolved analyte or filtered analyte greater than total analyte; analyses failed QC based on precision criteria.
3	Inorganic	BOD result is estimated due to the BOD blank exceeding the allowable oxygen depletion.
4	Inorganic	BOD duplicate precision not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
5	Inorganic	BOD result is estimated due to insufficient oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
6	Inorganic	BOD laboratory control sample not within control limits. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
7	Inorganic	BOD result is estimated due to complete oxygen depletion. Due to the 48 hour holding time for this test, it is not practical to reanalyze and try to correct the deficiency.
8	Inorganic	Sample was received unpreserved. Sample was preserved either at the time of receipt or at the time of sample preparation.
9	Inorganic	Sample was received with insufficient preservation. Acid was added either at the time of receipt or at the time of sample preparation.

Test Group Name	893057-001
CHROMIUM - DISSOLVED	M
CHROMIUM, HEXAVALENT	B

Code	WI Certification
B	405132750 / DATCP: 105-444
M	999407970

Pace Analytical Services, Inc.

1241 Bellevue Street
Green Bay, WI 54302
920-469-2436
Fax: 920-469-8827

QC Summary

Batch: 893057
Lab Section: WETCHEM
QC Batch Number: 28620
Prep Method: SM 3500 Cr-B
Analytical Method: SM 3500 Cr-B

QC Type	Client Sample ID	Lab Sample ID
MB	WCG2379-023MB	WCG2379-023MB
LCS	WCG2379-023MBLCS	WCG2379-023MBLCS
MS	OUTFALL 001MS	893057-001MS
MSD	OUTFALL 001MSD	893057-001MSD

Client Sample ID	Lab Sample ID	MB ID	Client Sample ID	Lab Sample ID	MB ID
OUTFALL 001	893057-001	MB			

Test Name	Method Blank Result Conc		LCS Spiked Conc	LCS Recovery Conc	%	C	LCSD Spiked Conc	LCSD Recovery Conc	%	C	LCS/LCSD RPD %	C	LCS/LCSD Control Limits LCL %	UCL %	RPD %	Parent Sample Number		Parent Result Conc	MS Spiked Conc	MS Recovery Conc	%	C	MSD Spiked Conc	MSD Recovery Conc	%	C	MS/MSD RPD %	C	MS/MSD Control Limits LCL %	UCL %	RPD %
Chromium, Hexavalent	<	3.4	300.00	301.6	100.5		---	---	---		---		90	110	20	893057-001		1674.0	3000.0	4690.1	100.5		3000.0	4667.6	99.8		0.5		90	110	20

Conc = ug/L unless otherwise noted
C = QC Code, see Qualifer Sheet
Parent Result is reported down to MDL in order to allow Validation of this worksheet
The %R and RPD results are calculated from raw data values with more significant figures than are reported on this form.

Report Date: 2/15/2008
QC Batch Number: 28620

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNI assoc Project # 893057

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

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

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

Thermometer Used — Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature ROT Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 2-4-08 CJ

Temp should be above freezing to 6°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.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. CRHG
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	
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.
-Includes date/time/ID/Analysis Matrix: GW		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed CJ / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 2/4/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Pace Analytical®
www.pacelabs.com

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

COC No. 031269

CHAIN OF CUSTODY

*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 #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	SAME
Invoice To Phone:	920/830-6141

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

FILTERED? (YES/NO) — Y/N: N, Y
PRESERVATION (CODE)* — Pick Letter: A, D

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: HEXAVALENT CHROMIUM	CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	OUTFALL 001	2/4/08	6:55	GW	X	X		2-250ml p DtA	

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:
Brian D. Wayner	2/4/08 8:12	D. Mielke	2/4/08 12:50
D. Mielke	2/4/08 13:40	C. Lee Pace	2/4/08 1340

PACE Project No. 893057

Receipt Temp = ROT °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / ~~Not Present~~ Intact / Not Intact

Pace Analytical®
www.pacelabs.com

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

March 11, 2008

Brian Wayner
Omnni Associates, Inc.
One Systems Drive
Appleton, WI 549141654

RE: Project: OUTFALL 001
Pace Project No.: 401199

Dear Brian Wayner:
Enclosed are the analytical results for sample(s) received by the laboratory on March 03, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Steven Mleczko

steve.mleczko@pacelabs.com
Project Manager

Enclosures

Pace Analytical®
www.pacelabs.com

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

CERTIFICATIONS

Project: OUTFALL 001
Pace Project No.: 401199

Green Bay Certification IDs
Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs
Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

Pace Analytical®
www.pacelabs.com

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

SAMPLE SUMMARY

Project: OUTFALL 001
Pace Project No.: 401199

Lab ID	Sample ID	Matrix	Date Collected	Date Received
401199001	OUTFALL 001	Water	03/03/08 07:11	03/03/08 11:30

Pace Analytical®
www.pacelabs.com

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

SAMPLE ANALYTE COUNT

Project: OUTFALL 001
Pace Project No.: 401199

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
401199001	OUTFALL 001	EPA 7196	DEY	1	PASI-G

Pace Analytical®
www.pacelabs.com

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

PROJECT NARRATIVE

Project: OUTFALL 001
Pace Project No.: 401199

Method: EPA 7196
Description: 7196 Chromium, Hexavalent
Client: OMNNI ASSOCIATES, INC.
Date: March 11, 2008

General Information:
1 sample was analyzed for EPA 7196. All samples were received in acceptable condition with any exceptions noted below.

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 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.

Duplicate Sample:
All duplicate sample results were within method 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®
www.pacelabs.com

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

ANALYTICAL RESULTS

Project: OUTFALL 001
Pace Project No.: 401199

Sample: OUTFALL 001 **Lab ID: 401199001** Collected: 03/03/08 07:11 Received: 03/03/08 11:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7196 Chromium, Hexavalent	Analytical Method: EPA 7196								
Chromium, Hexavalent	**2.9**	mg/L	0.14	0.042	12.5		03/03/08 14:10	18540-29-9	

Pace Analytical®
www.pacelabs.com

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

QUALITY CONTROL DATA

Project: OUTFALL 001
Pace Project No.: 401199

QC Batch: WETA/1027
QC Batch Method: EPA 7196
Analysis Method: EPA 7196
Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 401199001

METHOD BLANK: 1777
Associated Lab Samples: 401199001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium, Hexavalent	mg/L	<0.0034	0.011	

LABORATORY CONTROL SAMPLE: 1778

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.30	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1779 1780

Parameter	Units	401199001 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	2.9	3.8	3.8	6.6	6.6	100	100	90-110	.2	20	

Pace Analytical®
www.pacelabs.com

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

QUALIFIERS

Project: OUTFALL 001
Pace Project No.: 401199

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNI Associates Project # 401199

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

Optional
Proj. Due Date:
Proj. Name:

Tracking #: _____

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

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

Thermometer Used NA Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature R01 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 3/3/08 AB

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.
Short Hold Time Analysis (<72hr):	☒Yes ☐No ☐N/A	6. hexchrome
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	
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.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed: AB — Lot # of added preservative:
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☐No ☒N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 3/4/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Pace Analytical®
www.pacelabs.com

MN: 612-607-1700 WI: 920-469-2436

COC No. 031270

CHAIN OF CUSTODY

*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 #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE N. SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	SAME
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	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: HEXAVALENT CHROMIUM	Analyses Requested: CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	A		Y			
						D					
001	OUTFALL 001	3/3/08	7:11	GW			X	X	2-250 ml HDPE		

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:	Relinquished By: Brian D. Wayner	Date/Time: 3/3/08 9:35	Received By: B Kemper	Date/Time: 3/3/08 0950
Transmit Prelim Rush Results by (complete what you want):	Relinquished By: B Kemper	Date/Time: 3/3/08 1130	Received By: Cindy Buisky	Date/Time: 3/3/08 1130
Email #1:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Email #2:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Telephone:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Fax:				

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

PACE Project No. 401199

Receipt Temp = R01 °C

Sample Receipt pH (OK) / Adjusted

Cooler Custody Seal Present / (Not Present)

Intact / Not Intact

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

March 11, 2008

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

RE: Project: 401199 OMNNI ASSOCIATES
Pace Project No.: 1069220

Dear Client Services:
Enclosed are the analytical results for sample(s) received by the laboratory on March 03, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Coordinator

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

Enclosures

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 401199 OMNNI ASSOCIATES
Pace Project No.: 1069220

Lab ID	Sample ID	Matrix	Date Collected	Date Received
401199001	OUTFALL 001	Water	03/03/08 07:11	03/03/08 11:30

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 401199 OMNNI ASSOCIATES
Pace Project No.: 1069220

Lab ID	Sample ID	Method	Analysts	Analytes Reported
401199001	OUTFALL 001	EPA 6020	RJS	1

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 401199 OMNNI ASSOCIATES
Pace Project No.: 1069220

Sample: OUTFALL 001 **Lab ID: 401199001** Collected: 03/03/08 07:11 Received: 03/03/08 11:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Chromium	**2500**	ug/L	25.0	12.5	50	03/10/08 11:50	03/10/08 13:23	7440-47-3	M0

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 401199 OMNNI ASSOCIATES
Pace Project No.: 1069220

QC Batch: MPRP/11577
QC Batch Method: EPA 3020
Analysis Method: EPA 6020
Analysis Description: 6020 MET Dissolved
Associated Lab Samples: 401199001

METHOD BLANK: 451186
Associated Lab Samples: 401199001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium	ug/L	ND	0.50	

LABORATORY CONTROL SAMPLE: 451187

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	80	78.7	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 451188 451189

Parameter	Units	401199001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	2500	80	80	2510	2590	8	108	70-130	3	20	M0

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 401199 OMNNI ASSOCIATES
Pace Project No.: 1069220

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

ANALYTE QUALIFIERS

M0 Matrix spike recovery was outside laboratory control limits.

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 401199 OMNNI ASSOCIATES
Pace Project No.: 1069220

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401199001	**OUTFALL 001**	EPA 3020	MPRP/11577	EPA 6020	ICPM/4593

Pace Analytical®
www.pacelabs.com

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

April 11, 2008

Brian Wayner
Omnni Associates, Inc.
One Systems Drive
Appleton, WI 549141654

RE: Project: N1866A05/003 MAUTHE
Pace Project No.: 402140

Dear Brian Wayner:
Enclosed are the analytical results for sample(s) received by the laboratory on April 01, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Steven Mleczko

steve.mleczko@pacelabs.com
Project Manager

Enclosures

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

CERTIFICATIONS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402140

Green Bay Certification IDs
Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs
Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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

SAMPLE SUMMARY

Project: N1866A05/003 MAUTHE
Pace Project No.: 402140

Lab ID	Sample ID	Matrix	Date Collected	Date Received
402140001	OUTFALL 001	Water	04/01/08 07:03	04/01/08 14:10

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

SAMPLE ANALYTE COUNT

Project: N1866A05/003 MAUTHE
Pace Project No.: 402140

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
402140001	**OUTFALL 001**	EPA 7196	DEY	1	PASI-G

Pace Analytical®
www.pacelabs.com

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

PROJECT NARRATIVE

Project: N1866A05/003 MAUTHE
Pace Project No.: 402140

Method: EPA 7196
Description: 7196 Chromium, Hexavalent
Client: OMNNI ASSOCIATES, INC.
Date: April 11, 2008

General Information:
1 sample was analyzed for EPA 7196. All samples were received in acceptable condition with any exceptions noted below.

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 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.

Duplicate Sample:
All duplicate sample results were within method 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®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402140

Sample: OUTFALL 001 **Lab ID: 402140001** Collected: 04/01/08 07:03 Received: 04/01/08 14:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7196 Chromium, Hexavalent	Analytical Method: EPA 7196								
Chromium, Hexavalent	**1.6**	mg/L	0.14	0.042	12.5		04/01/08 15:15	18540-29-9	

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

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402140

QC Batch: WETA/1222
QC Batch Method: EPA 7196
Analysis Method: EPA 7196
Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 402140001

METHOD BLANK: 11751
Associated Lab Samples: 402140001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium, Hexavalent	mg/L	<0.0034	0.011	

LABORATORY CONTROL SAMPLE: 11752

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.31	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11753 11754

Parameter	Units	402140001 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	1.6	3.8	3.8	5.6	5.5	106	102	90-110	2	20	

Pace Analytical®
www.pacelabs.com

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

QUALIFIERS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402140

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

April 10, 2008

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

RE: Project: 402140 OMNNI ASSOCIATES
Pace Project No.: 1070809

Dear Client Services:
Enclosed are the analytical results for sample(s) received by the laboratory on April 01, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sylvia Hunter

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Manager

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

Enclosures

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 402140 OMNNI ASSOCIATES
Pace Project No.: 1070809

Lab ID	Sample ID	Matrix	Date Collected	Date Received
402140001	OUTFALL 001	Water	04/01/08 07:03	04/01/08 14:10

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 402140 OMNNI ASSOCIATES
Pace Project No.: 1070809

Lab ID	Sample ID	Method	Analysts	Analytes Reported
402140001	**OUTFALL 001**	EPA 6020	RJS	1

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 402140 OMNNI ASSOCIATES
Pace Project No.: 1070809

Sample: OUTFALL 001 **Lab ID: 402140001** Collected: 04/01/08 07:03 Received: 04/01/08 14:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Chromium	**1530**	ug/L	12.5	6.2	25	04/07/08 13:30	04/08/08 14:55	7440-47-3	M0

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 402140 OMNNI ASSOCIATES
Pace Project No.: 1070809

QC Batch: MPRP/11791
QC Batch Method: EPA 3020
Analysis Method: EPA 6020
Analysis Description: 6020 MET Dissolved
Associated Lab Samples: 402140001

METHOD BLANK: 461446
Associated Lab Samples: 402140001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium	ug/L	ND	0.50	

LABORATORY CONTROL SAMPLE: 461447

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	80	86.3	108	85-115	

MATRIX SPIKE SAMPLE: 461448

Parameter	Units	08034554 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	2.8	80	79.4	96	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 461482 461483

Parameter	Units	402140001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	1530	80	80	1390	1400	-170	-164	70-130	.4	20	M0

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 402140 OMNNI ASSOCIATES
Pace Project No.: 1070809

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

ANALYTE QUALIFIERS

M0 Matrix spike recovery was outside laboratory control limits.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Omni-Appleton Project # 402140

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

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

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

Thermometer Used NA **Type of Ice:** (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature NA **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 4/4/08

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.
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	
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.
-Includes date/time/ID/Analysis Matrix: (W)				
All containers needing preservation have been checked.	☒Yes	☐No	☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes	☐No	☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No		Initial when completed: JL / Lot # of added preservative:
Samples checked for dechlorination:	☐Yes	☐No	☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	15.
Trip Blank Present:	☐Yes	☐No	☒N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased): _____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 4/11/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Pace Analytical®
www.pacelabs.com

