Operation and Maintenance Report No. 59

N.W. Mauthe Superfund Site
Appleton, Wisconsin

November 12, 2019
Terracon Project No. 58117057
WDNR BRRTS No. 02-45-000127

Prepared for:
Wisconsin Department of Natural Resources
Oshkosh, Wisconsin

Prepared by:
Terracon Consultants, Inc.
Franklin, Wisconsin

November 12, 2019

Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
625 East County Road Y, Suite 700
Oshkosh, Wisconsin 54901-9731

Attn: Ms. Jennifer Borski

Re: Operation and Maintenance Report No. 59
N.W. Mauthe Superfund Site
725 South Outagamie Street
Appleton, Wisconsin
WDNR BRRTS No. 02-45-000127
Terracon Project No. 58117057

Dear Ms. Borski:

Terracon Consultants, Inc. (Terracon) has prepared this Operation and Maintenance Report to summarize the activities that took place at the above-referenced site from October 1, 2018, through September 30, 2019. The report documents system operations and site conditions through the reporting period and recommends continued system operation without change.

Sincerely,
Terracon Consultants, Inc.

Scott A. Hodgson, P.G.
Senior Project Manager

Blaine R. Schroyer, P.E.
Principal/Office Manager

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Brian Kreski (City of Appleton Department of Utilities Environmental Programs Coordinator)

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

November 12, 2019
Terracon Project No. 58117057

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) was retained by the Wisconsin Department of Natural Resources (WDNR) to perform remedial system operation and maintenance services at the above-referenced site. The WDNR project contact is Ms. Jennifer Borski, Oshkosh Service Center.

2.0 BACKGROUND

2.1 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 of the NW¼ of Section 34, T21N, R17E, Outagamie County (Figure 1 – Site Location Map, Appendix A).

2.2 Site History

The Mauthe site is 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 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 the following.

- 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 milligrams per kilogram (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 (ARARs)
- 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 at 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 observation 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 showed contamination remained in the soil above ch. NR 720 Wisconsin Administrative Code (WAC) levels, in the groundwater above ch. NR 140 WAC enforcement standards, and in the groundwater above the applicable or relevant and appropriate requirements (ARARs) established for the Mauthe site. Groundwater did 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 wastewater treatment facility.

On October 13, 2007, MCO discontinued operational responsibilities of the system. OMNNI began operational responsibilities on October 14, 2007 and maintained responsibility through September 30, 2011. Terracon assumed system operation responsibilities on October 1, 2011.

2.3 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 (Figure 2 – Site Detail Map, Appendix A). 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. The current building onsite houses the treatment facility. Approximately half of the land immediately surrounding the site contains impervious structures or paved roads and parking areas.

2.4 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 feet in length. The central trench runs south of the site parallel to the railroad and is approximately 280 feet in length. The southeast trench runs along Second and Outagamie streets and is approximately 600 feet in length (Figure 2 – Site Detail Map, Appendix A).

The groundwater treatment system was designed to capture groundwater containing contaminants at concentrations greater than 1992 Chapter NR 140, WAC preventive 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 coarse 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.

Under normal operation, water levels are maintained at or near the bottom of the trenches. The trenches can provide storage and continue to act as a hydraulic barrier until the water in the trenches rises to the level of the water table. This storage capacity allows the hydraulic barrier to continue even when 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 manhole/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 manhole extends approximately 31 fbgs. The southeast trench collection piping enters Manhole 2 at a depth of approximately 17 fbgs, and the central trench collection piping enters Manhole 2 at a depth of approximately 28 fbgs. Groundwater from the manholes is piped to the treatment facility (Figure 2 – Site Detail Map, Appendix A).

2.5 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 6 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 approximately 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 was an air-operated, double-diaphragm pump with an 86 gpm capacity. The reaction tank feed pump was 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 allowed for the collection and transfer of sludge. The volume of water treated during a batch process was 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 were the primary parts in the treatment process. However, there were several other components necessary for the successful treatment of contaminated groundwater. They included a 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 were 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, auto dialer, PLC system, and uninterruptible power supply. The master control panel also sounds 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 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 City of Appleton industrial user permit 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.

The current Appleton Industrial User (Wastewater Discharge) permit was reissued on May 31, 2018 (Permit No. 18-21). The permit allows the continuation of groundwater direct discharge to the sanitary sewer as long as contaminant concentrations remain below discharge limits. Permit No. 18-21 expires at midnight, May 31, 2021.

2.6 Groundwater Monitoring Network

The groundwater monitoring wells (water table observation 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 11 observation wells constructed during the RI and the remedial action (RA) activities (W-2, W-8, W-15, and MW-101 through MW-108), 5 observation wells (MW-109 through MW-113) installed in May 2006, and 4 piezometers (PZ5 through PZ8) installed in May 2005 to evaluate the remaining source area (Figure 2 – Site Detail Map, Appendix A). The following descriptions are reflective of static groundwater conditions; however, pumping from the manholes/trenches affects site conditions such that static conditions are usually not observed.

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

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

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

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

Five observation wells (MW-109 through MW-113) installed in May 2006 are located at former source areas identified during the RI. They are described as follows.

- MW-109 is located at the west edge of the former chromium building between two historical 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 historical 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 an 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.

On May 10, 2004, four piezometers (PZ-01, PZ-02, PZ-03, and PZ-04) were removed. 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.

3.0 INFLUENT/EFFLUENT MONITORING AND REPORTING

Prior to October 2012, effluent samples were collected at the Outfall 001[1] sample collection port. The discharge valve from the storage tank was closed, typically one to three days prior to sampling, depending on the anticipated groundwater infiltration into the collection system. The storage tank was allowed to accumulate pumped water until the sampling event, typically Thursday morning. The discharge valve was opened and water was allowed to discharge for approximately 5 minutes. The Outfall 001 sampling port was opened and approximately 10 gallons of water was allowed to discharge from the sampling port prior to collecting a sample.

[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.*

On October 19, 2012, system plumbing changes were completed to improve the sampling method. Terracon contracted Ogden Plumbing to replumb the system effluent line so that a greater volume of water was retained within the equalization tank and to install a sampling port on the equalization tank Outfall 001 discharge pipe. Due to the improvement in the system plumbing, Terracon now collects a composite effluent sample from the sampling port on the equalization tank Outfall 001 discharge pipe. Samples are typically collected the first Thursday of the month.

3.1 Monthly Monitoring and Reporting

During the monthly monitoring events for this reporting period, unfiltered samples were collected from the equalization tank Outfall 001 sample port and analyzed for hexavalent chromium and total dissolved chromium. A pH value from the Outfall 001 sample was also determined on the samples collected by using an Oakton pHTestrs. Pace Analytical Services, Inc. (Pace) performed the laboratory analysis. Pace provided an electronic report of the analysis to Scott Hodgson, Terracon's project manager, who emailed the report to Jennifer Borski, WDNR project manager. A summary of the laboratory analysis can be found in Table 1 – Influent and Effluent Summary, Appendix B.

During the monthly monitoring events, an unfiltered sample was collected from the Manhole 1 influent sampling port and from the Manhole 2 influent sampling port. The presence of hexavalent chromium was measured in the Manhole 1 and 2 influent samples using a Hach test kit, model Pocket Colorimeter II, and pH values were determined using an Oakton pHTestrs. The pounds of total chromium removed by the system each month is shown in Table 1.

Total flows from Outfall 001, from Manhole 1, and from Manhole 2 were recorded on an Operator Log Sheet during the monthly sample collection. Total flows from Outfall 001, from Manhole 1, and from Manhole 2 are also recorded periodically throughout the month (Table 1 – Influent and Effluent Summary, Appendix B). A monthly email message was sent to the City of Appleton Department of Utilities Environmental Programs Coordinator and the WDNR project manager with the total flow that was recorded from Outfall 001.

The WDNR project manager was provided with a monthly status report summarizing operation and maintenance at the site. The monthly status reports included Terracon's invoice for services from the previous 28-day period, a copy of subcontractor invoices paid during the month, a copy of the Operator Log Sheets, a copy of the Inspection Sheet, and a copy of Table 1 – Influent and Effluent Summary Quarterly Monitoring and Reporting.

3.2 Quarterly Monitoring and Reporting

A quarterly compliance report was submitted by email to the City of Appleton Department of Utilities Environmental Projects Coordinator, Brian Kreski, and the WDNR project manager, Jennifer Borski, on October 2, 2018, (Third Quarter 2018), January 4, 2019 (Fourth Quarter 2018), April 2, 2019 (First Quarter 2019), and July 9, 2019 (Second Quarter 2019). Each quarterly compliance report included total metered discharge readings, pH measurements, and laboratory analytic test reports. There were no effluent limit exceedances during this reporting period.

3.3 Annual Monitoring and Reporting

Prior to 2019 the Monitoring Report was completed on a semi-annual basis, however, beginning in 2019 the two semi-annual monitoring reports will be condensed into one annual report. The annual reporting consists of this document, the Annual Operation and Maintenance Report, which is prepared for the WDNR project manager after receiving the laboratory data from the annual groundwater sampling or water level measurement/inspection event. The Annual Operation and Maintenance Report includes the Operation, Maintenance, Monitoring and Optimization Reporting of Soil and Groundwater Remediation Systems, Form 4400-194 (see Form 4400-194, Appendix D).

4.0 COMPLIANCE SAMPLING

Compliance sampling of the groundwater effluent is conducted twice per year by the City of Appleton and once per year by Terracon. The sample is collected at the sampling port for Outfall 001 at the storage tank. The effluent is analyzed for the parameters listed in Table 2 – City of Appleton Compliance Limits, Outfall 001, Appendix B. Compliance sampling was conducted by the City of Appleton on April 18, 2019 and September 18, 2019, and by Terracon on July 10, 2019, during this reporting period. During the Terracon July 10, 2019, sampling the lab forgot to pick up the collected samples, so that the hexavalent chromium sample could not be extracted within the 12-hour limit. As such, Terracon returned on July 11, 2019, to re-collect the hexavalent and total chromium samples.

A summary of the City of Appleton's compliance sampling analysis and Terracon's annual compliance sampling analysis can be found in Table 2 – City of Appleton Compliance Limits, Outfall 001, Appendix B.

In addition to the sampling events listed above, and as described in Section 3.0, total chromium and hexavalent chromium are currently analyzed monthly for a sample collected from the Outfall 001 sampling port on the equalizer tank (Table 1 – Influent and Effluent Summary, Appendix B).

5.0 GROUNDWATER SAMPLING

5.1 Groundwater Sampling Procedures

Three adjustments to the original monitoring plan have been requested since 1997. On December 3, 1999, Jennifer Huffman with the WDNR requested an adjustment that included the following.

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, except for continued cyanide sampling in monitoring wells MW-110, MW-111, and MW-112 and semi-annual VOC sampling rather than annual VOC sampling as requested.

On March 24, 2003, Jennifer Borski with the WDNR requested the following adjustment 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
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.

On September 19, 2018, Jennifer Borski with the WDNR requested the following adjustment to the monitoring plan.

1. Total (dissolved) chromium will be analyzed every two years in September at MW-101, MW-102, MW-103, MW-104, MW-107, MW-109, MW-110, MW-111, MW-112 and MW-113;
2. Total (dissolved) chromium will continue to be analyzed every four years in September at perimeter wells W-2, W-8, W-15, MW-105, MW-106 and MW-108;
3. Cyanide will be analyzed every two years in September at MW-110, MW-111 and MW-112
4. VOCs will be analyzed every two years in September at MW-107, MW-109, MW-110, MW-111, MW-112 and MW-113.

EPA approved the 2018 request on November 13, 2018. EPA recommended that for the wells sampled only during the 4-year event three well (casing) volumes should be purged and then the wells sampled using low-flow and stabilization parameters.

There are 20 groundwater monitoring wells including 16 water table observation wells and 4 piezometers associated with the Mauthe remediation system (see Figure 2 – Site Detail Map, Appendix A).

Groundwater samples were collected during this reporting period on September 25 and 26, 2019, as part of the comprehensive 4-year sampling event. During the sampling event, static groundwater levels were measured in each of the 14 site monitoring wells sampled including observation wells W-2, W-8, W-15, MW-101, MW-103, MW-104, and MW-106 through MW-113, prior to sampling. Groundwater levels were not measured in observation wells MW-102 and MW-105 because the flushmount cover bolts were bent and the well could not be opened. Historical groundwater elevations for the site are summarized in Table 3 – Groundwater Elevations, Appendix B, and presented graphically on Figure 3 – Groundwater Hydrographs, Appendix A. The groundwater elevation data from the observation wells was used to develop a groundwater contour map (Figure 4 – Groundwater Table Contour Map—September 2019, Appendix A). Groundwater flow was generally towards the collection trenches. The gradient immediately adjacent to the trenches is very steep because the groundwater elevation in the trench, in general, is at the elevation of the sump high float level (approximately 25 feet below surface grade) and low-conductivity clay soils exist in the area. As a result, the complex flow pattern and steep gradient near the trenches cannot be accurately depicted at the required map scale. As such, Terracon has used professional judgment to depict the groundwater elevation near the trench as an accessory contour on Figure 4, placed to show the general flow pattern near the trenches.

Down-well tubing was installed in monitoring points to be sampled. A peristaltic pump was attached to the down-well tubing and the monitoring points were micro-purged using low-flow techniques before collecting the sample(s). The sampling process utilized a flow-through cell where probes measured temperature, conductivity (specific conductance), pH, dissolved oxygen (DO), and oxidation/reduction potential (ORP) in each well. Flow through the cell was maintained at approximately 200 milliliters per minute (mL/min), utilizing a resister to control pump flow. Purging proceeded until parameters were stable to within 10% for 3 consecutive readings taken a minimum of 2 minutes apart. The six monitoring wells sampled only during the 4-year event that required purging of three well casing volumes were initially purged using a peristaltic pump set at the highest speed after first measuring the temperature, conductivity, pH, DO, and ORP under static conditions. The peristaltic pump speed was then reduced to approximately 200 mL/min to purge the last gallon prior to sampling. During purging of the final gallon, temperature, conductivity, pH, DO, and ORP were monitored and readings taken periodically. Purged water from the monitoring points was collected, taken into the treatment building, dumped into the floor

sump, and subsequently pumped into the equalizer tank to discharge to the Outfall 001 pipe leading to the City of Appleton sanitary sewer system.

Groundwater samples were collected for VOCs, dissolved iron, total chromium, manganese, and cyanide in accordance with the site monitoring plan after the monitoring points were purged as described above. Final temperature, conductivity (specific conductance), pH, dissolved oxygen, and oxidation/reduction potential were recorded just prior to sampling (see Table 4 – Groundwater Geochemical Parameters, Appendix B). The groundwater samples were collected in the order of VOC vials first (if applicable) and metal samples second. The chromium (metal) samples, dissolved iron, and manganese samples were field filtered with disposable 45-micron in-line filters. 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, dissolved iron, or manganese were preserved with nitric acid. The samples to be analyzed for total cyanide were preserved with sodium hydroxide. The samples were delivered to Pace Analytical Laboratory (Green Bay) by a Pace currier.

The groundwater elevations, purged groundwater volume, field testing data, and sample collection time for each well were recorded on a Groundwater Sampling Field Sheet (see Groundwater Sampling Field Sheets, Appendix C).

5.2 Groundwater Sampling Results

During the September 2019 sampling event, field measurements were taken on groundwater samples collected from monitoring wells W-2, W-8, W-15, MW-101, MW-103, MW-104, and MW-106 through MW-113 for temperature, conductivity (specific conductance), pH, dissolved oxygen, and oxidation/reduction potential. Observation wells MW-102 and MW-105 were not sampled because they could not be opened. A summary of the final field measurements after stabilization are contained in Table 4 – Groundwater Geochemical Parameters, Appendix B.

Groundwater from observation wells W-2, W-8, W-15, MW-101, MW-103, MW-104, MW-106 through MW-113 was analyzed for (filtered) total (dissolved) chromium, dissolved iron, and manganese. Groundwater from observation wells MW-107 and MW-109 through MW-113 was also analyzed for VOCs and groundwater from observation wells MW-110 through MW-112 was analyzed for total cyanide.

The laboratory analytical results indicated that levels of (filtered) total chromium exceeded the 1992 NR 140, WAC, groundwater PALs[2] in samples from monitoring wells MW-107 (1,300 µg/L),

[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...*

MW-109 (339 µg/L), MW-111 (76.3 µg/L), MW-112 (305 µg/L), and MW-113 (759 µg/L). The laboratory analytical results indicated that cyanide was not detected in any of the monitoring wells. The laboratory analytical results indicated that levels of manganese exceeded the 1992 NR 140, WAC, groundwater PALs[3] in samples from monitoring wells W-2 (271 µg/L), MW-104 (244 µg/L), MW-106 (55.2 µg/L), MW-108 (79.9 µg/L), MW-110 (542 µg/L), MW-112 (283 µg/L), and MW-113 (5,010 µg/L) (See Table 5 – Historical Groundwater Analytic Test Results -- Selected Metals, Appendix B, and laboratory report and chain-of-custody record, Appendix C). An isoconcentration map for (filtered) total chromium concentrations is shown on Figure 5 – Groundwater Table Total Chromium Isoconcentration Map - September 2019, Appendix A.

The laboratory analytical results indicate that levels of VOCs (at least one of the following analytes: 1,1-dichloroethene, 1,1,1-trichloroethane, and trichloroethene) exceed the 1992 NR 140, WAC, PALs in samples from monitoring wells MW-107 and MW-109 through MW-113 (see Table 6 – Historical Groundwater Analytic Test Results - Volatile Organic Compounds, Appendix B, and laboratory report and chain-of-custody record, Appendix C).

Groundwater hydrographs were prepared for monitoring wells MW-102, MW-103, MW-104, MW-107, MW-109, and MW-113 and are presented on Figure 3, Appendix A. Chromium concentration trend graphs were prepared for monitoring wells MW-103, MW-104, MW-107, and MW-109 through MW-113 and are presented as Figures 6 through 13, Appendix A. Chlorinated volatile organic compound (CVOC) concentration trend graphs for monitoring wells MW-107, MW-110, and MW-113 are presented as Figures 14 through 16, Appendix A.

6.0 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.

6.1 Monthly Operation and Maintenance Activities

On a monthly basis, either during the monthly sampling event of Outfall 001 or another time, the grounds, truck bay, office area, bathroom, treatment process area, and sample preparation area were inspected. The Inspection Sheet contains a listing of items to be checked during the monthly inspection.

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.

[3] "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.

During the monthly sampling, general inspection of the building, grounds, and treatment equipment was conducted. Monthly building and grounds inspections were performed each month from October 2018 through September 2019.

A copy of the monthly inspection sheet was included with the corresponding monthly invoice status report.

6.2 Annual Operation and Maintenance Activities

During this reporting period, annual operation and maintenance activities included the heater inspection (November 2018), backflow preventer inspection (March 2018), and fire extinguisher/emergency light inspection (March 2018).

The heater inspection was performed on November 8, 2019, by Ogden Plumbing & Heating (Ogden). No issues were identified. The backflow preventer inspection was performed by Ogden on March 26, 2019. No violations were found. Ogden filed the inspection report on March 26, 2019. The fire extinguisher/emergency light inspection was performed by Ahern on March 26, 2019. There were no issues identified.

6.3 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 has taken over grounds maintenance at the N.W. Mauthe site through an intergovernmental agreement between the City of Appleton and WDNR. City staff provided lawn maintenance.

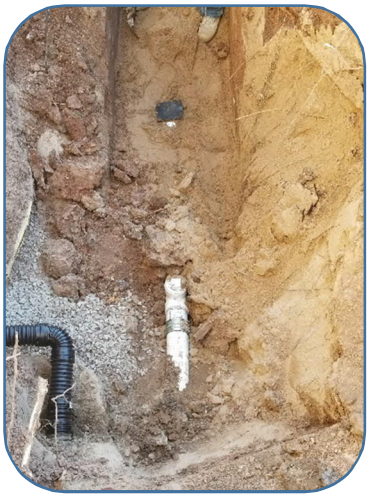
2. Outfall 001 flow meter/totalizer operation is checked during site visits. According to the factory representative, there are no operator performed calibration functions for the meter unless a hardware failure occurs.

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.

4. Terracon met City of Appleton personnel at the site on April 18 and September 18, 2019, to collect their semi-annual effluent compliance sample.

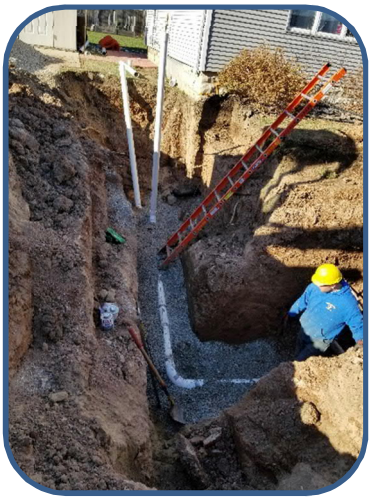
6.4 Significant Operation and Maintenance Activities

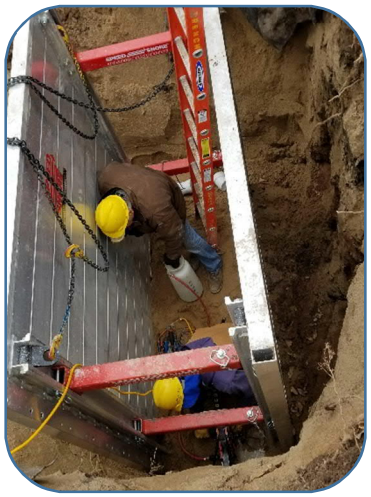
The residence at 801 South Outagamie Street had reported ongoing issues with water seeping into the basement since Spring 2017. Water seeped into the basement mainly from the west side, flowed across the floor and accumulated in the sump pit. According to available records, the sump discharge line was supposed to be connected to the groundwater collection trench to the east but details of that connection were not known. The water flowing into the sump pit did not drain from the sump pit as it was designed. Because the drain tile at the residence was connected to the groundwater collection trench, WDNR took the responsibility to determine if the connection to the system was a source of the problem. After attempts to video the drain tile and connection to the groundwater collection trench failed to identify a specific problem or exactly how the drain tile was connected to the groundwater collection trench, WDNR decided to excavate and install a new hard polyvinyl chloride (PVC) gravity discharge line connected directly to the Manhole 2 sump pit in the northeast corner of the property.



Excavation began on November 12, 2018, at the southeast corner of the house to expose the existing foundation drain tile and to determine how to connect the new gravity drain piping to the foundation drain tile. However, as excavation proceeded, a hard PVC lateral pipe was discovered that was connected into the foundation drain and that led eastward toward the groundwater collection trench.

The lateral was south of the foundation corner and approximately 1.5 feet deeper than the foundation drain. A camera was used to verify the that the lateral pipe was connected to foundation drain and that there were roots and an obstruction in the lateral to the east. After verifying that the lateral was connected to the foundation drain, it was decided to cut the lateral and connect the new hard PVC gravity discharge line into the lateral near where it connected to the foundation drain. The vertical discharge line cleanout requested by the City of Appleton Plumbing Inspector was placed at the connection point. The lateral piping was excavated and exposed to the east until backfill in the groundwater collection trench was encountered. A backflow preventer check valve was found to be inline but was not functioning properly due to tree roots and sediment. At the groundwater collection trench the lateral pipe had a 90 degree elbow downward but the elbow was open-ended and not connected into the groundwater collection trench piping. The elbow was clogged with tree roots, organic matter, and sediment. The old





lateral piping was removed and the new lateral was laid in the same location until turning north toward Manhole 2.

The new discharge line was laid towards the north and then east to connect to Manhole 2. Sand fill from the central groundwater collection trench (going westward from Manhole 2) was encountered as trenching approached Manhole 2. Because the piping was deeper than originally anticipated and because of the sand fill encountered near Manhole 2, a trench box had to be used for safety purposes but was not originally planned as encountering that quantity of sand backfill was another unforeseen circumstance.

The connection to Manhole 2 was made at approximately 9 feet below grade where a hole was cored through the Manhole 2 sidewall. Typically, the walls of concrete rings used in the construction of Manhole 2 are approximately 4 to 6-inches thick; however, the concrete wall of Manhole 2 proved to be approximately 27-inches thick.

The connection to Manhole 2 was completed on November 16, 2018. Upon consultation with the WDNR, Jennifer Borski determined that the sand backfill from the central groundwater trench needed to be replaced with similar material wrapped in a water-permeable geotextile fabric as backfilling proceeded. This was not originally planned. Backfilling the pit near Manhole 2 with sand was completed on November 16, 2018.

Ogden returned to the site on Monday November 19, 2018, to clean up and restore the site to a condition that it could be left for the winter. Ogden also placed 10-foot extensions on the southeast and west roof drains that direct the runoff out into the lawn 10 feet from the house and plugged the sump pit discharge line in the basement. The sump pit discharge was plugged with hydraulic cement.

Ogden returned to the site on Monday November 19, 2018, to clean up and restore the site to a condition that it could be left for the winter. Ogden also placed 10-foot extensions on the southeast and west roof drains that direct the runoff out into the lawn 10 feet from the house and plugged the sump pit discharge line in the basement. The sump pit discharge was plugged with hydraulic cement.

Because more soil was generated during the excavation than was anticipated due to deeper excavation, replacement of soil beneath the driveway with gravel to minimize settling, and no room to manage the additional soil onsite, several truckloads of soil were hauled offsite to the excavator contractor (Kavanaugh Excavating) facility located at N3335 County Road J, Freedom, WI. The soil pile was managed as if contaminated and was covered with plastic. Because the soil was potentially contaminated, characterization samples were collected and analyzed for both total chromium and hex chromium. Terracon visited the site to inspect and potentially sample the soil stockpile initially on November 27, 2018. The soil stockpile was found to be approximately 75 feet long by 15 feet wide by an estimated average height of 5.5 feet (or roughly 115 cubic yards/7 truckloads) and was securely covered with anchored plastic. However, because of cold weather the soil was solidly frozen and could not be sampled.

Terracon returned on November 30, 2018, when it was above freezing to attempt sampling again. At that time with the assistance of Kavanaugh Excavating and a backhoe, the soil stockpile was uncovered and inspected. Inspection indicated that due to the initial excavation and management at 801 South Outagamie; subsequent loading, hauling, and dumping at N3335 County Road J, and moving the soil around at that location, the soil was well mixed and specific areas of sand or topsoil could not be distinguished. As such, eight test pits were dug along the top of the soil stockpile and composite samples were collected from each test pit (stockpile #1 through stockpile #8). The soil pile was re-covered with plastic and secured.

The composite soil samples were submitted to Pace Analytical laboratory in Green Bay, Wisconsin, for analysis of total chromium and hexavalent chromium. The results indicated no detect of hexavalent chromium in each of the samples. Total chromium ranged from 16.5 to 26.5 milligrams per kilogram.

Ogden returned to the site in June 2019 after the ground thawed and sufficiently warmed to complete site restoration including adding additional fill in areas where subsidence occurred, placing topsoil, reseeding disturbed areas of lawn and adjacent terrace at 801 South Outagamie Street, and replacing the concrete sidewalk and driveway where necessary.

6.5 Emergency Operations and Shut Downs

While onsite for the COA compliance sampling on July 22, 2019, Terracon observed that the pumps had not run in 57 hours. Although the pump light was lit, there was no power to other parts of the control panel. The audible alarm was sounding. Terracon checked breakers and panel but found no immediate problem. The water level in man hole #2 was approximately 25 feet bgs, which was well below the foundation drain tile elevation of the residences connected to the recovery trench and so was not an urgent problem.

On July 23, 2019, Terracon met Suburban Electric onsite to further investigate the pumps. It was found that the pumps did not malfunction. When the power went out, the battery backup kicked in. The power was out for so long that the backup battery went dead. When the power came back on it did not automatically go back to auto power. After unplugging the battery, the system kicked in and pumps were running in auto mode.

Terracon returned to the site later that day and confirmed that the system was running correctly. Terracon also replaced the system backup battery.

Due to these circumstances and the fact that the programmable logic controller is obsolete such that parts will soon no longer be available, WDNR engaged Suburban Electric to develop options for replacing the control system with a more efficient modern system.

7.0 FACILITY MEETINGS/REVIEWS

Jennifer Borski, WDNR project manager, has periodically communicated with the City of Appleton's Parks & Recreation Department to confirm the Cooperative Agreement conditions are being followed and the arrangement is still satisfactory to both parties. The existing Cooperative Agreement was renewed on May 4, 2017, and expires on May 4, 2022.

The City of Appleton Fire Department performed their annual inspection of the facility on May 6, 2019. No issues were noted.

On July 12, 2018, Brian Kreski, City of Appleton Department of Utilities Program Environmental Programs Coordinator, met Terracon at the site to discuss operations and perform the annual inspection of the facility. No issues were noted.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The results of the laboratory analysis from the September 2019 sampling event indicate that the groundwater continues to exceed the 1992 NR 140, WAC, PALs for chromium and several VOCs, although in general, concentrations have decreased compared to September 2018.

The containment trenches appear to be, in general, operating as designed, but as they have exceeded their design life, they appear to be less efficient at collecting and transmitting groundwater to the sumps than in the past. The groundwater laboratory analysis and the groundwater elevations indicate that the groundwater plume is, in general, being controlled horizontally by the groundwater containment trenches.

Approximately 1,054,354 gallons of groundwater were extracted from the containment trenches from October 1, 2018, through September 30, 2019 (average 2,889 gallons per day). The groundwater was discharged to the City of Appleton sanitary sewer system under the Industrial User (Wastewater Discharge) Permit Number 18-21. There were no exceedances of the compliance limits during this reporting period.

Approximately 3.165 pounds of chromium were removed by the system during this reporting period.

Based on the laboratory analysis from the September 2019 annual groundwater sampling event and the laboratory analysis from the Outfall 001 during the reporting period, Terracon recommends continued operation of the groundwater extraction system with direct discharge to the City of Appleton sanitary sewer system.

During the annual groundwater monitoring event in September 2019, observation wells MW-102 and MW-105 were found to be damaged and could not be accessed. For both wells, a bolt on the lid of the flushmount protective cover was bent and could not be removed and the flushmount cover was damaged. Observation well MW-102 may have been damaged during the excavation activities in November 2018 at 801 South Outagamie Street whereas MW-105 may have been damaged by a snow plow. Terracon recommends both wells be repaired in Spring 2020, which likely would require replacing the entire flushmount cover.

Terracon further recommends that WDNR continue to work with Suburban Electric to replace the current system controls with a more modern system that is accessible remotely and more efficient.

9.0 GENERAL COMMENTS

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

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

10.0 CERTIFICATIONS

I, Blaine R. Schroyer, P.E., 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.

E-31505
Signature and P.E. number

Project Engineer
Title

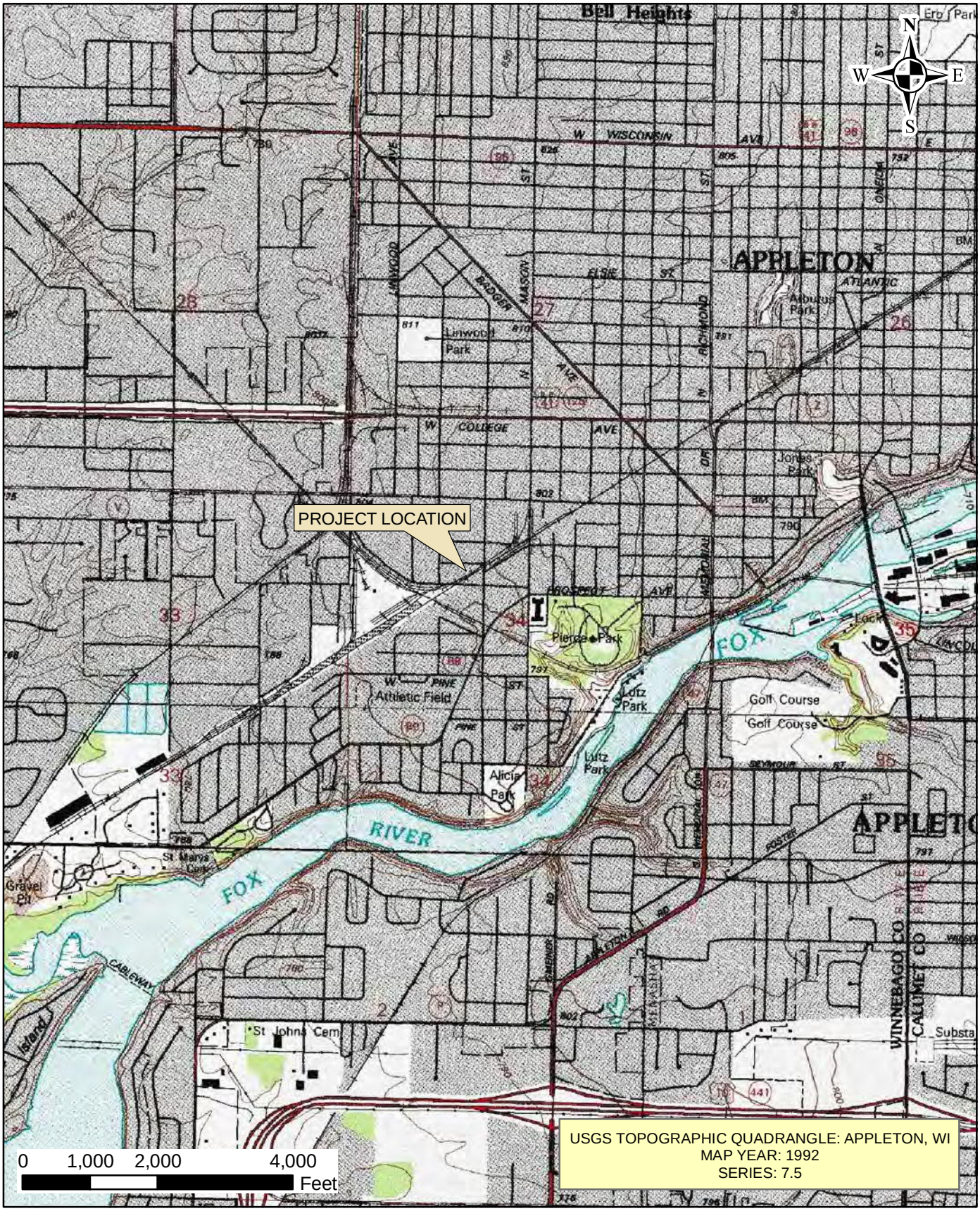
I, Scott A. Hodgson, P.G., hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to 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.

Scott A. Hodgson PG-1229 Date 11/12/2019
Signature and P.G. number

Project Geologist
Title

Appendix A

Figures 1 to 16



Project Mngr:	PAL
Drawn By:	LES
Checked By:	PAL
Project No:	58117057
Date:	03/21/2012

Terracon
Consulting Engineers & Scientists
9856 South 57th Street Franklin, WI 53132
(414) 423 0255 (414) 423 0566

SITE LOCATION MAP

N.W. MAUTHE SITE
725 SOUTH OUTAGAMIE STREET

APPLETON WISCONSIN

FIGURE

1

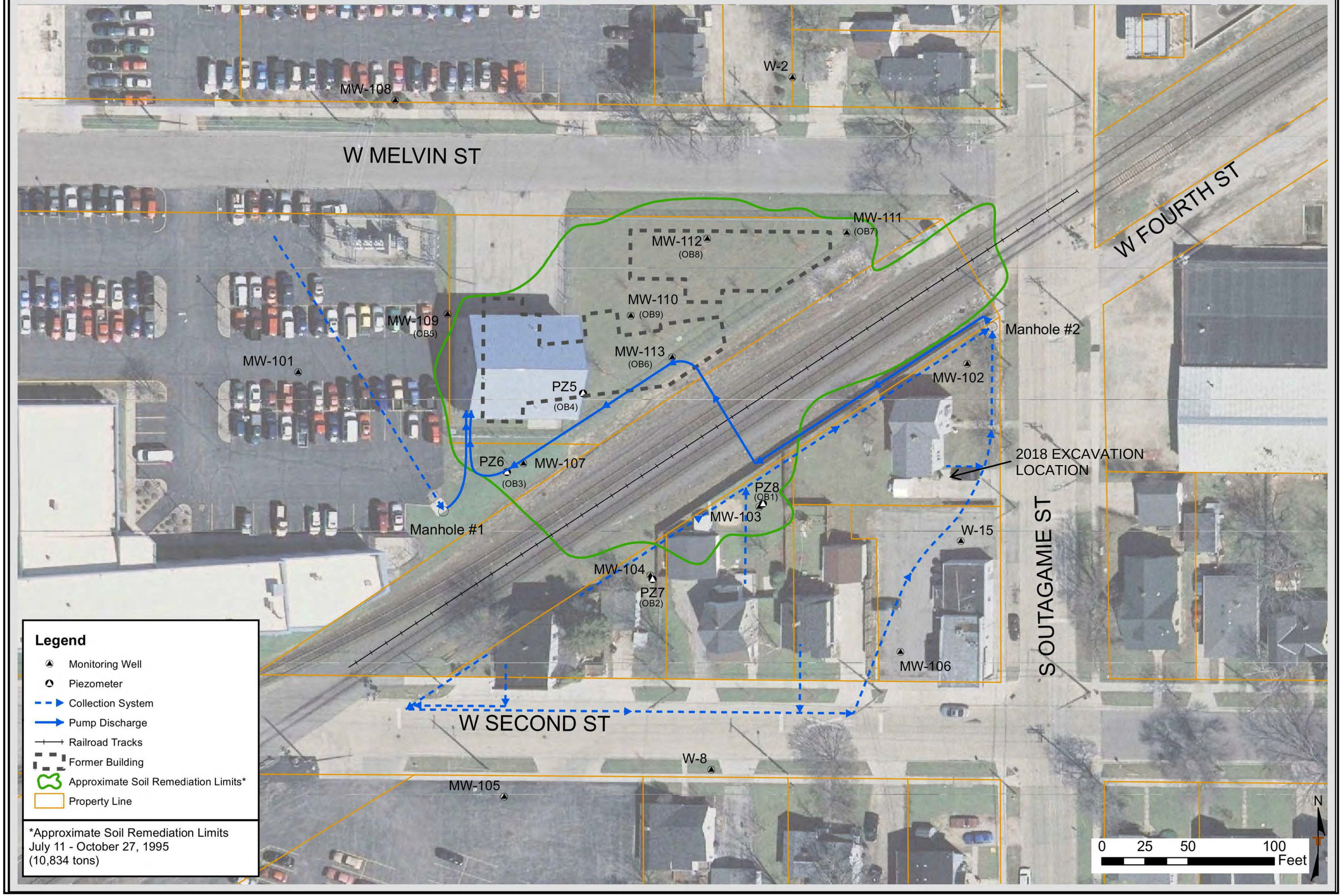


FIGURE 2

SITE DETAIL MAP

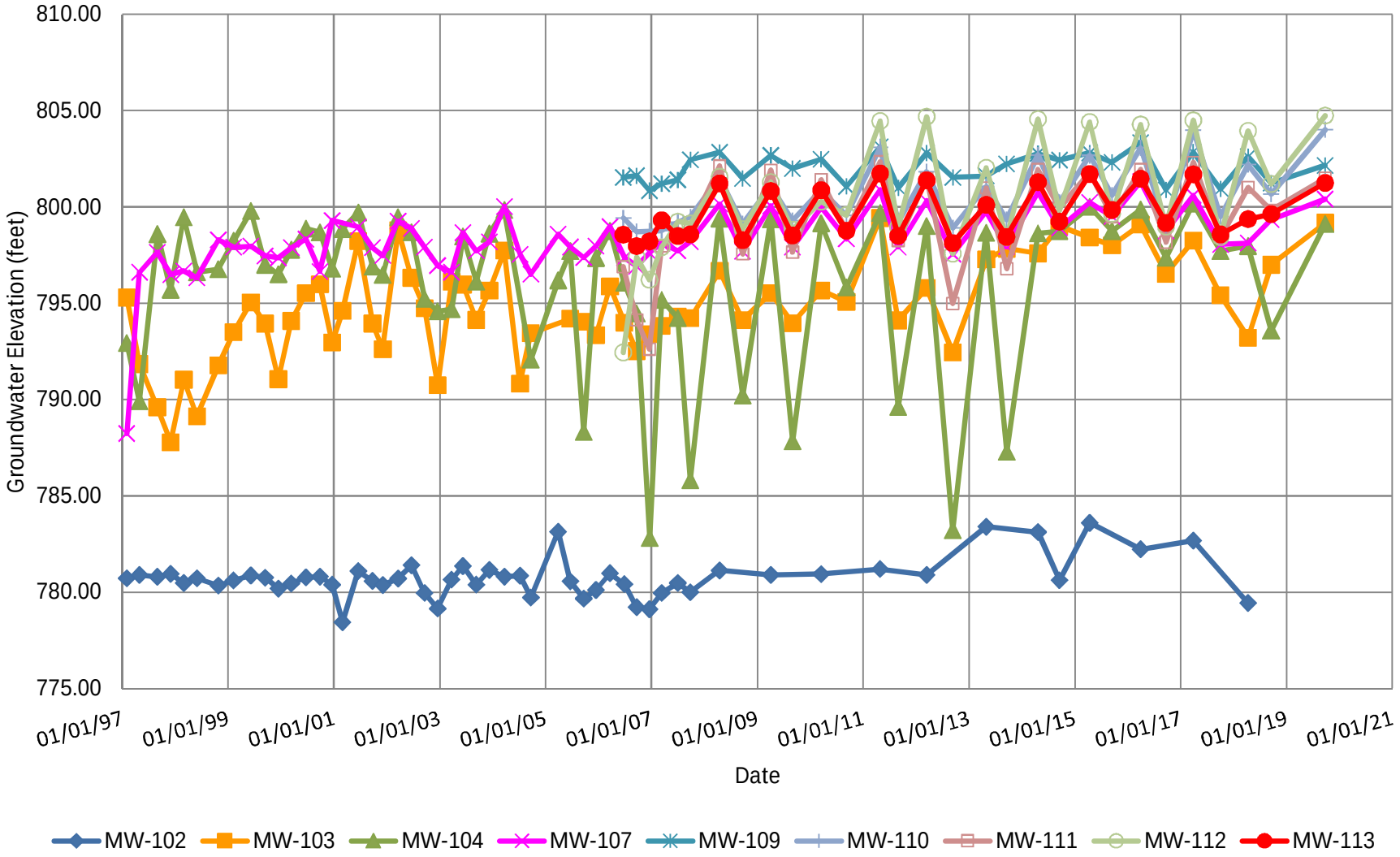
N.W. MAUTHE SITE
725 SOUTH OUTAGAMIE STREET
APPLETON WISCONSIN

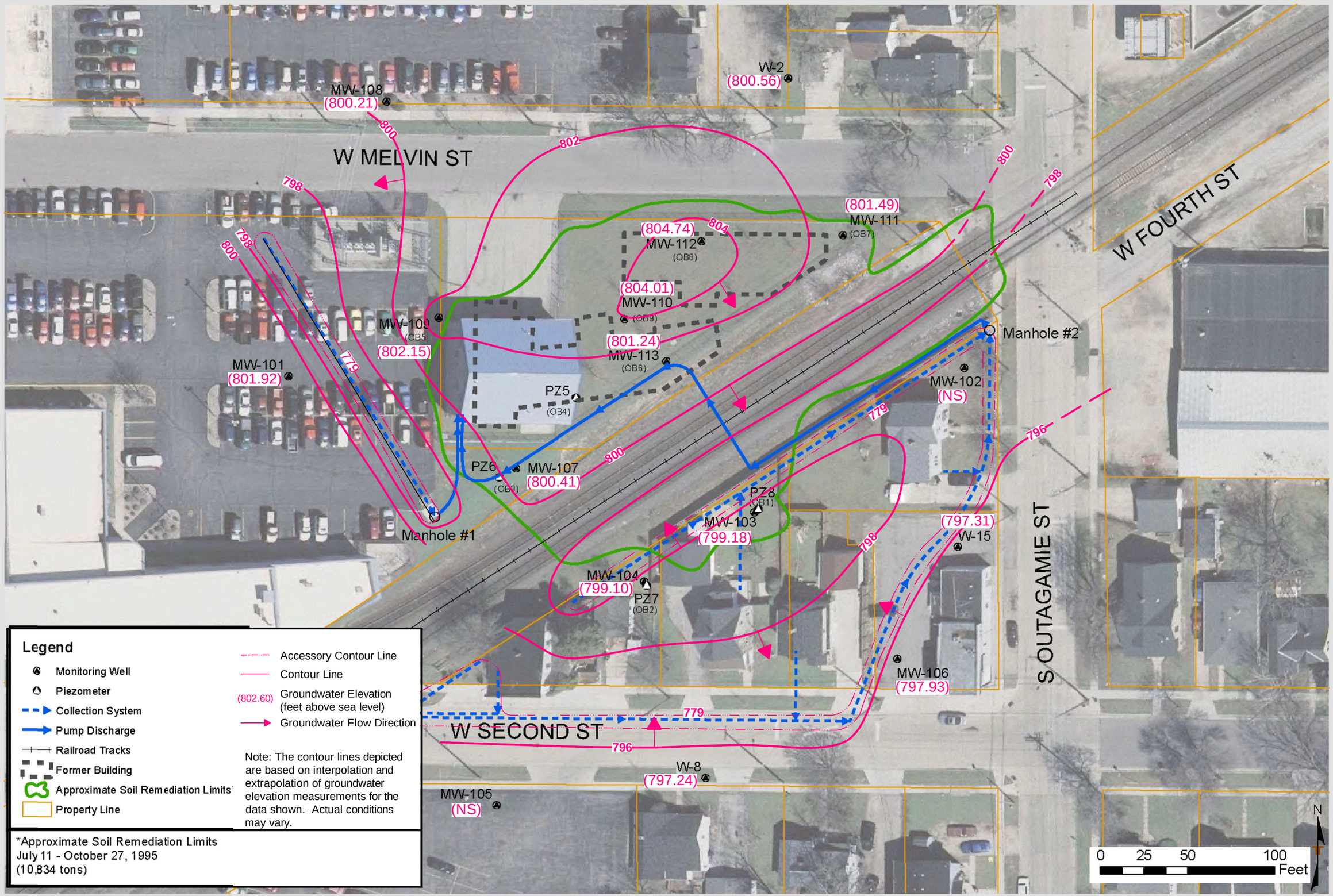
Terracon
Consulting Engineers and Scientists
9555 South 57th Street Franklin, WI 53132
PH. (414) 423 0255 FAX (414) 423 0566

Project No.	58117057		
Scale:	As Shown	File No.	58117057 MW Location Map.dwg
Date:	03/20/2012		
Project Mngr:	PAL		
Drawn By:	LES	Checked By:	PAL
Approved By:	PAL		

Note: Figure taken from Omni Site Detail Map, January 2011

FIGURE 3
Groundwater Hydrographs
N.W. Mauthe Superfund Site





Legend

- Monitoring Well
- Piezometer
- Collection System
- Pump Discharge
- Railroad Tracks
- Former Building
- Approximate Soil Remediation Limits*
- Property Line
- Accessory Contour Line
- Contour Line
- (802.60) Groundwater Elevation (feet above sea level)
- Groundwater Flow Direction

Note: The contour lines depicted are based on interpolation and extrapolation of groundwater elevation measurements for the data shown. Actual conditions may vary.

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

Note: Figure taken from Omni Site Detail Map, January 2011

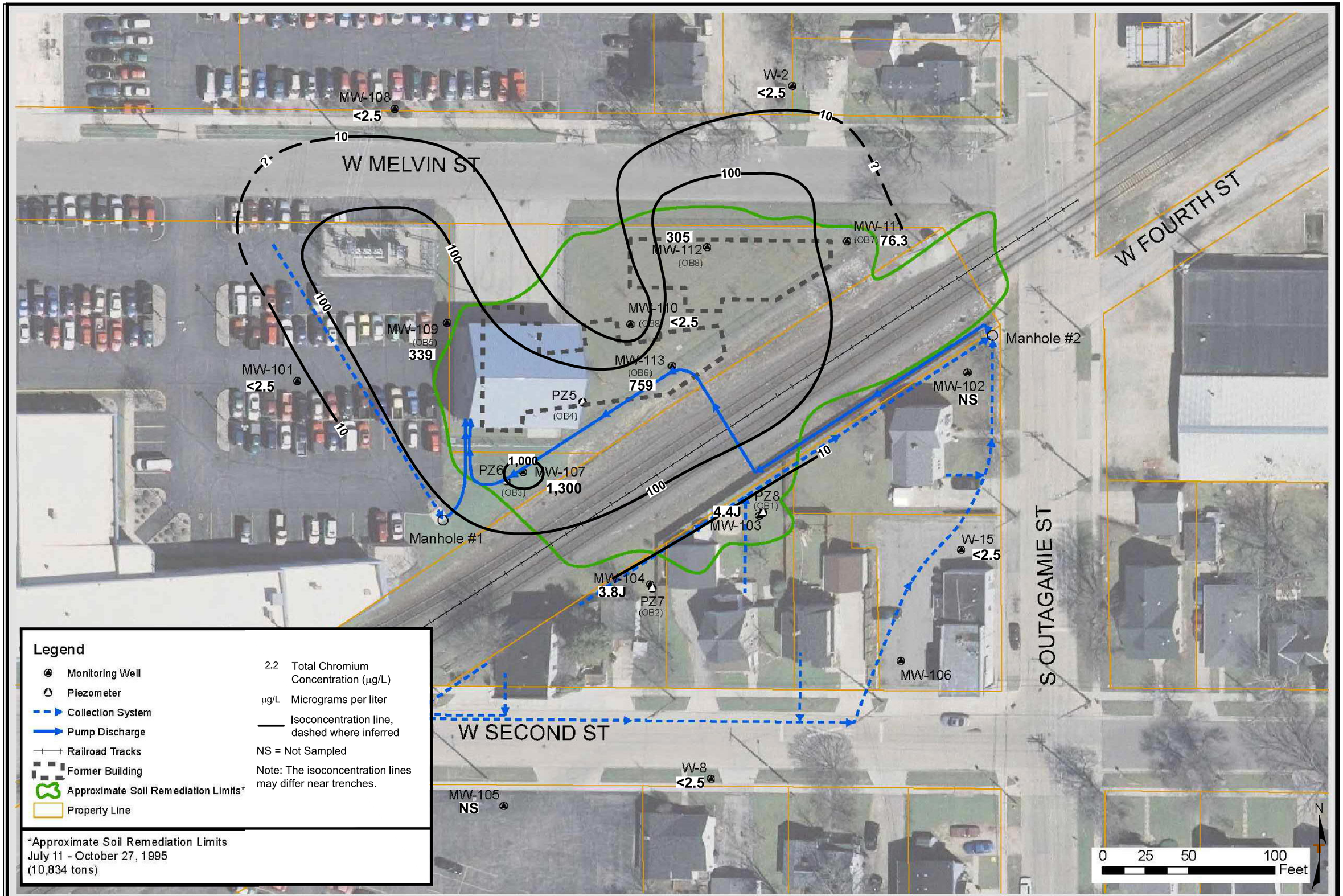
FIGURE 4

GROUNDWATER TABLE CONTOUR MAP - SEPTEMBER 2019

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

Terracon
Consulting Engineers and Scientists
9856 South 57th Street
Franklin, WI 53132
PH: (414) 423 0255
FAX (414) 423 0566

Project No.	58117057
Scale:	As Shown
File No.	58117057C1R2
Date:	10/2019
Project Mngr:	SAH
Drawn By:	JLM
Checked By:	SAH
Approved By:	SAH



Legend

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

2.2 Total Chromium Concentration (µg/L)

µg/L Micrograms per liter

Isoconcentration line, dashed where inferred

NS = Not Sampled

Note: The isoconcentration lines may differ near trenches.

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

Note: Figure taken from Omni Site Detail Map, January 2011

FIGURE 5

GROUNDWATER TOTAL CHROMIUM ISOCONCENTRATION MAP - SEPTEMBER 2019

N.W. MAUTHE SITE
726 SOUTH OUTAGAMIE STREET
APPLETON WISCONSIN

Terracon
Consulting Engineers and Scientists
9856 South 57th Street Franklin, WI 53132
PH: (414) 423-0255 FAX: (414) 423-0566

Project No.	58117057
Scale:	As Shown
File No.	58117057C2R2
Date:	10/2019
Project Mngr:	SAH
Drawn By:	JMN
Checked By:	KLK
Approved By:	SAH