[redacted] MIDWEST REGION [redacted]
MN: 612-607-1700 WI: 920-469-2436

[redacted] Page [redacted] of [redacted]

COC No. 031271

CHAIN OF CUSTODY

*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

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6191
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Quote #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	SAME
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
Sl = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: Hexavalent Chromium	Analyses Requested: Chromium	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	A					
					Y	D					
001	OUTFALL 001	4/1/08	7:03	GW			X	X		2-250ml #1	

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:
Brian D. Wayner	4/1/08 7:50	B Kempen	4/1/08 0915
B Kempen	4/1/08 1410	D. Mahon	4/1/08 14:15

PACE Project No. 402140

Receipt Temp = 1.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Pace Analytical®
www.pacelabs.com

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

April 18, 2008

Brian Wayner
Omnni Associates, Inc.
One Systems Drive
Appleton, WI 549141654

RE: Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

Dear Brian Wayner:
Enclosed are the analytical results for sample(s) received by the laboratory on April 08, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Steven Mleczko

steve.mleczko@pacelabs.com
Project Manager

Enclosures

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

CERTIFICATIONS

Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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

SAMPLE SUMMARY

Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

Lab ID	Sample ID	Matrix	Date Collected	Date Received
402394001	OUTFALL 001	Water	04/08/08 07:10	04/08/08 11:25

Pace Analytical Services, In
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

SAMPLE ANALYTE COUNT

Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
402394001	**OUTFALL 001**	EPA 335.4	DAW	1	PASI-G
		EPA 7196	DEY	1	PASI-G
		EPA 7470	LMS	1	PASI-G

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

ANALYTICAL RESULTS

Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

Sample: OUTFALL 001 **Lab ID: 402394001** Collected: 04/08/08 07:10 Received: 04/08/08 11:25 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**<0.10**	ug/L	0.33	0.10	1	04/09/08 15:58	04/10/08 11:07	7439-97-6	
335.4 Cyanide, Tot. Dissolved	Analytical Method: EPA 335.4								
Cyanide	**0.014J**	mg/L	0.020	0.0060	1		04/16/08 14:13	57-12-5	B
7196 Chromium, Hexavalent	Analytical Method: EPA 7196								
Chromium, Hexavalent	**0.063**	mg/L	0.011	0.0034	1		04/08/08 15:45	18540-29-9	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

QUALITY CONTROL DATA

Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

QC Batch: WETA/1275
QC Batch Method: EPA 7196
Analysis Method: EPA 7196
Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 402394001

METHOD BLANK: 14489
Associated Lab Samples: 402394001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium, Hexavalent	mg/L	<0.0034	0.011	

LABORATORY CONTROL SAMPLE: 14490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.32	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 14491 14492

Parameter	Units	402394001 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	0.063	.3	.3	0.39	0.38	110	106	90-110	3	20	

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

QUALITY CONTROL DATA

Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

QC Batch: MERP/1050
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury Dissolved
Associated Lab Samples: 402394001

METHOD BLANK: 14733
Associated Lab Samples: 402394001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ug/L	<0.10	0.33	

LABORATORY CONTROL SAMPLE: 14734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.7	113	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 14735 14736

Parameter	Units	402406018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.20	5	5	5.6	5.5	112	110	85-115	2	20	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

QUALITY CONTROL DATA

Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

QC Batch: WETA/1322
QC Batch Method: EPA 335.4
Analysis Method: EPA 335.4
Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 402394001

METHOD BLANK: 16769
Associated Lab Samples: 402394001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	0.0083J	0.020	

LABORATORY CONTROL SAMPLE: 16770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 16771 16772

Parameter	Units	402410001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	1.6	.1	.1	1.7	1.8	135	200	90-110	4	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 16773 16774

Parameter	Units	402632001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.014J	.1	.1	0.0060J	0.0066J	-8	-7	90-110		20	M0

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

QUALIFIERS

Project: N1866 A05-003 MAUTHE
Pace Project No.: 402394

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

M0 Matrix spike recovery was outside laboratory control limits.

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

April 18, 2008

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

RE: Project: 402394 OMNNI ASSOCIATES
Pace Project No.: 1071222

Dear Client Services:
Enclosed are the analytical results for sample(s) received by the laboratory on April 08, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sylvia Hunter

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Manager

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

Enclosures

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 402394 OMNNI ASSOCIATES
Pace Project No.: 1071222

Lab ID	Sample ID	Matrix	Date Collected	Date Received
402394001	OUTFALL 001	Water	04/08/08 07:10	04/08/08 11:25

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 402394 OMNNI ASSOCIATES
Pace Project No.: 1071222

Lab ID	Sample ID	Method	Analysts	Analytes Reported
402394001	**OUTFALL 001**	EPA 6020	RJS	8

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 402394 OMNNI ASSOCIATES
Pace Project No.: 1071222

Sample: OUTFALL 001 **Lab ID: 402394001** Collected: 04/08/08 07:10 Received: 04/08/08 11:25 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**11.4**	ug/L	4.0	2.0	1	04/17/08 12:40	04/17/08 15:29	7429-90-5	
Arsenic	**0.43**	ug/L	0.20	0.10	1	04/17/08 12:40	04/17/08 15:29	7440-38-2	
Cadmium	**0.11**	ug/L	0.10	0.050	1	04/17/08 12:40	04/17/08 15:29	7440-43-9	
Chromium	**864**	ug/L	2.5	1.2	5	04/17/08 12:40	04/17/08 15:33	7440-47-3	
Copper	**4.3**	ug/L	0.20	0.10	1	04/17/08 12:40	04/17/08 15:29	7440-50-8	
Lead	**0.095J**	ug/L	0.10	0.050	1	04/17/08 12:40	04/17/08 15:29	7439-92-1	
Nickel	**2.4**	ug/L	0.10	0.050	1	04/17/08 12:40	04/17/08 15:29	7440-02-0	
Zinc	**7.1**	ug/L	5.0	2.5	1	04/17/08 12:40	04/17/08 15:29	7440-66-6	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 402394 OMNNI ASSOCIATES
Pace Project No.: 1071222

QC Batch: MPRP/11882
QC Batch Method: EPA 3020
Analysis Method: EPA 6020
Analysis Description: 6020 MET Dissolved
Associated Lab Samples: 402394001

METHOD BLANK: 465778
Associated Lab Samples: 402394001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	ND	4.0	
Arsenic	ug/L	ND	0.20	
Cadmium	ug/L	ND	0.10	
Chromium	ug/L	ND	0.50	
Copper	ug/L	ND	0.20	
Lead	ug/L	ND	0.10	
Nickel	ug/L	ND	0.10	
Zinc	ug/L	ND	5.0	

LABORATORY CONTROL SAMPLE: 465779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	76.5	96	85-115	
Arsenic	ug/L	80	82.8	103	85-115	
Cadmium	ug/L	80	85.4	107	85-115	
Chromium	ug/L	80	80.6	101	85-115	
Copper	ug/L	80	80.3	100	85-115	
Lead	ug/L	80	79.4	99	85-115	
Nickel	ug/L	80	80.9	101	85-115	
Zinc	ug/L	80	81.1	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 465780 465781

Parameter	Units	1070229001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	20.3	80	80	88.6	94.5	85	93	70-130	6	20	
Arsenic	ug/L	2.3	80	80	79.5	85.9	96	105	70-130	8	20	
Cadmium	ug/L	ND	80	80	77.4	83.2	97	104	70-130	7	20	
Chromium	ug/L	1.7J	80	80	77.4	83.5	95	102	70-130	8	20	
Copper	ug/L	2.9	80	80	75.4	81.3	91	98	70-130	7	20	
Lead	ug/L	ND	80	80	72.6	79.3	91	99	70-130	9	20	
Nickel	ug/L	1.5	80	80	73.3	80.9	90	99	70-130	10	20	
Zinc	ug/L	ND	80	80	79.5	84.4	93	99	70-130	6	20	

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 402394 OMNNI ASSOCIATES
Pace Project No.: 1071222

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 402394 OMNNI ASSOCIATES
Pace Project No.: 1071222

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
402394001	**OUTFALL 001**	EPA 3020	MPRP/11882	EPA 6020	ICPM/4690

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNNI Project # 402394

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

Tracking #: _____

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

Optional: Proj. Due Date: Proj. Name #:

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

Thermometer Used NA Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature R01 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 4/8/08 JJ

Temp should be above freezing to 6°C Comments: ABV

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.	
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. 24 hrs.	
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		
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.	
-Includes date/time/ID/Analysis Matrix: W			
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed:	Lot # of added preservative:
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.	
Trip Blank Present:	☐Yes ☑No ☐N/A	16.	
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A		
Pace Trip Blank Lot # (if purchased): _____			

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 4/8/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

(Please Print Clearly)

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D Wayner
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 #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	SAME
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, 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? (Y/N)	PRESERVATION (CODE)*	Analysis Requested: HEXAVALENT CHROMIUM	TOTAL CYANIDE	TOTALS: ALUMINUM	ARSENIC	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	ZINC	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	A														
					N	G														
					N	D														
					N	D														
					N	D														
					N	D														
					N	D														
001	OUTFALL 001	4/8/08	7:10	GW			X	X	X	X	X	X	X	X	X	X	X		2-250mL, 2-250mL D	

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:
Brian D. Wayner	4/8/08 8:12am	D. Mielke	4/8/08 8:47
D. Mielke	4/8/08 11:25		4/8/08 11:25

PACE Project No. 402394

Receipt Temp = 2.01 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Pace Analytical®
www.pacelabs.com

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

April 15, 2008

Brian Wayner
Omnni Associates, Inc.
One Systems Drive
Appleton, WI 549141654

RE: Project: N1866A05/003 MAUTHE
Pace Project No.: 402654

Dear Brian Wayner:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Steven Mleczko

steve.mleczko@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

CERTIFICATIONS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402654

Green Bay Certification IDs
Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs
Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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

SAMPLE SUMMARY

Project: N1866A05/003 MAUTHE
Pace Project No.: 402654

Lab ID	Sample ID	Matrix	Date Collected	Date Received
402654001	OUTFALL 001	Water	04/15/08 06:21	04/15/08 11:55

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

SAMPLE ANALYTE COUNT

Project: N1866A05/003 MAUTHE
Pace Project No.: 402654

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
402654001	**OUTFALL 001**	EPA 7196	DEY	1	PASI-G

Pace Analytical®
www.pacelabs.com

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

PROJECT NARRATIVE

Project: N1866A05/003 MAUTHE
Pace Project No.: 402654

Method: **EPA 7196**
Description: 7196 Chromium, Hexavalent
Client: OMNNI ASSOCIATES, INC.
Date: April 15, 2008

General Information:
1 sample was analyzed for EPA 7196. All samples were received in acceptable condition with any exceptions noted below.

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 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/1315

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 402654001

M0: Matrix spike recovery was outside laboratory control limits.

- MSD (Lab ID: 16573)
  - Chromium, Hexavalent

Duplicate Sample:
All duplicate sample results were within method 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®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402654

Sample: OUTFALL 001 **Lab ID: 402654001** Collected: 04/15/08 06:21 Received: 04/15/08 11:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7196 Chromium, Hexavalent	Analytical Method: EPA 7196								
Chromium, Hexavalent	**0.36**	mg/L	0.14	0.042	12.5		04/15/08 13:30	18540-29-9	M0

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402654

QC Batch: WETA/1315
QC Batch Method: EPA 7196
Analysis Method: EPA 7196
Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 402654001

METHOD BLANK: 16570
Associated Lab Samples: 402654001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium, Hexavalent	mg/L	<0.0034	0.011	

LABORATORY CONTROL SAMPLE: 16571

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.32	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 16572 16573

Parameter	Units	402654001 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	0.36	3.8	3.8	4.5	4.6	110	112	90-110	2	20	M0

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

QUALIFIERS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402654

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M0 Matrix spike recovery was outside laboratory control limits.

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNI Assoc Project # 402654

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

Optional: Proj. Due Date: Proj. Name:

Tracking #: _____

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

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

Thermometer Used — Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 20I Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 4-15-08 CG

Temp should be above freezing to 6°C Comments: AB ✓

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.	
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. & Hex Chrome	
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		
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.	
-Includes date/time/ID/Analysis Matrix: GW			
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.	
Trip Blank Present:	☐Yes ☑No ☐N/A	16.	
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A		
Pace Trip Blank Lot # (if purchased): _____			

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 4/15/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Pace Analytical®
www.pacelabs.com

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

Page [redacted] of [redacted]

COC No. 031272

CHAIN OF CUSTODY

AB ✓

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian Wayner
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 #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	SAME
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	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analyses Requested: HEXAVALENT CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					Y/N	Pick Letter				
001	OUTFALL 001	4/15/08	6:21	GW	N	A	X		1-250ml pA	

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:
Brian Wayner	4/15/08	B Kempen	4/15/08 0930
B Kempen	4/15/08 1155	Pace	4-15-08 1155

PACE Project No. 402654

Receipt Temp = ROT °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / ~~Not Present~~ Intact / Not Intact

Pace Analytical®
www.pacelabs.com

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

April 30, 2008

Brian Wayner
Omnni Associates, Inc.
One Systems Drive
Appleton, WI 549141654

RE: Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Dear Brian Wayner:
Enclosed are the analytical results for sample(s) received by the laboratory on April 17, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Steven Mleczko

steve.mleczko@pacelabs.com
Project Manager

Enclosures

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

CERTIFICATIONS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Green Bay Certification IDs
Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs
Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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

SAMPLE SUMMARY

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Lab ID	Sample ID	Matrix	Date Collected	Date Received
402787001	MW-101	Water	04/16/08 19:00	04/17/08 14:05
402787002	MW-102	Water	04/16/08 13:53	04/17/08 14:05
402787003	MW-103	Water	04/16/08 12:41	04/17/08 14:05
402787004	MW-104	Water	04/16/08 12:03	04/17/08 14:05
402787005	MW-107	Water	04/16/08 15:00	04/17/08 14:05
402787006	MW-109	Water	04/16/08 15:49	04/17/08 14:05
402787007	MW-110	Water	04/16/08 18:22	04/17/08 14:05
402787008	MW-111	Water	04/16/08 16:29	04/17/08 14:05
402787009	MW-112	Water	04/16/08 17:04	04/17/08 14:05
402787010	MW-113	Water	04/16/08 17:50	04/17/08 14:05
402787011	TRIP BLANK	Water	04/16/08 00:00	04/17/08 14:05
402787012	DUPLICATE	Water	04/16/08 00:00	04/17/08 14:05

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

SAMPLE ANALYTE COUNT

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
402787001	**MW-101**	EPA 6010	DLB	1	PASI-G
402787002	**MW-102**	EPA 6010	DLB	1	PASI-G
402787003	**MW-103**	EPA 6010	DLB	1	PASI-G
402787004	**MW-104**	EPA 6010	DLB	1	PASI-G
402787005	**MW-107**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	64	PASI-G
402787006	**MW-109**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	64	PASI-G
402787007	**MW-110**	EPA 335.4	DAW	1	PASI-G
		EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	64	PASI-G
402787008	**MW-111**	EPA 335.4	DAW	1	PASI-G
		EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	64	PASI-G
402787009	**MW-112**	EPA 335.4	DAW	1	PASI-G
		EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	64	PASI-G
402787010	**MW-113**	EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	64	PASI-G
402787011	**TRIP BLANK**	EPA 8260	SMT	64	PASI-G
402787012	**DUPLICATE**	EPA 335.4	DAW	1	PASI-G
		EPA 6010	DLB	1	PASI-G
		EPA 8260	SMT	64	PASI-G

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

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-101 **Lab ID: 402787001** Collected: 04/16/08 19:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**2.4J**	ug/L	5.0	0.57	1		04/18/08 12:20	7440-47-3	

Sample: MW-102 **Lab ID: 402787002** Collected: 04/16/08 13:53 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**<0.57**	ug/L	5.0	0.57	1		04/18/08 12:24	7440-47-3	

Sample: MW-103 **Lab ID: 402787003** Collected: 04/16/08 12:41 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**380**	ug/L	5.0	0.57	1		04/18/08 12:28	7440-47-3	

Sample: MW-104 **Lab ID: 402787004** Collected: 04/16/08 12:03 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**545**	ug/L	5.0	0.57	1		04/18/08 12:32	7440-47-3	

Sample: MW-107 **Lab ID: 402787005** Collected: 04/16/08 15:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**4410**	ug/L	5.0	0.57	1		04/18/08 12:36	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<2.0**	ug/L	5.0	2.0	5		04/21/08 11:20	71-43-2	
Bromobenzene	**<4.1**	ug/L	5.0	4.1	5		04/21/08 11:20	108-86-1	
Bromochloromethane	**<4.8**	ug/L	5.0	4.8	5		04/21/08 11:20	74-97-5	
Bromodichloromethane	**<2.8**	ug/L	9.3	2.8	5		04/21/08 11:20	75-27-4	
Bromoform	**<4.7**	ug/L	15.7	4.7	5		04/21/08 11:20	75-25-2	
Bromomethane	**<4.6**	ug/L	15.2	4.6	5		04/21/08 11:20	74-83-9	
n-Butylbenzene	**<4.6**	ug/L	5.0	4.6	5		04/21/08 11:20	104-51-8	
sec-Butylbenzene	**<4.4**	ug/L	5.0	4.4	5		04/21/08 11:20	135-98-8	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, In
1241 Bellevue Street
Green Bay, WI 54302
(920)469-24

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-107 **Lab ID: 402787005** Collected: 04/16/08 15:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
tert-Butylbenzene	**<4.8**	ug/L	5.0	4.8	5		04/21/08 11:20	98-06-6	
Carbon tetrachloride	**<2.4**	ug/L	5.0	2.4	5		04/21/08 11:20	56-23-5	
Chlorobenzene	**<2.0**	ug/L	5.0	2.0	5		04/21/08 11:20	108-90-7	
Chloroethane	**<4.8**	ug/L	5.0	4.8	5		04/21/08 11:20	75-00-3	
Chloroform	**<1.8**	ug/L	6.2	1.8	5		04/21/08 11:20	67-66-3	
Chloromethane	**<1.2**	ug/L	4.0	1.2	5		04/21/08 11:20	74-87-3	
2-Chlorotoluene	**<4.2**	ug/L	5.0	4.2	5		04/21/08 11:20	95-49-8	
4-Chlorotoluene	**<3.7**	ug/L	5.0	3.7	5		04/21/08 11:20	106-43-4	
1,2-Dibromo-3-chloropropane	**<4.4**	ug/L	14.5	4.4	5		04/21/08 11:20	96-12-8	
Dibromochloromethane	**<4.0**	ug/L	5.0	4.0	5		04/21/08 11:20	124-48-1	
1,2-Dibromoethane (EDB)	**<2.8**	ug/L	9.3	2.8	5		04/21/08 11:20	106-93-4	
Dibromomethane	**<3.0**	ug/L	5.0	3.0	5		04/21/08 11:20	74-95-3	
1,2-Dichlorobenzene	**<4.2**	ug/L	5.0	4.2	5		04/21/08 11:20	95-50-1	
1,3-Dichlorobenzene	**<4.4**	ug/L	5.0	4.4	5		04/21/08 11:20	541-73-1	
1,4-Dichlorobenzene	**<4.8**	ug/L	5.0	4.8	5		04/21/08 11:20	106-46-7	
Dichlorodifluoromethane	**<5.0**	ug/L	5.0	5.0	5		04/21/08 11:20	75-71-8	
1,1-Dichloroethane	**20.8**	ug/L	5.0	3.8	5		04/21/08 11:20	75-34-3	
1,2-Dichloroethane	**<1.8**	ug/L	5.0	1.8	5		04/21/08 11:20	107-06-2	
1,1-Dichloroethene	**21.8**	ug/L	5.0	2.8	5		04/21/08 11:20	75-35-4	
cis-1,2-Dichloroethene	**<4.2**	ug/L	5.0	4.2	5		04/21/08 11:20	156-59-2	
trans-1,2-Dichloroethene	**<4.4**	ug/L	5.0	4.4	5		04/21/08 11:20	156-60-5	
1,2-Dichloropropane	**<2.3**	ug/L	5.0	2.3	5		04/21/08 11:20	78-87-5	
1,3-Dichloropropane	**<3.0**	ug/L	10.2	3.0	5		04/21/08 11:20	142-28-9	
2,2-Dichloropropane	**<3.1**	ug/L	5.0	3.1	5		04/21/08 11:20	594-20-7	
1,1-Dichloropropene	**<3.8**	ug/L	5.0	3.8	5		04/21/08 11:20	563-58-6	
cis-1,3-Dichloropropene	**<0.95**	ug/L	3.2	0.95	5		04/21/08 11:20	10061-01-5	
trans-1,3-Dichloropropene	**<0.95**	ug/L	3.2	0.95	5		04/21/08 11:20	10061-02-6	
Diisopropyl ether	**<3.8**	ug/L	5.0	3.8	5		04/21/08 11:20	108-20-3	
Ethylbenzene	**<2.7**	ug/L	5.0	2.7	5		04/21/08 11:20	100-41-4	
Hexachloro-1,3-butadiene	**<3.4**	ug/L	5.0	3.4	5		04/21/08 11:20	87-68-3	
Isopropylbenzene (Cumene)	**<3.0**	ug/L	5.0	3.0	5		04/21/08 11:20	98-82-8	
p-Isopropyltoluene	**<3.4**	ug/L	5.0	3.4	5		04/21/08 11:20	99-87-6	
Methylene Chloride	**<2.2**	ug/L	7.2	2.2	5		04/21/08 11:20	75-09-2	
Methyl-tert-butyl ether	**<3.0**	ug/L	10.2	3.0	5		04/21/08 11:20	1634-04-4	
Naphthalene	**<3.7**	ug/L	25.0	3.7	5		04/21/08 11:20	91-20-3	
n-Propylbenzene	**<4.0**	ug/L	5.0	4.0	5		04/21/08 11:20	103-65-1	
Styrene	**<4.3**	ug/L	5.0	4.3	5		04/21/08 11:20	100-42-5	
1,1,1,2-Tetrachloroethane	**<4.6**	ug/L	5.0	4.6	5		04/21/08 11:20	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	3.3	1.0	5		04/21/08 11:20	79-34-5	
Tetrachloroethene	**<2.2**	ug/L	5.0	2.2	5		04/21/08 11:20	127-18-4	
Toluene	**<3.4**	ug/L	5.0	3.4	5		04/21/08 11:20	108-88-3	
1,2,3-Trichlorobenzene	**<3.7**	ug/L	5.0	3.7	5		04/21/08 11:20	87-61-6	
1,2,4-Trichlorobenzene	**<4.8**	ug/L	5.0	4.8	5		04/21/08 11:20	120-82-1	
1,1,1-Trichloroethane	**257**	ug/L	5.0	4.5	5		04/21/08 11:20	71-55-6	
1,1,2-Trichloroethane	**2.7J**	ug/L	7.0	2.1	5		04/21/08 11:20	79-00-5	
Trichloroethene	**550**	ug/L	5.0	2.4	5		04/21/08 11:20	79-01-6	

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

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-107 **Lab ID: 402787005** Collected: 04/16/08 15:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Trichlorofluoromethane	**<4.0**	ug/L	5.0	4.0	5		04/21/08 11:20	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	5.0	5.0	5		04/21/08 11:20	96-18-4	
1,2,4-Trimethylbenzene	**<4.8**	ug/L	5.0	4.8	5		04/21/08 11:20	95-63-6	
1,3,5-Trimethylbenzene	**<4.2**	ug/L	5.0	4.2	5		04/21/08 11:20	108-67-8	
Vinyl chloride	**<0.90**	ug/L	3.0	0.90	5		04/21/08 11:20	75-01-4	
m&p-Xylene	**<9.0**	ug/L	10.0	9.0	5		04/21/08 11:20	1330-20-7	
o-Xylene	**<4.2**	ug/L	5.0	4.2	5		04/21/08 11:20	95-47-6	
4-Bromofluorobenzene (S)	82	%	64-132		5		04/21/08 11:20	460-00-4	
Dibromofluoromethane (S)	87	%	68-122		5		04/21/08 11:20	1868-53-7	
Toluene-d8 (S)	90	%	73-127		5		04/21/08 11:20	2037-26-5	

Sample: MW-109 **Lab ID: 402787006** Collected: 04/16/08 15:49 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**1550**	ug/L	5.0	0.57	1		04/18/08 12:40	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.41**	ug/L	1.0	0.41	1		04/21/08 08:59	71-43-2	
Bromobenzene	**<0.82**	ug/L	1.0	0.82	1		04/21/08 08:59	108-86-1	
Bromochloromethane	**<0.97**	ug/L	1.0	0.97	1		04/21/08 08:59	74-97-5	
Bromodichloromethane	**<0.56**	ug/L	1.9	0.56	1		04/21/08 08:59	75-27-4	
Bromoform	**<0.94**	ug/L	3.1	0.94	1		04/21/08 08:59	75-25-2	
Bromomethane	**<0.91**	ug/L	3.0	0.91	1		04/21/08 08:59	74-83-9	
n-Butylbenzene	**<0.93**	ug/L	1.0	0.93	1		04/21/08 08:59	104-51-8	
sec-Butylbenzene	**<0.89**	ug/L	1.0	0.89	1		04/21/08 08:59	135-98-8	
tert-Butylbenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 08:59	98-06-6	
Carbon tetrachloride	**<0.49**	ug/L	1.0	0.49	1		04/21/08 08:59	56-23-5	
Chlorobenzene	**<0.41**	ug/L	1.0	0.41	1		04/21/08 08:59	108-90-7	
Chloroethane	**<0.97**	ug/L	1.0	0.97	1		04/21/08 08:59	75-00-3	
Chloroform	**0.39J**	ug/L	1.2	0.37	1		04/21/08 08:59	67-66-3	
Chloromethane	**<0.24**	ug/L	0.80	0.24	1		04/21/08 08:59	74-87-3	
2-Chlorotoluene	**<0.85**	ug/L	1.0	0.85	1		04/21/08 08:59	95-49-8	
4-Chlorotoluene	**<0.74**	ug/L	1.0	0.74	1		04/21/08 08:59	106-43-4	
1,2-Dibromo-3-chloropropane	**<0.87**	ug/L	2.9	0.87	1		04/21/08 08:59	96-12-8	
Dibromochloromethane	**<0.81**	ug/L	1.0	0.81	1		04/21/08 08:59	124-48-1	
1,2-Dibromoethane (EDB)	**<0.56**	ug/L	1.9	0.56	1		04/21/08 08:59	106-93-4	
Dibromomethane	**<0.60**	ug/L	1.0	0.60	1		04/21/08 08:59	74-95-3	
1,2-Dichlorobenzene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 08:59	95-50-1	
1,3-Dichlorobenzene	**<0.87**	ug/L	1.0	0.87	1		04/21/08 08:59	541-73-1	
1,4-Dichlorobenzene	**<0.95**	ug/L	1.0	0.95	1		04/21/08 08:59	106-46-7	
Dichlorodifluoromethane	**<0.99**	ug/L	1.0	0.99	1		04/21/08 08:59	75-71-8	
1,1-Dichloroethane	**1.9**	ug/L	1.0	0.75	1		04/21/08 08:59	75-34-3	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-109 **Lab ID: 402787006** Collected: 04/16/08 15:49 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2-Dichloroethane	**<0.36**	ug/L	1.0	0.36	1		04/21/08 08:59	107-06-2	
1,1-Dichloroethene	**1.9**	ug/L	1.0	0.57	1		04/21/08 08:59	75-35-4	
cis-1,2-Dichloroethene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 08:59	156-59-2	
trans-1,2-Dichloroethene	**<0.89**	ug/L	1.0	0.89	1		04/21/08 08:59	156-60-5	
1,2-Dichloropropane	**<0.46**	ug/L	1.0	0.46	1		04/21/08 08:59	78-87-5	
1,3-Dichloropropane	**<0.61**	ug/L	2.0	0.61	1		04/21/08 08:59	142-28-9	
2,2-Dichloropropane	**<0.62**	ug/L	1.0	0.62	1		04/21/08 08:59	594-20-7	
1,1-Dichloropropene	**<0.75**	ug/L	1.0	0.75	1		04/21/08 08:59	563-58-6	
cis-1,3-Dichloropropene	**<0.19**	ug/L	0.63	0.19	1		04/21/08 08:59	10061-01-5	
trans-1,3-Dichloropropene	**<0.19**	ug/L	0.63	0.19	1		04/21/08 08:59	10061-02-6	
Diisopropyl ether	**<0.76**	ug/L	1.0	0.76	1		04/21/08 08:59	108-20-3	
Ethylbenzene	**<0.54**	ug/L	1.0	0.54	1		04/21/08 08:59	100-41-4	
Hexachloro-1,3-butadiene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 08:59	87-68-3	
Isopropylbenzene (Cumene)	**<0.59**	ug/L	1.0	0.59	1		04/21/08 08:59	98-82-8	
p-Isopropyltoluene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 08:59	99-87-6	
Methylene Chloride	**<0.43**	ug/L	1.4	0.43	1		04/21/08 08:59	75-09-2	
Methyl-tert-butyl ether	**<0.61**	ug/L	2.0	0.61	1		04/21/08 08:59	1634-04-4	
Naphthalene	**<0.74**	ug/L	5.0	0.74	1		04/21/08 08:59	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	1.0	0.81	1		04/21/08 08:59	103-65-1	
Styrene	**<0.86**	ug/L	1.0	0.86	1		04/21/08 08:59	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.92**	ug/L	1.0	0.92	1		04/21/08 08:59	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.20**	ug/L	0.67	0.20	1		04/21/08 08:59	79-34-5	
Tetrachloroethene	**<0.45**	ug/L	1.0	0.45	1		04/21/08 08:59	127-18-4	
Toluene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 08:59	108-88-3	
1,2,3-Trichlorobenzene	**<0.74**	ug/L	1.0	0.74	1		04/21/08 08:59	87-61-6	
1,2,4-Trichlorobenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 08:59	120-82-1	
1,1,1-Trichloroethane	**31.9**	ug/L	1.0	0.90	1		04/21/08 08:59	71-55-6	
1,1,2-Trichloroethane	**0.45J**	ug/L	1.4	0.42	1		04/21/08 08:59	79-00-5	
Trichloroethene	**39.4**	ug/L	1.0	0.48	1		04/21/08 08:59	79-01-6	
Trichlorofluoromethane	**<0.79**	ug/L	1.0	0.79	1		04/21/08 08:59	75-69-4	
1,2,3-Trichloropropane	**<0.99**	ug/L	1.0	0.99	1		04/21/08 08:59	96-18-4	
1,2,4-Trimethylbenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 08:59	95-63-6	
1,3,5-Trimethylbenzene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 08:59	108-67-8	
Vinyl chloride	**<0.18**	ug/L	0.60	0.18	1		04/21/08 08:59	75-01-4	
m&p-Xylene	**<1.8**	ug/L	2.0	1.8	1		04/21/08 08:59	1330-20-7	
o-Xylene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 08:59	95-47-6	
4-Bromofluorobenzene (S)	83	%	64-132		1		04/21/08 08:59	460-00-4	
Dibromofluoromethane (S)	89	%	68-122		1		04/21/08 08:59	1868-53-7	
Toluene-d8 (S)	89	%	73-127		1		04/21/08 08:59	2037-26-5	