FIGURE 6

MW-103 Total Chromium Concentration Trends

N.W. Mauthe Superfund Site

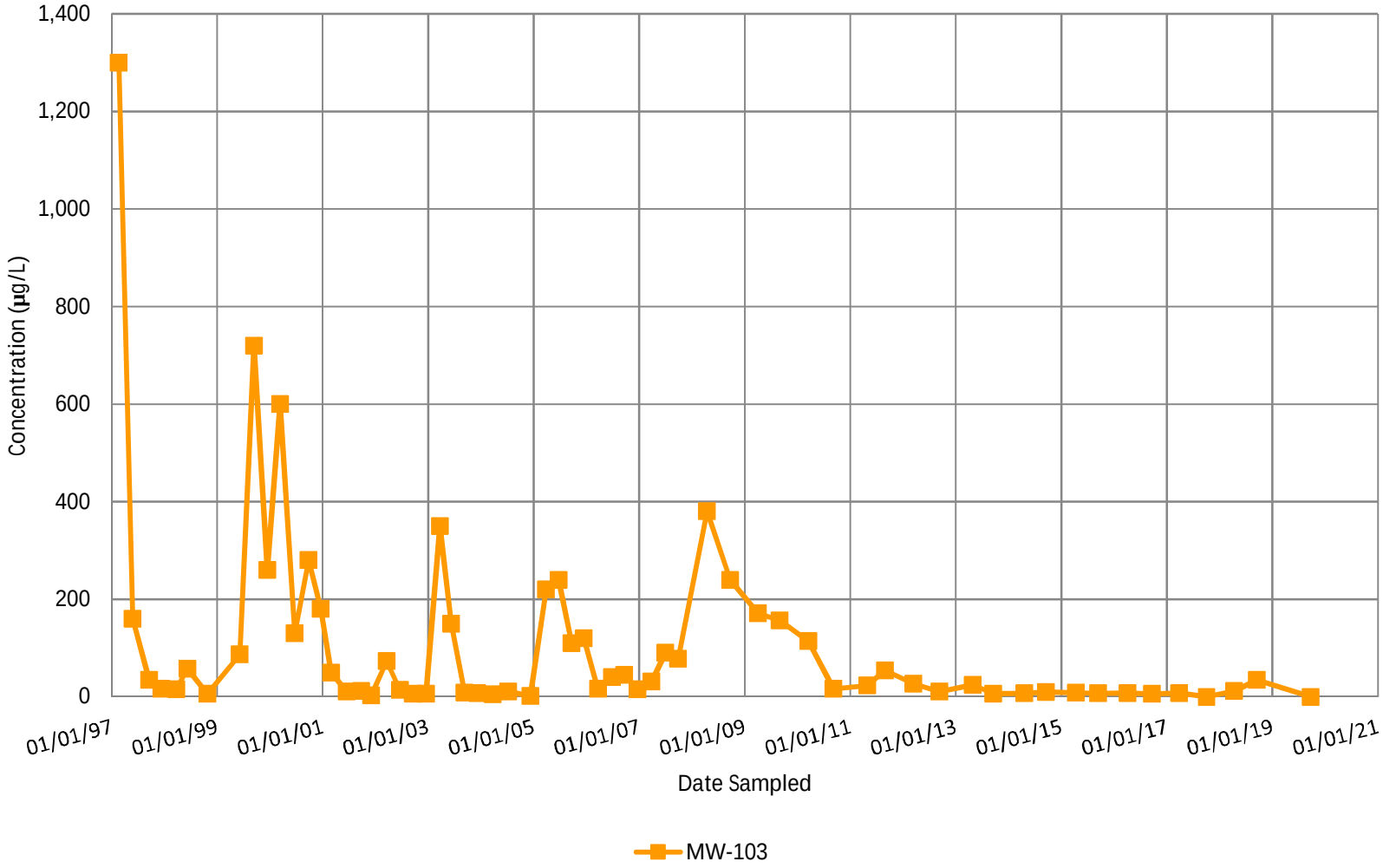


FIGURE 7

MW-104 Total Chromium Concentration Trends

N.W. Mauthe Superfund Site

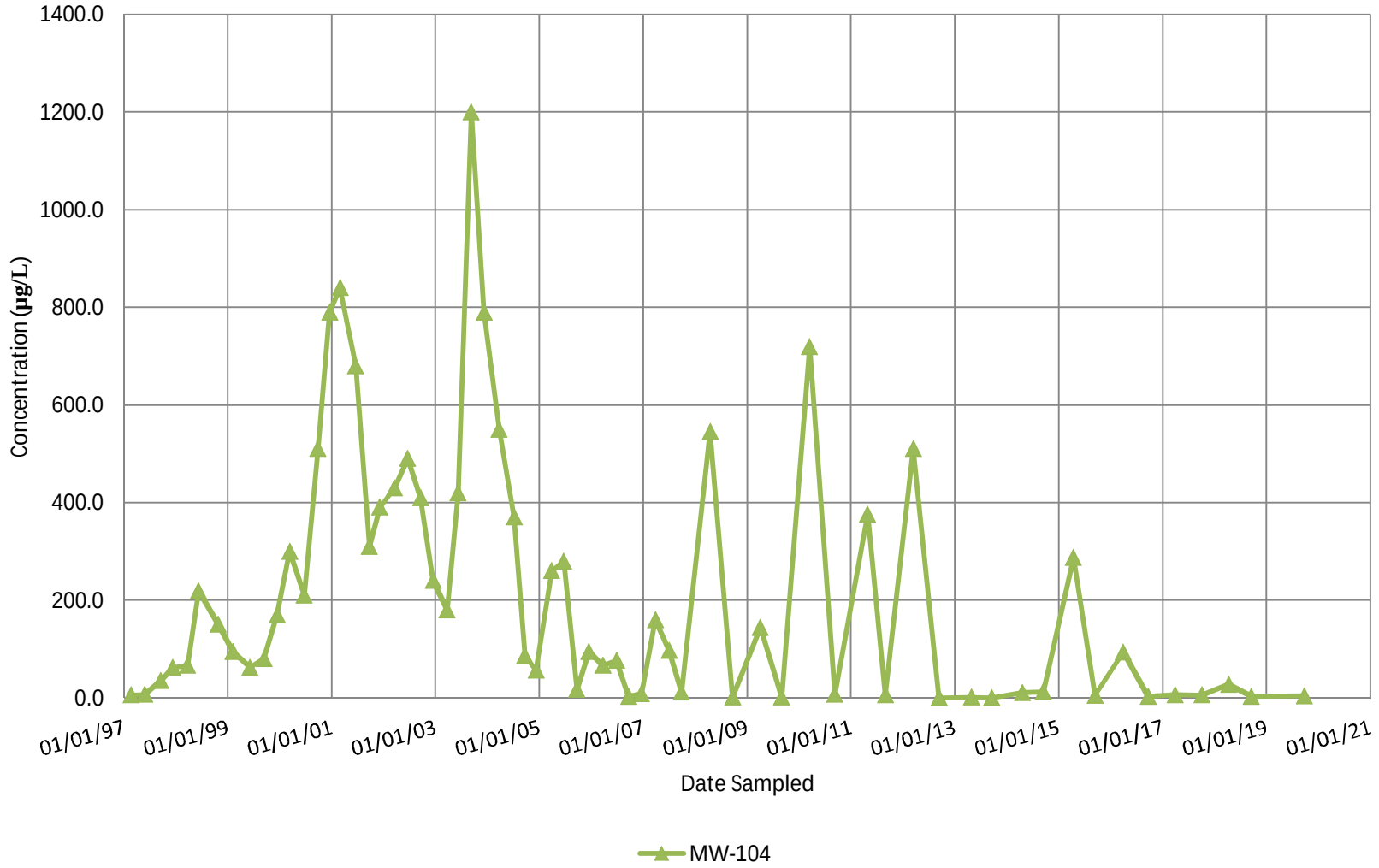


FIGURE 8

MW-107 Total Chromium Concentration Trends

N.W. Mauthe Superfund Site

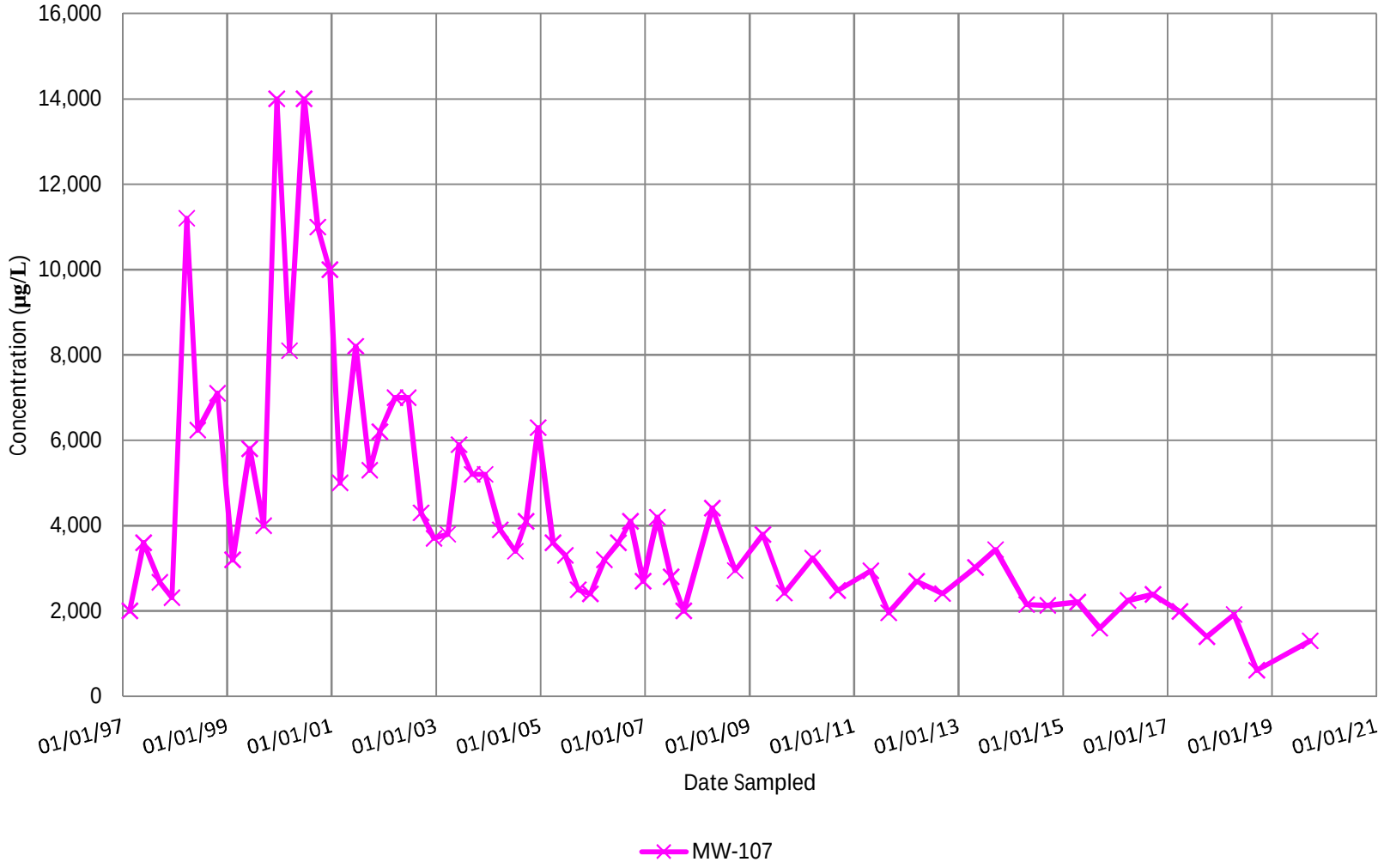


FIGURE 9

MW-109 Total Chromium Concentration Trends

N.W. Mauthe Superfund Site

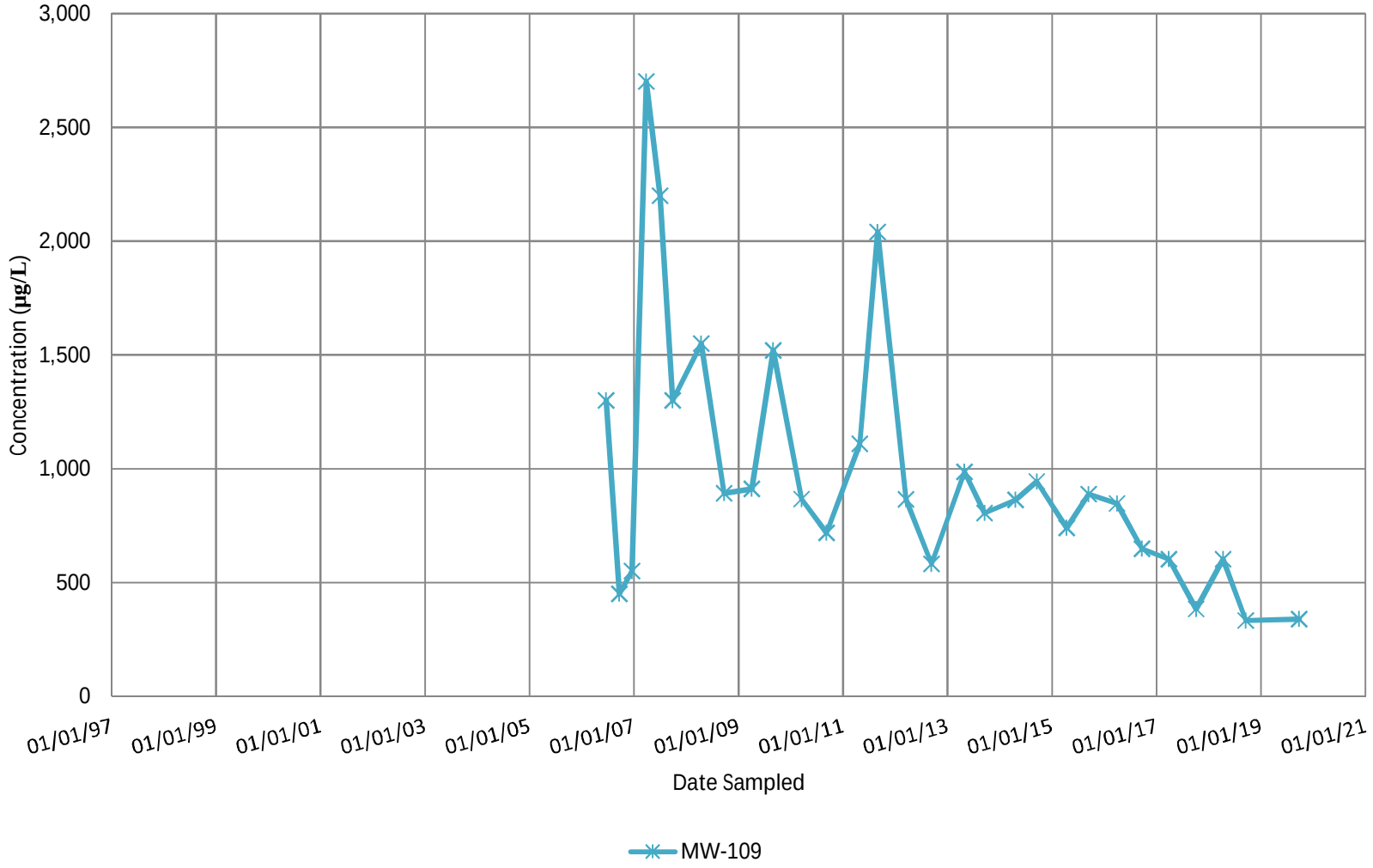


FIGURE 10

MW-110 Total Chromium Concentration Trends

N.W. Mauthe Superfund Site

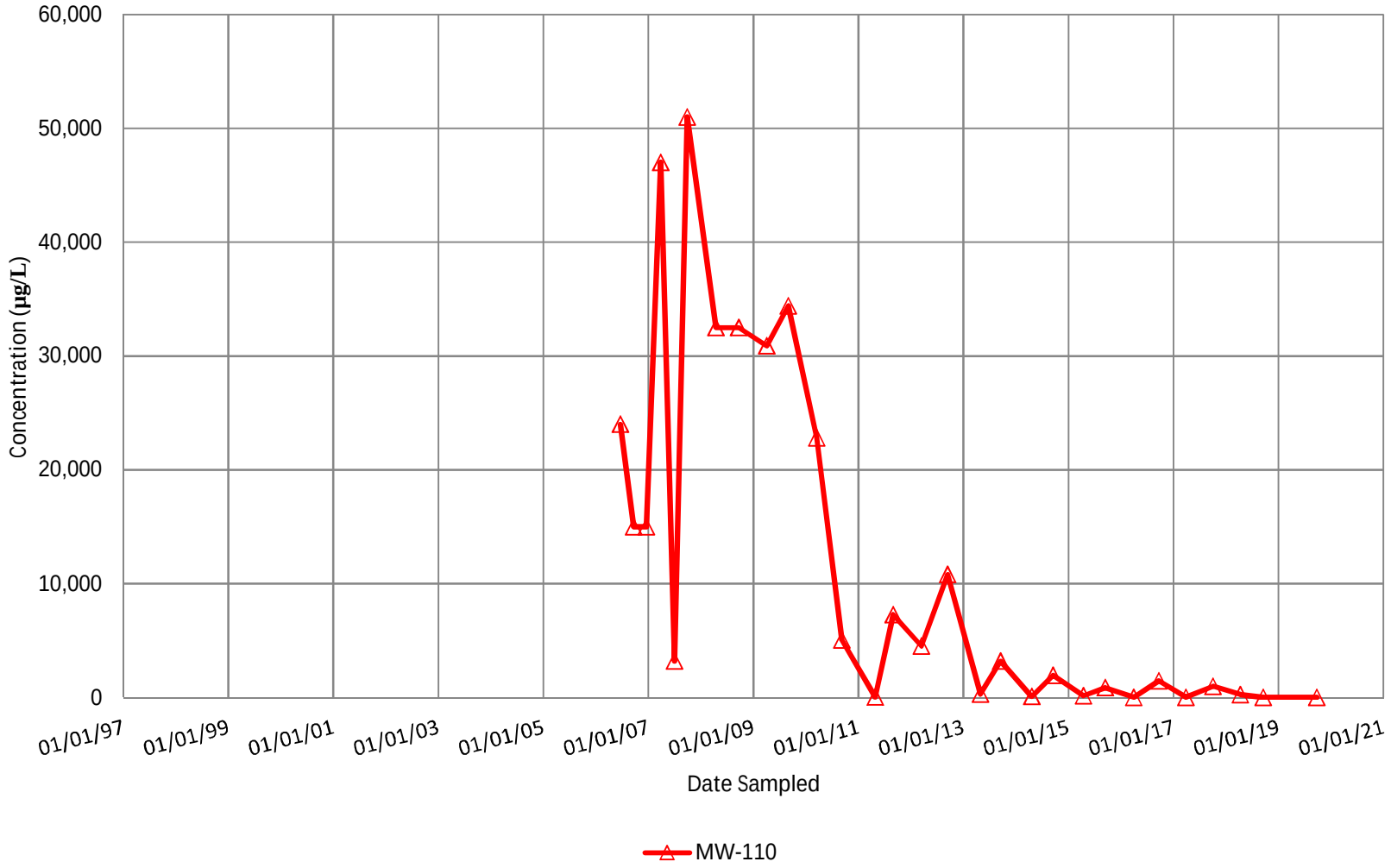


FIGURE 11

MW-111 Total Chromium Concentration Trends

N.W. Mauthe Superfund Site

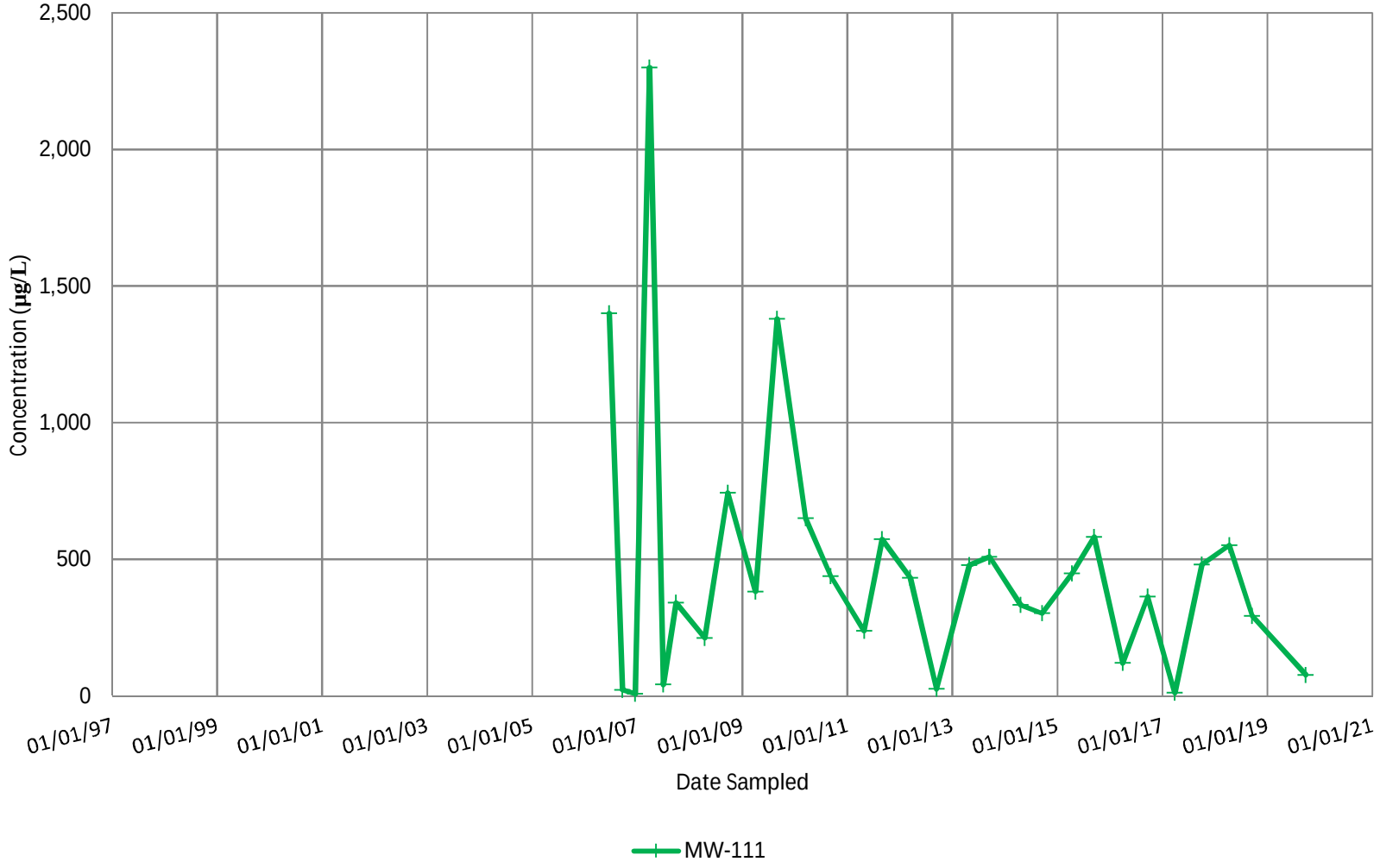


FIGURE 12

MW-112 Total Chromium Concentration Trends

N.W. Mauthe Superfund Site

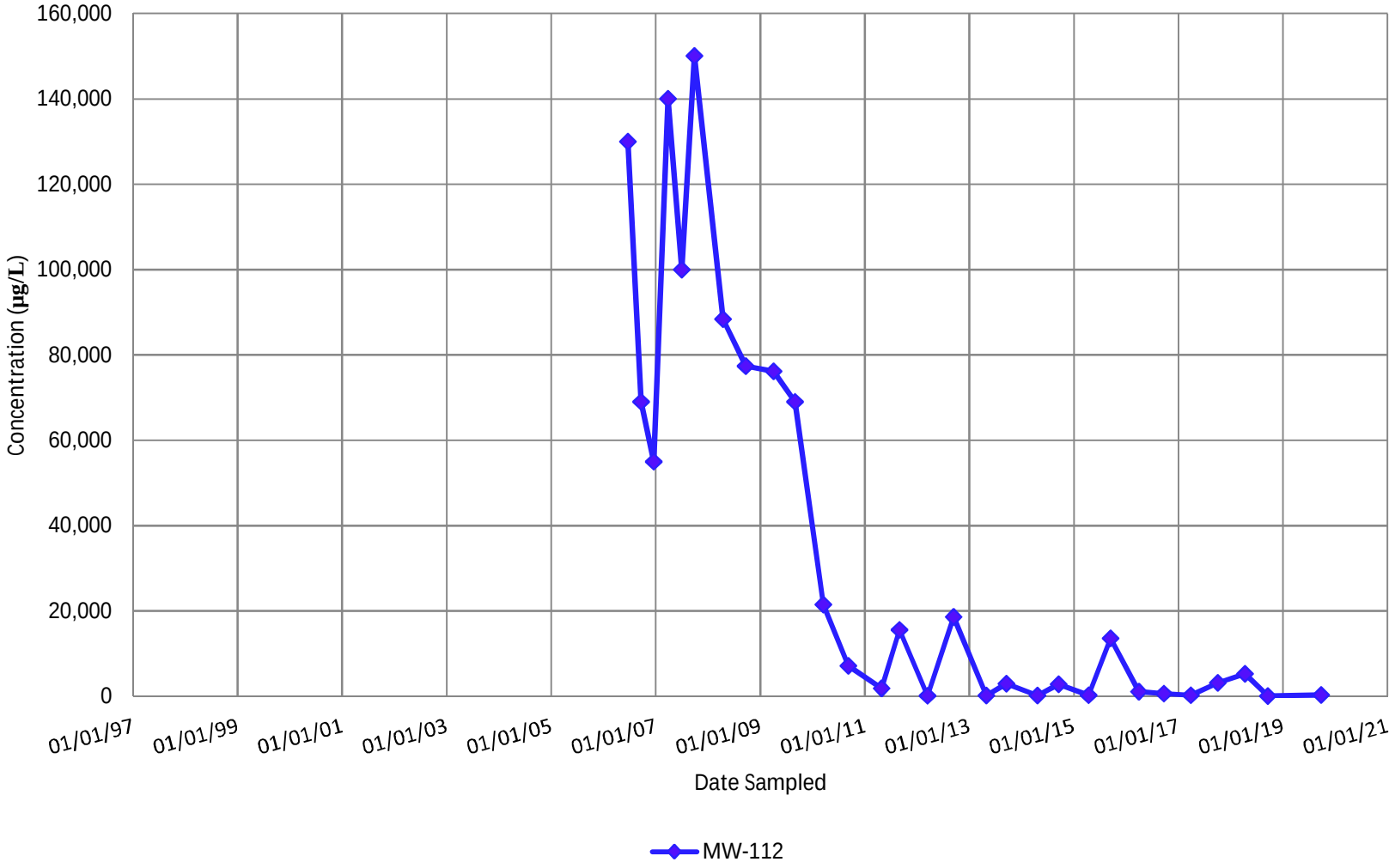


FIGURE 13

MW-113 Total Chromium Concentration Trends

N.W. Mauthe Superfund Site

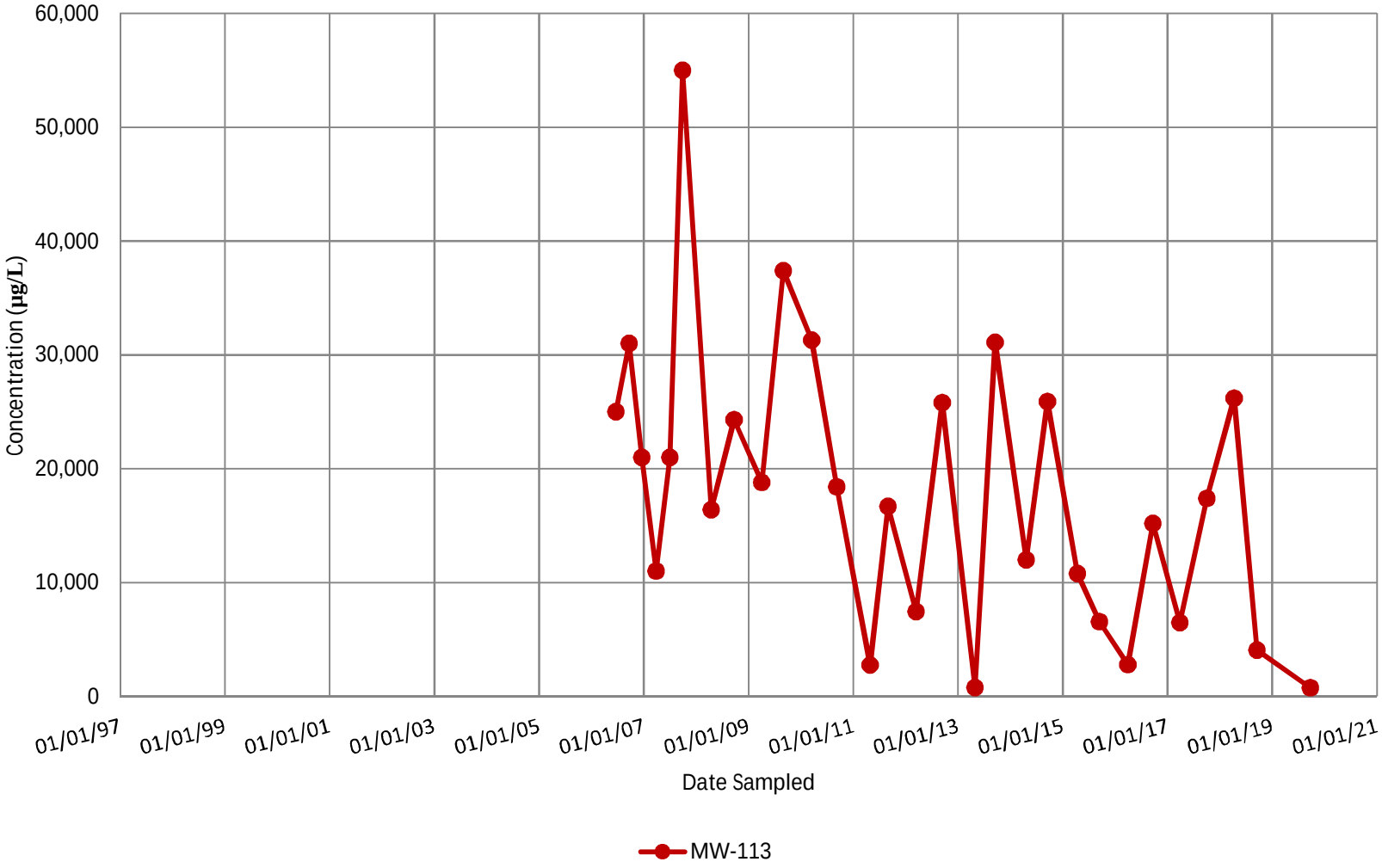


FIGURE 14

MW-107 CVOC Concentration Trends

N.W. Mauthe Superfund Site

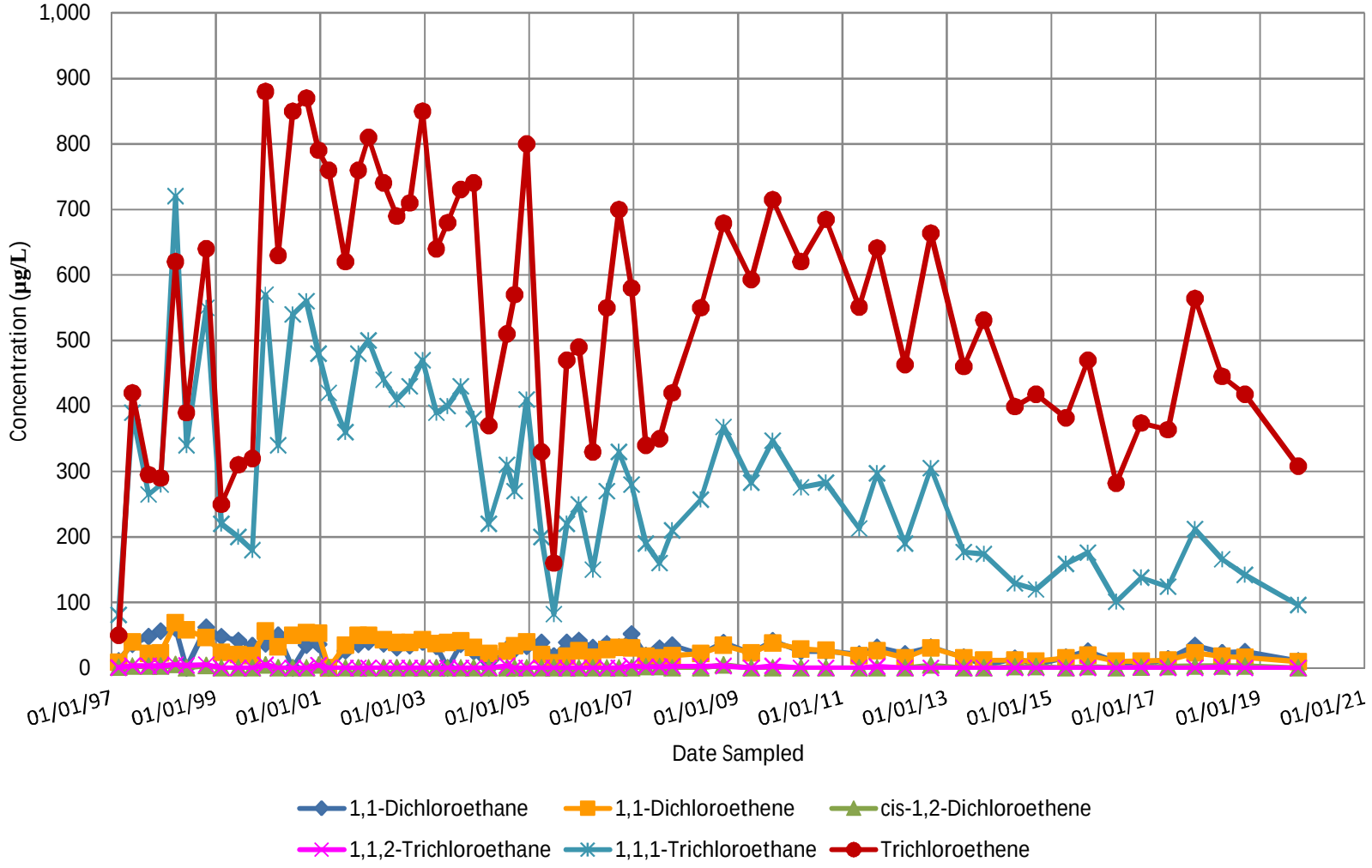


FIGURE 15

MW-110 CVOC Concentration Trends

N.W. Mauthe Superfund Site

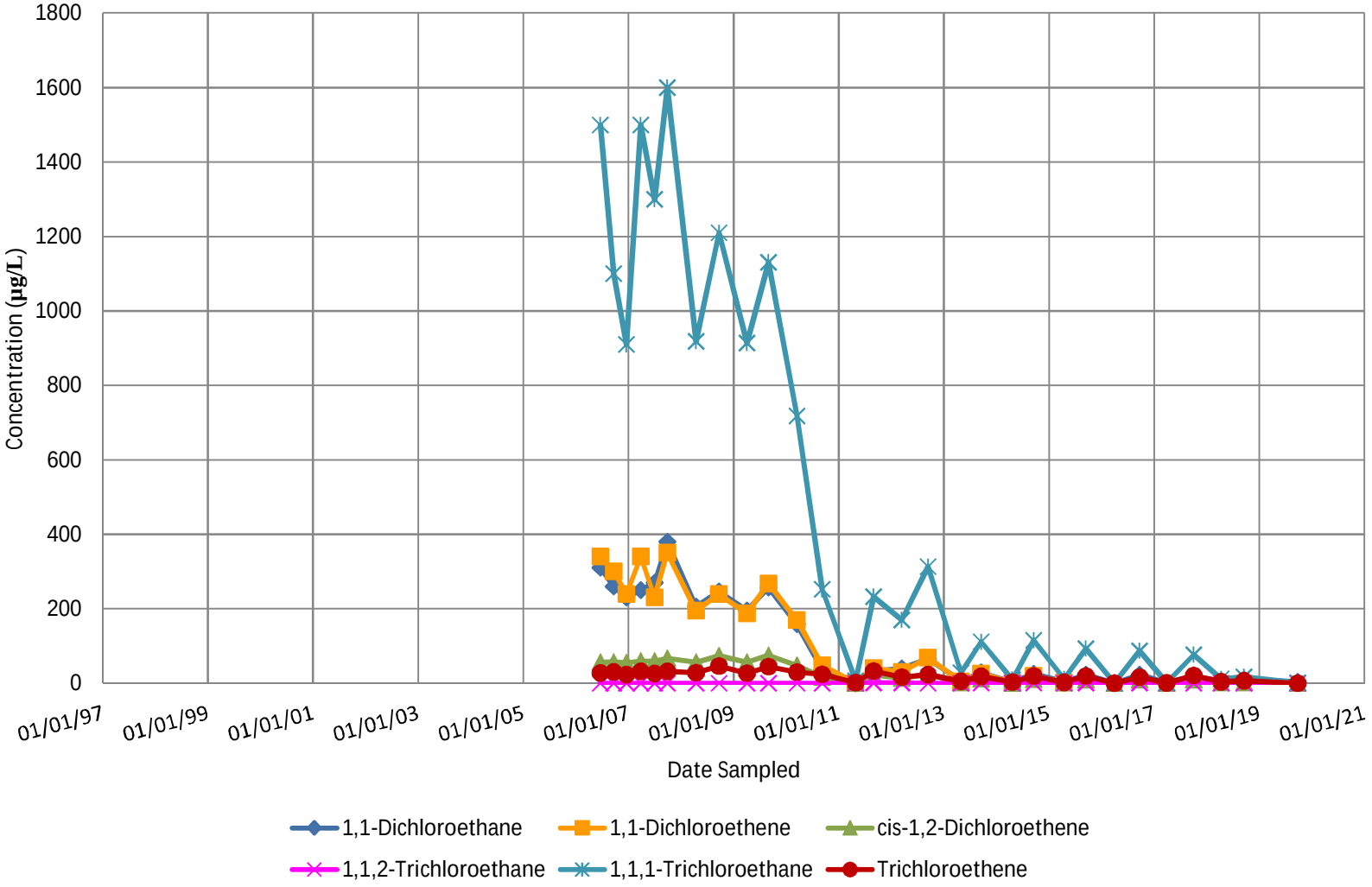
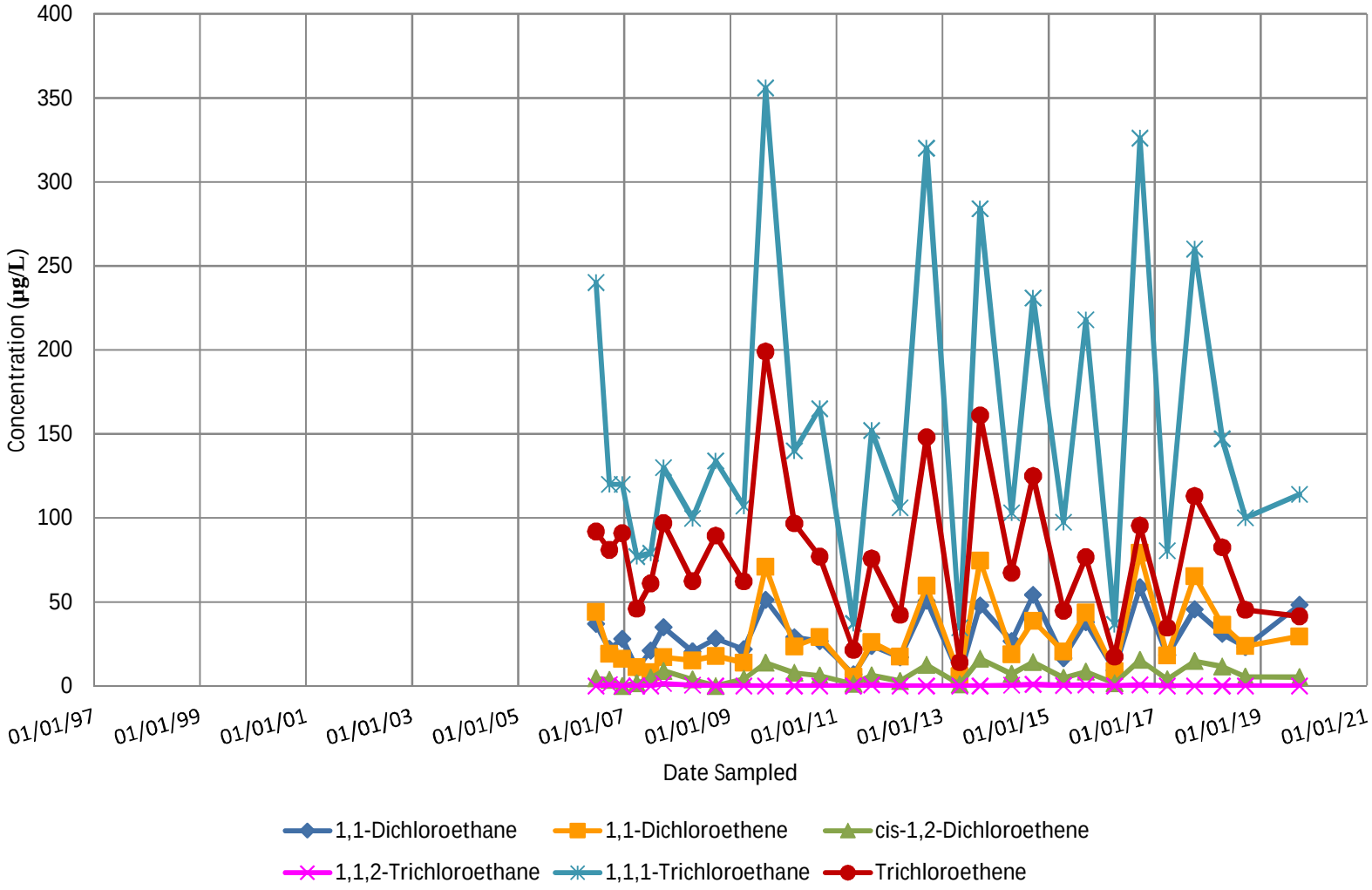


FIGURE 16

MW-113 CVOC Concentration Trends

N.W. Mauthe Superfund Site



Appendix B

Tables 1 to 6

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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*											
05/05/08		8,890,994	30,718					22,372			59,203		
05/06/08		8,890,994	0		9.1	0.95	0.679	22,844	8.7	1.14	60,259	8.8	0.62
05/12/08		8,907,573	16,579					28,018			70,853		
05/13/08		8,907,573	0		9.2	0.69		28,487	8.8	1.00	71,555	9.0	0.34
05/19/08		8,920,045	12,472					32,756			79,328		
05/20/08		8,920,045	0		9.1	0.74		33,225	8.8	0.96	80,376	8.9	0.27
05/26/08		8,929,582	9,537	**May**				36,557			85,277		
05/27/08		8,929,582	0	**66,866**	9.0	0.60		37,025	8.9	1.04	85,979	8.9	0.16
	06/01/08	*8,935,384*											

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
06/02/08		8,936,965	7,383					39,411			90,202		
06/03/08		8,936,965	0		9.3	0.90	0.824	39,876	9.0	1.06	90,901	9.0	0.54
06/09/08		8,951,078	14,113					43,187			101,102		
06/10/08		8,951,078	0		9.2	0.85		44,118	9.0	1.53	106,505	9.0	0.38
06/11/08		8,960,258	9,180					45,176			112,396		
06/16/08		8,999,813	39,555					52,865			140,673		
06/16/08		8,999,813	0					52,865			141,398		
06/17/08		8,999,813	0		9.2	1.4		53,808	9.1	3.40	143,560	9.1	0.33
06/18/08		9,007,718	7,905					54,790			146,825		
06/23/08		9,016,923	9,205					57,605			153,557		
06/24/08		9,016,923	0		9.3	0.20		58,074	9.1	2.50	154,613	9.0	0.14
06/30/08		9,026,850	9,927	**June**				61,392			160,227		
06/30/08		9,026,850	0	**91,466**				61,392			160,573		
	07/01/08	*9,026,850*											
07/01/08		9,026,850	0		9.3	1.4	1.290	61,861	9.0	2.45	161,266	9.1	0.58
07/07/08		9,035,952	9,102					64,701			166,481		
07/08/08		9,035,952	0		9.4	1.2		65,168	9.1	1.90	167,518	9.2	1.05
07/10/08		9,041,071	5,119					66,138			170,315		
07/14/08		9,054,932	13,861					68,973			182,057		
07/15/08		9,054,932	0		9.4	0.82		69,444	9.0	1.80	184,517	9.2	0.54
07/21/08		9,083,663	28,731					74,198			206,929		
07/22/08		9,083,663	0		9.4	0.74		75,898	9.2	2.52	211,453	9.2	0.31
07/25/08		9,114,297	30,634					81,242			230,374		
07/28/08		9,121,075	6,778					83,136			235,668		
07/29/08		9,121,075	0		7.4	0.70		83,609	7.2	3.30	237,073	7.2	0.30
07/29/08		9,123,409	2,334	**July**				83,646			237,455		
	08/01/08	*9,127,730*		**100,880**									
08/04/08		9,137,140	13,731					87,426			248,221		
08/05/08		9,137,140	0		7.6	1.30	1.260	87,426	7.2	2.72	250,342	7.2	0.41
08/05/08		9,141,581	4,441					87,938			252,120		
08/09/08		9,151,886	10,305					90,785			260,213		
08/11/08		9,154,723	2,837					91,732			262,298		
08/12/08		9,154,723	0		7.5	1.2		92,206	7.2	2.45	263,337	7.3	0.25
08/13/08		9,157,388	2,665					92,710			264,058		
08/18/08		9,162,704	5,316					94,604			267,897		
08/19/08		9,162,704	0		7.5	0.98		95,077	7.2	2.08	268,595	7.2	0.20
08/19/08		9,163,932	1,228					95,106			268,623		
08/21/08		9,166,109	2,177					96,049			270,020		
08/24/08		9,168,274	2,165					96,993			271,417		
08/26/08		9,168,274	0	**August**	7.5	1.1		97,465	7.1	2.25	272,112	7.1	0.22
	09/01/08	*9,173,323*		**45,593**									
09/01/08		9,173,586	5,312					99,390			274,587		
09/02/08		9,173,586	0		7.6	1.4	1.290	99,863	7.3	2.50	274,936	7.3	0.21
09/02/08		9,174,445	859					99,894			274,962		
09/06/08		9,176,960	2,515					100,837			276,718		
09/08/08		9,176,960	0		7.5	1.3		101,310	7.2	2.25	277,071	7.3	0.16
09/15/08		9,182,218	5,258					103,257			279,911		
09/16/08		9,182,218	0		7.6	1.3		103,731	7.3	2.60	280,611	7.6	0.37
09/18/08		9,185,245	3,027					104,715			281,689		
09/22/08		9,187,538	2,293					105,663			283,095		
09/23/08		9,187,538	0		7.5	1.6		106,137	7.3	3.05	283,475	7.5	0.17
09/28/08		9,191,553	4,015					107,560			285,589		
09/30/08		9,191,553	0	**September**	7.6	1.8		108,035	7.4	3.70	285,942	7.4	0.18
	10/01/08	*9,192,867*		**19,545**									

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
10/05/08		9,195,280	3,727					109,500			287,383		
10/07/08		9,195,280	0		7.7	2.2	2.000	109,975	7.4	4.38	288,093	7.8	0.12
10/07/08		9,196,521	1,241					110,012			288,124		
10/10/08		9,200,017	3,496					110,965			290,943		
10/12/08		9,200,017	0					111,919			291,644		
10/14/08		9,200,017	0		7.8	1.9		112,396	7.5	3.48	292,698	7.8	0.27
10/16/08		9,204,404	4,387					112,906			293,436		
10/18/08		9,206,201	1,797					113,861			294,504		
10/21/08		9,206,201	0		7.8			114,337	7.5	4.02	295,563	7.9	0.28
10/22/08		9,208,980	2,779					114,848			296,250		
10/26/08		9,211,601	2,621					116,279			297,676		
10/28/08		9,211,601	0	**October**	7.9	2.0		116,756	7.7	3.96	298,743	8.2	0.26
	11/01/08	*9,214,938*		**22,071**									
11/01/08		9,215,379	3,778					117,743			300,201		
11/04/08		9,215,379	0		8.0	2.1	1.880	118,698	7.7	4.32	301,273	8.1	0.20
11/04/08		9,217,467	2,088					118,732			301,305		
11/07/08		9,219,330	1,863					119,685			302,376		
11/10/08		9,220,422	1,092					120,162			303,090		
11/20/08		9,229,031	8,609					123,506			309,112		
11/24/08		9,231,935	2,904					124,939			310,833		
11/24/08		9,232,260	325					124,939			311,189		
11/26/08		9,233,464	1,204					125,702			311,660		
11/28/08		9,234,926	1,462	**November**				126,192			312,744		
	12/01/08	*9,234,926*		**19,988**									
12/02/08		9,234,926	0		8.2	2.3	2.190	127,656	7.8	3.57	314,118	8.3	0.18
12/12/08		9,242,670	7,744					130,122			316,912		
12/17/08		9,247,587	4,917	**December**				131,563			320,808		
	01/01/09	*9,266,230*		**31,304**									
01/02/09		9,268,140	20,553					136,435			338,229		
01/06/09		9,268,140	0		7.8	2.5	2.430	137,894	7.7	4.48	341,351	7.8	1.05
01/12/09		9,277,419	9,279	**January**				139,384			344,897		
	02/01/09	*9,287,182*		**20,952**									
02/01/09		9,287,326	9,907					143,256			351,798		
02/03/09		9,287,326	0		7.8	3.3	2.900	143,738	7.9	4.69	352,143	8.2	0.34
02/05/09		9,288,848	1,522	**February**				143,772			352,912		
	03/01/09	*9,334,332*		**47,151**									
03/01/09		9,335,249	46,401					153,077			393,568		
03/03/09		9,335,249	0		7.6	2.4	1.970	153,561	7.9	4.24	394,973	8.2	0.87
03/11/09		9,355,734	20,485					156,519			412,282		
03/30/09		9,463,572	107,838					182,357			500,471		
03/31/09		9,463,572	0	**March**				183,323			501,935		
	04/01/09	*9,467,680*		**133,348**									
04/01/09		9,469,538	5,966					184,290			504,856		
04/03/09		9,478,305	8,767					187,194			511,375		
04/06/09		9,485,542	7,237					189,607			516,807		
04/07/09		9,485,542	0		7.7	0.84	0.730	190,569	7.9	1.14	518,251	8.1	0.52
04/13/09		9,498,358	12,816					194,432			525,799		
04/14/09		9,498,358	0		7.7	0.59		194,908	8.0	1.20	525,799	8.2	0.27
04/20/09		9,507,740	9,382					198,262			532,295		
04/21/09		9,507,740	0		7.8	1.0		198,262	8.0	0.96	533,364	8.3	1.74
04/27/09		9,545,303	37,563					208,646			561,846		
04/28/09		9,545,303	0		8.0	1.2		210,663	7.7	1.89	566,157	7.5	0.28