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

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-110 **Lab ID: 402787007** Collected: 04/16/08 18:22 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**32500**	ug/L	50.0	5.7	10		04/18/08 12:45	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<8.2**	ug/L	20.0	8.2	20		04/21/08 09:46	71-43-2	
Bromobenzene	**<16.4**	ug/L	20.0	16.4	20		04/21/08 09:46	108-86-1	
Bromochloromethane	**<19.4**	ug/L	20.0	19.4	20		04/21/08 09:46	74-97-5	
Bromodichloromethane	**<11.2**	ug/L	37.3	11.2	20		04/21/08 09:46	75-27-4	
Bromoform	**<18.8**	ug/L	62.7	18.8	20		04/21/08 09:46	75-25-2	
Bromomethane	**<18.2**	ug/L	60.7	18.2	20		04/21/08 09:46	74-83-9	
n-Butylbenzene	**<18.6**	ug/L	20.0	18.6	20		04/21/08 09:46	104-51-8	
sec-Butylbenzene	**<17.8**	ug/L	20.0	17.8	20		04/21/08 09:46	135-98-8	
tert-Butylbenzene	**<19.4**	ug/L	20.0	19.4	20		04/21/08 09:46	98-06-6	
Carbon tetrachloride	**<9.8**	ug/L	20.0	9.8	20		04/21/08 09:46	56-23-5	
Chlorobenzene	**<8.2**	ug/L	20.0	8.2	20		04/21/08 09:46	108-90-7	
Chloroethane	**<19.4**	ug/L	20.0	19.4	20		04/21/08 09:46	75-00-3	
Chloroform	**<7.4**	ug/L	24.7	7.4	20		04/21/08 09:46	67-66-3	
Chloromethane	**<4.8**	ug/L	16.0	4.8	20		04/21/08 09:46	74-87-3	
2-Chlorotoluene	**<17.0**	ug/L	20.0	17.0	20		04/21/08 09:46	95-49-8	
4-Chlorotoluene	**<14.8**	ug/L	20.0	14.8	20		04/21/08 09:46	106-43-4	
1,2-Dibromo-3-chloropropane	**<17.4**	ug/L	58.0	17.4	20		04/21/08 09:46	96-12-8	
Dibromochloromethane	**<16.2**	ug/L	20.0	16.2	20		04/21/08 09:46	124-48-1	
1,2-Dibromoethane (EDB)	**<11.2**	ug/L	37.3	11.2	20		04/21/08 09:46	106-93-4	
Dibromomethane	**<12.0**	ug/L	20.0	12.0	20		04/21/08 09:46	74-95-3	
1,2-Dichlorobenzene	**<16.6**	ug/L	20.0	16.6	20		04/21/08 09:46	95-50-1	
1,3-Dichlorobenzene	**<17.4**	ug/L	20.0	17.4	20		04/21/08 09:46	541-73-1	
1,4-Dichlorobenzene	**<19.0**	ug/L	20.0	19.0	20		04/21/08 09:46	106-46-7	
Dichlorodifluoromethane	**<19.8**	ug/L	20.0	19.8	20		04/21/08 09:46	75-71-8	
1,1-Dichloroethane	**206**	ug/L	20.0	15.0	20		04/21/08 09:46	75-34-3	
1,2-Dichloroethane	**<7.2**	ug/L	20.0	7.2	20		04/21/08 09:46	107-06-2	
1,1-Dichloroethene	**195**	ug/L	20.0	11.4	20		04/21/08 09:46	75-35-4	
cis-1,2-Dichloroethene	**55.9**	ug/L	20.0	16.6	20		04/21/08 09:46	156-59-2	
trans-1,2-Dichloroethene	**<17.8**	ug/L	20.0	17.8	20		04/21/08 09:46	156-60-5	
1,2-Dichloropropane	**<9.2**	ug/L	20.0	9.2	20		04/21/08 09:46	78-87-5	
1,3-Dichloropropane	**<12.2**	ug/L	40.7	12.2	20		04/21/08 09:46	142-28-9	
2,2-Dichloropropane	**<12.4**	ug/L	20.0	12.4	20		04/21/08 09:46	594-20-7	
1,1-Dichloropropene	**<15.0**	ug/L	20.0	15.0	20		04/21/08 09:46	563-58-6	
cis-1,3-Dichloropropene	**<3.8**	ug/L	12.7	3.8	20		04/21/08 09:46	10061-01-5	
trans-1,3-Dichloropropene	**<3.8**	ug/L	12.7	3.8	20		04/21/08 09:46	10061-02-6	
Diisopropyl ether	**<15.2**	ug/L	20.0	15.2	20		04/21/08 09:46	108-20-3	
Ethylbenzene	**<10.8**	ug/L	20.0	10.8	20		04/21/08 09:46	100-41-4	
Hexachloro-1,3-butadiene	**<13.4**	ug/L	20.0	13.4	20		04/21/08 09:46	87-68-3	
Isopropylbenzene (Cumene)	**<11.8**	ug/L	20.0	11.8	20		04/21/08 09:46	98-82-8	
p-Isopropyltoluene	**<13.4**	ug/L	20.0	13.4	20		04/21/08 09:46	99-87-6	
Methylene Chloride	**<8.6**	ug/L	28.7	8.6	20		04/21/08 09:46	75-09-2	
Methyl-tert-butyl ether	**<12.2**	ug/L	40.7	12.2	20		04/21/08 09:46	1634-04-4	
Naphthalene	**<14.8**	ug/L	100	14.8	20		04/21/08 09:46	91-20-3	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-110 **Lab ID: 402787007** Collected: 04/16/08 18:22 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
n-Propylbenzene	**<16.2**	ug/L	20.0	16.2	20		04/21/08 09:46	103-65-1	
Styrene	**<17.2**	ug/L	20.0	17.2	20		04/21/08 09:46	100-42-5	
1,1,1,2-Tetrachloroethane	**<18.4**	ug/L	20.0	18.4	20		04/21/08 09:46	630-20-6	
1,1,2,2-Tetrachloroethane	**<4.0**	ug/L	13.3	4.0	20		04/21/08 09:46	79-34-5	
Tetrachloroethene	**<9.0**	ug/L	20.0	9.0	20		04/21/08 09:46	127-18-4	
Toluene	**<13.4**	ug/L	20.0	13.4	20		04/21/08 09:46	108-88-3	
1,2,3-Trichlorobenzene	**<14.8**	ug/L	20.0	14.8	20		04/21/08 09:46	87-61-6	
1,2,4-Trichlorobenzene	**<19.4**	ug/L	20.0	19.4	20		04/21/08 09:46	120-82-1	
1,1,1-Trichloroethane	**918**	ug/L	20.0	18.0	20		04/21/08 09:46	71-55-6	
1,1,2-Trichloroethane	**<8.4**	ug/L	28.0	8.4	20		04/21/08 09:46	79-00-5	
Trichloroethene	**28.2**	ug/L	20.0	9.6	20		04/21/08 09:46	79-01-6	
Trichlorofluoromethane	**<15.8**	ug/L	20.0	15.8	20		04/21/08 09:46	75-69-4	
1,2,3-Trichloropropane	**<19.8**	ug/L	20.0	19.8	20		04/21/08 09:46	96-18-4	
1,2,4-Trimethylbenzene	**<19.4**	ug/L	20.0	19.4	20		04/21/08 09:46	95-63-6	
1,3,5-Trimethylbenzene	**<16.6**	ug/L	20.0	16.6	20		04/21/08 09:46	108-67-8	
Vinyl chloride	**<3.6**	ug/L	12.0	3.6	20		04/21/08 09:46	75-01-4	
m&p-Xylene	**<36.0**	ug/L	40.0	36.0	20		04/21/08 09:46	1330-20-7	
o-Xylene	**<16.6**	ug/L	20.0	16.6	20		04/21/08 09:46	95-47-6	
4-Bromofluorobenzene (S)	84	%	64-132		20		04/21/08 09:46	460-00-4	
Dibromofluoromethane (S)	88	%	68-122		20		04/21/08 09:46	1868-53-7	
Toluene-d8 (S)	91	%	73-127		20		04/21/08 09:46	2037-26-5	
335.4 Cyanide, Tot. Dissolved	Analytical Method: EPA 335.4								
Cyanide	**0.055**	mg/L	0.020	0.0060	1		04/29/08 11:40	57-12-5	B

Sample: MW-111 **Lab ID: 402787008** Collected: 04/16/08 16:29 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**212**	ug/L	5.0	0.57	1		04/18/08 12:48	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.41**	ug/L	1.0	0.41	1		04/21/08 09:22	71-43-2	
Bromobenzene	**<0.82**	ug/L	1.0	0.82	1		04/21/08 09:22	108-86-1	
Bromochloromethane	**<0.97**	ug/L	1.0	0.97	1		04/21/08 09:22	74-97-5	
Bromodichloromethane	**<0.56**	ug/L	1.9	0.56	1		04/21/08 09:22	75-27-4	
Bromoform	**<0.94**	ug/L	3.1	0.94	1		04/21/08 09:22	75-25-2	
Bromomethane	**<0.91**	ug/L	3.0	0.91	1		04/21/08 09:22	74-83-9	
n-Butylbenzene	**<0.93**	ug/L	1.0	0.93	1		04/21/08 09:22	104-51-8	
sec-Butylbenzene	**<0.89**	ug/L	1.0	0.89	1		04/21/08 09:22	135-98-8	
tert-Butylbenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 09:22	98-06-6	
Carbon tetrachloride	**<0.49**	ug/L	1.0	0.49	1		04/21/08 09:22	56-23-5	
Chlorobenzene	**<0.41**	ug/L	1.0	0.41	1		04/21/08 09:22	108-90-7	

Pace Analytical®
www.pacelabs.com

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

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-111 **Lab ID: 402787008** Collected: 04/16/08 16:29 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Chloroethane	**<0.97**	ug/L	1.0	0.97	1		04/21/08 09:22	75-00-3	
Chloroform	**1.2**	ug/L	1.2	0.37	1		04/21/08 09:22	67-66-3	
Chloromethane	**<0.24**	ug/L	0.80	0.24	1		04/21/08 09:22	74-87-3	
2-Chlorotoluene	**<0.85**	ug/L	1.0	0.85	1		04/21/08 09:22	95-49-8	
4-Chlorotoluene	**<0.74**	ug/L	1.0	0.74	1		04/21/08 09:22	106-43-4	
1,2-Dibromo-3-chloropropane	**<0.87**	ug/L	2.9	0.87	1		04/21/08 09:22	96-12-8	
Dibromochloromethane	**<0.81**	ug/L	1.0	0.81	1		04/21/08 09:22	124-48-1	
1,2-Dibromoethane (EDB)	**<0.56**	ug/L	1.9	0.56	1		04/21/08 09:22	106-93-4	
Dibromomethane	**<0.60**	ug/L	1.0	0.60	1		04/21/08 09:22	74-95-3	
1,2-Dichlorobenzene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 09:22	95-50-1	
1,3-Dichlorobenzene	**<0.87**	ug/L	1.0	0.87	1		04/21/08 09:22	541-73-1	
1,4-Dichlorobenzene	**<0.95**	ug/L	1.0	0.95	1		04/21/08 09:22	106-46-7	
Dichlorodifluoromethane	**<0.99**	ug/L	1.0	0.99	1		04/21/08 09:22	75-71-8	
1,1-Dichloroethane	**1.6**	ug/L	1.0	0.75	1		04/21/08 09:22	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/L	1.0	0.36	1		04/21/08 09:22	107-06-2	
1,1-Dichloroethene	**2.7**	ug/L	1.0	0.57	1		04/21/08 09:22	75-35-4	
cis-1,2-Dichloroethene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 09:22	156-59-2	
trans-1,2-Dichloroethene	**<0.89**	ug/L	1.0	0.89	1		04/21/08 09:22	156-60-5	
1,2-Dichloropropane	**<0.46**	ug/L	1.0	0.46	1		04/21/08 09:22	78-87-5	
1,3-Dichloropropane	**<0.61**	ug/L	2.0	0.61	1		04/21/08 09:22	142-28-9	
2,2-Dichloropropane	**<0.62**	ug/L	1.0	0.62	1		04/21/08 09:22	594-20-7	
1,1-Dichloropropene	**<0.75**	ug/L	1.0	0.75	1		04/21/08 09:22	563-58-6	
cis-1,3-Dichloropropene	**<0.19**	ug/L	0.63	0.19	1		04/21/08 09:22	10061-01-5	
trans-1,3-Dichloropropene	**<0.19**	ug/L	0.63	0.19	1		04/21/08 09:22	10061-02-6	
Diisopropyl ether	**<0.76**	ug/L	1.0	0.76	1		04/21/08 09:22	108-20-3	
Ethylbenzene	**<0.54**	ug/L	1.0	0.54	1		04/21/08 09:22	100-41-4	
Hexachloro-1,3-butadiene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 09:22	87-68-3	
Isopropylbenzene (Cumene)	**<0.59**	ug/L	1.0	0.59	1		04/21/08 09:22	98-82-8	
p-Isopropyltoluene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 09:22	99-87-6	
Methylene Chloride	**<0.43**	ug/L	1.4	0.43	1		04/21/08 09:22	75-09-2	
Methyl-tert-butyl ether	**<0.61**	ug/L	2.0	0.61	1		04/21/08 09:22	1634-04-4	
Naphthalene	**<0.74**	ug/L	5.0	0.74	1		04/21/08 09:22	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	1.0	0.81	1		04/21/08 09:22	103-65-1	
Styrene	**<0.86**	ug/L	1.0	0.86	1		04/21/08 09:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.92**	ug/L	1.0	0.92	1		04/21/08 09:22	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.20**	ug/L	0.67	0.20	1		04/21/08 09:22	79-34-5	
Tetrachloroethene	**<0.45**	ug/L	1.0	0.45	1		04/21/08 09:22	127-18-4	
Toluene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 09:22	108-88-3	
1,2,3-Trichlorobenzene	**<0.74**	ug/L	1.0	0.74	1		04/21/08 09:22	87-61-6	
1,2,4-Trichlorobenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 09:22	120-82-1	
1,1,1-Trichloroethane	**20.3**	ug/L	1.0	0.90	1		04/21/08 09:22	71-55-6	
1,1,2-Trichloroethane	**<0.42**	ug/L	1.4	0.42	1		04/21/08 09:22	79-00-5	
Trichloroethene	**52.9**	ug/L	1.0	0.48	1		04/21/08 09:22	79-01-6	
Trichlorofluoromethane	**<0.79**	ug/L	1.0	0.79	1		04/21/08 09:22	75-69-4	
1,2,3-Trichloropropane	**<0.99**	ug/L	1.0	0.99	1		04/21/08 09:22	96-18-4	
1,2,4-Trimethylbenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 09:22	95-63-6	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-111 **Lab ID: 402787008** Collected: 04/16/08 16:29 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,3,5-Trimethylbenzene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 09:22	108-67-8	
Vinyl chloride	**<0.18**	ug/L	0.60	0.18	1		04/21/08 09:22	75-01-4	
m&p-Xylene	**<1.8**	ug/L	2.0	1.8	1		04/21/08 09:22	1330-20-7	
o-Xylene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 09:22	95-47-6	
4-Bromofluorobenzene (S)	84	%	64-132		1		04/21/08 09:22	460-00-4	
Dibromofluoromethane (S)	89	%	68-122		1		04/21/08 09:22	1868-53-7	
Toluene-d8 (S)	91	%	73-127		1		04/21/08 09:22	2037-26-5	
335.4 Cyanide, Tot. Dissolved	Analytical Method: EPA 335.4								
Cyanide	**0.016J**	mg/L	0.020	0.0060	1		04/29/08 11:44	57-12-5	B

Sample: MW-112 **Lab ID: 402787009** Collected: 04/16/08 17:04 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**88400**	ug/L	50.0	5.7	10		04/18/08 12:53	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<4.1**	ug/L	10.0	4.1	10		04/21/08 12:11	71-43-2	
Bromobenzene	**<8.2**	ug/L	10.0	8.2	10		04/21/08 12:11	108-86-1	
Bromochloromethane	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:11	74-97-5	
Bromodichloromethane	**<5.6**	ug/L	18.7	5.6	10		04/21/08 12:11	75-27-4	
Bromoform	**<9.4**	ug/L	31.3	9.4	10		04/21/08 12:11	75-25-2	
Bromomethane	**<9.1**	ug/L	30.3	9.1	10		04/21/08 12:11	74-83-9	
n-Butylbenzene	**<9.3**	ug/L	10.0	9.3	10		04/21/08 12:11	104-51-8	
sec-Butylbenzene	**<8.9**	ug/L	10.0	8.9	10		04/21/08 12:11	135-98-8	
tert-Butylbenzene	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:11	98-06-6	
Carbon tetrachloride	**<4.9**	ug/L	10.0	4.9	10		04/21/08 12:11	56-23-5	
Chlorobenzene	**<4.1**	ug/L	10.0	4.1	10		04/21/08 12:11	108-90-7	
Chloroethane	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:11	75-00-3	
Chloroform	**<3.7**	ug/L	12.3	3.7	10		04/21/08 12:11	67-66-3	
Chloromethane	**<2.4**	ug/L	8.0	2.4	10		04/21/08 12:11	74-87-3	
2-Chlorotoluene	**<8.5**	ug/L	10.0	8.5	10		04/21/08 12:11	95-49-8	
4-Chlorotoluene	**<7.4**	ug/L	10.0	7.4	10		04/21/08 12:11	106-43-4	
1,2-Dibromo-3-chloropropane	**<8.7**	ug/L	29.0	8.7	10		04/21/08 12:11	96-12-8	
Dibromochloromethane	**<8.1**	ug/L	10.0	8.1	10		04/21/08 12:11	124-48-1	
1,2-Dibromoethane (EDB)	**<5.6**	ug/L	18.7	5.6	10		04/21/08 12:11	106-93-4	
Dibromomethane	**<6.0**	ug/L	10.0	6.0	10		04/21/08 12:11	74-95-3	
1,2-Dichlorobenzene	**<8.3**	ug/L	10.0	8.3	10		04/21/08 12:11	95-50-1	
1,3-Dichlorobenzene	**<8.7**	ug/L	10.0	8.7	10		04/21/08 12:11	541-73-1	
1,4-Dichlorobenzene	**<9.5**	ug/L	10.0	9.5	10		04/21/08 12:11	106-46-7	
Dichlorodifluoromethane	**<9.9**	ug/L	10.0	9.9	10		04/21/08 12:11	75-71-8	
1,1-Dichloroethane	**<7.5**	ug/L	10.0	7.5	10		04/21/08 12:11	75-34-3	

Pace Analytical®
www.pacelabs.com

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

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-112 **Lab ID: 402787009** Collected: 04/16/08 17:04 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2-Dichloroethane	**<3.6**	ug/L	10.0	3.6	10		04/21/08 12:11	107-06-2	
1,1-Dichloroethene	**<5.7**	ug/L	10.0	5.7	10		04/21/08 12:11	75-35-4	
cis-1,2-Dichloroethene	**<8.3**	ug/L	10.0	8.3	10		04/21/08 12:11	156-59-2	
trans-1,2-Dichloroethene	**<8.9**	ug/L	10.0	8.9	10		04/21/08 12:11	156-60-5	
1,2-Dichloropropane	**<4.6**	ug/L	10.0	4.6	10		04/21/08 12:11	78-87-5	
1,3-Dichloropropane	**<6.1**	ug/L	20.3	6.1	10		04/21/08 12:11	142-28-9	
2,2-Dichloropropane	**<6.2**	ug/L	10.0	6.2	10		04/21/08 12:11	594-20-7	
1,1-Dichloropropene	**<7.5**	ug/L	10.0	7.5	10		04/21/08 12:11	563-58-6	
cis-1,3-Dichloropropene	**<1.9**	ug/L	6.3	1.9	10		04/21/08 12:11	10061-01-5	
trans-1,3-Dichloropropene	**<1.9**	ug/L	6.3	1.9	10		04/21/08 12:11	10061-02-6	
Diisopropyl ether	**<7.6**	ug/L	10.0	7.6	10		04/21/08 12:11	108-20-3	
Ethylbenzene	**<5.4**	ug/L	10.0	5.4	10		04/21/08 12:11	100-41-4	
Hexachloro-1,3-butadiene	**<6.7**	ug/L	10.0	6.7	10		04/21/08 12:11	87-68-3	
Isopropylbenzene (Cumene)	**<5.9**	ug/L	10.0	5.9	10		04/21/08 12:11	98-82-8	
p-Isopropyltoluene	**<6.7**	ug/L	10.0	6.7	10		04/21/08 12:11	99-87-6	
Methylene Chloride	**<4.3**	ug/L	14.3	4.3	10		04/21/08 12:11	75-09-2	
Methyl-tert-butyl ether	**<6.1**	ug/L	20.3	6.1	10		04/21/08 12:11	1634-04-4	
Naphthalene	**<7.4**	ug/L	50.0	7.4	10		04/21/08 12:11	91-20-3	
n-Propylbenzene	**<8.1**	ug/L	10.0	8.1	10		04/21/08 12:11	103-65-1	
Styrene	**<8.6**	ug/L	10.0	8.6	10		04/21/08 12:11	100-42-5	
1,1,1,2-Tetrachloroethane	**<9.2**	ug/L	10.0	9.2	10		04/21/08 12:11	630-20-6	
1,1,2,2-Tetrachloroethane	**<2.0**	ug/L	6.7	2.0	10		04/21/08 12:11	79-34-5	
Tetrachloroethene	**<4.5**	ug/L	10.0	4.5	10		04/21/08 12:11	127-18-4	
Toluene	**<6.7**	ug/L	10.0	6.7	10		04/21/08 12:11	108-88-3	
1,2,3-Trichlorobenzene	**<7.4**	ug/L	10.0	7.4	10		04/21/08 12:11	87-61-6	
1,2,4-Trichlorobenzene	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:11	120-82-1	
1,1,1-Trichloroethane	**20.1**	ug/L	10.0	9.0	10		04/21/08 12:11	71-55-6	
1,1,2-Trichloroethane	**<4.2**	ug/L	14.0	4.2	10		04/21/08 12:11	79-00-5	
Trichloroethene	**1130**	ug/L	10.0	4.8	10		04/21/08 12:11	79-01-6	
Trichlorofluoromethane	**<7.9**	ug/L	10.0	7.9	10		04/21/08 12:11	75-69-4	
1,2,3-Trichloropropane	**<9.9**	ug/L	10.0	9.9	10		04/21/08 12:11	96-18-4	
1,2,4-Trimethylbenzene	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:11	95-63-6	
1,3,5-Trimethylbenzene	**<8.3**	ug/L	10.0	8.3	10		04/21/08 12:11	108-67-8	
Vinyl chloride	**<1.8**	ug/L	6.0	1.8	10		04/21/08 12:11	75-01-4	
m&p-Xylene	**<18.0**	ug/L	20.0	18.0	10		04/21/08 12:11	1330-20-7	
o-Xylene	**<8.3**	ug/L	10.0	8.3	10		04/21/08 12:11	95-47-6	
4-Bromofluorobenzene (S)	83	%	64-132		10		04/21/08 12:11	460-00-4	
Dibromofluoromethane (S)	87	%	68-122		10		04/21/08 12:11	1868-53-7	
Toluene-d8 (S)	90	%	73-127		10		04/21/08 12:11	2037-26-5	
335.4 Cyanide, Tot. Dissolved	Analytical Method: EPA 335.4								
Cyanide	**0.38**	mg/L	0.12	0.036	1		04/29/08 11:44	57-12-5	B

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-113 **Lab ID: 402787010** Collected: 04/16/08 17:50 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**16400**	ug/L	50.0	5.7	10		04/18/08 13:04	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.41**	ug/L	1.0	0.41	1		04/21/08 11:43	71-43-2	
Bromobenzene	**<0.82**	ug/L	1.0	0.82	1		04/21/08 11:43	108-86-1	
Bromochloromethane	**<0.97**	ug/L	1.0	0.97	1		04/21/08 11:43	74-97-5	
Bromodichloromethane	**<0.56**	ug/L	1.9	0.56	1		04/21/08 11:43	75-27-4	
Bromoform	**<0.94**	ug/L	3.1	0.94	1		04/21/08 11:43	75-25-2	
Bromomethane	**<0.91**	ug/L	3.0	0.91	1		04/21/08 11:43	74-83-9	
n-Butylbenzene	**<0.93**	ug/L	1.0	0.93	1		04/21/08 11:43	104-51-8	
sec-Butylbenzene	**<0.89**	ug/L	1.0	0.89	1		04/21/08 11:43	135-98-8	
tert-Butylbenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 11:43	98-06-6	
Carbon tetrachloride	**<0.49**	ug/L	1.0	0.49	1		04/21/08 11:43	56-23-5	
Chlorobenzene	**<0.41**	ug/L	1.0	0.41	1		04/21/08 11:43	108-90-7	
Chloroethane	**<0.97**	ug/L	1.0	0.97	1		04/21/08 11:43	75-00-3	
Chloroform	**<0.37**	ug/L	1.2	0.37	1		04/21/08 11:43	67-66-3	
Chloromethane	**<0.24**	ug/L	0.80	0.24	1		04/21/08 11:43	74-87-3	
2-Chlorotoluene	**<0.85**	ug/L	1.0	0.85	1		04/21/08 11:43	95-49-8	
4-Chlorotoluene	**<0.74**	ug/L	1.0	0.74	1		04/21/08 11:43	106-43-4	
1,2-Dibromo-3-chloropropane	**<0.87**	ug/L	2.9	0.87	1		04/21/08 11:43	96-12-8	
Dibromochloromethane	**<0.81**	ug/L	1.0	0.81	1		04/21/08 11:43	124-48-1	
1,2-Dibromoethane (EDB)	**<0.56**	ug/L	1.9	0.56	1		04/21/08 11:43	106-93-4	
Dibromomethane	**<0.60**	ug/L	1.0	0.60	1		04/21/08 11:43	74-95-3	
1,2-Dichlorobenzene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 11:43	95-50-1	
1,3-Dichlorobenzene	**<0.87**	ug/L	1.0	0.87	1		04/21/08 11:43	541-73-1	
1,4-Dichlorobenzene	**<0.95**	ug/L	1.0	0.95	1		04/21/08 11:43	106-46-7	
Dichlorodifluoromethane	**<0.99**	ug/L	1.0	0.99	1		04/21/08 11:43	75-71-8	
1,1-Dichloroethane	**20.5**	ug/L	1.0	0.75	1		04/21/08 11:43	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/L	1.0	0.36	1		04/21/08 11:43	107-06-2	
1,1-Dichloroethene	**15.3**	ug/L	1.0	0.57	1		04/21/08 11:43	75-35-4	
cis-1,2-Dichloroethene	**3.7**	ug/L	1.0	0.83	1		04/21/08 11:43	156-59-2	
trans-1,2-Dichloroethene	**<0.89**	ug/L	1.0	0.89	1		04/21/08 11:43	156-60-5	
1,2-Dichloropropane	**<0.46**	ug/L	1.0	0.46	1		04/21/08 11:43	78-87-5	
1,3-Dichloropropane	**<0.61**	ug/L	2.0	0.61	1		04/21/08 11:43	142-28-9	
2,2-Dichloropropane	**<0.62**	ug/L	1.0	0.62	1		04/21/08 11:43	594-20-7	
1,1-Dichloropropene	**<0.75**	ug/L	1.0	0.75	1		04/21/08 11:43	563-58-6	
cis-1,3-Dichloropropene	**<0.19**	ug/L	0.63	0.19	1		04/21/08 11:43	10061-01-5	
trans-1,3-Dichloropropene	**<0.19**	ug/L	0.63	0.19	1		04/21/08 11:43	10061-02-6	
Diisopropyl ether	**<0.76**	ug/L	1.0	0.76	1		04/21/08 11:43	108-20-3	
Ethylbenzene	**<0.54**	ug/L	1.0	0.54	1		04/21/08 11:43	100-41-4	
Hexachloro-1,3-butadiene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 11:43	87-68-3	
Isopropylbenzene (Cumene)	**<0.59**	ug/L	1.0	0.59	1		04/21/08 11:43	98-82-8	
p-Isopropyltoluene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 11:43	99-87-6	
Methylene Chloride	**<0.43**	ug/L	1.4	0.43	1		04/21/08 11:43	75-09-2	
Methyl-tert-butyl ether	**<0.61**	ug/L	2.0	0.61	1		04/21/08 11:43	1634-04-4	
Naphthalene	**<0.74**	ug/L	5.0	0.74	1		04/21/08 11:43	91-20-3	