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	05/01/09	*9,568,209*		**April**									
05/01/09		9,574,025	28,722	**100,528**				217,567			582,471		
05/04/09		9,582,624	8,599					220,929			588,270		
05/05/09		9,582,624	0		7.6	0.76	0.724	221,884	8.0	1.29	589,714	8.0	0.33
05/11/09		9,599,171	16,547					227,170			599,566		
05/12/09		9,599,171	0		8.0	0.89		228,124	7.6	0.84	600,996	7.9	0.24
05/18/09		9,613,720	14,549					232,921			609,305		
05/19/09		9,613,720	0		7.4	0.79		233,874	7.0	0.84	610,378	7.2	0.38
05/19/09		9,615,798	2,078					233,908			610,421		
05/19/09		9,616,122	324					233,908			610,775		
05/25/09		9,624,219	8,097					237,697			615,786		
05/26/09		9,624,219	0		7.3	0.58		238,168	7.1	1.08	616,149	7.0	0.16
	06/01/09	*9,650,519*		**May**									
06/01/09		9,652,323	28,104	**82,310**				245,914			637,378		
06/02/09		9,652,323	0		7.3	0.23	0.648	246,871	6.9	1.05	638,835	7.2	0.26
06/03/09		9,658,104	5,781					248,350			641,072		
06/15/09		9,701,735	43,631					261,249			674,466		
	07/01/09	*9,727,520*		**June**									
07/01/09		9,727,975	26,240	**77,001**				272,082			691,914		
07/05/09		9,732,032	4,057					273,967			694,431		
07/07/09		9,732,032	0		7.4	0.96	0.878	274,443	7.1	2.20	695,508	7.1	0.20
07/20/09		9,742,289	10,257					278,743			700,527		
	08/01/09	*9,748,231*		**July**									
08/03/09		9,749,397	7,108	**20,712**				282,543			704,414		
08/04/09		9,749,397	0		7.5	1.9	1.680	283,019	7.1	2.80	704,768	7.3	0.14
08/08/09		9,752,139	2,742					284,005			706,115		
08/08/09		9,753,763	1,624					284,480			707,282		
08/09/09		9,757,508	3,745					284,962			710,677		
08/10/09		9,761,572	4,064					285,930			714,131		
08/10/09		9,762,328	756					286,411			714,491		
08/12/09		9,765,851	3,523					287,368			717,355		
08/13/09		9,767,253	1,402					287,846			718,430		
08/17/09		9,771,256	4,003					289,758			720,916		
08/30/09		9,785,737	14,481					295,976			730,538		
	09/01/09	*9,787,043*		**August**									
09/01/09		9,787,352	1,615	**38,811**	7.6	1.6	1.320	296,492	7.1	2.85	731,650	7.4	0.53
09/10/09		9,794,060	6,708					299,850			735,572		
09/21/09		9,800,194	6,134					303,204			738,803		
09/22/09		9,800,194	0					303,684			739,163		
	10/01/09	*9,806,949*		**September**									
10/01/09		9,807,491	7,297	**19,906**				306,569			743,395		
10/05/09		9,811,856	4,365					308,500			746,224		
10/06/09		9,811,856	0		6.9	1.8	1.700	308,983	6.8	2.48	746,576	7.1	0.55
10/15/09		9,827,819	15,963					314,838			757,329		
10/18/09		9,830,464	2,645					316,288			758,757		
	11/01/09	*9,871,202*		**October**									
11/02/09		9,875,106	44,642	**64,253**				329,981			793,417		
11/03/09		9,875,106	0		7.4	1.2	1.150	330,961	7.0	2.60	795,595	7.2	0.46
11/04/09		9,880,551	5,445					331,974			797,084		
11/05/09		9,882,809	2,258					332,950			798,526		
11/11/09		9,891,712	8,903					337,309			803,889		
11/12/09		9,893,927	2,215					338,274			805,324		
11/16/09		9,896,880	2,953					339,720			807,132		
11/17/09		9,897,695	815					340,200			807,495		
11/20/09		9,899,892	2,197					341,164			808,946		
11/30/09		9,914,595	14,703					346,476			819,664		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	12/01/09	*9,914,595*		**November**									
12/01/09		9,914,595	0	**43,393**	7.6	1.7	1.500	347,446	7.3	2.25	820,740	7.8	0.67
12/15/09		9,931,024	16,429					354,237			829,781		
12/18/09		9,933,254	2,230					355,200			831,213		
	01/01/10	*9,956,004*		**December**									
01/03/10		9,960,070	26,816	**41,409**				362,443			853,235		
01/05/10		9,960,070	0		6.9	2.3	2.220	362,924	7.2	5.36	855,045	7.2	0.68
01/14/10		9,969,979	9,909					365,847			860,488		
01/18/10		9,972,503	2,524					366,807			862,304		
01/31/10		9,991,034	18,531					370,664			878,832		
	02/01/10	*9,991,034*		**January**									
02/02/10		9,991,034	0	**35,030**	7.4	1.6	1.460	371,145	7.2	4.05	880,637	7.2	0.46
02/03/10		9,994,392	3,358					371,664			881,364		
02/16/10		10,002,996	8,604					374,543			887,937		
02/28/10		10,009,542	6,546					376,928			892,655		
	03/01/10	*10,009,542*		**February**									
03/02/10		10,009,542	0	**18,508**	7.6	1.6	1.340	376,928	7.4	2.70	893,732	7.4	1.41
03/06/10		10,015,341	5,799					377,919			898,085		
03/13/10		10,048,616	33,275					383,764			927,938		
03/17/10		10,065,891	17,275					388,140			942,069		
03/23/10		10,077,601	11,710					392,478			950,481		
03/31/10		10,088,487	10,886					396,786			958,091		
	04/01/10	*10,088,725*		**March**									
04/01/10		10,088,817	330	**79,183**				396,786			958,456		
04/04/10		10,092,465	3,648					398,207			961,014		
04/06/10		10,092,465	0		7.4	1.3	1.180	399,166	7.2	2.00	962,110	7.2	0.20
04/19/10		10,151,166	58,701					416,846			1,005,028		
	05/01/10	*10,189,439*		**April**									
05/03/10		10,196,869	45,703	**100,715**				432,284			1,038,553		
05/04/10		10,196,869	0		7.3	0.98	0.902	433,730	7.1	1.12	1,040,370	7.2	0.37
05/17/10		10,258,463	61,594					453,256			1,083,344		
06/01/10		10,294,510	36,047					466,168			1,109,480		
	06/01/10	*10,294,510*		**May**									
06/01/10		10,294,510	0	**105,071**	7.6	0.85	0.762	467,117	7.2	1.44	1,110,569	7.3	0.28
06/21/10		10,372,589	78,079					488,138			1,171,628		
06/30/10		10,400,340	27,751					495,720			1,193,925		
06/30/10		10,400,889	549					496,193			1,194,286		
	07/01/10	*10,401,954*		**June**									
07/01/10		10,402,536	1,647	**107,444**				496,664			1,195,375		
07/05/10		10,409,431	6,895					499,493			1,200,058		
07/06/10		10,409,431	0		7.3	1.1	0.988	499,963	7.3	1.92	1,200,783	7.5	0.41
07/12/10		10,426,614	17,183					504,247			1,213,873		
07/21/10		10,506,902	80,288					525,545			1,275,358		
07/22/10		10,515,567	8,665					527,488			1,282,668		
07/23/10		10,532,459	16,892					531,679			1,283,332		
	08/01/10	*10,586,662*		**July**									
08/02/10		10,594,781	62,322	**184,709**				549,129			1,283,332		
08/03/10		10,594,781	0		7.8	0.54	0.515	549,601	7.4	1.20	1,283,332	7.5	0.20
08/04/10		10,599,046	4,265					550,588			1,283,332		
08/04/10		10,599,046	0					550,588			1,283,358		
08/04/10		10,599,046	0					550,588			1,283,358		
08/05/10		10,600,937	1,891					551,531			1,284,413		
08/06/10		10,602,372	1,435					552,002			1,285,481		
08/07/10		10,604,242	1,870					552,943			1,286,560		
08/12/10		10,621,705	17,463					558,442			1,299,650		
08/18/10		10,644,322	22,617					565,095			1,317,296		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	09/01/10	*10,664,511*		**August**									
09/06/10		10,672,363	28,041	**77,849**				575,879			1,336,978		
09/07/10		10,672,363	0		7.7	0.64	0.588	575,879	7.2	1.28	1,337,698	7.4	0.19
09/09/10		10,675,017	2,654					576,846			1,338,823		
09/09/10		10,675,348	331					576,846			1,339,184		
09/15/10		10,681,923	6,575					579,656			1,343,454		
09/20/10		10,688,747	6,824					582,004			1,348,431		
09/28/10		10,712,898	24,151					588,142			1,368,075		
09/28/10		10,713,225	327					588,142			1,368,432		
	10/01/10	*10,717,803*		**September**									
10/01/10		10,718,374	5,149	**53,291**				590,497			1,371,651		
10/03/10		10,721,339	2,965					591,909			1,373,451		
10/05/10		10,721,339	0		7.6	0.80	0.763	592,849	7.3	1.32	1,374,902	7.5	0.10
10/15/10		10,733,086	11,747					597,097			1,380,767		
10/17/10		10,734,957	1,871					598,030			1,381,848		
10/31/10		10,760,102	25,145					605,549			1,401,547		
	11/01/10	*10,760,102*		**October**									
11/02/10		10,760,102	0	**42,299**	7.8	0.65	0.639	606,486	7.6	1.44	1,403,369	7.9	0.20
11/11/10		10,773,294	13,192					611,203			1,410,005		
11/14/10		10,775,484	2,190					612,137			1,411,471		
11/17/10		10,778,424	2,940					613,539			1,413,301		
11/28/10		10,790,717	12,293					618,231			1,422,421		
	12/01/10	*10,794,632*		**November**									
12/04/10		10,800,013	9,296	**34,530**				622,006			1,428,648		
12/07/10		10,800,013	0		7.6	1.0	0.989	623,423	7.8	1.80	1,430,482	7.9	0.24
12/15/10		10,811,058	11,045					627,228			1,435,313		
12/20/10		10,814,659	3,601					628,621			1,437,887		
12/23/10		10,816,825	2,166					629,558			1,439,358		
	01/01/11	*10,827,569*		**December**									
01/02/11		10,829,348	12,523	**32,938**				632,850			1,449,967		
01/04/11		10,829,348	0		8.0	1.6	1.500	633,803	7.9	5.31	1,452,901	8.0	0.53
01/17/11		10,845,438	16,090					638,076			1,462,175		
01/28/11		10,852,203	6,765					640,437			1,467,352		
01/30/11		10,853,317	1,114					640,910			1,468,093		
	02/01/11	*10,853,317*		**January**									
02/01/11		10,853,317	0	**25,748**	7.9	2.1	2.100	641,382	7.7	4.90	1,468,834	7.6	0.18
02/02/11		10,854,899	1,582					641,426			1,469,273		
02/14/11		10,859,963	5,064					643,318			1,472,988		
02/21/11		10,876,100	16,137					646,167			1,488,233		
02/21/11		10,876,705	605					646,167			1,488,978		
02/24/11		10,880,277	3,572					647,105			1,491,974		
02/27/11		10,883,601	3,324					648,128			1,494,713		
	03/01/11	*10,883,601*		**February**									
03/01/11		10,883,601	0	**30,284**	7.8	1.8	1.530	648,594	7.7	4.95	1,496,572	7.8	0.52
03/21/11		10,957,602	74,001					664,834			1,558,957		
	04/01/11	*11,023,291*		**March**									
04/04/11		11,045,838	88,236	**139,690**				687,442			1,632,177		
04/05/11		11,045,838	0		8.0	0.40	0.380	688,903	7.8	1.10	1,637,351	7.7	0.21
04/16/11		11,138,592	92,754					710,138			1,708,997		
04/26/11		11,216,566	77,974					731,830			1,771,918		
04/29/11		11,258,391	41,825					743,289			1,804,105		
04/29/11		11,262,451	4,060					744,757			1,807,043		
	05/02/11	*11,274,169*		**April**									
05/02/11		11,277,586	15,135	**250,878**				750,559			1,818,009		
05/03/11		11,277,586	0		7.8	0.37	0.338	751,514	7.6	0.68	1,819,601	7.8	0.20
05/16/11		11,310,055	32,469					763,336			1,841,085		
05/17/11		11,311,520	1,465					763,807			1,842,263		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	06/01/11	*11,344,383*		**May**									
06/02/11		11,347,664	36,144	**70,214**				778,512			1,868,238		
06/06/11		11,354,057	6,393					781,832			1,872,152		
06/07/11		11,354,057	0		7.7	0.46	0.447	782,305	7.6	0.85	1,872,545	7.7	0.14
06/17/11		11,368,867	14,810					788,961			1,881,915		
06/20/11		11,373,134	4,267					790,860			1,884,626		
	07/01/11	*11,419,112*		**June**									
07/04/11		11,434,679	61,545	**74,729**				811,146			1,932,424		
07/05/11		11,434,679	0		7.9	0.78	0.752	811,621	7.6	1.50	1,933,199	7.5	0.19
07/18/11		11,450,616	15,937					818,915			1,942,544		
07/27/11		11,470,412	19,796					825,753			1,958,375		
07/28/11		11,473,213	2,801					826,666			1,960,688		
	08/01/11	*11,483,192*		**July**									
08/01/11		11,484,004	10,791	**64,080**				830,795			1,968,801		
08/02/11		11,484,004	0		7.9	0.86	0.800	831,711	7.5	1.26	1,970,342	7.5	0.42
08/04/11		11,492,474	8,470					834,025			1,975,014		
08/05/11		11,493,370	896					834,506			1,975,820		
08/15/11		11,509,618	16,248					841,800			1,986,618		
08/31/11		11,524,004	14,386					849,495			1,994,794		
	09/01/11	*11,524,179*		**August**									
09/01/11		11,524,431	427	**40,987**				849,948			1,994,794		
09/03/11								850,953			1,997,262		
09/05/11		11,533,935	9,504					852,322			2,003,014		
09/06/11		11,533,935	0		8.0	1.2	1.180	852,778	7.7	1.65	2,004,161	7.7	0.55
09/08/11		11,538,054	4,119					854,174			2,005,726		
09/19/11		11,547,336	9,282					859,158			2,011,134		
09/20/11		11,548,416	1,080					859,611			2,011,902		
09/28/11		11,562,993	14,577					863,696			2,024,247		
	10/01/11	*11,568,104*		**September**									
10/03/11		11,572,412	9,419	**43,925**				867,344			2,031,123		
10/04/11		11,574,566	2,154					868,253			2,032,650		
10/05/11		11,574,566	0					868,707			2,033,029		
10/06/11		11,574,566	0					869,161			2,033,785		
10/08/11		11,579,097	4,531					870,519			2,036,082		
10/10/11		11,579,097	0		7.5	1.2	1.090	870,972	7.4	2.15	2,036,082	7.5	0.22
10/26/11		11,603,315	24,218					879,056			2,054,141		
10/30/11		11,606,358	3,043					880,416			2,055,759		
	11/01/11	*11,607,509*		**October**			**Pounds Cr**						
11/01/11		11,608,102	1,744	**39,405**			**0.358**	881,323			2,055,759		
11/02/11		11,608,233	131					881,362			2,055,792		
11/03/11		11,608,233	0		8.2	1.3	1.220	881,378	8.1	2.46	2,055,818	8.0	0.03
11/05/11		11,611,395	3,162					882,340			2,059,467		
11/06/11		11,614,756	3,361					883,608			2,062,594		
11/07/11		11,616,924	2,168					883,718			2,063,343		
11/08/11		11,618,636	1,712					884,345			2,065,014		
11/12/11		11,651,616	32,980					890,384			2,094,235		
11/15/11		11,662,529	10,913					894,135			2,102,462		
11/23/11		11,677,899	15,370					900,936			2,112,833		
11/29/11		11,687,640	9,741				**Pounds Cr**	905,028			2,119,690		
	12/01/11	*11,689,609*		**November**			**0.834**						
12/01/11		11,687,640	0	**82,100**	7.4	1.7	1.700	905,938	7.8	2.65	2,119,690	8.0	0.72
12/06/11		11,706,691	19,051					910,893			2,134,888		
12/15/11		11,724,224	17,533					918,198			2,147,141		
12/26/11		11,737,368	13,144					924,102			2,155,863		
12/31/11		11,742,107	4,739					926,371			2,158,911		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	01/01/12	*11,742,204*		**December**			**Pounds Cr**						
01/04/12		11,744,667	2,560	**52,595**			**0.745**	927,731			2,158,911		
01/05/12		11,744,667	0		6.9	0.98	0.862	928,184	7.5	1.84	2,161,198	7.3	0.27
01/19/12		11,754,619	9,952					932,303			2,166,977		
01/27/12		11,758,987	4,368					934,572			2,169,652		
01/31/12		11,761,124	2,137				**Pounds Cr**	935,480			2,171,180		
	02/01/12	*11,761,228*		**January**			**0.137**						
02/02/12		11,761,124	0	**19,024**	7.4	2.1	1.860	936,191	7.7	2.50	2,172,687	7.7	6.1
02/07/12		11,763,586	2,358					938,043		2.80	2,176,546		1.71
02/22/12		11,778,355	14,769					941,736			2,183,827		
02/24/12		11,780,157	16,571					942,642			2,184,964		
02/28/12		11,782,379	18,793				**Pounds Cr**	943,547			2,186,478		
	03/01/12	*11,783,379*		**February**			**0.329**						
03/01/12		11,782,379	0	**21,255**	7.1	2.6	2.560	944,002	7.3	3.45	2,186,478	7.6	2.04
03/14/12		11,824,851	41,472					956,400			2,221,364		
03/21/12		11,839,925	15,074					962,783			2,231,770		
03/25/12		11,848,965	9,040					965,591			2,239,149		
	04/01/12	*11,865,023*		**March**			**Pounds Cr**						
04/03/12		11,871,806	22,841	**81,644**			**1.740**	973,817			2,256,557		
04/05/12		11,871,806	6,783		7.6	0.83	0.730	975,189	7.9	1.28	2,258,866	7.8	0.48
04/18/12		11,896,899	25,093					984,322			2,273,887		
04/21/12		11,906,449	9,550					986,147			2,282,902		
	05/01/12	*11,923,538*		**April**			**Pounds Cr**						
05/02/12		11,930,935	24,486	**58,515**			**0.356**	996,194			2,300,258		
05/03/12		11,933,848	2,913					997,107			2,302,572		
05/09/12		11,989,964	56,116					1,010,822			2,349,979		
05/14/12		12,005,061	15,097					1,016,338			2,361,277		
05/16/12		12,005,061	0		6.5	0.67	0.581	1,018,169	7.4	0.63	2,363,951	7.6	0.15
05/20/12		12,016,709	11,648					1,021,100			2,368,989		
05/22/12		12,018,570	1,861					1,022,007			2,370,141		
05/24/12		12,021,249	2,679					1,023,245			2,372,066		
05/31/12		12,028,808	7,559					1,027,317			2,378,556		
	06/01/12	*12,029,342*		**May**			**Pounds Cr**						
06/02/12		12,030,994	2,186	**105,804**			**0.512**	1,027,317			2,378,556		
06/05/12		12,033,617	2,623					1,028,676			2,380,101		
06/07/12		12,033,617	0		6.8	0.55	0.507	1,029,581	7.4	0.99	2,381,259	7.7	0.17
06/19/12		12,046,851	13,234					1,034,134			2,389,253		
06/29/12		12,056,747	9,896					1,038,653			2,395,689		
	07/01/12	*12,057,998*		**June**			**Pounds Cr**						
07/03/12		12,059,332	1,334	**28,656**			**0.121**	1,040,009			2,397,210		
07/05/12		12,059,332	0		6.1	0.98	0.906	1,040,913	6.2	1.24	2,397,969	6.6	0.19
07/10/12		12,064,003	4,671					1,042,739			2,402,552		
07/20/12		12,069,263	5,260					1,045,446			2,402,552		
	08/01/12	*12,078,083*		**July**			**Pounds Cr**						
08/01/12		12,078,359	9,096	**20,085**			**0.152**	1,049,510			2,408,561		
08/02/12		12,078,359	0		6.2	1.20	1.120	1,049,969	6.2	1.72	2,408,954	6.0	0.56
08/07/12		12,082,510	4,151					1,051,808			2,410,869		
08/16/12		12,098,108	15,598					1,056,800			2,423,447		
	09/01/12	*12,111,167*		**August**			**Pounds Cr**						
09/01/12		12,111,772	13,664	**33,084**			**0.309**	1,063,135			2,432,088		
09/09/12		12,116,611	4,839					1,065,875			2,434,745		
09/11/12		12,117,783	1,172			1.70	1.520	1,066,747	6.4	0.72	2,435,127	6.3	0.21
09/18/12		12,121,226	3,443					1,068,577			2,437,061		
09/26/12		12,125,024	3,798					1,070,837			2,438,957		

TABLE 1
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N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	10/01/12	*12,126,164*		**September**			**Pounds Cr**						
10/04/12		12,127,304	2,280	**14,997**			**0.190**	1,072,193			2,440,091		
10/04/12		12,127,304	1,140			1.50	1.370	1,072,193	6.4	1.44	2,440,091	6.2	0.32
10/05/12		12,129,085	1,781					1,073,276			2,440,999		
10/09/12		12,129,791	706					1,073,696			2,441,370		
10/19/12		12,163,907	34,116					1,081,043			2,471,345		
10/30/12		12,189,653	25,746					1,092,239			1,289,448		
	11/01/12	*12,191,094*		**October**			**Pounds Cr**						
11/06/12		12,196,769	7,116	**64,930**			**0.741**	1,096,343			2,493,654		
11/09/12		12,198,437	1,668		NA	1.1	1.040	1,097,450	NA	1.34	2,494,750	NA	0.21
11/22/12		12,212,741	14,304					1,103,179			2,504,679		
11/30/12		12,218,011	5,270					1,106,155			2,507,598		
	12/01/12	*12,218,663*		**November**			**Pounds Cr**						
12/03/12		12,219,752	1,089	**27,569**			**0.239**	1,107,006			2,508,689		
12/10/12		12,223,289	3,537		8.0	1.00	1.100	1,109,121	7.7	1.60	2,510,506	8.0	0.27
12/26/12		12,234,632	11,343					1,114,683			2,517,462		
12/31/12		12,239,248	4,616					1,117,237			2,520,012		
	01/01/13	*12,239,543*		**December**			**Pounds Cr**						
01/01/13		12,239,958	710	**20,880**			**0.191**	1,117,663			2,520,377		
01/10/13		12,246,590	6,632			1.90	1.720	1,120,640	7.7	1.68	2,524,770	8.0	1.32
01/24/13		12,278,928	32,338					1,130,141			2,550,847		
01/28/13		12,282,035	3,107					1,131,414			2,553,042		
01/31/13		12,287,892	5,857					1,132,425			2,558,715		
	02/01/13	*12,288,247*		**January**			**Pounds Cr**						
02/01/13		12,289,018	1,126	**48,644**			**0.697**	1,132,680			2,559,456		
02/07/13		12,293,874	4,856		7.9	0.82	0.663	1,134,376	7.6	1.35	2,563,137	8.0	0.22
02/20/13		12,308,445	14,571					1,038,672			2,575,057		
02/27/13		12,313,181	19,307					1,140,359			2,578,725		
	03/01/13	*12,314,165*		**February**			**Pounds Cr**						
03/03/13		12,315,958	2,777	**25,918**			**0.143**	1,141,206			2,580,927		
03/07/13		12,318,024	2,066		7.9	0.83	0.753	1,142,054	7.7	1.44	2,582,395	7.8	0.27
03/18/13		12,361,201	43,177					1,151,536			2,619,703		
03/20/13		12,365,136	3,935					1,153,250			2,622,317		
03/27/13		12,378,442	13,306					1,159,233			2,630,884		
03/31/13		12,400,821	22,379					1,164,838			2,649,804		
	04/01/13	*12,403,728*		**March**			**Pounds Cr**						
04/01/13		12,407,465	3,737	**89,563**			**0.562**	1,165,570			2,655,346		
04/11/13		12,461,497	54,032		7.4	0.42	0.431	1,180,148	7.0	0.60	2,700,747	7.4	0.14
04/17/13		12,522,138	60,641					1,196,092			2,749,790		
	05/01/13	*12,570,545*		**April**			**Pounds Cr**						
05/01/13		---	---	**166,817**			**0.599**						
05/01/13		12,571,333	49,195		8.1	0.56	0.553	1,215,096	7.3	0.38	2,785,968	7.8	0.09
05/19/13		12,623,298	51,965					1,235,753			2,823,953		
	06/01/13	*12,647,282*		**May**			**Pounds Cr**						
				76,737			**0.353**						
06/06/13		12,657,605	34,307		7.6	0.96	0.826	1,251,551	7.4	0.47	2,849,502	7.8	0.73
06/12/13		12,669,485	11,880					1,256,351			2,857,966		
06/17/13		12,680,642	11,157					1,259,722			2,867,078		
	07/01/13	*12,727,950*		**June**			**Pounds Cr**						
				80,668			**0.555**						
07/18/13		12,767,116	86,474		7.4	0.73	0.694	1,286,165	6.7	0.73	2,938,280	7.5	0.07
07/31/13		12,780,876	13,760					1,293,015			2,947,351		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	08/01/13	*12,781,814*		**July**			**Pounds Cr**						
				53,864			**0.311**						
08/04/13		12,784,628	3,752					1,293,015			2,947,351		
08/07/13		12,786,184	1,556					1,295,588			2,951,110		
08/08/13		12,786,555	371		7.5	0.83	0.775	1,296,442	6.8	0.68	2,951,801	7.2	0.16
08/19/13		12,795,058	8,503					1,298,966			2,954,811		
08/21/13		12,795,638	580					1,300,287			2,956,243		
08/26/13		12,797,295	1,657					1,301,154			2,957,147		
08/28/13		12,800,434	3,139					1,302,541			2,958,987		
	09/01/13	*12,803,511*		**August**			**Pounds Cr**						
09/01/13		12,803,511	6,216	**21,697**			**0.140**	1,303,580			2,961,265		
09/05/13		12,808,096	4,585					1,305,282			2,964,435		
09/09/13		12,811,883	8,372					1,306,947			2,966,675		
09/11/13		12,815,166	7,070					1,309,139			2,968,968		
09/14/13		12,818,151	6,268					1,310,005			2,970,501		
09/18/13		12,822,283	7,117		7.3	1.3	1.170	1,311,729	7.1	0.99	2,973,533	7.3	0.19
09/30/13		12,833,637	11,354					1,317,815			2,980,475		
	10/01/13	*12,834,025*		**September**			**Pounds Cr**						
10/01/13		12,834,025	388	**30,514**			**0.297**	1,318,244			2,980,475		
10/08/13		12,843,796	9,771					1,321,693			2,988,064		
10/16/13		12,852,554	8,758					1,325,559			2,994,143		
10/18/13		12,855,027	2,473		7.7	1.20	1.120	1,326,419	7.5	1.04	2,996,041	7.8	0.14
	11/01/13	*12,867,815*		**October**			**Pounds Cr**						
11/01/13		12,867,815	12,788	**33,790**			**0.315**	1,332,902			3,004,777		
11/05/13		12,876,841	9,026					1,335,488			3,012,422		
11/13/13		12,903,367	26,526		7.8	1.00	0.920	1,345,039	8.1	0.66	3,033,152	7.9	0.11
11/20/13		12,924,566	21,199					1,350,740			3,051,316		
	12/01/13	*12,940,971*		**November**			**Pounds Cr**						
12/02/13		12,944,252	19,686	**73,156**			**0.560**	1,360,688			3,063,995		
12/10/13		12,954,971	10,719		7.6	1.4	1.320	1,365,411	7.4	2.70	3,071,689	7.1	0.07
12/12/13		12,957,411	2,440					1,366,744			3,073,244		
12/23/13		12,965,941	8,530					1,371,029			3,078,956		
12/31/13		12,970,459	4,518					1,373,592			3,081,611		
	01/01/14	*12,970,599*		**December**			**Pounds Cr**						
01/01/14		12,970,772	313	**29,628**			**0.326**	1,373,592			3,081,991		
01/15/14		12,976,884	6,112		7.5	1.2	1.050	1,376,582	7.1	2.20	3,086,176	7.6	0.11
01/31/14		12,983,061	6,177					1,379,605			3,090,406		
	02/01/14	*12,983,265*		**January**			**Pounds Cr**						
02/02/14		12,983,747	686	**12,666**			**0.111**	1,380,032			3,090,789		
02/13/14		12,987,155	3,408		8.0	1.8	1.610	1,381,726	8.1	2.88	3,093,093	8.3	0.19
02/28/14		12,993,603	6,448										
	03/01/14	*12,993,783*		**February**			**Pounds Cr**						
03/01/14		12,993,909	306	**10,518**			**0.141**						
03/13/14		13,005,882	11,973		7.6	0.38	0.434	1,385,639	7.7	5.80	3,112,477	8.0	0.30
03/31/14		13,059,539	53,657										
	04/01/14	*13,059,979*		**March**			**Pounds Cr**						
04/01/14		13,061,650	2,111	**66,196**			**0.239**	1,399,014			3,165,447		
04/12/14		13,091,485	29,835					1,411,117			3,187,701		
04/13/14		13,099,571	8,086					1,412,822			3,195,631		
04/15/14		13,135,912	36,341					1,424,711			3,224,028		
04/18/14		13,165,955	30,043					1,434,115			3,247,300		
04/22/14		13,210,016	44,061		7.6	0.44	0.377	1,440,204	7.4	0.72	3,258,396	7.5	0.31
	05/01/14	*13,211,258*		**April**			**Pounds Cr**						
05/01/14		13,211,345	1,329	**151,279**			**0.475**	1,451,524			3,282,450		
05/13/14		13,267,656	56,311		7.5	0.28	0.273	1,471,868	7.3	0.73	3,326,392	7.4	0.20
05/14/14		13,280,912	13,256					1,475,015			3,337,773		
05/15/14		13,286,754	5,842					1,476,780			3,342,511		
05/20/14		13,304,068	17,314					1,483,692			3,355,729		
	06/01/14	*13,332,599*		**May**			**Pounds Cr**						
06/02/14		13,336,115	32,047	**121,341**			**0.276**	1,495,755			3,382,176		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
06/12/14		13,372,027	35,912		7.9	0.40	0.381	1,508,756	7.6	0.60	3,410,073	7.8	0.20
06/14/14		13,374,936	2,909					1,510,080			3,412,070		
06/17/14		13,379,348	4,412					1,512,220			3,415,268		
06/19/14		13,394,274	14,926					1,514,826			3,429,626		
06/20/14		13,401,646	7,372					1,517,014			3,436,003		
06/30/14		13,444,046	42,400					1,531,745			3,470,067		
	07/01/14	*13,445,046*		**June**			**Pounds Cr**	1,532,601			3,472,302		
07/01/14		13,446,138	2,092	**112,447**			**0.357**						
07/02/14		13,449,088	2,950					1,533,460			3,475,127		
07/09/14		13,463,816	14,728		7.7	0.68	0.689	1,539,906	7.4	1.0	3,486,800	7.4	1.0
07/14/14		13,472,104	8,288					1,543,805			3,492,830		
07/28/14		13,480,642	8,538	**July**			**Pounds Cr**	1,551,065			3,501,179		
	08/01/14	*13,481,746*		**36,700**			**0.211**						
08/01/14		13,481,837	1,195					1,552,341			3,502,760		
08/13/14		13,495,032	13,195		7.9	0.681	0.72	1,557,877	7.5	1.16	3,511,069	7.7	0.92
08/17/14		13,502,593	7,561					1,560,483			3,517,406		
08/19/14		13,509,446	6,853					1,562,278			3,523,163		
08/20/14		13,517,300	7,854					1,563,989			3,530,111		
08/22/14		13,525,676	8,376					1,567,014			3,536,533		
08/25/14		13,534,424	8,748					1,571,333			3,542,173		
08/29/14		13,539,488	5,064					1,573,914			3,545,371		
08/30/14		13,542,314	2,826	**August**			**Pounds Cr**	1,575,198			3,547,361		
	09/01/14	*13,543,999*		**62,253**			**0.37**						
09/02/14		13,546,601	4,287					1,577,338			3,550,419		
09/05/14		13,550,482	3,881					1,579,481			3,553,370		
09/08/14		13,562,709	12,227					1,582,918			3,564,025		
09/17/14		13,579,703	16,994		7.9	0.60	0.546	1,589,348	7.6	1.16	3,577,644	7.3	0.36
09/24/14		13,593,114	13,411	**September**			**Pounds Cr**	1,595,011			3,577,644		
	10/01/14	*13,602,541*		**58,542**			**0.27**	1,600,155			3,577,644		
10/01/14		13,603,009	9,895					1,600,155			3,577,644		
10/16/14		13,633,400	30,391		7.3	0.67	0.596	1,610,440	7.8	1.28	3,619,044	7.4	0.36
10/28/14		13,658,462	25,062	**October**			**Pounds Cr**	1,621,724			3,636,660		
	11/01/14	*13,662,568*		**60,027**			**0.298**						
11/01/14		13,663,621	5,159					1,624,238			3,640,194		
11/12/14		13,672,756	9,135		8.1	1.1	0.980	1,629,780	7.6	1.62	3,648,121	8.1	1.08
11/30/14		13,695,977	23,221					1,640,533			3,663,353		
	12/01/14	*13,696,416*		**November**			**Pounds Cr**						
12/01/14		13,697,118	1,141	**37,515**			**0.306**	1,640,533			3,663,353		
12/04/14		13,701,386	4,268					1,643,108			3,666,947		
12/08/14		13,705,980	4,594					1,645,245			3,670,118		
12/12/14		13,709,486	3,506		8.1	1.5	1.320	1,646,957	7.7	2.72	3,672,490	8.5	0.35
12/31/14		13,768,265	58,779					1,666,522			3,720,581		
	01/01/15	*13,769,665*		**December**			**Pounds Cr**						
01/01/15		13,770,654	2,389	**73,249**			**0.805**	1,667,388			3,722,195		
01/12/15		13,785,790	15,136		8.2	0.65	0.597	1,674,271	7.8	1.36	3,733,018	7.3	0.20
01/31/15		13,798,407	12,617					1,679,866			3,742,191		
	02/01/15	*13,798,602*		**January**			**Pounds Cr**						
02/01/15		13,798,727	320	**28,937**			**0.144**	1,679,866			3,742,588		
02/04/15		13,800,127	1,400		8.1	0.74	0.721	1,680,719	7.9	1.48	3,743,379	7.1	0.17
02/16/15		13,804,943	4,816					1,682,892			3,746,962		
02/20/15		13,805,957	1,014					1,683,320			3,747,752		
02/24/15		13,806,974	1,017					1,683,745			3,748,542		
02/28/15		13,808,369	1,395					1,684,600			3,749,334		
	03/01/15	*13,808,507*		**February**			**Pounds Cr**						
03/01/15		13,808,690	321	**9,905**			**0.059**	1,684,600			3,749,728		
03/18/15		13,815,075	6,385		8.2	0.80	0.713	1,687,150	7.2	1.00	3,757,618	8.0	0.34
03/23/15		13,815,928	853					1,688,046			3,759,604		
03/25/15		13,816,332	404					1,688,901			3,759,889		
03/26/15		13,816,697	365					1,689,329			3,760,382		
	04/01/15	*13,822,714*		**March**			**Pounds Cr**						