Pace Analytical®
www.pacelabs.com

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

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: MW-113 **Lab ID: 402787010** Collected: 04/16/08 17:50 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
n-Propylbenzene	**<0.81**	ug/L	1.0	0.81	1		04/21/08 11:43	103-65-1	
Styrene	**<0.86**	ug/L	1.0	0.86	1		04/21/08 11:43	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.92**	ug/L	1.0	0.92	1		04/21/08 11:43	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.20**	ug/L	0.67	0.20	1		04/21/08 11:43	79-34-5	
Tetrachloroethene	**<0.45**	ug/L	1.0	0.45	1		04/21/08 11:43	127-18-4	
Toluene	**<0.67**	ug/L	1.0	0.67	1		04/21/08 11:43	108-88-3	
1,2,3-Trichlorobenzene	**<0.74**	ug/L	1.0	0.74	1		04/21/08 11:43	87-61-6	
1,2,4-Trichlorobenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 11:43	120-82-1	
1,1,1-Trichloroethane	**99.7**	ug/L	1.0	0.90	1		04/21/08 11:43	71-55-6	
1,1,2-Trichloroethane	**0.44J**	ug/L	1.4	0.42	1		04/21/08 11:43	79-00-5	
Trichloroethene	**62.4**	ug/L	1.0	0.48	1		04/21/08 11:43	79-01-6	
Trichlorofluoromethane	**<0.79**	ug/L	1.0	0.79	1		04/21/08 11:43	75-69-4	
1,2,3-Trichloropropane	**<0.99**	ug/L	1.0	0.99	1		04/21/08 11:43	96-18-4	
1,2,4-Trimethylbenzene	**<0.97**	ug/L	1.0	0.97	1		04/21/08 11:43	95-63-6	
1,3,5-Trimethylbenzene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 11:43	108-67-8	
Vinyl chloride	**<0.18**	ug/L	0.60	0.18	1		04/21/08 11:43	75-01-4	
m&p-Xylene	**<1.8**	ug/L	2.0	1.8	1		04/21/08 11:43	1330-20-7	
o-Xylene	**<0.83**	ug/L	1.0	0.83	1		04/21/08 11:43	95-47-6	
4-Bromofluorobenzene (S)	82	%	64-132		1		04/21/08 11:43	460-00-4	
Dibromofluoromethane (S)	89	%	68-122		1		04/21/08 11:43	1868-53-7	
Toluene-d8 (S)	89	%	73-127		1		04/21/08 11:43	2037-26-5	

Sample: TRIP BLANK **Lab ID: 402787011** Collected: 04/16/08 00:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.41**	ug/L	1.0	0.41	1		04/18/08 14:22	71-43-2	
Bromobenzene	**<0.82**	ug/L	1.0	0.82	1		04/18/08 14:22	108-86-1	
Bromochloromethane	**<0.97**	ug/L	1.0	0.97	1		04/18/08 14:22	74-97-5	
Bromodichloromethane	**<0.56**	ug/L	1.9	0.56	1		04/18/08 14:22	75-27-4	
Bromoform	**<0.94**	ug/L	3.1	0.94	1		04/18/08 14:22	75-25-2	
Bromomethane	**<0.91**	ug/L	3.0	0.91	1		04/18/08 14:22	74-83-9	
n-Butylbenzene	**<0.93**	ug/L	1.0	0.93	1		04/18/08 14:22	104-51-8	
sec-Butylbenzene	**<0.89**	ug/L	1.0	0.89	1		04/18/08 14:22	135-98-8	
tert-Butylbenzene	**<0.97**	ug/L	1.0	0.97	1		04/18/08 14:22	98-06-6	
Carbon tetrachloride	**<0.49**	ug/L	1.0	0.49	1		04/18/08 14:22	56-23-5	
Chlorobenzene	**<0.41**	ug/L	1.0	0.41	1		04/18/08 14:22	108-90-7	
Chloroethane	**<0.97**	ug/L	1.0	0.97	1		04/18/08 14:22	75-00-3	
Chloroform	**<0.37**	ug/L	1.2	0.37	1		04/18/08 14:22	67-66-3	
Chloromethane	**<0.24**	ug/L	0.80	0.24	1		04/18/08 14:22	74-87-3	
2-Chlorotoluene	**<0.85**	ug/L	1.0	0.85	1		04/18/08 14:22	95-49-8	
4-Chlorotoluene	**<0.74**	ug/L	1.0	0.74	1		04/18/08 14:22	106-43-4	
1,2-Dibromo-3-chloropropane	**<0.87**	ug/L	2.9	0.87	1		04/18/08 14:22	96-12-8	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: TRIP BLANK **Lab ID: 402787011** Collected: 04/16/08 00:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dibromochloromethane	**<0.81**	ug/L	1.0	0.81	1		04/18/08 14:22	124-48-1	
1,2-Dibromoethane (EDB)	**<0.56**	ug/L	1.9	0.56	1		04/18/08 14:22	106-93-4	
Dibromomethane	**<0.60**	ug/L	1.0	0.60	1		04/18/08 14:22	74-95-3	
1,2-Dichlorobenzene	**<0.83**	ug/L	1.0	0.83	1		04/18/08 14:22	95-50-1	
1,3-Dichlorobenzene	**<0.87**	ug/L	1.0	0.87	1		04/18/08 14:22	541-73-1	
1,4-Dichlorobenzene	**<0.95**	ug/L	1.0	0.95	1		04/18/08 14:22	106-46-7	
Dichlorodifluoromethane	**<0.99**	ug/L	1.0	0.99	1		04/18/08 14:22	75-71-8	
1,1-Dichloroethane	**<0.75**	ug/L	1.0	0.75	1		04/18/08 14:22	75-34-3	
1,2-Dichloroethane	**<0.36**	ug/L	1.0	0.36	1		04/18/08 14:22	107-06-2	
1,1-Dichloroethene	**<0.57**	ug/L	1.0	0.57	1		04/18/08 14:22	75-35-4	
cis-1,2-Dichloroethene	**<0.83**	ug/L	1.0	0.83	1		04/18/08 14:22	156-59-2	
trans-1,2-Dichloroethene	**<0.89**	ug/L	1.0	0.89	1		04/18/08 14:22	156-60-5	
1,2-Dichloropropane	**<0.46**	ug/L	1.0	0.46	1		04/18/08 14:22	78-87-5	
1,3-Dichloropropane	**<0.61**	ug/L	2.0	0.61	1		04/18/08 14:22	142-28-9	
2,2-Dichloropropane	**<0.62**	ug/L	1.0	0.62	1		04/18/08 14:22	594-20-7	
1,1-Dichloropropene	**<0.75**	ug/L	1.0	0.75	1		04/18/08 14:22	563-58-6	
cis-1,3-Dichloropropene	**<0.19**	ug/L	0.63	0.19	1		04/18/08 14:22	10061-01-5	
trans-1,3-Dichloropropene	**<0.19**	ug/L	0.63	0.19	1		04/18/08 14:22	10061-02-6	
Diisopropyl ether	**<0.76**	ug/L	1.0	0.76	1		04/18/08 14:22	108-20-3	
Ethylbenzene	**<0.54**	ug/L	1.0	0.54	1		04/18/08 14:22	100-41-4	
Hexachloro-1,3-butadiene	**<0.67**	ug/L	1.0	0.67	1		04/18/08 14:22	87-68-3	
Isopropylbenzene (Cumene)	**<0.59**	ug/L	1.0	0.59	1		04/18/08 14:22	98-82-8	
p-Isopropyltoluene	**<0.67**	ug/L	1.0	0.67	1		04/18/08 14:22	99-87-6	
Methylene Chloride	**<0.43**	ug/L	1.4	0.43	1		04/18/08 14:22	75-09-2	
Methyl-tert-butyl ether	**<0.61**	ug/L	2.0	0.61	1		04/18/08 14:22	1634-04-4	
Naphthalene	**<0.74**	ug/L	5.0	0.74	1		04/18/08 14:22	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	1.0	0.81	1		04/18/08 14:22	103-65-1	
Styrene	**<0.86**	ug/L	1.0	0.86	1		04/18/08 14:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.92**	ug/L	1.0	0.92	1		04/18/08 14:22	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.20**	ug/L	0.67	0.20	1		04/18/08 14:22	79-34-5	
Tetrachloroethene	**<0.45**	ug/L	1.0	0.45	1		04/18/08 14:22	127-18-4	
Toluene	**<0.67**	ug/L	1.0	0.67	1		04/18/08 14:22	108-88-3	
1,2,3-Trichlorobenzene	**<0.74**	ug/L	1.0	0.74	1		04/18/08 14:22	87-61-6	
1,2,4-Trichlorobenzene	**<0.97**	ug/L	1.0	0.97	1		04/18/08 14:22	120-82-1	
1,1,1-Trichloroethane	**<0.90**	ug/L	1.0	0.90	1		04/18/08 14:22	71-55-6	
1,1,2-Trichloroethane	**<0.42**	ug/L	1.4	0.42	1		04/18/08 14:22	79-00-5	
Trichloroethene	**<0.48**	ug/L	1.0	0.48	1		04/18/08 14:22	79-01-6	
Trichlorofluoromethane	**<0.79**	ug/L	1.0	0.79	1		04/18/08 14:22	75-69-4	
1,2,3-Trichloropropane	**<0.99**	ug/L	1.0	0.99	1		04/18/08 14:22	96-18-4	
1,2,4-Trimethylbenzene	**<0.97**	ug/L	1.0	0.97	1		04/18/08 14:22	95-63-6	
1,3,5-Trimethylbenzene	**<0.83**	ug/L	1.0	0.83	1		04/18/08 14:22	108-67-8	
Vinyl chloride	**<0.18**	ug/L	0.60	0.18	1		04/18/08 14:22	75-01-4	
m&p-Xylene	**<1.8**	ug/L	2.0	1.8	1		04/18/08 14:22	1330-20-7	
o-Xylene	**<0.83**	ug/L	1.0	0.83	1		04/18/08 14:22	95-47-6	
4-Bromofluorobenzene (S)	83	%	64-132		1		04/18/08 14:22	460-00-4	
Dibromofluoromethane (S)	85	%	68-122		1		04/18/08 14:22	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: TRIP BLANK **Lab ID: 402787011** Collected: 04/16/08 00:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Toluene-d8 (S)	89	%	73-127		1		04/18/08 14:22	2037-26-5	

Sample: DUPLICATE **Lab ID: 402787012** Collected: 04/16/08 00:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium	**88300**	ug/L	50.0	5.7	10		04/18/08 13:08	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<4.1**	ug/L	10.0	4.1	10		04/21/08 12:34	71-43-2	
Bromobenzene	**<8.2**	ug/L	10.0	8.2	10		04/21/08 12:34	108-86-1	
Bromochloromethane	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:34	74-97-5	
Bromodichloromethane	**<5.6**	ug/L	18.7	5.6	10		04/21/08 12:34	75-27-4	
Bromoform	**<9.4**	ug/L	31.3	9.4	10		04/21/08 12:34	75-25-2	
Bromomethane	**<9.1**	ug/L	30.3	9.1	10		04/21/08 12:34	74-83-9	
n-Butylbenzene	**<9.3**	ug/L	10.0	9.3	10		04/21/08 12:34	104-51-8	
sec-Butylbenzene	**<8.9**	ug/L	10.0	8.9	10		04/21/08 12:34	135-98-8	
tert-Butylbenzene	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:34	98-06-6	
Carbon tetrachloride	**<4.9**	ug/L	10.0	4.9	10		04/21/08 12:34	56-23-5	
Chlorobenzene	**<4.1**	ug/L	10.0	4.1	10		04/21/08 12:34	108-90-7	
Chloroethane	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:34	75-00-3	
Chloroform	**<3.7**	ug/L	12.3	3.7	10		04/21/08 12:34	67-66-3	
Chloromethane	**<2.4**	ug/L	8.0	2.4	10		04/21/08 12:34	74-87-3	
2-Chlorotoluene	**<8.5**	ug/L	10.0	8.5	10		04/21/08 12:34	95-49-8	
4-Chlorotoluene	**<7.4**	ug/L	10.0	7.4	10		04/21/08 12:34	106-43-4	
1,2-Dibromo-3-chloropropane	**<8.7**	ug/L	29.0	8.7	10		04/21/08 12:34	96-12-8	
Dibromochloromethane	**<8.1**	ug/L	10.0	8.1	10		04/21/08 12:34	124-48-1	
1,2-Dibromoethane (EDB)	**<5.6**	ug/L	18.7	5.6	10		04/21/08 12:34	106-93-4	
Dibromomethane	**<6.0**	ug/L	10.0	6.0	10		04/21/08 12:34	74-95-3	
1,2-Dichlorobenzene	**<8.3**	ug/L	10.0	8.3	10		04/21/08 12:34	95-50-1	
1,3-Dichlorobenzene	**<8.7**	ug/L	10.0	8.7	10		04/21/08 12:34	541-73-1	
1,4-Dichlorobenzene	**<9.5**	ug/L	10.0	9.5	10		04/21/08 12:34	106-46-7	
Dichlorodifluoromethane	**<9.9**	ug/L	10.0	9.9	10		04/21/08 12:34	75-71-8	
1,1-Dichloroethane	**<7.5**	ug/L	10.0	7.5	10		04/21/08 12:34	75-34-3	
1,2-Dichloroethane	**<3.6**	ug/L	10.0	3.6	10		04/21/08 12:34	107-06-2	
1,1-Dichloroethene	**<5.7**	ug/L	10.0	5.7	10		04/21/08 12:34	75-35-4	
cis-1,2-Dichloroethene	**<8.3**	ug/L	10.0	8.3	10		04/21/08 12:34	156-59-2	
trans-1,2-Dichloroethene	**<8.9**	ug/L	10.0	8.9	10		04/21/08 12:34	156-60-5	
1,2-Dichloropropane	**<4.6**	ug/L	10.0	4.6	10		04/21/08 12:34	78-87-5	
1,3-Dichloropropane	**<6.1**	ug/L	20.3	6.1	10		04/21/08 12:34	142-28-9	
2,2-Dichloropropane	**<6.2**	ug/L	10.0	6.2	10		04/21/08 12:34	594-20-7	
1,1-Dichloropropene	**<7.5**	ug/L	10.0	7.5	10		04/21/08 12:34	563-58-6	
cis-1,3-Dichloropropene	**<1.9**	ug/L	6.3	1.9	10		04/21/08 12:34	10061-01-5	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