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N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
04/07/15		13,823,071	6,374	**14,207**			**0.084**	1,694,467			3,765,931		
04/15/15		13,856,854	33,783		7.4	0.92	0.858	1,704,938	7.7	1.92	3,792,943	7.0	0.25
04/30/15		13,885,187	28,333					1,718,370			3,812,262		
	05/01/15	*13,885,585*		**April**			**Pounds Cr**						
05/04/15		13,889,467	4,280	**62,871**			**0.449**	1,720,520			3,815,063		
05/13/15		13,898,048	8,581		8.0	0.60	0.554	1,724,812	7.8	0.92	3,820,667	8.1	0.37
05/18/15		13,905,897	7,849					1,727,444			3,827,133		
05/19/15		13,909,365	3,468					1,728,740			3,830,304		
05/23/15		13,914,964	5,599					1,731,329			3,834,357		
05/25/15		13,920,921	5,957					1,733,052			3,839,818		
05/28/15		13,937,530	16,609					1,736,965			3,854,997		
	06/01/15	*13,958,452*		**May**			**Pounds Cr**						
06/02/15		13,967,174	29,644	**72,867**			**0.336**	1,746,201			3,878,793		
06/03/15		13,970,819	3,645					1,747,948			3,881,197		
06/10/15		13,986,712	15,893		7.4	0.60	0.547	1,755,299	7.1	0.66	3,892,044	7.2	0.27
06/16/15		14,018,102	31,390					1,765,062			3,917,649		
06/19/15		14,042,191	24,089					1,772,128			3,937,351		
06/28/15		14,066,780	24,589					1,781,741			3,956,167		
06/30/15		14,069,200	2,420					1,783,061			3,957,962		
	07/01/15	*14,069,642*		**June**			**Pounds Cr**						
07/01/15		14,069,914	714	**111,190**			**0.506**	1,783,061			3,957,962		
07/08/15		14,077,301	7,387		7.7	0.37	0.351	1,787,623	7.2	0.68	3,963,593	7.5	0.23
07/14/15		14,085,720	8,419					1,790,678			3,970,192		
07/29/15		14,114,029	28,309					1,804,056			3,993,110		
	08/01/15	*14,115,454*		**July**			**Pounds Cr**						
08/05/15		14,117,883	3,854	**45,812**			**0.134**	1,807,395			3,995,776		
08/12/15		14,131,529	13,646			0.41	0.371	1,812,749	7.2	0.51	4,006,460	7.1	0.19
08/17/15		14,137,372	5,843					1,816,582			4,010,201		
08/18/15		14,138,406	1,034					1,817,349			4,011,060		
08/27/15		14,145,800	7,394					1,822,802			4,016,771		
	09/01/15	*14,151,425*		**August**			**Pounds Cr**						
09/04/15		14,155,393	9,593	**35,971**			**0.111**	1,828,088			4,025,183		
09/09/15		14,175,870	20,477		7.6	0.23	0.208	1,833,613	7.2	0.72	4,041,266	7.0	0.14
09/18/15		14,191,902	16,032					1,843,839			4,055,798		
09/28/15		14,211,188	19,286					1,852,031			4,069,063		
09/29/15		14,211,559	371					1,852,459			4,069,894		
	10/01/15	*14,212,577*		**September**			**Pounds Cr**						
10/01/15		14,212,781	1,222	**61,152**			**0.106**	1,853,738			4,071,365		
10/07/15		14,220,473	7,692			0.72	0.661	1,856,721	7.2	1.26	4,071,365	7.3	0.16
10/13/15		14,226,617	6,144					1,859,329			4,079,148		
10/21/15		14,233,700	7,083					1,863,168			4,082,924		
10/27/15		14,241,197	7,497					1,865,726			4,088,517		
	11/01/15	*14,260,606*		**October**			**Pounds Cr**						
11/02/15		14,266,255	25,058	**48,029**			**0.264**	1,872,203			4,108,562		
11/12/15		14,288,543	22,288		7.7	0.73	0.700	1,882,551	7.3	1.20	4,122,107	7.6	0.26
11/30/15		14,334,387	45,844					1,898,090			4,155,815		
	12/01/15	*14,336,677*		**November**			**Pounds Cr**						
12/01/15		14,339,197	4,810	**76,072**			**0.443**	1,899,821			4,159,227		
12/10/15		14,364,604	25,407		7.9	0.69	0.627	1,910,218	7.4	0.66	4,176,267	7.3	0.30
12/21/15		14,458,622	94,018					1,937,179			4,246,823		
	01/01/16	*14,487,544*		**December**			**Pounds Cr**						
01/01/16		14,488,585	29,963	**150,867**			**0.788**	1,949,306			4,267,333		
01/07/16		14,499,288	10,703		7.9	0.62	0.572	1,954,033	7.4	0.87	4,274,451	7.6	0.40
	02/01/16	*14,532,622*		**January**			**Pounds Cr**						

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
02/01/16		14,533,138	33,850	**45,078**			**0.215**	1,971,254			4,316,580		
02/10/16		14,562,012	28,874		8.1	0.87	0.858	1,973,902	7.6	0.61	4,324,057	8.1	0.70
02/29/16		14,601,368	39,356					1,982,872			4,359,110		
	03/01/16	*14,602,713*		**February**			**Pounds Cr**						
03/01/16		14,603,747	2,379	**70,091**			**0.501**	1,983,300			4,361,401		
03/10/16		14,625,282	21,535		7.9	0.63	0.609	1,988,471	7.3	1.44	4,380,928	7.4	0.37
03/31/16		14,728,685	103,403					2,017,845			4,463,804		
	04/01/16	*14,733,540*		**March**			**Pounds Cr**						
04/02/16		14,751,888	23,203	**130,827**			**0.663**	2,023,638			4,482,114		
04/06/16		14,770,034	18,146		7.8	0.38	0.244	2,029,748	7.2	0.53	4,495,836	7.2	0.24
	05/01/16	*14,827,634*		**April**			**Pounds Cr**						
05/03/16		14,834,742	64,708	**94,094**			**0.191**	2,057,059			4,539,976		
05/12/16		14,846,704	19,070		7.6	0.70	0.645	2,062,615	7.2	0.47	4,547,811	7.1	0.69
05/17/16		14,856,181	9,477					2,067,406			4,553,472		
	06/01/16	*14,889,570*		**May**			**Pounds Cr**						
06/06/16		14,902,417	46,236	**61,936**			**0.333**	2,086,371			4,585,701		
06/08/16		14,906,067	3,650		7.5	0.43	0.406	2,088,096	7.1	0.69	4,587,959	7.1	0.25
06/19/16		14,946,108	40,041					2,101,451			4,617,396		
	07/01/16	*14,980,911*		**June**			**Pounds Cr**						
07/01/16		14,983,214	37,106	**91,341**			**0.309**	2,113,474			4,646,051		
07/07/16		14,998,455	15,241		7.4	0.50	0.430	2,119,487	7.0	0.87	4,656,766	7.1	0.20
07/31/16		15,036,518	38,063					2,138,364			4,681,191		
	08/01/16	*15,036,760*		**July**			**Pounds Cr**						
08/01/16		15,037,244	726	**55,849**			**0.200**	2,138,788			4,682,282		
08/11/16		15,047,013	9,769		7.4	0.61	0.583	2,144,319	7.1	0.98	4,687,103	7.1	0.12
08/24/16		15,065,460	18,447					2,152,060			4,700,186		
	09/01/16	*15,080,715*		**August**			**Pounds Cr**						
09/02/16		15,081,239	15,779	**43,955**			**0.213**	2,159,787			4,709,523		
09/08/16		15,093,858	12,619		7.2	0.41	0.355	2,164,508	7.1	0.60	4,718,876	6.9	0.17
09/15/16		15,117,114	23,256					2,173,196			4,734,824		
09/30/16		15,161,513	44,399					2,190,037			4,766,164		
	10/01/16	*15,162,610*		**September**			**Pounds Cr**						
10/01/16		15,162,976	1,463	**81,895**			**0.242**	2,190,896			4,766,917		
10/05/16		15,170,280	7,304		7.5	0.76	0.707	2,194,329	7.1	1.17	4,771,417	7.2	0.24
	11/01/16	*15,218,316*		**October**			**Pounds Cr**						
11/01/16		15,218,916	48,636	**55,706**			**0.328**	2,214,974			4,803,706		
11/09/16		15,231,072	12,156		7.7	0.58	0.550	2,221,415	7.3	1.02	4,810,434	7.2	0.17
11/30/16		15,257,768	26,696					2,231,705			4,829,512		
	12/01/16	*15,259,593*		**November**			**Pounds Cr**						
12/01/16		15,262,085	4,317	**41,277**			**0.189**	2,233,005			4,832,948		
12/08/16		15,278,159	16,074		7.7	0.90	0.832	2,240,348	7.4	1.41	4,843,138	7.3	0.26
	01/01/17	*15,320,273*		**December**			**Pounds Cr**						
01/05/17		15,328,203	50,044	**60,680**			**0.420**						
01/05/17		15,328,203	0			1.00	0.895	2,259,750	7.5	1.44	4,878,940	7.4	0.47
01/31/17		15,387,622	59,419					2,272,198			4,933,594		
	02/01/17	*15,387,845*		**January**			**Pounds Cr**						
02/01/17		15,388,387	765	**67,572**			**0.504**	2,272,625			4,933,971		
02/09/17		15,399,455	11,068		7.8	0.56	0.542	2,277,351	7.5	0.99	4,941,836	7.1	0.13
	03/01/17	*15,452,749*		**February**			**Pounds Cr**						
03/08/17		15,476,369	76,914	**64,904**			**0.305**						
03/08/17		15,476,369	0		7.8	0.59	0.539	2,302,121	7.3	1.14	5,002,178	7.3	0.26
03/14/17		15,497,125	20,756					2,309,539			5,016,906		
03/25/17		15,528,765	31,640					2,321,231			5,039,669		
03/29/17		15,542,291	13,526					2,325,638			5,049,699		
	04/01/17	*15,558,808*		**March**			**Pounds Cr**						
04/02/17		15,562,275	19,984	**106,059**			**0.476**	2,333,037			5,064,049		
04/06/17		15,582,526	20,251		7.7	0.43	0.405	2,340,089	7.3	0.57	5,064,049	7.3	0.27
04/27/17		15,676,954	94,428					2,372,953			5,146,405		

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Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	05/01/17	*15,703,639*		**April**			**Pounds Cr**						
05/04/17		15,728,166	51,212	**144,831**			**0.488**						
05/04/17		15,728,166	0		7.6	0.28	0.257	2,387,552	7.1	0.36	5,185,807	6.8	0.21
	06/01/17	*15,796,047*		**May**			**Pounds Cr**						
06/08/17		15,812,038	83,872	**92,408**			**0.198**						
06/08/17		15,812,038	0		7.5	0.35	0.325	2,421,837	7.1	0.36	5,243,312	7.2	0.16
	07/01/17	*15,888,740*		**June**			**Pounds Cr**						
07/01/17		15,891,390	79,352	**92,693**			**0.251**						
07/06/17		15,902,647	11,257		7.5	0.57	0.525	2,453,044	7.1	0.69	5,309,639	7.0	0.50
07/31/17		15,945,154	42,507					2,472,011			5,337,122		
	08/01/17	*15,945,504*		**July**			**Pounds Cr**						
08/01/17		15,945,880	726	**56,764**			**0.248**	2,472,438			5,337,492		
08/09/17		15,958,437	12,557		7.4	0.68	0.624	2,478,016	7.0	0.66	5,347,291	6.9	0.38
	09/01/17	*15,992,489*		**August**			**Pounds Cr**						
09/07/17		16,001,926	43,489	**46,985**			**0.244**	2,472,438			5,337,492		
09/07/17		16,001,926	0		7.4	0.50	0.488	2,497,770	7.1	0.68	5,375,524	6.9	0.14
09/29/17		16,031,780	29,854					2,510,609			5,395,101		
	10/01/17	*16,034,956*		**September**			**Pounds Cr**						
10/03/17		16,035,404	3,624	**42,467**			**0.173**	2,512,318			5,397,338		
10/05/17		16,037,996	2,592		7.5	0.44	0.410	2,513,176	7.1	1.14	5,399,232	6.7	0.12
	11/01/17	*16,080,246*		**October**			**Pounds Cr**						
11/07/17		16,090,463	52,467	**45,290**			**0.155**	2,536,891			5,436,850		
11/09/17		16,092,667	2,204		7.6	0.76	0.718	2,538,180	7.2	0.99	5,437,985	7.2	0.22
11/15/17		16,098,379	5,712					2,541,643			5,441,055		
11/30/17		16,109,689	11,310					2,549,030			5,450,173		
	12/01/17	*16,110,147*		**November**			**Pounds Cr**						
12/03/17		16,112,117	2,428	**29,901**			**0.179**	2,550,308			5,451,687		
12/07/17		16,115,265	3,148		7.4	0.82	0.755	2,551,590	7.4	1.29	5,453,973	7.4	0.20
12/14/17		16,121,000	5,735					2,551,590			5,453,973		
12/31/17		16,131,936	10,936					2,560,147			5,464,203		
	01/01/18	*16,132,116*		**December**			**Pounds Cr**						
01/01/18		16,132,328	392	**21,969**			**0.138**	2,560,571			5,464,203		
01/04/18		16,133,697	1,369		--	0.78	0.734	2,560,993	--	0.41	5,465,331	--	0.04
	02/01/18	*16,144,665*		**January**			**Pounds Cr**						
02/01/18		16,144,863	11,166	**12,549**			**0.077**	2,566,068			5,472,876		
02/08/18		16,147,315	2,452		7.8	0.75	0.906	2,567,326	7.4	1.68	5,474,376	7.2	0.16
02/28/18		16,155,889	8,574					2,570,306			5,481,207		
	03/01/18	*16,156,053*		**February**			**Pounds Cr**						
03/01/18		16,156,211	322	**11,388**			**0.086**	2,570,306			5,481,586		
03/08/18		16,163,746	7,535		7.7	0.52	0.526	2,574,570	7.4	0.78	5,485,747	7.2	0.20
03/27/18		16,183,153	19,407					2,585,717			5,495,623		
03/31/18		16,188,615	5,462					2,472,869*			5,499,048		
	04/01/18	*16,189,199*		**March**			**Pounds Cr**						
04/01/18		16,190,057	1,442	**33,146**			**0.145**	2,473,316			5,500,204		
04/05/18		16,195,349	5,292		7.7	0.60	0.585	2,476,332	7.3	0.84	5,502,874	7.4	0.35
04/10/18		16,203,721	8,372					2,480,242			5,508,217		
04/25/18		16,302,239	98,518					2,508,161			5,586,326		
04/30/18		16,328,835	26,596					2,516,938			5,606,361		
	05/01/18	*16,330,212*		**April**			**Pounds Cr**						
05/01/18		16,331,044	2,209	**141,013**			**0.687**	2,517,809			5,607,864		
05/04/18		16,360,268	29,224					2,526,963			5,630,632		
05/10/18		16,409,694	49,426		7.6	0.30	0.315	2,541,347	7.2	0.51	5,667,843	6.8	0.19
05/22/18		16,428,757	19,063					2,547,991			5,681,939		
05/24/18		16,455,003	26,246					2,557,801			5,698,300		
05/29/18		16,462,967	7,964					2,562,178			5,702,537		
	06/01/18	*16,466,594*		**May**			**Pounds Cr**						
06/01/18		16,467,299	4,332	**136,382**			**0.358**	2,563,476			5,705,975		
06/05/18		16,476,100	8,801					2,566,515			5,712,597		
06/07/18		16,480,044	3,944		7.6	0.38	0.382	2,568,258	7.1	0.53	5,715,101	7.3	0.21
06/30/18		16,537,167	57,123					2,588,614			5,756,117		

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N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	07/01/18	*16,537,690*		**June**			**Pounds Cr**						
07/01/18		16,538,238	1,071	**71,096**			**0.226**	2,589,032			5,756,879		
07/05/18		16,542,427	4,189		7.6	0.31	0.311	2,591,176	7.2	0.57	5,759,920	7.1	0.16
07/12/18		16,545,145	2,718					2,594,639			5,763,368		
07/19/18		16,553,309	8,164					2,597,639			5,766,777		
07/31/18		16,571,725	18,416					2,604,452			5,779,752		
	08/01/18	*16,571,996*		**July**			**Pounds Cr**						
08/01/18		16,572,495	770	**34,306**			**0.089**	2,589,032			5,756,879		
08/08/18		16,581,462	8,967		--	0.43	0.438	2,608,818	7.1	0.55	5,785,813	7.0	0.27
08/31/18		16,637,913	56,451					2,629,840			5,828,591		
	09/01/18	*16,640,165*		**August**			**Pounds Cr**						
09/01/18		16,641,711	3,798	**68,169**			**0.125**	2,631,151			5,831,336		
09/06/18		16,695,169	53,458		7.5	0.24	0.256	2,646,502	7.1	0.59	5,871,311	6.7	0.08
09/17/18		16,734,724	39,555					2,659,921			5,899,762		
09/18/18		16,738,499	3,775					2,660,806			5,903,277		
09/30/18		16,775,825	37,326					2,672,955			5,932,062		
	10/01/18	*16,776,168*		**September**			**Pounds Cr**						
10/01/18		16,776,700	875	**136,003**			**0.290**	2,673,387			5,932,454		
10/03/18		16,785,853	9,153		7.8	0.30	0.303	2,675,556	7.3	0.60	5,940,463	7.1	0.22
10/25/18		16,899,216	113,363					2,709,668			6,027,153		
	11/01/18	*16,908,245*		**October**			**Pounds Cr**						
11/01/18		16,908,712	9,496	**132,077**			**0.333**	2,713,560			6,033,788		
11/07/18		16,921,099	12,387		7.7	0.38	0.424	2,717,458	7.1	0.36	6,044,211	6.8	0.34
11/12/18		16,936,140	15,041					2,723,181			6,054,634		
11/14/18		16,940,487	4,347					2,725,362			6,057,406		
11/16/18		16,944,318	3,831					2,727,099			6,059,771		
11/19/18		16,949,417	5,099					2,729,266			6,063,298		
	12/01/18	*16,964,903*		**November**			**Pounds Cr**						
12/06/18		16,972,133	22,716	**56,658**			**0.200**	2,738,784			6,080,566		
12/06/18		16,972,133	0		8.0	0.52	0.521	2,738,784	7.4	0.53	6,080,566	7.2	0.45
	01/01/19	*17,020,007*		**December**			**Pounds Cr**						
01/04/19		17,021,076	48,943	**55,104**			**0.239**	2,757,483			6,116,420		
01/10/19		17,051,054	29,978		7.8	0.26	0.246	2,765,903	7.2	0.41	6,140,244	7.0	0.18
	02/01/19	*17,085,876*		**January**			**Pounds Cr**						
02/01/19		17,086,762	35,708	**65,869**			**0.135**	2,779,438			6,166,376		
02/07/19		17,092,183	5,421		8.0	0.36	0.398	2,781,163	7.5	0.37	6,170,668	7.3	0.35
	03/01/19	*17,108,085*		**February**			**Pounds Cr**						
03/01/19		17,108,314	16,131	**22,209**			**0.074**	2,786,817			6,183,118		
03/07/19		17,112,149	3,835		7.9	0.29	0.296	2,788,121	7.4	--	6,186,219	7.4	--
03/26/19		17,201,867	89,718					2,810,744			6,261,318		
	04/01/19	*17,220,303*		**March**			**Pounds Cr**						
04/02/19		17,221,255	19,388	**112,218**			**0.277**	2,818,615			6,274,417		
04/02/19		17,221,255	0		7.7	0.40	0.408	2,818,615	7.2	0.53	6,274,417	7.2	0.15
04/18/19		17,270,735	49,480					2,834,848			6,312,336		
04/30/19		17,336,326	65,591					2,855,668			6,362,011		
	05/01/19	*17,338,042*		**April**			**Pounds Cr**						
05/01/19		17,340,509	4,183	**117,739**			**0.400**	2,856,981			6,365,212		
05/09/19		17,366,641	26,132		7.8	0.43	0.441	2,866,635	7.2	0.39	6,383,940	7.2	0.66
	06/01/19	*17,467,893*		**May**			**Pounds Cr**						
06/06/19		17,492,562	125,921	**129,851**			**0.477**	2,856,981			6,365,212		
06/06/19		17,492,562	0		7.6	0.23	0.249	2,908,632	7.2	0.32	6,478,871	7.0	0.22
06/11/19		17,502,105	9,543					2,912,952			6,486,321		
06/18/19		17,525,532	23,427					2,920,258			6,503,730		
	07/01/19	*17,581,030*		**June**			**Pounds Cr**						
07/08/19		17,613,923	88,391	**113,137**			**0.235**	2,947,437			6,572,415		
07/10/19		17,619,393	5,470		7.6	0.25	0.229	2,949,581	7.1	0.48	6,576,370	7.0	0.12
07/22/19		17,636,628	17,235					2,956,444			6,590,064		
07/23/19		17,644,137	7,509					2,958,908			6,596,369		
07/26/19		17,655,780	11,643					2,961,918			6,602,890		
07/31/19		17,662,536	6,756					2,965,324			6,606,751		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

	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) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis[1] (mg/L) [Local Limit 7.0 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)
	08/01/19	*17,662,953*		**July**			**Pounds Cr**						
08/01/19		17,663,650	1,114	**81,923**			**0.156**	2,965,752			6,607,522		
08/07/19		17,674,432	10,782		7.7	0.37	0.383	2,969,223	7.3	0.38	6,615,773	7.5	0.30
08/31/19		17,712,769	38,337					2,984,986			6,643,285		
	09/01/19	*17,713,001*		**August**			**Pounds Cr**						
09/01/19		17,713,872	1,103	**50,048**			**0.160**	2,985,412			6,644,057		
09/05/19		17,719,385	5,513		7.8	0.48	0.489	2,987,590	7.3	0.50	6,644,933	7.3	0.43
09/18/19		17,790,650	71,265					3,009,066			6,701,147		
09/30/19		17,829,959	39,309					3,022,795			6,730,481		
	10/01/19	*17,830,522*		**September**			**Pounds Cr**						
10/01/19		17,831,112	1,153	**117,521**			**0.479**	2,985,412			6,644,057		
10/10/19		17,895,551	64,439		7.7	0.23	0.239	3,042,581	7.4	0.35	6,779,975	7.2	0.16

Italicized red type metered discharge reading was calculated by linear interpolation to 12 midnight.

Industrial User (Wastewater Discharge) Permit 18-21 Outfall 001 Effluent Limits		
pH	Hexavalent Chromium	Total Chromium
Between 5.0 and 12.4 s.u.	<4.5 mg/L	<7.0 mg/L

[1] Beginning in September 2018, the Total Chromium lab sample was not filtered. Previously, through August 2018, the sample was filtered (0.45 micron filter).
* On 3/31/18, the MH1 flowmeter face was blank. Upon replacing the batteries, the totalizer reading reverted to 2,472,869 gallons, a difference of -112,848 gallons from the previous known total.

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[1] (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 #18-21 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
Appleton	08/19/08	<0.08	<0.001	<0.01	0.95	<0.01	0.005	<0.03	0.0002	<0.02	<0.01	NA
Appleton	03/31/09	<0.09	<0.012	<0.01	0.99	<0.01	<0.008	<0.05	<0.0002	<0.02	<0.01	NA
OMNNI	04/07/09	<0.0151	0.003 J	0.00040 J	0.767	0.0024 J	<0.0060	<0.0014	<0.00010	0.0016 J	0.0137 J	0.84
Appleton	09/22/09	<0.08	<0.006	<0.01	2.3	<0.01	<0.008	<0.05	<0.0002	<0.02	<0.01	NA
Appleton	03/02/10	<0.06	<0.002	<0.01	1.6	<0.01	<0.008	<0.03	<0.0002	<0.01	<0.01	NA
OMNNI	04/06/10	0.0501 J	<0.0014	0.00043 J	1.16	0.0024 J	<0.0061	<0.00075	<0.0001	0.0023 J	0.0046 J	1.3
Appleton	11/02/10	<0.10	<0.010	<0.01	0.71	<0.01	<0.008	<0.03	<0.0002	<0.01	<0.01	NA
Appleton	02/24/11	<0.08	<0.001	<0.01	1.5	<0.01	0.008	<0.04	<0.0002	<0.02	<0.01	NA
OMNNI	04/05/11	0.0725 J	0.0025 J	<0.00026	0.401	0.0028 J	<0.0061	<0.0014	<0.00010	0.00053 J	0.0023 J	0.40
Appleton	10/26/11	<0.08	<0.005	<0.01	1.2	<0.01	0.007	<0.04	<0.0002	<0.02	<0.01	NA
Appleton	03/21/12	<0.11	<0.004	<0.01	1.3	0.01	0.007	<0.04	<0.0002	<0.02	<0.01	NA
Terracon	04/05/12	<0.0695	<0.0047	<0.00039	0.696	0.014 J	<0.0061	<0.0014	<0.00010	0.001 J	<0.0053	0.83
Appleton	10/04/12	0.0865	0.0051	0.00049	1.43	0.0028 J	0.026	0.0022	0.0001	0.00019 J	<0.0053	NA
Terracon	04/11/13	0.078	<0.004	<0.00048	0.431	0.0024 J	<0.0038	<0.027	<0.00010	0.00013 J	<0.0024	0.42
Appleton	04/17/13	<0.0714	<0.0042	<0.00048	0.279	0.0029 J	<0.0038	<0.027	<0.00010	0.00062 J	<0.0024	NA
Appleton	11/20/13	<0.0714	<0.0042	<0.00048	1.13	0.0018 J	0.0044 J	<0.027	<0.00010	0.00085 J	0.0034 J	NA
Appleton	04/15/14	0.119 J	<0.0068	<0.001	0.27	0.0036 J	<0.060	<0.0016	<0.00010	<0.0013	<0.0058	NA
Terracon	05/13/14	0.116 J	<0.0068	<0.001	0.273	0.0034 J	<0.060	0.0040 J	<0.00010	<0.0013	0.0064 J	0.28
Appleton	9/24/2014	<0.0655	<0.0068	<0.001	0.757	<0.0034	<0.010	<0.0016	<0.00010	<0.0013	<0.0058	NA
Terracon	4/15/2015	0.054 J	<0.0072	<0.00060	0.858	0.0041 J	<0.010	<0.0030	<0.00010	<0.0014	0.0026 J	0.92
Appleton	6/3/2015	<0.0655	<0.0068	<0.001	0.504	<0.0034	<0.020	<0.0016	<0.00010	0.0013 J	<0.0058	NA
Appleton	10/21/2015	0.105 J	<0.0068	<0.0010	0.676	<0.0034	<0.010	0.0024 J	<0.00010	<0.0013	0.0078 J	NA
Terracon	5/12/2016	0.0637 J	<0.0072	<0.00060	0.645	<0.0036	<0.0068	<0.0030	<0.00013	0.0018 J	<0.0013	0.70
Appleton	5/17/2016	<0.090	<0.001	<0.010	0.530	<0.010	<0.007	<0.030	<0.0002	<0.020	<0.01	NA
Appleton	11/1/2016	<0.090	<0.010	<0.010	0.560	<0.010	<0.007	<0.030	<0.0002	<0.020	<0.010	NA
Appleton	4/27/2017	<0.060	<0.001	<0.010	0.370	<0.010	0.007	<0.030	<0.0002	<0.020	<0.010	NA
Terracon	6/8/2017	<0.0555	<0.0083	<0.0013	0.345	<0.0063	<0.0068	<0.0043	<0.00013	<0.0026	<0.0093	0.35
Appleton	11/9/2017	<0.060	0.001	0.010	0.770	<0.010	<0.007	<0.030	<0.0002	<0.020	<0.010	NA
Appleton	5/22/2018	NA	<0.015	<0.0006	0.319	0.005	0.010	<0.005	<0.0002	0.005	<0.002	NA
Terracon	6/7/2018	0.0713 J	<0.0083	<0.0013	0.382	<0.0063	<0.014	<0.0043	<0.00013	<0.0026	<0.0093	0.38
Appleton	11/14/2018	NA	0.020	0.001	0.325	0.004	<0.009	<0.005	<0.0002	0.004	0.004	NA
Appleton	4/18/2019	NA	<0.015	<0.0006	0.519	0.005	<0.005	<0.009	<0.0002	0.005	<0.002	NA
Terracon	7/10/2019	NA	0.0091 J	<0.0013	0.229	<0.0063	0.011 J	0.006 J	<0.00013	0.0029 J	<0.0116	0.25
Appleton	9/18/2019	NA	Results not yet available									NA

J = Estimated concentration detected above the limit of detection and below the limit of quantitation

[1] Beginning in September 2018, the Total Chromium lab sample was not filtered. Previously, through August 2018, the sample was filtered (0.45 micron filter).

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

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
	04/03/09	1.20		803.46
	03/17/10	1.37		803.29
	04/29/11	0.65		804.01
	03/14/12	1.55		803.11

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N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
W-2	04/29/13	1.68		802.98
	04/21/14	0.80		803.86
	09/16/14	7.19		797.47
	04/13/15	1.55		803.11
	03/30/16	1.41		803.25
	03/28/17	1.32		803.34
	04/10/18	4.66		800.00
	09/25/19	4.10		800.56
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

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N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
W-8	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
	04/03/09	6.16		797.20
	03/17/10	6.14		797.22
	04/29/11	5.92		797.44
	03/14/12	6.09		797.27
	04/29/13	6.46		796.90
	04/21/14	6.20		797.16
	09/16/14	6.27		797.09
	04/13/15	6.09		797.27
	03/30/16	6.08		797.28
	03/28/17	5.94		797.42
	04/10/18	5.99		797.37
	09/25/19	6.12		797.24
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

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
W-15	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	-		-
	04/03/09	6.24		797.18
	03/17/10	7.19		796.23
	04/29/11	6.21		797.21
	03/14/12	6.62		796.80
	04/29/13	6.41		797.35
	04/21/14	ICE		#VALUE!
	09/16/14	6.40	803.96	797.56
	04/13/15	6.45		797.51
	03/30/16	6.41		797.55
	03/28/17	6.21		797.75
	04/10/18	7.38		796.58
	09/25/19	6.65		797.31
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

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-101	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
	04/03/09	5.09		802.50
	03/17/10	7.27		800.32
	04/29/11	3.36		804.23
	03/14/12	6.55		801.04
	04/29/13	5.46		802.13
	04/21/14	3.64	807.60	803.95
	09/16/14	5.37		802.23
	04/13/15	3.80		803.80
	03/30/16	4.95		802.65
	03/28/17	4.65		802.95
	04/10/18	5.14		802.46
	09/25/19	5.68		801.92
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

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-102	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
	12/17/02	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
	03/29/05	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
	04/03/09	23.48		780.89
	03/17/10	23.44		780.93
	04/29/11	23.18		781.19
	03/14/12	23.48		780.89
	04/29/13	21.05		783.40
	04/21/14	21.33		783.12
	09/16/14	23.83		780.62
	04/13/15	20.85		783.60
	03/30/16	22.22		782.23
	03/28/17	21.78		782.67
	04/10/18	25.02		779.43
MW-103	02/01/97	-		795.29
	05/01/97	-		791.83

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-103	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
	09/22/08	9.62		794.12
	04/03/09	8.22		795.52
	09/01/09	9.78		793.96
	03/17/10	8.07		795.67
	09/09/10	8.66		795.08
	04/29/11	4.32		799.42

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-103	09/01/11	9.63		794.11
	03/14/12	7.95		795.79
	09/11/12	11.30		792.44
	04/29/13	6.47		797.27
	09/18/13	5.91		797.83
	04/21/14	6.15		797.59
	09/16/14	4.74		799.00
	04/13/15	5.33		798.41
	09/14/15	5.73		798.01
	03/30/16	4.67		799.07
	09/21/16	7.22		796.52
	03/28/17	5.49		798.25
	10/03/17	8.34		795.40
	04/10/18	10.53		793.21
	09/17/18	6.75		796.99
	09/25/19	4.56		799.18
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

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-104	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
	09/22/08	17.08		790.20
	04/03/09	7.93		799.35
	09/01/09	19.45		787.83
	03/17/10	8.13		799.15
	09/09/10	11.46		795.82
	04/29/11	7.60		799.68
	09/01/11	17.67		789.61
	03/14/12	8.28		799.00
	09/11/12	24.08		783.20
	04/29/13	8.62		798.66
	09/18/13	20.00		787.28
	04/21/14	8.65		798.63
	09/16/14	8.53		798.75
	04/13/15	7.28		800.00
	09/14/15	8.54		798.74
	03/30/16	7.42		799.86
	09/21/16	9.92		797.36
	03/28/17	7.11		800.17
	10/03/17	9.58		797.70
	04/10/18	9.32		797.96
	09/17/18	13.71		793.57
	09/25/19	8.18		799.10
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

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-105	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
	04/03/09	3.29		800.17
	03/17/10	4.05		799.41
	04/29/11	2.30		801.16
	03/14/12	3.50		799.96
	04/29/13	3.41		800.55
	04/21/14	2.68		801.28
	09/16/14	3.40		800.56
	04/13/15	2.94		801.02
	03/30/16	3.29		800.67
	03/28/17	3.11		800.85
	04/10/18	4.18		799.78
MW-106	02/01/97	-		794.75
	05/01/97	-		797.23
	09/01/97	-		796.91

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-106	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
	04/03/09	7.03		796.80
	03/17/10	7.03		796.80
	04/29/11	5.05		798.78
	03/14/12	6.75		797.33
	04/29/13	7.04		797.04
	04/21/14	Inaccessible		#VALUE!
	09/16/14	6.11	804.15	798.04

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-106	04/13/15	5.77	804.15	798.38
	03/30/16	5.72		798.43
	03/28/17	3.88		800.27
	04/10/18	7.31		796.84
	09/25/19	6.22		797.93
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

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-107	09/27/07	10.86		798.20
	04/16/08	8.92		800.14
	09/22/08	11.35		797.71
	04/03/09	9.02		800.04
	09/01/09	11.15		797.91
	03/17/10	9.09		799.97
	09/09/10	10.72		798.34
	04/29/11	8.17		800.89
	09/01/11	11.14		797.92
	03/14/12	8.74		800.32
	09/11/12	11.51		797.55
	04/29/13	9.33		799.76
	09/17/13	11.15		797.94
	04/21/14	8.35		800.74
	09/16/14	10.19		798.90
	04/13/15	8.86		800.23
	09/14/15	9.60		799.49
	03/30/16	7.79		801.30
	09/21/16	10.34		798.75
	03/28/17	8.49		800.60
	10/03/17	11.04		798.05
	04/10/18	10.96		798.13
	09/17/18	9.75		799.34
	09/25/19	8.68		800.41
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

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-108	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
	04/03/09	6.04		800.57
	03/17/10	6.32		800.29
	04/29/11	6.76		799.85
	03/14/12	6.39		800.22
	04/29/13	6.58		800.03
	04/21/14	6.64		799.97
	09/16/14	6.57		800.04
	04/13/15	6.42		800.19
	03/30/16	6.02		800.59
	03/28/17	6.51		800.10
	04/10/18	6.92		799.69
	09/25/19	6.40		800.21
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
	09/22/08	9.04		801.48
	04/03/09	7.85		802.67
	09/01/09	8.53		801.99
	03/17/10	8.05		802.47
	09/09/10	9.46		801.06

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-109	04/29/11	7.39		803.13
	09/01/11	9.54		800.98
	03/14/12	7.71		802.81
	09/11/12	8.99		801.53
	04/29/13	8.92		801.60
	09/17/13	8.29		802.23
	04/21/14	7.76		802.76
	09/16/14	8.09		802.43
	04/13/15	7.71		802.81
	09/14/15	8.20		802.32
	03/30/16	7.18		803.34
	09/21/16	9.64		800.88
	03/28/17	7.67		802.85
	10/03/17	9.60		800.92
	04/10/18	7.92		802.60
	09/17/18	9.29		801.23
	09/25/19	8.37		802.15
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
	09/22/08	10.67		799.14
	04/03/09	8.72		801.09
	09/01/09	10.52		799.29
	03/17/10	8.92		800.89
	09/09/10	10.24		799.57
	04/29/11	6.72		803.09
	09/01/11	10.57		799.24
	03/14/12	7.98		801.83
	09/11/12	10.91		798.90
	04/29/13	8.75		801.06
	09/17/13	10.47		799.34
	04/21/14	7.12		802.69
	09/16/14	9.57		800.24
	04/13/15	7.13		802.68
	09/14/15	9.20		800.61
	03/30/16	6.75		803.06
	09/21/16	10.86		798.95
	03/28/17	5.82		803.99
	10/03/17	10.31		799.50
	04/10/18	7.61		802.20
	09/17/18	9.15		800.66
	09/25/19	5.80		804.01

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
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
	09/22/08	10.03		797.56
	04/03/09	5.68		801.91
	09/01/09	9.95		797.64
	03/17/10	6.17		801.42
	09/09/10	8.83		798.76
	04/29/11	5.25		802.34
	09/01/11	9.33		798.26
	03/14/12	6.11		801.48
	09/11/12	12.61		794.98
	04/29/13	6.61		800.98
	09/18/13	10.80		796.79
	04/21/14	5.65		801.94
	09/16/14	7.66		799.93
	04/13/15	5.79		801.80
	09/14/15	8.10		799.49
	03/30/16	5.65		801.94
	09/21/16	9.43		798.16
	03/28/17	5.28		802.31
	10/03/17	9.17		798.42
	04/10/18	6.58		801.01
	09/17/18	7.76		799.83
	09/25/19	6.10		801.49
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
	09/22/08	9.29		798.85
	04/03/09	6.85		801.29
	09/01/09	9.32		798.82
	03/17/10	7.87		800.27
	09/09/10	8.57		799.57
	04/29/11	3.69		804.45
	09/01/11	9.19		798.95
	03/14/12	3.49		804.69

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
MW-112	09/11/12	10.57		797.57
	04/29/13	6.11		802.03
	09/17/13	9.72		798.42
	04/21/14	3.58		804.56
	09/16/14	8.34		799.80
	04/13/15	3.73		804.41
	09/14/15	8.50		799.64
	03/30/16	3.86		804.28
	09/21/16	9.16		798.98
	03/28/17	3.64		804.50
	10/03/17	9.70		798.44
	04/10/18	4.19		803.95
	09/17/18	6.95		801.19
	09/25/19	3.40		804.74
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
	09/22/08	9.97		798.27
	04/03/09	7.41		800.83
	09/01/09	9.72		798.52
	03/17/10	7.37		800.87
	09/09/10	9.48		798.76
	04/29/11	6.50		801.74
	09/01/11	9.74		798.50
	03/14/12	6.86		801.38
	09/11/12	10.11		798.13
	04/29/13	8.14		800.10
	09/17/13	9.80		798.44
	04/21/14	6.95		801.29
	09/16/14	9.00		799.24
	04/13/15	6.53		801.71
	09/14/15	8.40		799.84
	03/30/16	6.78		801.46
	09/21/16	9.07		799.17
	03/28/17	6.54		801.70
	10/03/17	9.67		798.57
	04/10/18	8.87		799.37
	09/17/18	8.61		799.63
	09/25/19	7.00		801.24
PZ5	07/19/05	37.39	810.88	773.49

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
PZ5	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
	04/03/09	28.00		782.88
	03/17/10	28.33		782.55
	04/29/11	27.33		783.55
	03/14/12	27.68		783.20
	04/29/13	27.40		783.48
	04/21/14	27.88		783.00
	09/16/14	27.40		783.48
	04/13/15	28.78		782.10
	03/30/16	26.86		784.02
	03/28/17	26.74		784.14
	04/10/18	28.10		782.78
	09/25/19	25.10		785.78
PZ6	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
	04/03/09	29.15		780.62
	03/17/10	29.72		780.05
	04/29/11	28.37		781.40
	03/14/12	28.85		780.92
	04/29/13	28.40		781.37
	04/21/14	28.91		780.86
	09/16/14	28.80		780.97
	04/13/15	30.00		779.77
	03/30/16	28.04		781.73
	03/28/17	27.91		781.86
	04/10/18	29.29		780.48
	09/25/19	27.43		782.34
PZ7	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

TABLE 3
Groundwater Elevations
N.W. Mauthe Superfund Site - Appleton, WI
Terracon Project No. 58117057

Well Name	Date Measured	Depth To Water (feet)	Reference Elevation (To Top PVC) (feet)	Groundwater Elevation (feet)
PZ7	04/03/09	23.76		780.72
	03/17/10	24.33		780.15
	04/29/11	23.27		781.21
	03/14/12	23.70		780.78
	04/29/13	24.19		780.29
	04/21/14	23.94		780.54
	09/16/14	22.65		781.83
	04/13/15	23.21		781.27
	03/30/16	21.35		783.13
	03/28/17	21.49		782.99
	04/10/18	22.07		782.41
	09/25/19	21.67		782.81
PZ8	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
	04/03/09	20.63		783.72
	03/17/10	21.25		783.10
	04/29/11	20.65		783.70
	03/14/12	20.94		783.41
	04/29/13	20.25		784.10
	04/21/14	20.09		784.26
	09/16/14	20.71		783.64
	04/13/15	21.02		783.33
	03/30/16	19.67		784.68
	03/28/17	19.81		784.54
	04/10/18	21.27		783.08
	09/25/19	20.79		783.56

* 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, event.
***** New elevation after the PVC casing was shortened after the March 21, 2006, event.
******New elevation after PVC casing was shortened after the December 19, 2006, event.

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	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	7.93	14.80	1278 us	1.40	119.00	12.00	0.00
	02/09/99	4	8.47	9.50	1278 us	2.10	146.00	16.00	0.20
	06/08/99	4	7.20	14.60	1234 us	1.00	85.00	11.20	1.00
	09/13/99	5.1	7.34	15.00	1254 us	1.90	(136.00)	9.60	0.00
	12/15/99	4.8	7.77	11.80	1199 us	1.50	(231.00)	4.80	0.00
	03/13/00	7	6.17	8.90	1278 us	1.30	59.00	7.60	0.00
	06/22/00	4.4	7.86	12.10	1240 us	1.50	59.00	7.60	0.00
	09/27/00	6.6	6.39	16.40	1140 us	1.90	(187.00)	9.60	0.00
	12/19/00	5	7.66	9.50	1171 us	1.85	(161.00)	11.20	0.00
	03/01/01	3.5	7.42	10.50	1084 us	1.41	(222.00)	9.20	0.00
	06/19/01	7	7.81	15.60	1980 us	1.10	(18.00)	8.40	0.00
	09/24/01	5	7.48	13.40	1712 us	0.90	(38.00)	6.60	0.00
	12/05/01	5	7.51	10.20	1244 us	1.10	(71.00)	9.60	0.00
	03/19/02	6	7.51	10.60	977 us	1.10	(210.00)	13.20	0.00
	06/20/02	6	7.40	15.00	1870 us	0.80	(88.00)	8.80	0.00
	09/18/02	5	7.18	14.80	1138 us	1.00	(99.00)	10.40	0.00
	12/17/02	4	7.34	10.30	1187 us	1.00	(103.00)	9.60	0.00
	03/24/03	4	7.30	10.30	1077 us	1.00	(310.00)	10.00	0.00
	06/10/03	6	7.21	14.90	1620 us	1.00	(110.00)	12.80	0.00
	09/10/03	4	7.09	14.60	1210 us	0.80	(111.00)	8.80	0.00
	03/24/04	4.5	7.30	7.40	1210 us	EM	6.00	NA	0.00
	03/29/05	4.5	7.20	6.30	1182 us	3.40	85.00	NA	0.00
	03/23/06	7	6.60	10.50	2470 us	2.65	191.00	NA	0.03
	03/27/07	4	7.4	9.0	1240 us	8.0	243	NA	0.04
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA
	09/22/08	NA	NA	NA	NA	NA	NA	NA	NA
	04/03/09	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/10	NA	NA	NA	NA	NA	NA	NA	NA
	04/29/11	1.25	7.45	7.1	1276.0 µs	0.69	126.7	NA	0.17
	04/14/15	4	5.88	8.94	6.14 mS/cm	1.91	(194.0)	NA	2.44
	09/25/19	7	6.91	13.51	1.475 mS/cm	0.36	(70.0)	NA	1.90

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	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	7.42	16.70	1459 us	1.30	97.00	14.40	0.20
	02/09/99	3.9	8.08	11.20	1386 us	1.30	21.00	8.00	2.40
	06/08/99	5.5	7.23	14.80	1283 us	1.80	85.00	14.00	5.60
	09/13/99	5.2	7.12	16.30	1363 us	1.70	(143.00)	14.40	1.60
	12/15/99	5.1	7.25	10.30	1375 us	0.90	(288.00)	14.40	1.20
	03/13/00	5	7.06	8.80	1277 us	1.10	(33.00)	8.40	1.00
	06/22/00	5	8.58	14.60	1177 us	1.97	(120.00)	6.80	0.00
	09/27/00	6	7.60	18.10	1098 us	1.50	(178.00)	10.00	0.00
	12/19/00	4	7.67	8.30	1227 us	1.14	(267.00)	11.60	0.00
	03/01/01	5	7.51	11.10	1175 us	1.20	(311.00)	11.20	0.00
	06/19/01	6	7.93	14.80	1310 us	0.80	(24.00)	6.20	0.00
	09/24/01	6	7.37	13.10	1177 us	0.40	4.00	6.40	0.00
	12/05/01	5	7.30	10.40	1288 us	1.00	(163.00)	12.40	0.00
	03/19/02	6	7.44	10.90	1044 us	1.30	(280.00)	11.20	0.00
	06/20/02	6	7.51	14.20	1240 us	0.80	(90.00)	6.20	0.00
	09/18/02	5	7.31	15.60	1221 us	1.30	(104.00)	14.60	1.00
	12/17/03	3	7.28	10.60	1,155	1.10	(172.00)	12.40	0.40
	03/24/03	5	7.18	10.60	1131 us	0.80	(342.00)	11.20	0.00
	06/10/03	4	7.30	15.00	1133 us	0.80	(121.00)	8.80	0.00
	09/10/03	5	7.22	15.00	1240 us	1.00	(175.00)	11.60	0.80
	03/24/04	4.3	7.40	7.80	755 us	EM	(47.00)	NA	0.00
	03/29/05	4	7.10	7.80	1743 us	3.43	87.00	NA	0.00
	03/23/06	4	7.20	8.30	2560 us	4.00	227.00	NA	0.00
	03/27/07	3	7.3	10.3	1438 us	6.71	237	NA	0.03
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA
	09/22/08	NA	NA	NA	NA	NA	NA	NA	NA
	04/03/09	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/10	NA	NA	NA	NA	NA	NA	NA	NA
	04/29/11	1.25	7.52	8.5	1510.0 µS/cm	3.32	222	NA	0.03
	04/13/15	1.5	6.55	8.49	4.74 mS/cm	5.92	138	NA	<0.0129
	09/25/19	5.5	7.13	16.96	1.07 mS/cm	0.00	108	NA	<0.0296

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	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	7.27	16.00	1551 us	0.80	137.00	14.40	0.00
	02/09/99	2.6	8.07	10.00	1418 us	1.30	7.00	12.00	0.60
	06/08/99	4.5	7.54	16.70	1465 us	1.50	75.00	12.00	1.40
	09/13/99	3.6	7.18	17.60	1647 us	1.90	(137.00)	10.40	0.80
	12/15/99	3.3	7.52	11.70	1544 us	1.50	(281.00)	12.40	1.00
	03/13/00	4	7.14	8.90	1266 us	1.40	(19.00)	7.60	0.40
	06/22/00	3	8.22	14.90	1546 us	1.63	36.00	7.30	0.00
	09/27/00	5	5.43	17.40	1711 us	1.30	(41.00)	12.40	0.00
	12/19/00	3	7.55	8.90	1628 us	3.23	(305.00)	15.20	1.60
	03/01/01	4	7.43	10.90	1435 us	2.10	(381.00)	16.00	0.80
	06/19/01	5	8.18	14.80	1380 us	1.40	(64.00)	6.00	0.00
	09/24/01	5	7.22	12.60	1160 us	1.00	(49.00)	8.00	0.00
	12/05/01	3	7.28	9.90	1544 us	2.00	(280.00)	12.80	1.20
	03/19/02	5	7.58	10.30	1284 us	1.80	(318.00)	12.20	0.40
	06/20/02	5	8.00	14.60	1280 us	1.00	(180.00)	12.40	0.00
	09/18/02	5	7.20	16.30	1399 us	1.60	(152.00)	13.60	0.40
	12/17/02	3	7.18	10.00	1234 US	2.00	(220.00)	8.80	1.00
	03/24/03	3	7.22	10.60	1294 us	1.40	(330.00)	12.40	0.20
	06/10/03	5	7.76	14.80	1148 us	1.20	(174.00)	11.20	0.00
	09/10/03	5	7.18	15.40	1317 us	1.20	(170.00)	10.40	0.60
	03/24/04	3.7	7.30	8.40	1516 us	EM	(32.00)	NA	0.00
	03/29/05	3	7.00	8.20	2240 us	3.81	85.00	NA	0.00
	03/23/06	4	7.00	7.50	1952 us	4.40	236.00	NA	0.00
	03/28/07	3	7.3	9.0	1420 us	3.28	213	NA	0.01
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA
	09/22/08	NA	NA	NA	NA	NA	NA	NA	NA
	04/03/09	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/10	NA	NA	NA	NA	NA	NA	NA	NA
	04/29/11	1.25	7.43	7.9	1713.0 µs	3.68	219	NA	0.00
	04/13/15	1.5	6.38	11.85	5.29 mS/cm	8.82	140	NA	<0.0129
	09/25/19	4.0	7.46	18.77	0.780 mS/cm	0.39	85	NA	<0.0296

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	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	7.13	14.10	2.27 ms	0.50	116.00	12.00	0.00
	02/09/99	7	8.11	12.70	2.11 ms	1.10	165.00	8.80	0.20
	06/08/99	6	7.05	15.00	2.17 ms	0.70	161.00	8.00	0.20
	09/13/99	5.9	7.25	14.90	2.12 ms	0.90	(125.00)	13.60	0.00
	12/15/99	6	8.71	12.70	2.06 ms	1.00	(262.00)	8.80	0.00
	03/13/00	7	6.34	11.60	1939 us	1.10	44.00	8.00	0.00
	06/22/00	5	7.73	15.20	2.25 ms	0.96	50.00	8.00	0.00
	09/27/00	8.5	6.80	15.50	2.18 ms	0.70	3.00	12.80	0.00
	12/19/00	10.5	7.12	11.90	2.18 ms	1.48	(233.00)	14.40	0.00
	03/01/01	8	7.41	11.00	2.31 ms	1.32	(283.00)	12.20	0.00
	06/19/01	9	8.04	13.60	1265 us	1.00	10.00	7.20	0.00
	09/24/01	8	7.79	13.40	1304 us	1.00	(11.00)	11.20	0.00
	12/05/01	9	7.40	11.20	2240 us	1.20	(304.00)	8.40	0.00
	03/19/02	9	7.36	10.80	1984 us	1.40	(210.00)	12.20	0.00
	06/20/02	10	7.93	13.80	1190 us	0.80	(30.00)	14.00	0.00
	09/18/02	10	7.24	15.00	2248 us	0.80	(113.00)	8.80	0.00
	12/17/02	8	7.27	11.40	1988 us	1.60	(334.00)	8.40	0.00
	03/24/03	9	7.45	11.10	1033 us	0.60	(190.00)	11.20	0.00
	06/10/03	10	7.66	14.00	1121 us	1.00	(61.00)	13.20	0.00
	09/10/03	8	7.30	14.80	2104 us	0.80	(124.00)	7.20	0.00
	03/24/04	6.7	6.90	10.10	3160 us	EM	(69.00)	NA	0.00
	03/29/05	6	6.60	12.12	4730 us	1.27	83.00	NA	0.00
	03/23/06	7	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
	09/22/08	NA	NA	NA	NA	NA	NA	NA	NA
	04/03/09	1.5	6.88	7.9	8.83 ms	2.23	NA	NA	NA
	03/17/10	1.5	6.90	9.1	7.30 ms	2.76	263	NA	NA
	04/29/11	1.25	7.06	10.2	5920 µs	2.57	293	NA	0.00
	03/16/12	2	6.20	10.1	0.47 S/m	1.90	212	NA	NA
	04/29/13	2.5	9.59	9.3	6.33 ms	2.09	(74.40)	NA	NA
	04/21/14	3.5	6.84	7.4	2.97 mS/cm	3.99	258.6	NA	NA
	04/14/15	2	5.87	8.17	19.5 mS/cm	5.42	144	NA	<0.0129
	03/30/16	1.5	6.86	8.90	4.56 mS/cm	2.43	58.7	NA	NA
	03/29/17	2	8.89	10.30	4.951 mS/cm	2.28	221.2	NA	NA
	04/11/18	1.5	6.74	9.90	5.369 mS/cm	2.65	133.8	NA	NA
	09/25/19	1.5	6.60	18.22	7.027 mS/cm	0.38	84.5	NA	<0.0296

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	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	8.07	13.00	1197 us	1.50	103.00	17.60	0.40
	02/09/99	0.5	7.48	11.00	1164 us	1.00	0.33	14.40	0.00
	06/08/99	0.5	7.89	18.60	1226 us	1.00	151.00	4.80	0.80
	09/13/99	0.5	7.84	13.30	1208 us	1.20	(246.00)	10.00	1.20
	12/15/99	0.5	7.78	9.00	1152 us	1.60	(288.00)	10.80	1.00
	03/13/00	0.5	6.74	9.70	1096 us	1.20	(260.00)	6.80	0.00
	06/22/00	0.5	8.01	12.30	1233 us	0.53	(13.00)	6.00	0.00
	09/27/00	0.5	8.25	12.50	1182 us	1.90	(241.00)	9.20	0.00
	12/19/00	0.5	7.59	8.70	1126 us	1.27	(454.00)	11.60	0.00
	03/01/01	0.5	7.30	10.90	1321 us	1.02	(521.00)	9.20	0.00
	06/19/01	0.5	8.64	13.20	1944 us	0.60	35.00	6.40	0.00
	09/24/01	0.5	7.63	13.40	1622 us	0.80	18.00	7.20	0.00
	12/05/01	0.5	7.59	9.40	1233 us	0.80	(110.00)	12.40	0.00
	03/19/02	0.5	7.41	10.80	1143 us	0.90	(503.00)	9.20	0.50
	06/20/02	0.5	8.18	13.80	1720 us	0.40	4.00	9.60	0.00
	09/18/02	0.5	7.04	13.50	1318 us	1.00	(212.00)	10.80	1.00
	12/17/02	0.5	7.55	10.00	1186 us	0.60	(94.00)	11.20	0.00
	03/24/03	0.5	7.38	10.40	972 us	0.40	(621.00)	8.40	0.00
	06/10/03	0.5	8.01	13.80	1530 us	0.40	(18.00)	8.60	0.00
	09/10/03	0.5	7.10	14.00	1313 us	0.80	(211.00)	8.00	0.80
	03/24/04	2.7	7.20	12.80	1112 us	EM	(26.00)	NA	0.00
	03/29/05	3	7.10	12.70	1199 us	2.71	85.00	NA	0.00
	03/23/06	2	7.50	9.20	1234 us	5.06	283.00	NA	0.00
	03/27/07	2	7.2	12.5	1093 us	1.73	86	NA	0.29
	04/16/08	1	7.10	14.1	NA	2.64	179.9	NA	NA
	09/22/08	NA	NA	NA	NA	NA	NA	NA	NA
	04/03/09	1	7.46	10.2	1275 us	4.90	NA	NA	NA
	03/17/10	1	7.35	11.6	1295 us	3.35	91.1	NA	NA
	04/29/11	1.25	7.40	11.5	1204 µs	2.33	234	NA	0.09
	03/14/12	1.5	6.50	12.7	0.12 S/m	5.50	97	NA	NA
	04/29/13	2.5	7.35	10.7	0.81 ms	4.15	(31.20)	NA	NA
	04/21/14	1	7.18	11.3	0.65 mS/cm	6.83	182.5	NA	NA
	04/13/15	1.5	6.51	14.57	2.59 mS/cm	7.01	133	NA	<.0.0129
	03/30/16	1.5	7.20	9.70	0.64 mS/cm	4.87	52.6	NA	NA
	03/29/17	2	8.68	9.80	0.717 mS/cm	5.84	158.8	NA	NA
	04/11/18	1.5	7.06	10.10	0.846 mS/cm	1.30	(33.70)	NA	NA
	09/25/19	Unable to sample. Bent bolt over well							

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	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	7.66	12.70	1566 us	0.70	147.00	12.00	0.20
	02/09/99	7.8	7.48	9.90	1443 us	1.40	53.00	11.20	0.80
	06/08/99	9.5	7.42	13.90	1350 us	0.70	109.00	7.20	0.00
	09/13/99	4.1	7.41	12.90	985 us	1.60	(165.00)	12.00	0.00
	12/15/99	4.6	7.82	10.60	2.58 ms	1.40	(294.00)	10.80	0.00
	03/13/00	4	6.57	9.40	1292 us	1.00	76.00	8.40	0.40
	06/22/00	4	8.43	11.50	1354 us	0.99	(90.00)	6.00	0.00
	09/27/00	11	7.48	13.70	1131 us	1.40	(302.00)	7.60	0.00
	12/19/00	9	7.90	6.60	1063 us	1.56	(344.00)	9.20	0.40
	03/01/01	8.5	7.68	11.20	1160 us	1.88	(374.00)	8.00	0.60
	06/19/01	13	7.81	14.10	1848 us	1.10	(28.00)	7.40	0.00
	09/24/01	2	7.32	12.70	1743 us	1.00	(47.00)	12.00	0.00
	12/05/01	11	7.18	9.00	1121 us	1.40	(291.00)	10.80	0.60
	03/19/02	11	7.60	11.40	1050 us	1.50	(311.00)	10.00	0.40
	06/20/02	12	7.47	14.40	1830 us	0.80	(62.00)	10.80	0.00
	09/18/02	10	7.18	13.00	748 us	1.40	(170.00)	11.20	0.00
	12/17/02	8	7.22	9.60	1134 us	1.20	(284.00)	10.00	0.40
	03/24/03	11	7.54	11.00	1262 us	1.20	(320.00)	10.00	0.60
	06/10/03	10	7.13	14.10	1644 us	0.60	(80.00)	10.00	0.20
	09/10/03	10	7.14	13.20	920 us	1.00	(165.00)	10.40	0.00
	12/10/03	10	7.28	10.40	1210 us	0.80	(310.00)	7.80	0.20
	03/24/04	8.6	7.30	10.20	656 us	EM	(126.00)	NA	0.00
	07/09/04	5	7.20	14.00	996 us	16.30	283.00	NA	0.00
	09/21/04	1.5	7.10	20.10	1004 us	EM	(19.00)	NA	0.00
	03/29/05	12	7.00	10.20	1164 us	1.16	84.00	NA	0.00
	06/21/05	7	7.10	13.30	1253 us	1.46	142.00	NA	0.00
	09/21/05	10	7.30	13.50	1233 us	3.40	225.00	NA	0.00
	12/14/05	7	7.20	9.90	1295 us	1.53	NA	NA	0.00
	03.23/06	7	7.00	11.50	1140 us	230.00	252.00	NA	0.00
	06/28/06	5	7.10	11.80	746 us	2.75	232.00	NA	0.00
	12/20/06	8	7.40	10.80	1207 us	2.89	241.00	NA	0.23
	03/28/07	8	7.2	10.8	1075 us	3.09	238.0	NA	0.05
	07/03/07	8	7.4	11.3	1154 us	3.54	126.0	NA	0.38
	09/28/07	8	7.2	13.7	1294 us	3.14	217.0	NA	0.00
	04/16/08	1	7.09	12.0	556 us	0.83	233	NA	NA
	09/22/08	1	7.27	13.8	1446 us	0.20	183.7	NA	NA
	04/03/09	1	7.40	9.4	1451 us	1.89	NA	NA	NA
	09/01/09	1	7.33	12.4	1409 µs	0.22	267	NA	NA
	03/17/10	1.5	7.30	10.8	1480 µs	0.89	231	NA	NA
	09/09/10	1.25	7.21	12.6	1468 µs	0.40	133.2	NA	NA
	04/29/11	1.25	7.36	10.2	1304 µs	2.17	244	NA	0.09
	09/01/11	1.5	7.36	13.5	1316 µs	0.63	89.7	NA	NA
	03/14/12	2	6.20	10.2	0.12 S/m	0.70	175.0	NA	NA
	09/11/12	2.5	7.03	15.9	1.15 ms	1.05	117.8	NA	NA
	04/29/13	1.5	12.45	9.3	0.97 ms	1.82	(102.50)	NA	NA
	09/18/13	2.5	6.40	14.00	0.12 ms	5.20	152.00	NA	NA
	04/21/14	1.5	7.02	9.2	0.63 mS/cm	2.64	219.5	NA	NA
	09/16/14	3.5	8.25	13.3	0.77 mS/cm	3.72	70.4	NA	NA
	04/14/15	2.5	5.90	7.62	3.51 mS/cm	5.80	118	NA	<0.0129
	09/14/15	1.5	7.15	14.62	1.007 mS/cm	0.51	69	NA	NA

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/L)
MW-103	04/05/16	1.5	7.26	8.30	0.63mS/cm	1.15	43.4	NA	NA
	09/21/16	3	7.01	13.95	0.819 mS/cm	0.70	247.2	NA	NA
	03/29/17	1.5	8.61	8.40	0.771 mS/cm	1.91	183.2	NA	NA
	10/04/17	3	7.38	13.57	1.006 mS/cm	0.20	181.5	NA	NA
	04/11/18	1.5	7.00	9.20	0.909 mS/cm	2.07	56.2	NA	NA
	09/17/18	2	6.61	14.51	1.089 mS/cm	2.01	121.1	NA	NA
	09/25/19	3	6.83	13.88	0.606 mS/cm	4.61	82.3	NA	<0.0296
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	7.84	13.20	1272 us	0.90	103.00	16.40	0.40
	02/09/99	9.5	7.66	10.10	1126 us	1.50	193.00	11.20	0.00
	06/08/99	13	6.80	15.60	1259 us	1.60	103.00	6.40	0.00
	09/13/99	13.8	7.08	13.90	1334 us	1.80	(146.00)	10.80	0.00
	12/15/99	11.2	7.68	10.80	1172 us	2.00	(232.00)	11.20	0.00
	03/13/00	16.5	6.91	10.20	1121 us	0.40	69.00	11.20	0.60
	06/22/00	11	8.65	11.60	1137 us	0.71	(211.00)	6.80	0.00
	09/27/00	8	7.24	12.90	1130 us	1.70	(123.00)	13.20	0.00
	12/19/00	8	7.75	8.20	1144 us	1.05	(240.00)	12.40	0.00
	03/01/01	9.5	7.72	10.60	1230 us	0.90	(220.00)	12.40	0.20
	06/19/01	13	7.91	12.90	1581 us	0.80	(110.00)	6.80	0.00
	09/24/01	8	7.18	12.40	1580 us	0.80	(99.00)	9.60	0.20
	12/05/01	7	7.22	9.90	1300 us	1.00	(311.00)	9.60	0.00
	03/19/02	10	7.70	10.60	1110 us	0.70	(210.00)	11.60	0.20
	06/20/02	10	7.53	13.00	1420 us	0.80	(174.00)	12.40	0.20
	09/18/02	9	7.03	14.60	1275 us	1.60	(148.00)	12.40	0.00
	12/17/02	8	7.31	10.00	1264 us	0.80	(294.00)	8.80	0.00
	03/24/03	8	7.61	10.40	1031 us	0.80	(240.00)	10.80	0.00
	06/10/03	10	7.40	15.00	1374 us	0.60	(91.00)	11.20	0.40
	09/10/03	9	7.08	14.20	1144 us	1.20	(151.00)	8.80	0.00
	12/01/03	8	7.35	10.10	1177 us	0.80	(280.00)	8.80	0.00
	03/24/04	13.6	7.30	9.90	1496 us	EM	(91.00)	NA	0.00
	07/09/04	5	7.00	12.00	1648 us	2.90	EM	NA	0.00
	09/21/04	1	7.00	13.10	1648 us	EM	1.00	NA	0.00
	03/29/05	6	7.00	10.20	1939 us	2.69	86.00	NA	0.00
	06/21/05	7	7.10	12.50	1999 us	3.50	125.00	NA	0.00
	09/21/05	7	7.10	13.80	1926 us	2.78	213.00	NA	0.00
	12/14/05	7	6.90	10.90	2320 us	2.11	253.00	NA	NA **
	03/23/06	10	6.90	10.60	2250 us	1.73	209.00	NA	0.00
	06/28/06	5	6.80	11.30	2290 us	1.40	215.00	NA	0.26
	12/20/06	8	7.10	11.90	2120 us	2.08	248.00	NA	0.00
	03/28/07	8	6.9	10.1	2450 us	3.80	226.0	NA	0.07
	07/03/07	6	7.1	11.5	2180 us	1.51	247.0	NA	0.61
	09/28/07	6	6.9	14.7	2380 us	2.22	266.0	NA	0.05
	04/16/08	1	6.96	13.9	853 us	1.74	157.0	NA	NA
	09/22/08	1	7.06	13.1	3.43 ms	0.23	61.8	NA	NA
	04/03/09	1	7.25	8.1	2.88 ms	1.67	NA	NA	NA
	09/01/09	1	7.11	11.6	3110 µs	0.60	262	NA	NA
	03/17/10	1.5	7.14	9.9	3.07 ms	0.93	210	NA	NA
	09/09/10	1.25	7.07	12.4	3.05 ms	0.24	(156.2)	NA	NA
	04/29/11	1.25	7.32	10.2	2980 µs	1.34	243	NA	0.00
	09/01/11	1.5	7.31	13.4	2.58 ms	0.31	(150.80)	NA	NA
	03/14/12	2	6.20	10.1	0.16 S/m	1.00	165.00	NA	NA
	09/11/12	2	6.95	13.4	1.85 ms	0.25	84.90	NA	NA

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/L)
MW-104	04/29/13	1.5	11.68	9.3	2.10 ms	0.24	(123.50)	NA	NA
	09/17/13	4.3	6.7	11.2	0.29ms	6.2	(84.00)	NA	NA
	04/21/14	1	6.86	10.1	2.12 mS/cm	1.91	253.90	NA	NA
	09/16/14	2	7.77	12.4	2.73 mS/cm	0.41	(102.40)	NA	NA
	04/14/15	1.5	6.04	7.88	5.30 mS/cm	4.60	122	NA	<0.0129
	09/14/15	1.75	7.11	13.92	1.941 mS/cm	0.55	(12)	NA	NA
	03/30/16	1.5	7.13	8.30	0.98 mS/cm	0.76	35.6	NA	NA
	09/21/16	2.5	7.11	15.30	0.986 mS/cm	0.23	(22.0)	NA	NA
	03/29/17	1.5	8.57	8.50	1.085 mS/cm	0.91	187.7	NA	NA
	10/04/17	3	7.49	12.78	1.269 mS/cm	0.15	178.6	NA	NA
	04/11/18	1.5	7.01	9.60	1.161 mS/cm	2.33	81.5	NA	NA
	09/17/18	2	6.87	14.07	1.456 mS/cm	0.24	(3.3)	NA	NA
	09/25/19	2	7.06	14.34	1.20 mS/cm	0.00	(65.0)	NA	2.75
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	7.57	16.80	2.87 ms	0.10	121.00	13.60	0.00
	02/09/99	5.9	7.34	10.60	2.76 ms	0.90	281.00	16.80	1.80
	06/08/99	5	7.32	17.80	2.87 ms	0.70	90.00	9.60	0.20
	09/13/99	3.5	7.00	17.20	2.74 ms	1.70	(182.00)	13.20	1.40
	1215/99	3.6	7.36	13.00	2.62 ms	1.60	(255.00)	8.80	1.20
	03/13/00	4.5	6.58	8.40	2430 us	1.30	23.00	9.60	0.80
	06/22/00	3.2	8.44	14.30	2.71 ms	0.88	(304.00)	6.40	0.00
	09/27/00	6	6.62	17.90	2.53 ms	1.10	(198.00)	12.80	0.00
	12/19/00	6	7.42	9.60	2.32 ms	2.27	(167.00)	12.40	0.00
	03/01/01	5	7.24	10.80	2.45 ms	1.89	(184.00)	11.60	0.00
	06/19/01	7	8.19	12.80	1877 us	0.60	(200.00)	6.80	0.00
	09/24/01	6	7.41	13.80	1809 us	0.80	(183.00)	7.20	0.00
	12/05/01	6	7.34	10.00	2148 us	1.80	(188.00)	11.20	0.20
	03/19/02	5	6.94	10.20	1984 us	1.80	(169.00)	9.60	0.00
	06/20/02	6	8.04	13.00	1400 us	1.00	(310.00)	10.80	0.00
	09/18/02	6	7.21	17.20	2800 us	1.60	(183.00)	10.80	1.60
	12/17/02	5	7.08	10.40	2008 us	1.40	(194.00)	13.20	0.40
	03/24/03	5	7.04	10.60	1477 us	1.40	(99.00)	14.00	0.00
	06/10/03	6	7.81	14.80	1344 us	1.20	(280.00)	8.60	0.00
	09/10/03	6	7.30	16.40	2626 us	1.20	(177.00)	10.00	1.20
	03/24/04	4.9	6.80	5.90	2220 us	EM	(78.00)	NA	0.00
	03/29/05	4	6.80	8.90	2300 us	2.12	87.00	NA	0.00
	03/23/06	4	6.90	8.60	2170 us	3.54	256.00	NA	0.22
	03/27/07	4	6.8	9.2	2180 us	3.37	296	NA	0.08
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA
	09/22/08	NA	NA	NA	NA	NA	NA	NA	NA
	04/03/09	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/10	NA	NA	NA	NA	NA	NA	NA	NA
	04/29/11	1.25	7.25	9.8	1812 µs	2.98	242	NA	0.00
	04/13/15	4	6.32	8.66	6.76 mS/cm	6.91	152	NA	0.0226 J
	09/25/19	Unable to sample. Bent bolt over well							