Sample: DUPLICATE **Lab ID: 402787012** Collected: 04/16/08 00:00 Received: 04/17/08 14:05 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	**<1.9**	ug/L	6.3	1.9	10		04/21/08 12:34	10061-02-6	
Diisopropyl ether	**<7.6**	ug/L	10.0	7.6	10		04/21/08 12:34	108-20-3	
Ethylbenzene	**<5.4**	ug/L	10.0	5.4	10		04/21/08 12:34	100-41-4	
Hexachloro-1,3-butadiene	**<6.7**	ug/L	10.0	6.7	10		04/21/08 12:34	87-68-3	
Isopropylbenzene (Cumene)	**<5.9**	ug/L	10.0	5.9	10		04/21/08 12:34	98-82-8	
p-Isopropyltoluene	**<6.7**	ug/L	10.0	6.7	10		04/21/08 12:34	99-87-6	
Methylene Chloride	**<4.3**	ug/L	14.3	4.3	10		04/21/08 12:34	75-09-2	
Methyl-tert-butyl ether	**<6.1**	ug/L	20.3	6.1	10		04/21/08 12:34	1634-04-4	
Naphthalene	**<7.4**	ug/L	50.0	7.4	10		04/21/08 12:34	91-20-3	
n-Propylbenzene	**<8.1**	ug/L	10.0	8.1	10		04/21/08 12:34	103-65-1	
Styrene	**<8.6**	ug/L	10.0	8.6	10		04/21/08 12:34	100-42-5	
1,1,1,2-Tetrachloroethane	**<9.2**	ug/L	10.0	9.2	10		04/21/08 12:34	630-20-6	
1,1,2,2-Tetrachloroethane	**<2.0**	ug/L	6.7	2.0	10		04/21/08 12:34	79-34-5	
Tetrachloroethene	**<4.5**	ug/L	10.0	4.5	10		04/21/08 12:34	127-18-4	
Toluene	**<6.7**	ug/L	10.0	6.7	10		04/21/08 12:34	108-88-3	
1,2,3-Trichlorobenzene	**<7.4**	ug/L	10.0	7.4	10		04/21/08 12:34	87-61-6	
1,2,4-Trichlorobenzene	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:34	120-82-1	
1,1,1-Trichloroethane	**18.6**	ug/L	10.0	9.0	10		04/21/08 12:34	71-55-6	
1,1,2-Trichloroethane	**<4.2**	ug/L	14.0	4.2	10		04/21/08 12:34	79-00-5	
Trichloroethene	**1060**	ug/L	10.0	4.8	10		04/21/08 12:34	79-01-6	
Trichlorofluoromethane	**<7.9**	ug/L	10.0	7.9	10		04/21/08 12:34	75-69-4	
1,2,3-Trichloropropane	**<9.9**	ug/L	10.0	9.9	10		04/21/08 12:34	96-18-4	
1,2,4-Trimethylbenzene	**<9.7**	ug/L	10.0	9.7	10		04/21/08 12:34	95-63-6	
1,3,5-Trimethylbenzene	**<8.3**	ug/L	10.0	8.3	10		04/21/08 12:34	108-67-8	
Vinyl chloride	**<1.8**	ug/L	6.0	1.8	10		04/21/08 12:34	75-01-4	
m&p-Xylene	**<18.0**	ug/L	20.0	18.0	10		04/21/08 12:34	1330-20-7	
o-Xylene	**<8.3**	ug/L	10.0	8.3	10		04/21/08 12:34	95-47-6	
4-Bromofluorobenzene (S)	83	%	64-132		10		04/21/08 12:34	460-00-4	
Dibromofluoromethane (S)	91	%	68-122		10		04/21/08 12:34	1868-53-7	
Toluene-d8 (S)	91	%	73-127		10		04/21/08 12:34	2037-26-5	
335.4 Cyanide, Tot. Dissolved	Analytical Method: EPA 335.4								
Cyanide	**0.25**	mg/L	0.020	0.0060	1		04/29/08 11:47	57-12-5	B

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

QC Batch: MSV/1452 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 402787005, 402787006, 402787007, 402787008, 402787009, 402787010, 402787011, 402787012

METHOD BLANK: 17686
Associated Lab Samples: 402787005, 402787006, 402787007, 402787008, 402787009, 402787010, 402787011, 402787012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.92	1.0	
1,1,1-Trichloroethane	ug/L	<0.90	1.0	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	0.67	
1,1,2-Trichloroethane	ug/L	<0.42	1.4	
1,1-Dichloroethane	ug/L	<0.75	1.0	
1,1-Dichloroethene	ug/L	<0.57	1.0	
1,1-Dichloropropene	ug/L	<0.75	1.0	
1,2,3-Trichlorobenzene	ug/L	<0.74	1.0	
1,2,3-Trichloropropane	ug/L	<0.99	1.0	
1,2,4-Trichlorobenzene	ug/L	<0.97	1.0	
1,2,4-Trimethylbenzene	ug/L	<0.97	1.0	
1,2-Dibromo-3-chloropropane	ug/L	<0.87	2.9	
1,2-Dibromoethane (EDB)	ug/L	<0.56	1.9	
1,2-Dichlorobenzene	ug/L	<0.83	1.0	
1,2-Dichloroethane	ug/L	<0.36	1.0	
1,2-Dichloropropane	ug/L	<0.46	1.0	
1,3,5-Trimethylbenzene	ug/L	<0.83	1.0	
1,3-Dichlorobenzene	ug/L	<0.87	1.0	
1,3-Dichloropropane	ug/L	<0.61	2.0	
1,4-Dichlorobenzene	ug/L	<0.95	1.0	
2,2-Dichloropropane	ug/L	<0.62	1.0	
2-Chlorotoluene	ug/L	<0.85	1.0	
4-Chlorotoluene	ug/L	<0.74	1.0	
Benzene	ug/L	<0.41	1.0	
Bromobenzene	ug/L	<0.82	1.0	
Bromochloromethane	ug/L	<0.97	1.0	
Bromodichloromethane	ug/L	<0.56	1.9	
Bromoform	ug/L	<0.94	3.1	
Bromomethane	ug/L	<0.91	3.0	
Carbon tetrachloride	ug/L	<0.49	1.0	
Chlorobenzene	ug/L	<0.41	1.0	
Chloroethane	ug/L	<0.97	1.0	
Chloroform	ug/L	<0.37	1.2	
Chloromethane	ug/L	<0.24	0.80	
cis-1,2-Dichloroethene	ug/L	<0.83	1.0	
cis-1,3-Dichloropropene	ug/L	<0.19	0.63	
Dibromochloromethane	ug/L	<0.81	1.0	
Dibromomethane	ug/L	<0.60	1.0	
Dichlorodifluoromethane	ug/L	<0.99	1.0	
Diisopropyl ether	ug/L	<0.76	1.0	
Ethylbenzene	ug/L	<0.54	1.0	
Hexachloro-1,3-butadiene	ug/L	<0.67	1.0	
Isopropylbenzene (Cumene)	ug/L	<0.59	1.0	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

METHOD BLANK: 17686

Associated Lab Samples: 402787005, 402787006, 402787007, 402787008, 402787009, 402787010, 402787011, 402787012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
m&p-Xylene	ug/L	<1.8	2.0	
Methyl-tert-butyl ether	ug/L	<0.61	2.0	
Methylene Chloride	ug/L	<0.43	1.4	
n-Butylbenzene	ug/L	<0.93	1.0	
n-Propylbenzene	ug/L	<0.81	1.0	
Naphthalene	ug/L	<0.74	5.0	
o-Xylene	ug/L	<0.83	1.0	
p-Isopropyltoluene	ug/L	<0.67	1.0	
sec-Butylbenzene	ug/L	<0.89	1.0	
Styrene	ug/L	<0.86	1.0	
tert-Butylbenzene	ug/L	<0.97	1.0	
Tetrachloroethene	ug/L	<0.45	1.0	
Toluene	ug/L	<0.67	1.0	
trans-1,2-Dichloroethene	ug/L	<0.89	1.0	
trans-1,3-Dichloropropene	ug/L	<0.19	0.63	
Trichloroethene	ug/L	<0.48	1.0	
Trichlorofluoromethane	ug/L	<0.79	1.0	
Vinyl chloride	ug/L	<0.18	0.60	
4-Bromofluorobenzene (S)	%	84	64-132	
Dibromofluoromethane (S)	%	84	68-122	
Toluene-d8 (S)	%	90	73-127	

LABORATORY CONTROL SAMPLE & LCSD: 17687 17688

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.0	50.3	104	101	75-128	3	20	
1,1,2,2-Tetrachloroethane	ug/L	50	45.6	46.5	91	93	67-125	2	20	
1,1,2-Trichloroethane	ug/L	50	50.5	51.3	101	103	75-125	2	20	
1,1-Dichloroethane	ug/L	50	53.9	51.7	108	103	71-130	4	20	
1,1-Dichloroethene	ug/L	50	54.2	53.1	108	106	75-125	2	20	
1,2-Dichloroethane	ug/L	50	51.8	50.7	104	101	71-132	2	20	
1,2-Dichloropropane	ug/L	50	52.7	51.8	105	104	73-125	2	20	
Benzene	ug/L	50	52.0	51.4	104	103	75-125	1	20	
Bromodichloromethane	ug/L	50	48.8	47.4	98	95	75-125	3	20	
Bromoform	ug/L	50	48.1	48.9	96	98	75-125	2	20	
Bromomethane	ug/L	50	41.2	41.2	82	82	66-125	.05	20	
Carbon tetrachloride	ug/L	50	52.4	51.2	105	102	75-125	2	20	
Chlorobenzene	ug/L	50	51.0	50.8	102	102	75-125	.4	20	
Chloroethane	ug/L	50	47.1	46.3	94	93	72-126	2	20	
Chloroform	ug/L	50	50.2	49.8	100	100	75-125	.8	20	
Chloromethane	ug/L	50	38.8	38.1	78	76	46-143	2	20	
cis-1,2-Dichloroethene	ug/L	50	52.3	51.8	105	104	75-125	1	20	
cis-1,3-Dichloropropene	ug/L	50	54.0	52.9	108	106	75-125	2	20	
Dibromochloromethane	ug/L	50	47.7	48.5	95	97	75-125	2	20	
Ethylbenzene	ug/L	50	55.7	55.0	111	110	75-125	1	20	

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

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

LABORATORY CONTROL SAMPLE & LCSD: 17687 17688

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
m&p-Xylene	ug/L	100	112	111	112	111	75-125	1	20	
Methylene Chloride	ug/L	50	54.6	53.5	109	107	75-125	2	20	
o-Xylene	ug/L	50	55.7	55.8	111	112	75-125	.2	20	
Styrene	ug/L	50	48.3	47.9	97	96	75-125	.8	20	
Tetrachloroethene	ug/L	50	50.8	50.2	102	100	75-130	1	20	
Toluene	ug/L	50	54.5	53.3	109	107	75-125	2	20	
trans-1,2-Dichloroethene	ug/L	50	50.4	48.8	101	98	75-125	3	20	
trans-1,3-Dichloropropene	ug/L	50	52.7	53.4	105	107	75-125	1	20	
Trichloroethene	ug/L	50	54.6	52.4	109	105	75-125	4	20	
Vinyl chloride	ug/L	50	45.5	44.3	91	89	65-130	3	20	
4-Bromofluorobenzene (S)	%				85	86	64-132			
Dibromofluoromethane (S)	%				88	87	68-122			
Toluene-d8 (S)	%				91	92	73-127			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17819 17820

Parameter	Units	402748001 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	<0.90	50	50	62.8	54.7	126	109	70-130	14	30	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	50	50	56.3	51.4	113	103	70-130	9	30	
1,1,2-Trichloroethane	ug/L	<0.42	50	50	62.9	55.8	126	112	70-130	12	30	
1,1-Dichloroethane	ug/L	<0.75	50	50	63.5	55.8	127	112	70-130	13	30	
1,1-Dichloroethene	ug/L	<0.57	50	50	63.7	55.3	127	111	70-135	14	30	
1,2-Dichloroethane	ug/L	<0.36	50	50	61.4	53.1	123	106	70-130	15	30	
1,2-Dichloropropane	ug/L	<0.46	50	50	62.2	53.9	124	108	70-130	14	30	
Benzene	ug/L	<0.41	50	50	62.6	55.0	125	110	70-130	13	30	
Bromodichloromethane	ug/L	<0.56	50	50	59.0	49.6	118	99	70-130	17	30	
Bromoform	ug/L	<0.94	50	50	57.8	47.9	116	96	70-130	19	30	
Bromomethane	ug/L	<0.91	50	50	51.5	44.4	103	89	63-147	15	30	
Carbon tetrachloride	ug/L	<0.49	50	50	62.3	53.8	125	108	70-131	15	30	
Chlorobenzene	ug/L	<0.41	50	50	61.7	54.0	123	108	70-130	13	30	
Chloroethane	ug/L	<0.97	50	50	55.7	49.2	111	98	67-138	12	30	
Chloroform	ug/L	0.39J	50	50	60.8	53.3	121	106	70-130	13	30	
Chloromethane	ug/L	<0.24	50	50	44.9	39.7	90	79	43-150	12	30	
cis-1,2-Dichloroethene	ug/L	<0.83	50	50	63.2	55.3	126	111	70-130	13	30	
cis-1,3-Dichloropropene	ug/L	<0.19	50	50	64.7	54.4	129	109	70-130	17	30	
Dibromochloromethane	ug/L	<0.81	50	50	57.3	49.8	115	100	70-130	14	30	
Ethylbenzene	ug/L	0.89J	50	50	64.4	56.8	127	112	70-136	13	30	
m&p-Xylene	ug/L	<1.8	100	100	121	106	120	105	70-137	13	30	
Methylene Chloride	ug/L	<0.43	50	50	64.2	56.7	128	113	70-130	13	30	
o-Xylene	ug/L	<0.83	50	50	62.1	55.5	123	110	70-130	11	30	
Styrene	ug/L	<0.86	50	50	34.4	32.5	69	65	70-130	5	30	
Tetrachloroethene	ug/L	<0.45	50	50	60.6	52.6	121	105	70-130	14	30	
Toluene	ug/L	<0.67	50	50	62.9	55.3	125	110	70-130	13	30	
trans-1,2-Dichloroethene	ug/L	<0.89	50	50	58.6	52.8	117	106	70-130	10	30	
trans-1,3-Dichloropropene	ug/L	<0.19	50	50	62.4	54.2	125	108	70-130	14	30	
Trichloroethene	ug/L	<0.48	50	50	62.4	53.3	125	107	70-130	16	30	