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	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	7.31	16.80	1824 us	1.20	138.00	12.80	0.00
	02/09/99	2.5	7.33	10.20	1605 us	1.10	197.00	20.80	0.00
	06/08/99	3.5	7.15	15.40	1332 us	0.70	17.00	6.40	0.20
	09/13/99	2.3	7.02	17.40	1357 us	1.00	(168.00)	11.60	0.00
	12/15/99	2	8.41	12.10	1445 us	0.80	(266.00)	10.00	0.00
	03/13/00	2.5	6.92	9.10	1513 us	1.60	18.00	10.40	0.00
	06/22/00	1.5	8.18	14.50	1736 us	2.02	38.00	7.20	0.00
	09/27/00	6	6.84	19.10	1715 us	1.60	(8.00)	12.00	0.00
	12/19/00	4	7.48	10.70	1694 us	1.43	(218.00)	10.80	0.00
	03/01/01	4	7.33	10.80	1722 us	1.50	(210.00)	9.20	0.00
	06/19/01	4	8.28	13.00	1361 us	1.10	(210.00)	6.40	0.00
	09/24/01	6	7.66	14.00	1220 us	0.80	(104.00)	11.20	0.00
	12/05/01	4	7.60	10.40	1702 us	0.90	(217.00)	12.80	0.00
	03/19/02	5	7.13	10.40	1630 us	1.70	(235.00)	9.20	0.00
	06/20/02	5	8.08	12.80	1288 us	1.20	(240.00)	8.80	0.00
	09/18/02	5	7.30	17.80	1438 us	1.00	(141.00)	8.80	0.00
	12/17/02	3	7.15	10.20	1788 us	0.80	(220.00)	11.20	0.00
	03/24/03	3	7.22	10.80	1250 us	1.10	(193.00)	10.00	0.00
	06/10/03	5	7.84	13.80	1310 us	1.20	(230.00)	10.20	0.00
	09/10/03	5	7.24	16.60	1303 us	0.80	(140.00)	12.00	0.00
	03/24/04	1.8	7.10	8.00	1761 us	EM	(57.00)	NA	0.00
	03/29/05	2.5	6.90	9.00	1995 us	2.24	85.00	NA	0.00
	03/23/06	4	7.00	9.40	2160 us	4.14	249.00	NA	0.00
	03/27/07	2	7.0	8.5	1887 us	5.04	249	NA	0.00
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA
	09/22/08	NA	NA	NA	NA	NA	NA	NA	NA
	04/03/09	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/10	NA	NA	NA	NA	NA	NA	NA	NA
	04/29/11	1.25	7.19	8.9	4120 µs	4.12	211	NA	0.06
	04/13/15	4	6.68	8.06	4.50 mS/cm	9.30	132	NA	<0.0129
	09/25/19	6.5	7.04	18.56	1201 µs	0.36	21.8	NA	<0.0296

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	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	7.41	12.10	1179 us	1.10	62.00	20.00	10.00
	02/09/99	9	8.10	12.00	1189 us	1.30	263.00	7.20	0.40
	06/08/99	9	7.48	15.60	1406 us	2.20	163.00	4.80	0.40
	09/13/99	8	7.30	12.90	1301 us	2.60	(114.00)	14.00	0.60
	12/15/99	10	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	8.75	12.40	1574 us	0.62	(120.00)	6.40	0.00
	09/27/00	10	7.42	14.20	1505 us	1.60	(114.00)	9.20	0.00
	12/19/00	13	7.69	9.50	1524 us	1.21	(38.00)	10.40	0.00
	03/01/01	16	7.81	9.90	1704 us	1.31	(93.00)	12.40	0.20
	06/19/01	15	7.64	13.40	1221 us	0.80	(80.00)	6.00	0.20
	09/24/01	9	7.04	12.40	977 us	0.60	(77.00)	12.00	0.40
	12/05/01	13	7.15	9.20	1611 us	0.80	(95.00)	8.40	0.00
	03/19/02	12	7.64	10.00	1730 us	1.30	8.00	9.60	0.20
	06/20/02	10	7.48	13.60	1304 us	0.60	(110.00)	9.60	0.40
	09/10/02	10	7.52	13.10	1403 us	2.00	(104.00)	12.40	0.40
	12/17/02	10	7.22	10.40	1593 us	0.80	(110.00)	7.80	0.00
	03/24/03	10	7.30	10.30	1362 us	1.00	(48.00)	10.80	0.00
	06/10/03	11	7.20	14.00	1277 us	0.80	(200.00)	9.20	1.00
	09/10/03	10	7.46	13.30	1121 us	1.30	(99.00)	8.00	0.20
	12/01/03	10	7.41	9.80	1360 us	1.00	(98.00)	8.40	0.00
	03/24/04	9	7.30	11.10	1704 us	EM	(109.00)	NA	0.00
	07/09/04	6	7.30	13.20	1704 us	4.59	166.00	NA	0.00
	09/21/04	3	7.10	14.30	1649 us	EM	7.00	NA	0.00
	03/29/05	9	7.20	11.50	1749 us	2.83	85.00	NA	0.00
	06/21/05	8	7.30	12.70	2010 us	1.85	119.00	NA	0.00
	09/21/05	8	7.50	15.20	1594 us	2.92	221.00	NA	0.00
	12/14/05	8	7.40	12.30	1708 us	1.80	250.00	NA	0.00
	03/27/06	10	7.30	11.90	1726 us	2.65	269.00	NA	0.00
	06/28/06	7	7.20	13.40	1696 us	3.76	212.00	NA	0.04
	12/20/06	8	7.20	11.80	1655 us	3.83	234.00	NA	0.08
	03/28/07	8	7.3	10.4	1599 us	7.14	240	NA	0.01
	07/03/07	7	7.5	11.8	1163 us	3.41	258	NA	0.00
	09/28/07	6	7.4	13.1	1642 us	2.64	238	NA	0.02
	04/16/08	1	7.30	13.5	NA	2.12	197.9	NA	NA
	09/22/08	1	7.47	15.4	1650 us	0.23	171.8	NA	NA
	04/03/09	1.5	7.63	10.0	1615 us	2.32	NA	NA	NA
	09/01/09	1.25	7.51	13.9	1586 µs	0.16	278	NA	NA
	03/17/10	1.5	7.61	11.2	1566 µs	2.09	258	NA	NA
	09/09/10	1.5	7.46	14.1	1532 µs	0.24	239	NA	NA
	04/29/11	1.25	7.63	11.0	1516 µs	1.66	274	NA	0.00
	09/01/11	1.5	7.63	15.0	1490 µs	0.28	184.1	NA	NA
	03/14/12	1	6.40	11.6	0.14 S/m	1.90	169.0	NA	NA
	09/11/12	2	7.27	16.8	1.27 ms	0.14	37.2	NA	NA
	04/30/13	2	10.66	9.7	1.11 ms	3.03	(70.4)	NA	NA
	09/17/13	3	7.0	15.0	0.14ms	4.0	65	NA	NA
	04/21/14	1	7.39	10.1	0.94 mS/cm	2.9	215.2	NA	NA
	09/16/14	3.5	7.95	14.7	0.86 mS/cm	2.29	(14.3)	NA	NA
	04/14/15	2	6.41	10.61	4.37 mS/cm	4.08	114	NA	<0.0129
	09/14/15	1.75	7.25	18.52	1.365 mS/cm	0.72	81	NA	NA

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/L)
MW-107	03/30/16	1.5	7.32	9.20	0.90 mS/cm	2.22	52.9	NA	NA
	09/21/16	3	7.31	16.95	0.959 mS/cm	0.68	43.8	NA	NA
	03/29/17	1.75	10.77	8.80	0.966 mS/cm	3.79	202.4	NA	NA
	10/03/17	2	7.67	16.09	1.214 mS/cm	0.18	230.6	NA	NA
	04/11/18	1.5	7.35	9.50	1.006 mS/cm	2.68	97.8	NA	NA
	09/17/18	2.5	7.08	16.99	1.168 mS/cm	0.22	58.5	NA	NA
	09/25/19	2	7.33	16.08	0.934 mS/cm	0.77	62	NA	<0.0296
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	7.95	14.30	1696 us	1.40	116.00	12.80	0.20
	02/09/99	8.1	7.51	11.00	1810 us	1.10	(65.00)	10.40	0.40
	06/08/99	12.5	7.60	15.00	1706 us	0.90	173.00	7.20	0.60
	09/13/99	13.5	7.29	13.60	1849 us	1.20	(180.00)	8.00	0.00
	12/15/99	12.8	7.68	11.80	1885 us	1.00	(286.00)	8.40	0.00
	03/13/00	14	6.25	10.20	1642 us	1.70	(4.00)	9.20	0.20
	06/22/00	11.5	7.62	14.10	1989 us	1.01	69.00	6.40	0.00
	09/27/00	12	7.43	13.10	1983 us	0.40	(73.00)	10.40	0.00
	12/19/00	10.5	7.60	10.10	2.01 ms	2.18	(184.00)	10.80	0.00
	03/01/01	9	7.49	11.20	2.38 ms	2.20	(211.00)	11.60	0.00
	06/19/01	8	8.20	13.80	1634 us	0.80	(90.00)	7.00	0.00
	09/24/01	9	7.59	14.20	1512 us	0.80	(83.00)	9.60	0.00
	12/05/01	10	7.49	10.50	2111 us	1.80	(199.00)	9.60	0.00
	03/19/02	12	7.30	10.80	2120 us	2.10	(170.00)	11.60	0.00
	06/20/02	12	7.92	14.00	1424 us	0.80	(120.00)	12.40	0.00
	09/18/02	12	7.13	13.40	1744 us	1.00	(132.00)	11.20	0.00
	12/17/02	10	7.36	10.40	1986 us	1.60	(174.00)	8.40	0.00
	03/24/03	10	7.31	10.40	2032 us	1.60	(190.00)	8.40	0.00
	06/10/03	11	7.64	14.60	1324 us	0.80	(144.00)	9.20	0.00
	09/10/03	11	7.15	13.30	1622 us	0.80	(124.00)	10.40	0.00
	03/24/04	10	7.70	12.30	1927 us	EM	(156.00)	NA	0.00
	03/29/05	9	7.30	10.80	2090 us	2.29	83.00	NA	0.00
	03/27/06	9	7.30	9.30	2880 us	1.72	2.69	NA	0.04
	03/27/07	9	7.2	12.9	3190 us	5.05	185	NA	0.04
	04/16/08	NA	NA	NA	NA	NA	NA	NA	NA
	09/22/08	NA	NA	NA	NA	NA	NA	NA	NA
	04/03/09	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/10	NA	NA	NA	NA	NA	NA	NA	NA
	04/29/11	1.25	7.27	10.2	3980 µs	1.03	224	NA	0.05
	04/14/15	2	5.98	10.79	11.4 mS/cm	3.75	135	NA	<0.0129
	09/25/19	2	7.07	17.20	2.65 mS/cm	0.49	88	NA	0.0379

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/L)
MW-109	06/21/06	2	6.42	14.80	1497 us	-	-	-	-
	09/20/06	2	6.66	14.60	1429 us	-	-	-	-
	12/20/06	8	7.10	11.00	2120 us	2.39	213.00	NA	0.16
	03/29/07	10	6.9	9.6	2050 us	7.71	284	NA	***
	07/03/07	9	7.2	12.8	2350 us	1.53	192	NA	0.04
	09/28/07	10	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
	09/22/08	1	7.14	15.7	2.88 ms	0.71	131.1	NA	NA
	04/03/09	1.5	7.29	8.4	2.40 ms	0.87	NA	NA	NA
	09/01/09	1	7.17	14.5	2650 µs	0.23	145.2	NA	NA
	03/17/10	1.5	7.37	8.3	2.31 ms	1.12	194.7	NA	NA
	09/09/10	1.5	7.09	15.3	2.73 ms	0.37	146.9	NA	NA
	04/29/11	1.25	7.27	8.4	2500 µs	0.81	164.6	NA	0.03
	09/01/11	1.5	7.28	15.2	2.56m	0.24	148.3	NA	NA
	03/16/12	1.5	6.40	9.6	0.20 S/m	1.50	200.0	NA	NA
	09/11/12	3	6.87	19.9	1.85 ms	1.00	70.5	NA	NA
	04/30/13	2.5	11.12	8.9	1.47 ms	2.53	(81.3)	NA	NA
	09/17/13	2.5	6.8	17.2	0	4.1	143	NA	NA
	04/21/14	1	7.02	9.0	1.36 mS/cm	2.22	220.1	NA	NA
	09/16/14	3.5	7.47	16.6	0.301 mS/cm	0.32	(80.0)	NA	NA
	04/14/15	4	5.95	7.80	8.54 mS/cm	5.35	136	NA	<0.0129
	09/14/15	1.5	6.82	20.51	4.269 mS/cm	0.80	103.3	NA	NA
	03/30/16	2	6.78	8.20	3.11 mS/cm	0.57	33.5	NA	NA
	09/21/16	2	6.81	18.90	3.581 mS/cm	0.37	41.8	NA	NA
	03/29/17	1.75	11.98	6.40	3.118 mS/cm	2.37	204.6	NA	NA
	10/04/17	3	7.26	16.38	3.899 mS/cm	1.07	222.8	NA	NA
	04/10/18	1.5	6.78	6.20	3.540 mS/cm	2.55	150.7	NA	NA
	09/21/18	2.5	6.85	20.92	4.221 mS/cm	1.46	100.5	NA	NA
	09/26/19	2	7.08	12.45	5.0 mS/cm	2.16	167	NA	<0.0296
MW-110	06/21/06	2	6.91	12.70	1178 us	-	-	-	-
	09/20/06	2	7.00	14.40	1248 us	-	-	-	-
	12/20/06	10	7.20	10.60	1757 us	2.07	234.00	NA	0.00
	03/29/07	10	7.2	8.1	1806 us	7.03	255	NA	0.03
	07/03/07	8	8.3	12.1	1752 us	2.96	227	NA	0.13
	09/28/07	11	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
	09/22/08	1	7.42	16.6	1892us	1.04	241	NA	NA
	04/03/09	1.5	7.57	7.5	2.24 ms	3.05	NA	NA	NA
	09/01/09	1.25	7.45	15.2	1849 µs	1.17	250	NA	NA
	03/17/10	1.5	7.53	8.3	2.62 ms	3.71	261	NA	NA
	09/09/10	1.5	7.32	15.4	2.34 ms	2.12	181.5	NA	NA
	04/29/11	1.25	7.54	8.2	1314 µs	3.91	272	NA	0.11
	09/01/11	1.5	7.50	17.3	1643 µs	2.67	181.4	NA	NA
	03/14/12	2	6.60	9.4	0.20 S/m	8.70	198.0	NA	NA
	09/12/12	2.5	7.13	18.5	1.64 ms	3.15	174.3	NA	NA
	04/30/13	3	8.29	7.7	2.44 ms	1.78	(66.9)	NA	NA
	09/17/13	2.8	6.8	15.1	0	4.0	107	NA	NA
	04/22/14	1	7.28	6.8	0.99 mS/cm	4.55	249.1	NA	NA
	04/15/15	2	6.58	5.88	5.99 mS/cm	10.28	104	NA	<0.0129
	09/17/14	3	7.50	15.3	1.45 mS/cm	0.14	(24.4)	NA	NA
	03/31/16	2	7.68	5.0	0.482 mS/cm	7.69	10.8	NA	NA
	09/21/16	2	7.00	17.0	1.238 mS/cm	1.90	85.9	NA	NA
	03/29/17	2	8.58	5.8	0.793 mS/cm	9.03	220.6	NA	NA
	10/03/17	3.5	7.27	16.51	1.323 mS/cm	0.42	213.3	NA	NA
	04/10/18	1.5	7.09	4.90	2.636 mS/cm	7.79	129.9	NA	NA
	09/21/18	2.5	6.70	18.97	1.621 mS/cm	0.10	5.2	NA	NA
	09/26/19	2.0	6.92	15.44	0.949 mS/cm	0.00	(52.0)	NA	1.08

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

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/L)
MW-111	06/21/06	2	7.01	12.40	1311 us	-	-	-	-
	09/20/06	1.75	6.99	14.00	1164 us	-	-	-	-
	12/20/06	6	7.20	11.00	1478 us	3.95	243.00	NA	0.01
	03/29/07	10	7.4	9.2	1908 us	9.29	209	NA	0.01
	07/03/07	6	7.4	12.1	1855 us	1.63	263	NA	0.28
	09/28/07	11	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
	09/22/08	1.25	7.48	16.1	1901 us	0.49	170	NA	NA
	04/03/09	1.5	7.64	7.5	1970 us	3.51	NA	NA	NA
	09/01/09	1.25	7.51	15.5	1777 µs	0.74	191.0	NA	NA
	03/17/10	1.5	7.61	8.3	1889 µs	3.05	287	NA	NA
	09/09/10	1.5	7.37	15.1	1900 µs	0.49	160.5	NA	NA
	04/29/11	1.25	7.60	9.1	2110 µs	1.95	286	NA	0.09
	09/01/11	1.5	7.57	15.0	1716 µs	0.85	159.6	NA	NA
	03/14/12	1.5	6.50	10.5	0.17 S/m	2.50	177.0	NA	NA
	09/12/12	3	7.26	16.1	1.47 ms	0.18	97.6	NA	NA
	04/30/13	2	8.75	8.0	1.43 ms	3.89	(43.7)	NA	NA
	09/17/13	2.8	7.0	15.5	0.18ms	3.5	106	NA	NA
	04/21/14	1	7.30	9.9	1.17 mS/cm	1.80	218.4	NA	NA
	09/17/14	2	7.72	14.1	1.23 mS/cm	0.16	20.4	NA	NA
	04/14/15	4	6.83	8.43	4.84 mS/cm	7.66	49	NA	<0.0129
	09/14/15	1.5	7.41	18.15	1.670 mS/cm	1.27	50.7	NA	NA
	03/31/16	2	7.38	6.00	0.82 mS/cm	1.84	(15.90)	NA	NA
	09/22/16	2	7.38	15.59	1.028 mS/cm	0.41	150.2	NA	NA
	03/29/17	1.75	8.76	7.30	0.876 mS/cm	3.32	190.3	NA	NA
	10/03/17	2.5	7.71	16.56	1.160 mS/cm	1.49	274.7	NA	NA
	04/10/18	2	7.33	6.30	1.121 mS/cm	4.14	110.5	NA	NA
	09/21/18	2	7.27	19.78	1.098 mS/cm	0.73	77.1	NA	NA
	09/26/19	2	7.46	13.60	0.825 mS/cm	0.60	135	NA	<0.0296
MW-112	06/21/06	2	7.21	12.40	1338 us	-	-	-	-
	09/20/06	2	7.28	14.60	1238 us	-	-	-	-
	12/20/06	8	7.50	10.70	1817 us	1.94	729.00	NA	0.00
	03/28/07	10	7.5	9.5	2050 us	7.93	228	NA	0.00
	07/03/07	9	7.6	13.7	1909 us	3.48	234	NA	0.28
	09/28/07	11	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
	09/22/08	1.25	7.71	15.9	2.34 ms	0.15	208	NA	NA
	04/03/09	1.5	7.79	7.6	2.5 ms	2.69	NA	NA	NA
	09/01/09	1.25	7.76	15.5	2320 µs	0.75	217	NA	NA
	03/17/10	1.5	7.81	8.5	1891 µs	3.02	264	NA	NA
	09/09/10	1.5	7.56	15.7	1921 µs	0.70	229	NA	NA
	04/29/11	1.25	7.75	8.4	1268 µs	2.92	252	NA	0.10
	09/01/11	1.5	7.83	15.0	1581µs	0.44	169.0	NA	NA
	03/14/12	1.5	6.60	8.4	0.076 S/m	9.40	215.0	NA	NA
	09/12/12	3	7.26	17.2	1.23 ms	0.22	219.7	NA	NA
	04/30/13	2	8.87	8.3	1.65 ms	0.55	(105.6)	NA	NA
	09/17/13	2.8	6.9	16.8	0.16ms	2.3	62	NA	NA
	04/21/14	3	7.27	8.5	0.72 mS/cm	1.67	194.4	NA	NA
	09/17/14	3	7.49	15.8	1.19 mS/cm	0.14	6.7	NA	NA
	04/14/15	2.5	6.18	10.27	4.00 mS/cm	6.39	107	NA	<0.0129
	09/14/15	1.5	7.50	18.31	1.993 mS/cm	0.79	59.8	NA	NA
	03/31/16	2.5	7.14	6.20	0.66 mS/cm	0.18	(35.30)	NA	NA
	03/22/16	2.1	7.19	16.21	1.088 mS/cm	0.41	130.2	NA	NA
	03/29/17	1.75	8.61	7.10	0.665 mS/cm	0.72	96.1	NA	NA
	10/03/17	3	7.53	17.16	1.132 mS/cm	0.20	243.3	NA	NA
	04/10/18	1.5	7.20	5.00	1.507 mS/cm	5.87	128.2	NA	NA
	09/21/18	2	6.96	20.54	1.512 mS/cm	0.16	63.2	NA	NA

TABLE 4

Groundwater Geochemical Parameters

N.W. Mauthe Superfund Site - Appleton, Wisconsin

Well Name	Sample Date	Purge* Volume (gallons)	pH (std units)	Temperature (°C)	Conductivity (units as shown)	Dissolved Oxygen (ppm, unless noted)	Redox (mV)	Alkalinity (gpg)	Ferrous Iron (mg/L)
MW-112	09/26/19	2	7.16	14.82	1.04 mS/cm	0.00	119	NA	0.0306 J
MW-113	06/21/06	2	6.91	12.90	1020 us	-	-	-	-
	09/20/06	2	7.11	14.60	900 us	-	-	-	-
	12/20/06	8	7.20	10.60	1757 us	2.07	234.00	NA	0.00
	03/29/07	10	7.3	8.0	1508 us	9.52	235	NA	***
	07/03/07	7	7.6	10.9	1552 us	2.05	262	NA	0.13
	09/28/07	13	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
	09/22/08	1.25	7.59	15.5	1711 us	0.22	218	NA	NA
	04/03/09	1.5	7.70	7.4	1749 us	3.50	NA	NA	NA
	09/01/09	1.25	7.56	15.6	1615 µs	0.57	270	NA	NA
	03/17/10	1.5	7.68	8.5	1800 µs	3.22	235	NA	NA
	09/09/10	1.5	7.49	15.5	1722 µs	0.37	223	NA	NA
	04/29/11	1.25	7.65	9.3	1660 µs	1.68	281	NA	0.00
	09/01/11	1.5	7.67	16.2	1552 µs	0.27	184.8	NA	NA
	03/14/12	2	6.60	8.8	0.15 S/m	4.50	236.0	NA	NA
	09/12/12	3	7.09	19.1	1.40 ms	1.40	55.0	NA	NA
	04/30/13	3	10.82	8.3	1.14 ms	0.30	(116.4)	NA	NA
	09/17/13	2.5	6.8	15.8	.018ms	3.9	142	NA	NA
	04/22/14	2	7.31	7.5	1.15 mS/cm	0.28	253.9	NA	NA
	09/17/14	2.5	7.78	15.7	1.28 mS/cm	0.31	(95.9)	NA	NA
	04/14/15	2	6.16	11.07	4.90 mS/cm	3.57	122	NA	<0.0129
	09/14/15	2	7.31	16.27	1.596 mS/cm	0.37	89.8	NA	NA
	03/31/16	2	7.15	6.70	0.80 mS/cm	1.75	15.11	NA	NA
	09/21/16	2.5	7.07	7.07	1.199 mS/cm	0.15	89.6	NA	NA
	03/29/17	2	8.56	7.00	1.143 mS/cm	3.02	209.6	NA	NA
	10/03/17	2.5	7.40	17.24	1.372 mS/cm	0.43	221.8	NA	NA
	04/10/18	1.5	7.23	6.90	1.259 mS/cm	2.83	131.5	NA	NA
	09/21/18	2	7.08	17.29	1.374 mS/cm	0.18	53.0	NA	NA
	09/26/19	2	7.19	15.77	1.13 mS/cm	0.00	134.0	NA	0.855

ppm = parts per million
us (old) = microsiemens / centimeter
µs = microsiemens / centimeter
S/m = siemens / meter
ms (old) = millisiemens / centimeter
mS/cm = millisiemens / 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.
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

Historical Groundwater Analytic Test 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	0.72 *	NA	NA	NA	2.8	NA	NA
	03/13/00	<.31	0.79 *	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*	0.91*	NA	NA	NA	8.0	NA	NA
	03/01/01	<.23	<.57	NA	NA	NA	<2.0	NA	NA
	06/19/01	<.17	0.55 *	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
	04/29/11	NA	0.51 J	NA	NA	NA	21.7	NA	NA
	04/14/15	NA	<2.1	NA	NA	NA	318	NA	NA
	09/25/19	NA	<2.5	NA	NA	NA	271	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
	04/29/11	NA	0.63 J	NA	NA	NA	<0.14	NA	NA
	04/13/15	NA	<2.1	NA	NA	NA	<1.4	NA	NA
	09/25/19	NA	<2.5	NA	NA	NA	<1.1	NA	NA

TABLE 5

Historical Groundwater Analytic Test 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
	04/29/11	NA	2.8 J	NA	NA	NA	8.3	NA	NA
	04/13/15	NA	2.8 J	NA	NA	NA	<1.4	NA	NA
	09/25/19	NA	<2.5	NA	NA	NA	4.8 J	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	<0.62	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	0.55 *	NA	NA	NA	<2.0	NA	NA
	12/05/01	<.23	0.90*	NA	NA	NA	<2.0	NA	NA
	03/19/02	<.23	0.66*	NA	NA	NA	<2.0	NA	NA
	06/20/02	<.23	0.58*	NA	NA	NA	2.2	NA	NA
	09/18/02	<.23	<0.44	NA	NA	NA	13.0	NA	NA
	12/17/02	<.23	<0.44	NA	NA	NA	33.0	NA	NA
	03/24/03	<.17	0.50*	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
	04/03/09	NA	1.9 J	NA	NA	NA	NA	NA	NA
	03/17/10	NA	2.5 J	NA	NA	NA	NA	NA	NA
	04/29/11	NA	1.4 J	NA	NA	NA	0.50 J	NA	NA
	03/16/12	NA	<2.0	NA	NA	NA	0.50 J	NA	NA
	04/29/13	NA	<2.0	NA	NA	NA	NA	NA	NA
	04/21/14	NA	2.2 J	NA	NA	NA	NA	NA	NA
	04/14/15	NA	<2.1	NA	NA	NA	<1.4	NA	NA
	03/30/16	NA	<2.1	NA	NA	NA	NA	NA	NA

TABLE 5

Historical Groundwater Analytic Test 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-101	03/29/17	NA	<2.5	NA	NA	NA	NA	NA	NA
	04/11/18	NA	<2.5	NA	NA	NA	NA	NA	NA
	09/25/19	NA	<2.5	NA	NA	NA	3.0 J	NA	NA
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
	04/03/09	NA	<0.57	NA	NA	NA	NA	NA	NA
	03/17/10	NA	0.74 J	NA	NA	NA	NA	NA	NA
	04/29/11	NA	6.1	NA	NA	NA	32.1	NA	NA
	03/14/12	NA	<2.0	NA	NA	NA	NA	NA	NA
	04/29/13	NA	130	NA	NA	NA	NA	NA	NA
	04/21/14	NA	128	NA	NA	NA	NA	NA	NA
	04/13/15	NA	98.2	NA	NA	NA	NA	NA	NA
	03/30/16	NA	116	NA	NA	NA	NA	NA	NA
	03/29/17	NA	90.5	NA	NA	NA	NA	NA	NA
	04/11/18	NA	<2.5	NA	NA	NA	NA	NA	NA
	09/25/19	Unable to sample - Broken bolt over well							

TABLE 5

Historical Groundwater Analytic Test 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
	09/22/08	NA	240	NA	NA	NA	NA	NA	NA
	04/03/09	NA	171	NA	NA	NA	NA	NA	NA
	09/01/09	NA	157	NA	NA	NA	NA	NA	NA
	03/17/10	NA	114	NA	NA	NA	NA	NA	NA
	09/09/10	NA	16.4	NA	NA	NA	NA	NA	NA
	04/29/11	NA	23.1	NA	NA	NA	<0.14	NA	NA
	09/01/11	NA	54.5	NA	NA	NA	NA	NA	NA
	03/14/12	NA	27.0	NA	NA	NA	NA	NA	NA
	09/11/12	NA	10.8	NA	NA	NA	NA	NA	NA
	04/29/13	NA	24.8	NA	NA	NA	NA	NA	NA
	09/17/13	NA	6.4	NA	NA	NA	NA	NA	NA
	04/21/14	NA	6.9	NA	NA	NA	NA	NA	NA
	09/17/14	NA	10.0	NA	NA	NA	NA	NA	NA
	04/14/15	NA	8.2	NA	NA	NA	<1.4	NA	NA
	09/14/15	NA	6.9	NA	NA	NA	NA	NA	NA
	04/05/16	NA	7.8 J	NA	NA	NA	NA	NA	NA
	09/21/16	NA	5.8 J	NA	NA	NA	NA	NA	NA
	03/29/17	NA	7.5 J	NA	NA	NA	NA	NA	NA
	10/04/17	NA	<2.5	NA	NA	NA	NA	NA	NA
	04/11/18	NA	11.7	NA	NA	NA	NA	NA	NA
	09/17/18	NA	34.3	NA	NA	NA	NA	NA	NA
	09/25/19	NA	4.4 J	NA	NA	NA	4.1 J	NA	NA

TABLE 5

Historical Groundwater Analytic Test 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
	12/05/01	<.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	1,200.0	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
	09/22/08	NA	1.3 J	NA	NA	NA	NA	NA	NA
	04/03/09	NA	144	NA	NA	NA	NA	NA	NA
	09/01/09	NA	1.4 J	NA	NA	NA	NA	NA	NA
	03/17/10	NA	719	NA	NA	NA	NA	NA	NA
	09/09/10	NA	6.7	NA	NA	NA	NA	NA	NA
	04/29/11	NA	376	NA	NA	NA	7.7	NA	NA
	09/01/11	NA	5.4	NA	NA	NA	NA	NA	NA
	03/14/12	NA	510	NA	NA	NA	NA	NA	NA
	09/11/12	NA	<2.0	NA	NA	NA	NA	NA	NA
	04/29/13	NA	1.3 J	NA	NA	NA	NA	NA	NA
	09/17/13	NA	<2.0	NA	NA	NA	NA	NA	NA
	04/21/14	NA	10.5	NA	NA	NA	NA	NA	NA
	09/16/14	NA	12.5	NA	NA	NA	NA	NA	NA
	04/14/15	NA	287.0	NA	NA	NA	<1.4	NA	NA
	09/14/15	NA	5.0	NA	NA	NA	NA	NA	NA
	03/30/16	NA	93.5	NA	NA	NA	NA	NA	NA
	09/21/16	NA	2.6 J	NA	NA	NA	NA	NA	NA
	03/29/17	NA	6.2 J	NA	NA	NA	NA	NA	NA
	10/04/17	NA	5.8 J	NA	NA	NA	NA	NA	NA
	04/11/18	NA	27.6	NA	NA	NA	NA	NA	NA
	09/17/18	NA	2.8 J	NA	NA	NA	NA	NA	NA
	09/25/19	NA	3.8 J	NA	NA	NA	244	NA	NA

TABLE 5

Historical Groundwater Analytic Test 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
	04/29/11	NA	0.64 J	NA	NA	NA	1.8 J	NA	NA
	04/13/15	NA	<2.1	NA	NA	NA	2.5J	NA	NA
	09/25/19	Unable to sample - Broken bolt over well							
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
	04/29/11	NA	0.79 J	NA	NA	NA	0.16 J	NA	NA
	04/13/15	NA	<2.1	NA	NA	NA	<1.4	NA	NA
	09/25/19	NA	<2.5	NA	NA	NA	55.2	NA	NA

TABLE 5

Historical Groundwater Analytic Test 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 J	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
	09/22/08	NA	2,950	NA	NA	NA	NA	NA	NA
	04/03/09	NA	3,790	NA	NA	NA	NA	NA	NA
	09/01/09	NA	2,420	NA	NA	NA	NA	NA	NA
	03/17/10	NA	3,240	NA	NA	NA	NA	NA	NA
	09/09/10	NA	2,480	NA	NA	NA	NA	NA	NA
	04/29/11	NA	2,940	NA	NA	NA	0.32 J	NA	NA
	09/01/11	NA	1,960	NA	NA	NA	NA	NA	NA
	03/14/12	NA	2,700	NA	NA	NA	NA	NA	NA
	09/11/12	NA	2,410	NA	NA	NA	NA	NA	NA
	04/30/13	NA	3,020	NA	NA	NA	NA	NA	NA
	09/17/13	NA	3,440	NA	NA	NA	NA	NA	NA
	04/21/14	NA	2,150	NA	NA	NA	NA	NA	NA
	09/16/14	NA	2,130	NA	NA	NA	NA	NA	NA
	04/14/15	NA	2,210	NA	NA	NA	2.0 J	NA	NA
	09/14/15	NA	1,600	NA	NA	NA	NA	NA	NA
	03/30/16	NA	2,250	NA	NA	NA	NA	NA	NA
	09/21/16	NA	2,390	NA	NA	NA	NA	NA	NA
	03/29/17	NA	1,990	NA	NA	NA	NA	NA	NA
	10/03/17	NA	1,400	NA	NA	NA	NA	NA	NA
	04/11/18	NA	1,920	NA	NA	NA	NA	NA	NA
	09/17/18	NA	609	NA	NA	NA	NA	NA	NA
	09/25/19	NA	1,300	NA	NA	NA	3.5 J	NA	NA

TABLE 5

Historical Groundwater Analytic Test 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	0.85*	NA	NA	NA	39.0	NA	NA
	09/18/02	<.23	<.44	NA	NA	NA	150.0	NA	NA
	12/17/02	<.23	0.67*	NA	NA	NA	34.0	NA	NA
	03/24/03	<.17	0.67*	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
	04/29/11	NA	1.8 J	NA	NA	NA	0.70 J	NA	NA
	04/14/15	NA	<2.1	NA	NA	NA	<1.4	NA	NA
	09/25/19	NA	<2.5	NA	NA	NA	79.9	NA	NA
MW-109 ****	06/21/06	<0.92	1,300	1,400	2.4*	<9.4	480.0	<0.072	<20
	09/20/06	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
	09/22/08	NA	892	NA	NA	NA	NA	NA	NA
	04/03/09	NA	912	NA	NA	NA	NA	NA	NA
	09/01/09	NA	1,520	NA	NA	NA	NA	NA	NA
	03/17/10	NA	867	NA	NA	NA	NA	NA	NA
	09/09/10	NA	718	NA	NA	NA	NA	NA	NA
	04/29/11	NA	1,110	NA	NA	NA	3.8 J	NA	NA
	09/01/11	NA	2,040	NA	NA	NA	NA	NA	NA
	03/16/12	NA	866	NA	NA	NA	NA	NA	NA
	09/11/12	NA	582	NA	NA	NA	NA	NA	NA
	04/29/13	NA	986	NA	NA	NA	NA	NA	NA
	09/17/13	NA	805	NA	NA	NA	NA	NA	NA
	04/21/14	NA	863	NA	NA	NA	NA	NA	NA
	09/16/14	NA	944	NA	NA	NA	NA	NA	NA
	04/14/15	NA	740	NA	NA	NA	<1.4	NA	NA
	09/14/15	NA	889	NA	NA	NA	NA	NA	NA
	03/30/16	NA	847	NA	NA	NA	NA	NA	NA
	09/21/16	NA	648	NA	NA	NA	NA	NA	NA
	03/29/17	NA	602	NA	NA	NA	NA	NA	NA
	10/04/17	NA	384	NA	NA	NA	NA	NA	NA
	04/10/18	NA	602	NA	NA	NA	NA	NA	NA
	09/17/18	NA	333	NA	NA	NA	NA	NA	NA
	09/26/19	NA	339	NA	NA	NA	18.3	NA	NA