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17819 17820

Parameter	Units	402748001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Vinyl chloride	ug/L	<0.18	50	50	54.6	47.6	109	95	62-138	14	30	
4-Bromofluorobenzene (S)	%						87	86	64-132			
Dibromofluoromethane (S)	%						87	87	68-122			
Toluene-d8 (S)	%						91	91	73-127			

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

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

QC Batch: ICP/1121 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 402787001, 402787002, 402787003, 402787004, 402787005, 402787006, 402787007, 402787008, 402787009, 402787010, 402787012

METHOD BLANK: 17853
Associated Lab Samples: 402787001, 402787002, 402787003, 402787004, 402787005, 402787006, 402787007, 402787008, 402787009, 402787010, 402787012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium	ug/L	<0.57	5.0	

LABORATORY CONTROL SAMPLE: 17854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	487	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 17855 17856

Parameter	Units	402792001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	ug/L	<0.57	500	500	474	473	95	95	75-125	.1	20	

REPORT OF LABORATORY ANALYSIS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

QC Batch: WETA/1383 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 402787007, 402787008, 402787009, 402787012

METHOD BLANK: 21157
Associated Lab Samples: 402787007, 402787008, 402787009, 402787012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	0.0070J	0.020	

LABORATORY CONTROL SAMPLE: 21158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	109	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 21159 21160

Parameter	Units	402787009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.38	.6	.6	0.99	0.99	102	103	90-110	.5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 21161 21162

Parameter	Units	402860007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.064J	.6	.6	0.70	0.69	105	105	90-110	.3	20	

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

QUALIFIERS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402787

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

Sample Condition Upon Receipt

Pace Analytical

Client Name: OMNI Project # 402787

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

Optional: Proj. Due Date: Proj. Name:

Tracking #: _____

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

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

Thermometer Used NA Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature R01 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C Comments: √MW1

Date and Initials of person examining contents: CA 4/17/08

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.
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	
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.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. 1/14
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed CA Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 4/18/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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

Pace Analytical®
www.pacelabs.com

VMW

CHAIN OF CUSTODY

*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

(Please Print Clearly)	
Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

	Quote #:	MAUTHE
	Mail To Contact:	BRIAN WAYNER
	Mail To Company:	OMNNI ASSOCIATES
	Mail To Address:	ONE SYSTEMS DR. APPLETON, WI 54914
	Invoice To Contact:	BRIAN WAYNER
	Invoice To Company:	OMNNI
	Invoice To Address:	SAME
	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	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analyses Requested: CHROMIUM	VOC	TOTAL CYANIDE					CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					Y/N	Pick Letter										
001	MW-101	4/16/08	19:00	GW	Yes	D	X								1-250mL D	
002	MW-102		13:53				X								↓	
003	MW-103		12:41				X								↓	
004	MW-104		12:03				X								↓	
005	MW-107		15:00				X	X							1-250mL D, 3-40mL	
006	MW-109		15:49				X	X							↓	
007	MW-110		18:22				X	X	X						2-250mL D,G, 3-40mL	
008	MW-111		16:29				X	X	X						↓	
009	MW-112		17:04				X	X	X						↓	
010	MW-113		17:50				X	X							1-250mL D, 3-40mL	
011	TRIP							X							2-40mL	
012	DUPLICATE						X	X	X						2-250mL D,G, 3-40mL	

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:
Brian D. Wayner	4/16/08 8:45pm	D. Muelke	4/17/08 9:00
D. Muelke	4/17/08 14:05		4/17/08 1405

PACE Project No.: 40787

Receipt Temp = 4.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal: Present / Not Present; Intact / Not Intact

Pace Analytical™
www.pacelabs.com

INVOICE

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

Invoice Number: 084001588
Date: 04/23/2008

Sold To:

Omnni Associates, Inc.
Omnni Associates, Inc.
One Systems Drive
Appleton, WI 54914-1654
(920) 830-6141

Please Remit To:

Pace Analytical Services, Inc.
P.O. Box 684056
Milwaukee, WI 53268-4056

Client Number/Client ID	Purchase Order No	Pace Project Mgr	Terms	Page
40-000578 / OMNNI ASSOC.		Steven Mleczko	Net 30 Days	1

Client Project: N1866A05/003 MAUTHE
Client Name: OMNNI ASSOCIATES, INC.
Pace Project No: 402943
Sample Received: 4/22/2008
Report Sent To: Brian Wayner, Omnni Associates, Inc.
Comments:

ANALYTICAL CHARGES

Quantity	Unit	Description	Method	Matrix	Price	Total
1	Ea	7196 Chromium, Hexavalent	EPA 7196	Water	$30.00	$30.00
					Analytical Subtotal	$30.00

Total Number of Charges 1 **Total Invoice Amount** **$30.00**

If you have any questions regarding this invoice, please contact Steven Mleczko at Pace.
Phone: (920)469-2436 Email: steve.mleczko@pacelabs.com

1.5% MONTHLY FINANCE CHARGE ASSESSED AFTER 30 DAYS.
PLEASE REFERENCE THE INVOICE NUMBER ON ALL REMITTANCE ADVICE.

AN EQUAL OPPORTUNITY EMPLOYER

Please complete and return copy of invoice with your payment.

Method of Payment: Check / VISA / MasterCard / American Express (circle one) *Phone #:*_____ *Fax #:*_____ **INVOICE TOTAL** **$30.00**

*Credit Card Holder: (print)*_____ *Email Address:*_____ Amount Paid: $_____

*Credit Card Account No:*_____ *Exp Date:*_____ *Zip Code:*_____ Check No: _____

*Signature:*_____ Customer Name: Omnni Associates, Inc. Customer No: 40-000578 Invoice No: 084001588

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

April 23, 2008

Brian Wayner
Omnni Associates, Inc.
One Systems Drive
Appleton, WI 549141654

RE: Project: N1866A05/003 MAUTHE
Pace Project No.: 402943

Dear Brian Wayner:
Enclosed are the analytical results for sample(s) received by the laboratory on April 22, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Steven Mleczko

steve.mleczko@pacelabs.com
Project Manager

Enclosures

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

CERTIFICATIONS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402943

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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

SAMPLE SUMMARY

Project: N1866A05/003 MAUTHE
Pace Project No.: 402943

Lab ID	Sample ID	Matrix	Date Collected	Date Received
402943001	**OUTFALL 001**	Water	04/22/08 07:05	04/22/08 15:45

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

SAMPLE ANALYTE COUNT

Project: N1866A05/003 MAUTHE
Pace Project No.: 402943

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
402943001	**OUTFALL 001**	EPA 7196	DEY	1	PASI-G

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

PROJECT NARRATIVE

Project: N1866A05/003 MAUTHE
Pace Project No.: 402943

Method: EPA 7196
Description: 7196 Chromium, Hexavalent
Client: OMNNI ASSOCIATES, INC.
Date: April 23, 2008

General Information:
1 sample was analyzed for EPA 7196. All samples were received in acceptable condition with any exceptions noted below.

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 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.

Duplicate Sample:
All duplicate sample results were within method 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
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402943

Sample: OUTFALL 001 **Lab ID: 402943001** Collected: 04/22/08 07:05 Received: 04/22/08 15:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7196 Chromium, Hexavalent	Analytical Method: EPA 7196								
Chromium, Hexavalent	**0.87**	mg/L	0.057	0.017	5		04/22/08 16:00	18540-29-9	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 402943

QC Batch: WETA/1358
QC Batch Method: EPA 7196
Analysis Method: EPA 7196
Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 402943001

METHOD BLANK: 19390
Associated Lab Samples: 402943001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium, Hexavalent	mg/L	<0.0034	0.011	

LABORATORY CONTROL SAMPLE: 19391

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.29	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 19392 19393

Parameter	Units	402943001 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	0.87	1.5	1.5	2.4	2.4	102	103	90-110	1	20	

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

QUALIFIERS

Project: N1866A05/003 MAUTHE
Pace Project No.: 402943

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

Sample Condition Upon Receipt

Pace Analytical

Client Name: Omni Assoc Project # 402943

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

Optional: Proj Due Date: Proj Name:

Tracking #: _____

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

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

Thermometer Used — Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature R01 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 4-22-08 CJ

Temp should be above freezing to 6°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.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. Hex Chrome
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	
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.
-Includes date/time/ID/Analysis Matrix: GW		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 4/23/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

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

COC No. 031273

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

*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

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Quote #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	SAME
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

FILTERED? (YES/NO) — Y/N: N
PRESERVATION (CODE)* — Pick Letter: A

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: HEXAVALENT CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	OUTFALL 001	4/22/08	7:05	GW	X		1-250mlp A	

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:
Brian D. Wayner	4/22/08	D. Mielke	4/22/08 9:55
D. Mielke	4/22/08 15:45	C. [illegible] Pace	4/22/08 15:45

PACE Project No. 402943

Receipt Temp = 20.1 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal
Present / ~~Not Present~~
Intact / Not Intact

Pace Analytical®
www.pacelabs.com

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

May 01, 2008

Brian Wayner
Omnni Associates, Inc.
One Systems Drive
Appleton, WI 549141654

RE: Project: N1866A05/003 MAUTHE
Pace Project No.: 403190

Dear Brian Wayner:
Enclosed are the analytical results for sample(s) received by the laboratory on April 29, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Steven Mleczko

steve.mleczko@pacelabs.com
Project Manager

Enclosures

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

CERTIFICATIONS

Project: N1866A05/003 MAUTHE
Pace Project No.: 403190

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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

SAMPLE SUMMARY

Project: N1866A05/003 MAUTHE
Pace Project No.: 403190

Lab ID	Sample ID	Matrix	Date Collected	Date Received
403190001	**OUTFALL 001**	Water	04/29/08 06:58	04/29/08 14:50

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

SAMPLE ANALYTE COUNT

Project: N1866A05/003 MAUTHE
Pace Project No.: 403190

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
403190001	**OUTFALL 001**	EPA 7196	DEY	1	PASI-G

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

PROJECT NARRATIVE

Project: N1866A05/003 MAUTHE
Pace Project No.: 403190

Method: EPA 7196
Description: 7196 Chromium, Hexavalent
Client: OMNNI ASSOCIATES, INC.
Date: May 01, 2008

General Information:
1 sample was analyzed for EPA 7196. All samples were received in acceptable condition with any exceptions noted below.

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 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/1408

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 403171001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 21930)
  - Chromium, Hexavalent
- MSD (Lab ID: 21931)
  - Chromium, Hexavalent

Duplicate Sample:
All duplicate sample results were within method 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®
www.pacelabs.com

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

ANALYTICAL RESULTS

Project: N1866A05/003 MAUTHE
Pace Project No.: 403190

Sample: OUTFALL 001 **Lab ID: 403190001** Collected: 04/29/08 06:58 Received: 04/29/08 14:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7196 Chromium, Hexavalent	Analytical Method: EPA 7196								
Chromium, Hexavalent	**0.51**	mg/L	0.057	0.017	5		04/29/08 16:40	18540-29-9	

Pace Analytical®
www.pacelabs.com

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

QUALITY CONTROL DATA

Project: N1866A05/003 MAUTHE
Pace Project No.: 403190

QC Batch: WETA/1408
QC Batch Method: EPA 7196
Analysis Method: EPA 7196
Analysis Description: 7196 Chromium, Hexavalent
Associated Lab Samples: 403190001

METHOD BLANK: 21928
Associated Lab Samples: 403190001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chromium, Hexavalent	mg/L	<0.0034	0.011	

LABORATORY CONTROL SAMPLE: 21929

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.3	0.29	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 21930 21931

Parameter	Units	403171001 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	ND	.3	.3	0.22	0.24	74	81	90-110	8	20	M0

Pace Analytical Services, Inc
1241 Bellevue Street
Green Bay, WI 54302
(920)469-243

QUALIFIERS

Project: N1866A05/003 MAUTHE
Pace Project No.: 403190

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

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.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M0 Matrix spike recovery was outside laboratory control limits.

Sample Condition Upon Receipt

Pace Analytical

Client Name: Bmw Project # 403190

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

Optional: Proj. Due Date: Proj. Name:

Tracking #: _____

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

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

Thermometer Used NA Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 20.1 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: cn 4/29/08

Temp should be above freezing to 6°C Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC:	☑Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix: W			
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☐N/A
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No	
Samples checked for dechlorination:	☐Yes	☐No	☑N/A
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A
Trip Blank Present:	☐Yes	☑No	☐N/A
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A
Pace Trip Blank Lot # (if purchased): _____			

1.
2.
3.
4.
5.
6. 24hr. Hex
7.
8.
9.
10.
11.
12.
13.

Initial when completed	Lot # of added preservative

14.
15.
16.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: 4/29/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Pace Analytical®
www.pacelabs.com

MN: 612-607-1700 WI: 920-469-2436

COC No. 031274

CHAIN OF CUSTODY

*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

Company Name:	OMNNI ASSOCIATES
Branch/Location:	APPLETON
Project Contact:	BRIAN WAYNER
Phone:	920/830-6141
Project Number:	N1866A05/1003
Project Name:	MAUTHE
Project State:	WI
Sampled By (Print):	BRIAN WAYNER
Sampled By (Sign):	Brian D. Wayner
PO #:	Regulatory Program:

Quote #:	MAUTHE
Mail To Contact:	BRIAN WAYNER
Mail To Company:	OMNNI ASSOCIATES
Mail To Address:	ONE SYSTEMS DRIVE APPLETON, WI 54914
Invoice To Contact:	BRIAN WAYNER
Invoice To Company:	OMNNI
Invoice To Address:	SAME
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	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: HEXAVALENT CHROMIUM	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	OUTFALL 001	4/24/08	6:58	GW	N	A	X		1-250 mL	

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:
Brian D. Wayner	4/29/08 7:40	B Kempen	4/29/08 0915
B Kempen	4/29/08 1450	[illegible]	4/29/08 1450

PACE Project No. 403190

Receipt Temp = 4.01 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

ENGINEERING • ARCHITECTURE • ENVIRONMENTAL

One Systems Drive
Appleton, WI 54914
1-800-571-6677
www.omnni.com