TABLE 5

Historical Groundwater Analytic Test 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-110 ****	06/21/06	<0.92	24,000	26,000	2.9*	40	290.0	<0.072	<20
	09/20/06	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
	09/22/08	NA	32,500	NA	NA	57	NA	NA	NA
	04/03/09	NA	30,900	NA	NA	42	NA	NA	NA
	09/01/09	NA	34,400	NA	NA	21	NA	NA	NA
	03/17/10	NA	22,800	NA	NA	39	NA	NA	NA
	09/09/10	NA	5,060	NA	NA	7.5 J	NA	NA	NA
	04/29/11	NA	27.2	NA	NA	<6.1	0.22 J	NA	NA
	09/01/11	NA	7,270	NA	NA	6.6 J	NA	NA	NA
	03/14/12	NA	4,530	NA	NA	6.6 J	NA	NA	NA
	09/12/12	NA	10,800	NA	NA	13 J	NA	NA	NA
	04/30/13	NA	294	NA	NA	4.3 J	NA	NA	NA
	09/17/13	NA	3,190	NA	NA	4.3 J	NA	NA	NA
	04/22/14	NA	76	NA	NA	<10	NA	NA	NA
	09/17/14	NA	1,960	NA	NA	<0.010	NA	NA	NA
	04/15/15	NA	156	NA	NA	10	2.7J	NA	NA
	09/14/15	NA	849	860	NA	<10	NA	NA	NA
	03/31/16	NA	3.5 J	NA	NA	<6.8	NA	NA	NA
	09/21/16	NA	1,460	NA	NA	<6.8	NA	NA	NA
	03/29/17	NA	6.7 J	NA	NA	<6.8	NA	NA	NA
	10/03/17	NA	987	NA	NA	<6.8	NA	NA	NA
	04/10/18	NA	251	NA	NA	<6.8	NA	NA	NA
	09/17/18	NA	6.2 J	NA	NA	<6.8	NA	NA	NA
	09/26/19	NA	<2.5	NA	NA	<6.8	542	NA	NA
MW-111 ****	06/21/06	<0.92	1,400	1,400	3.3*	27	190.0	<0.072	<20
****	09/20/06	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
	09/22/08	NA	743	NA	NA	NA	NA	NA	NA
	04/03/09	NA	381	NA	NA	13 J	NA	NA	NA
	09/01/09	NA	1,380	NA	NA	NA	NA	NA	NA
	03/17/10	NA	649	NA	NA	17 J	NA	NA	NA
	09/09/10	NA	438	NA	NA	NA	NA	NA	NA
	04/29/11	NA	238	NA	NA	<6.1	<0.14	NA	NA
	09/01/11	NA	572	NA	NA	NA	NA	NA	NA
	03/14/12	NA	432	NA	NA	13	NA	NA	NA
	09/12/12	NA	24.5	NA	NA	NA	NA	NA	NA
	04/30/13	NA	478	NA	NA	11 J	NA	NA	NA
	09/17/13	NA	509	NA	NA	11 J	NA	NA	NA
	04/21/14	NA	332	NA	NA	12 J	NA	NA	NA
	09/17/14	NA	302	NA	NA	12 J	NA	NA	NA
	04/14/15	NA	448	NA	NA	11	<1.4	NA	NA
	09/14/15	NA	582	660	NA	11	NA	NA	NA
	03/31/16	NA	120	NA	NA	<6.8	NA	NA	NA
	09/22/16	NA	363	NA	NA	NA	NA	NA	NA
	03/29/17	NA	10.1	NA	NA	<6.8	NA	NA	NA
	10/03/17	NA	480	NA	NA	NA	NA	NA	NA
	04/10/18	NA	551	NA	NA	9.9 J	NA	NA	NA
	09/17/18	NA	292	NA	NA	9.9 J	NA	NA	NA
	09/26/19	NA	76.3	NA	NA	<6.8	2.7 J	NA	NA
MW-112 ****	06/21/06	<0.92	130,000	140,000	5.3	140	180.0	<0.072	34,000
	09/20/06	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
	09/22/08	NA	77,400	NA	NA	210	NA	NA	NA
	04/03/09	NA	76,200	NA	NA	210	NA	NA	NA
	09/01/09	NA	69,000	NA	NA	150	NA	NA	NA

TABLE 5

Historical Groundwater Analytic Test 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-112	03/17/10	NA	21,500	NA	NA	110	NA	NA	NA
	09/09/10	NA	7,150	NA	NA	110	NA	NA	NA
	04/29/11	NA	1,840	NA	NA	<6.1	2.6 J	NA	NA
	09/01/11	NA	15,600	NA	NA	51	NA	NA	NA
	03/14/12	NA	149	NA	NA	<6.1	NA	NA	NA
	09/12/12	NA	18,600	NA	NA	32	NA	NA	NA
	04/30/13	NA	216	NA	NA	5.2 J	NA	NA	NA
	09/17/13	NA	2,940	NA	NA	5.2 J	NA	NA	NA
	04/21/14	NA	189	NA	NA	<10	NA	NA	NA
	09/17/14	NA	2,820	NA	NA	0.016	NA	NA	NA
	04/14/15	NA	274	NA	NA	10	<1.4	NA	NA
	09/14/15	NA	13,600	16,000	NA	21	NA	NA	NA
	03/31/16	NA	1,080	NA	NA	8.0 J	NA	NA	NA
	09/22/16	NA	638	NA	NA	7.0 J	NA	NA	NA
	03/29/17	NA	240	NA	NA	<14	NA	NA	NA
	10/03/17	NA	3,150	NA	NA	8.9 J	NA	NA	NA
	04/10/18	NA	5,310	NA	NA	14 J	NA	NA	NA
	09/17/18	NA	89.6	NA	NA	7.6 J	NA	NA	NA
	09/26/19	NA	305	NA	NA	<6.8	283	NA	NA
MW-113 ****	06/21/06	<0.92	25,000	26,000	3.4*	11	170.0	<0.072	<20
	09/20/06	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
	09/22/08	NA	24,300	NA	NA	NA	NA	NA	NA
	04/03/09	NA	18,800	NA	NA	NA	NA	NA	NA
	09/01/09	NA	37,400	NA	NA	NA	NA	NA	NA
	03/17/10	NA	31,300	NA	NA	NA	NA	NA	NA
	09/09/10	NA	18,400	NA	NA	NA	NA	NA	NA
	04/29/11	NA	2,760	NA	NA	NA	<0.14	NA	NA
	09/01/11	NA	16,700	NA	NA	NA	NA	NA	NA
	03/14/12	NA	7,460	NA	NA	NA	NA	NA	NA
	09/12/12	NA	25,800	NA	NA	NA	NA	NA	NA
	04/30/13	NA	776	NA	NA	NA	NA	NA	NA
	09/17/13	NA	31,100	NA	NA	NA	NA	NA	NA
	04/22/14	NA	12,000	NA	NA	NA	NA	NA	NA
	09/17/14	NA	25,900	NA	NA	NA	NA	NA	NA
	04/14/15	NA	10,800	NA	NA	NA	<1.4	NA	NA
	09/14/15	NA	6,560	7,400	NA	NA	NA	NA	NA
	03/31/16	NA	2,780	NA	NA	NA	NA	NA	NA
	09/21/16	NA	15,200	NA	NA	NA	NA	NA	NA
	03/29/17	NA	6,490	NA	NA	NA	NA	NA	NA
	10/03/17	NA	17,400	NA	NA	NA	NA	NA	NA
	04/10/18	NA	26,200	NA	NA	NA	NA	NA	NA
	09/17/18	NA	4,060	NA	NA	NA	NA	NA	NA
	09/26/19	NA	759	NA	NA	NA	5,010	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
	03/31/16****	NA	<2.1	NA	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
	03/30/16****	NA	<2.1	NA	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
	03/30/16****	NA	<2.1	NA	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
	04/05/16	NA	<2.1	NA	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 tubing.

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.

TABLE 5

Historical Groundwater Analytic Test 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

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

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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*	0.353*	<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

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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
	03/30/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	10.1	<0.20	<0.33	<1.0	<1.5
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	0.23*	***	<.56
	03/24/03	<.35	<.35	<.35	<.39	<.39	<.39	***	<.37	<.42	<.32	<.42	***	<.42
	04/05/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	<0.33	<1.0	<1.5

TABLE 6

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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
	03/30/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	<0.33	<1.0	<1.5
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

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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 J	22.1	2.61 J	<2.61	<2480	<68	265 J	2.83	295	<2480	-
	12/12/97	<10	<12	56 J	23	3 J	<3	<2500	<68	280	3	290	<2500	-
	03/25/98	<25	<30	61 J	69	5 J	<5	<17	<68	720	5	620	17*	-
	06/10/98	<12	<15	59*	58	<3	<3	<3100	63*	340 J	4 J	390	<3100	-
	10/27/98	<.24	1.4	62	46 J	3.6	0.51 J	<.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 J	<4.2	***	<3.2	570	4.5 J	880	***	<9.2
	03/13/00	<26	<23	50 J	32 J	<12	<31	***	<30	340	<.90	630	***	<57
	06/22/00	<26	<23	<29	50 J	<12	<31	***	<30	540	<9	850	***	<57
	09/27/00	<26	<23	35 J	54 J	<12	<31	***	<30	560	<9	870	***	<57
	12/19/00	<6.4	<5.6	36	53	4.5 J	<7.8	***	<7.5	480	4.1 J	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
	09/24/01	<6.5	<15	36	50	<9	<6.1	***	<6.2	480	<6.5	760	***	<32
	12/05/01	<6.5	<15	40	50	<9	<6.1	***	<6.2	500	<6.5	810	***	<32

TABLE 6

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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-107	03/19/02	<6.0	<7.5	37 J	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 J	37 J	<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 J	41 J	<19	<19	***	<19	430	<16	730	***	<22
	12/10/03	<17	<18	25 J	31 J	<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 J	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 J	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
	09/22/08	<2.0	<6.5	38.5	34.2	4.5 J	<4.4	***	<3.4	368	2.8 J	679	***	<13.2
	04/03/09	<2.0	<6.5	22.6	22.7	<4.2	<4.4	***	<3.4	283	<2.1	593	***	<13.2
	09/01/09	<2.0	<6.5	41.4	37.7	<4.2	<4.4	***	<3.4	347	2.8 J	715	***	<13.2
	03/17/10	<2.0	<6.5	25.3	29.0	<4.2	<4.4	***	<3.4	276	<2.1	620	***	<13.2
	09/09/10	<2.0	<6.5	25.8	26.7	<4.2	<4.4	***	<3.4	283	<2.1	685	***	<13.2
	04/29/11	<2.0	<6.5	21.0	18.3	<4.2	<4.4	***	<3.4	213	<2.1	551	***	<13.2
	09/01/11	<2.0	<6.5	31.5	26.1	<4.2	<4.4	***	5.2	297	2.3 J	641	***	<13.2
	03/14/12	<2.0	<6.5	21.4	15.6	<4.2	<4.4	***	<3.4	190	<2.1	463	***	<13.2
	09/11/12	<2.0	<6.5	32.0	30.5	4.2 J	<4.4	<4.2	<3.4	305	<2.1	664	<9.0	<13.2
	04/30/13	<2.5	<3.4	16.3	15.5	<2.1	<1.9	<2.5	<2.2	177	<1.9	460	<4.1	<6.6
	09/17/13	<5.0	<6.9	3.7	11.9	<4.2	<3.7	<5.0	<4.4	174	<3.9	531	<8.2	<13.2
	04/21/14	<2.5	<12.5	14.9	11.7	1.7 J	<1.2	<2.5	<2.5	129	<0.78	399	<5.0	<7.5
	09/16/14	<2.5	<12.5	5.2	10.7	2.2 J	<1.3	<2.5	<2.5	120	<0.78	418	<5.0	<7.5
	04/14/15	<2.5	<12.5	16.2	15.3	<1.3	<1.3	<2.5	<2.5	159	<0.99	382	<5.0	<7.5
	09/14/15	<2.5	<12.5	25.5	19.1	2.1 J	<1.3	***	<2.5	176	<0.99	470	***	<7.5

TABLE 6

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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-107	03/30/16	<2.5	<12.5	9.6	10.0	<1.3	<1.3	<2.5	<2.5	101	<0.99	282	<5.0	<7.5
	09/21/16	<1.2	<6.2	4.9	10.5	1.4 J	<0.64	<1.2	<1.2	138	0.86 J	374	<2.5	<3.7
	03/29/17	<1.2	<6.2	14.0	11.7	2.3 J	<0.64	<1.2	<1.2	124	<0.49	364	<2.5	<3.7
	10/03/17	<1.2	<6.2	34.2	23.2	2.8	<0.64	<1.2	<1.2	212	<0.49	564	<2.5	<3.7
	04/11/18	<1.2	<6.2	23.1	17.6	3.0	<0.64	<1.2	<1.2	166	1.4 J	445	<2.5	<3.7
	09/17/18	<0.62	<3.2	24.7	16.1	2.8	<2.7	<0.65	<0.43	142	<1.4	418	<1.2	<1.85
	09/25/19	<0.62	<3.2	10.9	9.5	1.2 J	<2.7	<0.65	<0.43	96.2	<1.4	308	<1.2	<1.85
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
	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 J	46	***	-
	09/20/06	-	0.39*	1.7*	2.2	<0.83	<0.89	***	-	37	0.45 J	51	***	-
	12/19/06	<0.41	0.44*	2.7	1.1*	<0.83	<0.89	***	-	33	0.52 J	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
	09/22/08	<0.41	<1.3	0.98 J	1.4	<0.83	<0.89	***	<0.67	26.9	<0.42	38.8	***	<2.63
	04/03/09	<0.41	<1.3	2.4	1.1	<0.83	<0.89	***	<0.67	29.6	<0.42	36.3	***	<2.63
	09/01/09	<0.41	<1.3	1.4	2.2	<0.83	<0.89	***	<0.67	35.8	0.50 J	50.8	***	<2.63
	03/17/10	<0.41	<1.3	2.4	1.6	<0.83	<0.89	***	<0.67	27.4	<0.42	37.9	***	<2.63
	09/09/10	<0.41	<1.3	0.84 J	1.2	<0.83	<0.89	***	<0.67	23.5	<0.42	41.5	***	<2.63
	04/29/11	<0.41	<1.3	2.2	1.6	<0.83	<0.89	***	<0.67	27.1	0.43 J	38.6	***	<13.2
	09/01/11	<0.41	<1.3	2.7	2.6	<0.83	<0.89	***	<0.67	52.5	0.69 J	66.8	***	<2.63
	03/14/12	<0.41	<1.3	2.4	1.1	<0.83	<0.89	***	<0.67	22.3	<0.42	33.5	***	<2.63
	09/11/12	<0.41	<1.3	1.1	0.91 J	<0.83	<0.89	***	<0.67	19.5	<0.42	30.2	***	<2.63
	04/30/13	<0.50	<0.69	1.8	1.0	<0.42	<0.37	***	<0.44	16.7	<0.39	28.7	***	<1.32
	09/17/13	<0.50	<0.69	0.8	0.8	<0.42	<0.37	***	<0.44	12.6	<0.39	26.3	***	<1.32

TABLE 6

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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-109	04/21/14	<0.50	<2.5	1.9	1.0	<0.26	<0.24	***	<0.50	18.9	0.27 J	28.6	***	<1.5
	09/16/14	<0.50	<2.5	1.0	0.89 J	<0.26	<0.26	<0.50	<0.50	17.2	<0.16	31.1	<1.0	<1.5
	04/14/15	<0.50	<2.5	1.5	1.1	<0.26	<0.26	<0.50	<0.50	17.8	<0.20	23.5	<1.0	<1.5
	09/14/15	<0.50	<2.5	1.4	1.1	<0.26	<0.26	***	<0.50	24.1	<0.20	38.3	***	<1.5
	03/30/16	<0.50	<2.5	0.94 J	1.0	<0.26	<0.26	<0.50	<0.50	15.1	<0.20	22.5	<1.0	<1.5
	09/21/16	<0.50	<2.5	1.8	1.8	0.28 J	<0.26	<0.50	<0.50	31.0	0.31 J	40.6	<1.0	<1.5
	03/29/17	<0.50	<2.5	1.2	1.2	<0.26	<0.26	<0.50	<0.50	17.4	<0.20	24.4	<1.0	<1.5
	10/04/17	<0.50	<2.5	1.9	1.5	0.37 J	<0.26	<0.50	<0.50	26.7	<0.20	39.1	<1.0	<1.5
	04/10/18	<0.50	1.2	1.9	1.1	<0.26	<0.26	<0.50	<0.50	26.7	0.25 J	25.8	<1.0	<1.5
	09/17/18	<0.25	<1.3	1.5	0.91 J	<0.27	<1.1	<0.26	<0.17	17.6	<0.55	27.3	<0.47	<0.73
	09/26/19	<0.25	<1.3	2.3	1.3 J	<0.27	<1.1	<0.26	<0.17	23.2	<0.55	35.3	<0.47	<0.73
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 J	***	-	1,100	<4.2	30	***	-
	12/19/06	<4.1	<3.7	230	240	55	16 J	***	<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 J	23 J	***	<17	1,600	<10	32 J	***	<2.63
	04/16/08	<8.2	<7.4	206	195	55.9	<17.8	***	<13.4	918	<8.4	28.2	***	<52.6
	09/22/08	<4.1	<13.0	246	239	73.5	29.1	***	<6.7	1,210	<4.2	45.5	***	<26.3
	04/03/09	<4.1	<13.0	195	188	56.5	14.0	***	<6.7	914	<4.2	26.2	***	<26.3
	09/01/09	<4.1	<13.0	257	268	74.9	16.3	***	<6.7	1,130	<4.2	44.2	***	<26.3
	03/17/10	<4.1	<13.0	159	169	47.3	9.8 J	***	<6.7	718	<4.2	29.8	***	<26.3
	09/09/10	<1.0	<3.2	36.3	47.7	17.2	3.3	***	<1.7	252	<1.0	23.5	***	<6.6
	04/29/11	<0.41	<1.3	0.84 J	0.62 J	<0.83	<0.89	***	<0.67	6.6	<0.42	1.0	***	<2.63
	09/01/11	<0.41	<1.3	32.5	40.0	22.2	3.0	***	<0.67	232	0.87 J	32.7	***	<2.63
	03/14/12	<1.6	<1.3	39.6	29.9	13.4	2.3	***	<0.67	170	0.46 J	15.8	***	<2.63
	09/12/12	<1.6	<5.2	65.3	68.9	24.4	5.2	***	<2.7	313	<1.7	22.7	***	<10.5
	04/30/13	<0.50	<0.69	6.8	4.4	1.9	0.38 J	***	<0.44	28.1	<0.39	4.7	***	<1.32
	09/17/13	<0.50	<0.69	28.5	25.6	11.4	1.9	***	<0.44	111	0.48	18	***	<1.32
	04/22/14	<0.50	<2.5	3.1	1.5	0.60 J	<0.24	***	<0.50	9.6	<0.16	2.4	***	<1.5
	09/17/14	<0.50	<2.5	24.7	19.1	10.4	1.5	<0.5	<0.50	115	0.38 J	19.3	<1.0	<1.5
	04/15/15	<0.50	<2.5	4.1	2.3	0.96 J	<0.26	<0.5	<0.50	11.5	<0.20	2.2	<1.0	<1.5
[c]	09/14/15	<0.50	<2.5	23.1	17.4	8.7	1.4	***	<0.50	92.9	0.38 J	19.1	***	<1.5
	03/31/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	<0.33	<1.0	<1.5
	09/21/16	<0.50	<2.5	23.1	19.3	9.6	1.5	<0.50	<0.50	86.8	0.31 J	16.5	<1.0	<1.5
	03/29/17	<0.50	<2.5	1.1	<0.41	<0.26	<0.26	<0.50	<0.50	1.3	<0.20	0.43 J	<1.0	<1.5
	10/03/17	<0.50	<2.5	18.3	17.1	9.0	1.6	<0.50	<0.50	76.0	<0.20	20.4	<1.0	<1.5
	04/10/18	<0.50	<2.5	5.8	2.8	1.5	0.28 J	<0.50	<0.50	11.4	<0.20	3.6	<1.0	<1.5
	09/17/18	<0.25	<1.3	10.3	3.1	1.7	<1.1	<0.26	<0.17	16.9	<0.55	6.7	<0.47	<0.73
	09/26/19	<0.25	<1.3	3.3	<0.24	<0.27	<1.1	<0.26	<0.17	1.6	<0.55	0.86 J	<0.47	<0.73

TABLE 6

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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
	09/22/08	<0.41	<1.3	2.6	6.7	<0.83	<0.89	***	<0.67	59.0	0.53 J	142	***	<2.63
	04/03/09	<0.41	<1.3	1.6	2.7	<0.83	<0.89	***	<0.67	21.4	<0.42	57.7	***	<2.63
	09/01/09	<0.41	<1.3	2.5	7.5	<0.83	<0.89	***	<0.67	56.8	0.51 J	147	***	<2.63
	03/17/10	<0.41	<1.3	1.8	3.9	<0.83	<0.89	***	<0.67	27.5	<0.42	75.3	***	<2.63
	09/09/10	<0.41	<1.3	2.2	4.5	<0.83	<0.89	***	<0.67	37.5	<0.42	110	***	<2.63
	04/29/11	<0.41	<1.3	2.0	2.7	<0.83	<0.89	***	<0.67	21.1	<0.42	65.0	***	<2.63
	09/01/11	<0.41	<1.3	2.3	4.5	<0.83	<0.89	***	<0.67	39.7	<0.42	109	***	<2.63
	03/14/12	<0.41	<1.3	2.3	2.7	<0.83	<0.89	***	<0.67	23.9	<0.42	62.6	***	<2.63
	09/12/12	<0.41	<1.3	3.1	3.2	<0.83	<0.89	***	<0.67	24.1	<0.42	66.7	***	<2.63
	04/30/13	<0.50	<0.69	1.8	2.9	<0.42	<0.37	***	<0.44	19.8	<0.39	64.1	***	<1.32
	09/17/13	<0.50	<0.69	2.3	4.8	<0.42	<0.37	***	<0.44	32.1	<0.39	108	***	<1.32
	04/21/14	<0.50	<2.5	1.7	2.2	<0.26	<0.24	***	<0.50	18.4	0.20 J	60	***	<1.5
	09/17/14	<0.50	<2.5	2.7	3.9	<0.26	<0.26	<0.50	<0.50	36.9	0.30 J	110	<1.0	<1.5
	04/14/15	<0.50	<2.5	1.6	2.4	<0.26	<0.26	<0.50	<0.50	15.6	<0.20	44.2	<1.0	<1.5
	09/14/15	<0.50	<2.5	2.3	3.9	<0.26	<0.26	***	<0.50	32.1	<0.20	103	***	<1.5
	03/31/16	<0.50	<2.5	1.6	2.0	<0.26	<0.26	<0.50	<0.50	14.6	<0.20	45.7	<1.0	<1.5
E	09/22/16	<0.50	<2.5	1.8	2.7	<0.26	<0.26	<0.50	<0.50	24.7	<0.20	68.4	<1.0	<1.5
	03/29/17	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	1.9	<0.20	9.0	<1.0	<1.5
	10/04/17	<0.50	<2.5	1.7	2.8	<0.26	<0.26	<0.50	<0.50	21.6	<0.20	74.5	<1.0	<1.5
	04/10/18	<0.50	<2.5	1.5	1.9	<0.26	<0.26	<0.50	<0.50	14.1	<0.20	45.8	<1.0	<1.5
	09/17/18	<0.25	<1.3	1.7	2.2	<0.27	<1.1	<0.26	<0.17	17.2	<0.55	59.4	<0.47	<0.73
	09/26/19	<0.25	<1.3	0.72 J	0.82 J	<0.27	<1.1	<0.26	<0.17	5.1	<0.55	24.2	<0.47	<0.73

TABLE 6

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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-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
	09/22/08	<4.1	<13.0	<7.5	5.7 J	<8.3	<8.9	***	<6.7	19.0	<4.2	1160	***	<26.3
	04/03/09	<4.1	<13.0	<7.5	5.8 J	<8.3	<8.9	***	<6.7	20.6	<4.2	1250	***	<26.3
	09/01/09	<4.1	<13.0	<7.5	8.2 J	<8.3	<8.9	***	<6.7	25.8	<4.2	1600	***	<26.3
	03/17/10	<4.1	<13.0	<7.5	<5.7	<8.3	<8.9	***	<6.7	<9.0	<4.2	556	***	<26.3
	09/09/10	<4.1	<13.0	<7.5	<5.7	<8.3	<8.9	***	<6.7	<9.0	<4.2	546	***	<26.3
	04/29/11	<0.41	<1.3	<0.75	<0.57	<0.83	<0.89	***	<0.67	0.94 J	<0.42	111	***	<2.63
	09/01/11	<2.0	<6.5	<3.8	<2.8	<4.2	<4.4	***	<3.4	7.5	<2.1	557	***	<13.2
	09/01/11	<0.41	<1.3	<0.75	<0.57	<0.83	<0.89	***	<0.67	<0.90	<0.42	47.9	***	<2.63
	09/12/12	<2.0	<6.5	<3.8	<2.8	<4.2	<4.4	***	<3.4	7.8	<2.1	623	***	<13.2
	04/30/13	<0.50	<0.69	<0.28	<0.43	<0.43	<0.37	***	<0.44	<0.44	<0.39	75	***	<1.32
	09/17/13	<2.5	<3.4	1.9	<2.1	<2.1	<1.9	***	<2.2	3.4	<1.9	474	***	<6.6
	04/21/14	<0.50	<2.5	0.24 J	<0.41	<0.26	<0.24	***	<0.50	<0.50	<0.16	46	***	<1.5
	09/17/14	<2.5	<12.5	2.1 J	<2.1	<1.3	<1.3	<2.5	<2.5	3.8 J	<0.78	493	<5.0	<7.5
	04/14/15	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	52.4	<1.0	<1.5
	09/14/15	<0.50	<2.5	1.6	<0.41	0.61 J	<0.26	***	<0.50	2.5	<0.20	294	***	<1.5
	03/31/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	31.4	<1.0	<1.5
	09/22/16	<0.50	<2.5	2.2	1.6	1.7	<0.26	<0.50	<0.50	1.6	<0.20	281	<1.0	<1.5
	03/29/17	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	64.9	<1.0	<1.5
	10/04/17	<1.2	<6.2	1.3 J	1.1 J	0.96 J	<0.64	<1.2	<1.2	2.6	<0.49	292	<2.5	<3.7
	04/10/18	<0.50	<2.5	1.0	0.62 J	1.0	<0.26	<0.50	<0.50	1.9	<0.20	205	<1.0	<1.5
	09/17/18	<0.25	<1.3	1.3	0.88 J	0.99 J	<1.1	<0.26	<0.17	1.5	<0.55	237	<0.47	<0.73
	09/26/19	<0.25	<1.3	0.61 J	0.40 J	14.8	<1.1	<0.26	<0.17	0.58 J	<0.55	87.7	<0.47	<0.73

TABLE 6

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

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-113	06/21/06	-	<0.74	37	44	4.4 J	<1.8	***	-	240	<0.84	92	***	-
	09/20/06	-	<0.37	22	19	3.6	1.3 J	***	-	120	0.82 J	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
[A]	09/28/07	<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
	09/22/08	<4.1	<13.0	28.2	17.9	<8.3	<8.9	***	<6.7	134	<4.2	89.4	***	<26.3
	04/03/09	<0.41	<1.3	21.8	13.9	4.1	<0.89	***	<0.67	107	<0.42	62.2	***	<2.63
	09/01/09	<1.0	<3.2	51.2	70.8	13.8	4.0	***	<1.7	356	1.4 J	199	***	<6.6
	03/17/10	<1.0	<3.2	29.0	23.6	7.8	<2.2	***	<1.7	140	<1.0	96.8	***	<6.6
	09/09/10	<0.82	<2.6	26.7	29.1	6.1	<1.8	***	<1.3	165	<0.84	77	***	<5.3
	04/29/11	<0.50	<1.3	6.9	5.5	1.1	<0.89	***	<0.67	37.1	<0.42	21.3	***	<2.63
	09/01/11	<0.41	<1.3	23.8	26.0	6.3	1.2	***	<0.67	152	0.55 J	75.9	***	<2.63
	03/14/12	<0.41	<1.3	17.1	17.3	2.9	<0.89	***	<0.67	106	<0.42	42.3	***	<2.63
	09/12/12	<2.0	<6.5	50.8	59.6	12.6	<4.4	***	<3.4	320	<2.1	148	***	<13.2
	04/30/13	<.50	<0.69	6.2	5.8	0.94	<0.37	***	<3.4	34.6	<2.1	14	***	<1.32
	09/17/13	<2.0	<2.8	47.9	74.6	16.3	4.2	***	<1.8	284	<1.6	161	***	<5.3
[B]	04/22/14	<0.50	<2.5	26.7	18.8	7.1	1.3	***	<0.50	103	0.50 J	67.4	***	<1.5
	09/17/14	<0.50	<2.5	54.3	38.8	14.2	2.4	<0.50	<0.50	231	0.89 J	125	<1.0	<1.5
	04/14/15	<0.50	<2.5	16.6	20.3	4.7	0.85 J	<0.50	<0.50	97.5	0.32 J	44.7	<1.0	<1.5
[D]	09/14/15	<0.50	<2.5	38.0	43.6	8.4	1.7	***	<0.50	218	0.68 J	76.6	***	<1.5
	03/31/16	<0.50	<2.5	9.2	8.9	1.6	<0.26	<0.50	<0.50	36.7	<0.20	17.3	<1.0	<1.5
	09/21/16	<1.2	<6.2	58.7	79.3	15.4	3.4	<1.2	<1.2	326	0.58 J	95.5	<2.5	<3.7
	03/29/17	<0.50	<2.5	18.4	18.0	4.0	0.73 J	<0.50	<0.50	80.5	<0.20	34.6	<1.0	<1.5
[F]	10/03/17	<0.50	<2.5	45.6	65.3	14.7	3.4	<0.50	<0.50	260	<0.20	113	<1.0	<1.5
	04/10/18	<2.5	<12.5	31.0	36.5	11.5	2.2 J	<2.5	<2.5	147	<0.99	82.4	<5.0	<7.5
[G]	09/17/18	<0.25	<1.3	23.2	23.7	5.4	<1.1	<0.26	<0.17	100	<0.55	45.2	<0.47	<0.73
[H]	09/26/19	<0.25	<1.3	48.3	29.5	5.2	1.2 J	<0.26	<0.17	114	<0.55	41.4	<0.47	<0.73
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	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
	09/21/05	<0.37	<0.75	<0.57	<0.83	<0.89	NA	NA	<0.90	<0.42	<0.48	NA	NA	NA
	03/31/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	<0.33	<1.0	<1.5
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
	09/21/05	<0.37	<0.75	<0.57	<0.83	<0.89	NA	NA	<0.90	<0.42	<0.48	NA	NA	NA
	03/30/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	<0.33	<1.0	<1.5
PZ-7	03/30/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	<0.33	<1.0	<1.5
PZ-8	04/05/16	<0.50	<2.5	<0.24	<0.41	<0.26	<0.26	<0.50	<0.50	<0.50	<0.20	<0.33	<1.0	<1.5

TABLE 6

Historical Groundwater Analytic Test Results--Volatile Organic Compounds

N.W. Mauthe Superfund Site - Appleton, Wisconsin

	Detected Volatile Organic Compounds (µg/L)												
	Benzene	**Chloroform**	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**cis-1,2,-Dichloroethene**	**Trans-1,2,-Dichloroethene**	**Ortho-Xylene**	**Toluene**	**1,1,1-Trichloroethane**	**1,1,2-Trichloroethane**	**Trichloroethene**	**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 adjusted 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 µg/l.

[B] = Dichlorodifluoromethane detected at 0.17 µg/L and 1,2-Dichloroethane detected at 0.34 µg/L

[C] = 1,2-Dichloroethane was detected at 0.34 J µg/l.

[D] = 1,2-Dichloroethane was detected at 0.47 J µg/l.

[E] = chloromethane was detected at 0.55 J µg/l.

[F] = 1,2-Dichloroethane was detected at 0.63 J µg/l and Methylene Chloride detected at 0.24J µg/l

[G] = 1,2-Dichloroethane was detected at 0.28 J µg/l

[H] = 1,2-Dichloroethane was detected at 0.37 J µg/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)

Appendix C

Laboratory Analytic Test Reports and Chain-of-Custody Record
Groundwater Sampling Field Sheets

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

October 11, 2019

Scott Hodgson
Terracon, Inc. - Franklin
9856 South 57th Street
Franklin, WI 53132

RE: Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Dear Scott Hodgson:
Enclosed are the analytical results for sample(s) received by the laboratory on September 27, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

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

CERTIFICATIONS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40196093001	**W-2**	Water	09/25/19 12:48	09/27/19 13:30
40196093002	**W-8**	Water	09/25/19 14:40	09/27/19 13:30
40196093003	**W-15**	Water	09/25/19 14:10	09/27/19 13:30
40196093004	**MW-101**	Water	09/25/19 11:50	09/27/19 13:30
40196093005	**MW-103**	Water	09/25/19 15:38	09/27/19 13:30
40196093006	**MW-104**	Water	09/25/19 15:31	09/27/19 13:30
40196093007	**MW-106**	Water	09/25/19 14:30	09/27/19 13:30
40196093008	**MW-107**	Water	09/25/19 16:43	09/27/19 13:30
40196093009	**MW-108**	Water	09/25/19 12:43	09/27/19 13:30
40196093010	**MW-109**	Water	09/26/19 08:50	09/27/19 13:30
40196093011	**MW-110**	Water	09/26/19 12:03	09/27/19 13:30
40196093012	**MW-111**	Water	09/26/19 09:34	09/27/19 13:30
40196093013	**MW-112**	Water	09/26/19 10:28	09/27/19 13:30
40196093014	**MW-113**	Water	09/26/19 11:20	09/27/19 13:30
40196093015	**BD-1**	Water	09/26/19 09:34	09/27/19 13:30
40196093016	**TB**	Water	09/26/19 00:00	09/27/19 13:30

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

SAMPLE ANALYTE COUNT

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40196093001	**W-2**	EPA 6010	TXW	3	PASI-G
40196093002	**W-8**	EPA 6010	TXW	3	PASI-G
40196093003	**W-15**	EPA 6010	TXW	3	PASI-G
40196093004	**MW-101**	EPA 6010	TXW	3	PASI-G
40196093005	**MW-103**	EPA 6010	TXW	3	PASI-G
40196093006	**MW-104**	EPA 6010	TXW	3	PASI-G
40196093007	**MW-106**	EPA 6010	TXW	3	PASI-G
40196093008	**MW-107**	EPA 6010	TXW	3	PASI-G
		EPA 8260	SMT	64	PASI-G
40196093009	**MW-108**	EPA 6010	TXW	3	PASI-G
40196093010	**MW-109**	EPA 6010	TXW	3	PASI-G
		EPA 8260	SMT	64	PASI-G
40196093011	**MW-110**	EPA 6010	TXW	3	PASI-G
		EPA 8260	SMT	64	PASI-G
		EPA 335.4	DAW	1	PASI-G
40196093012	**MW-111**	EPA 6010	TXW	3	PASI-G
		EPA 8260	SMT	64	PASI-G
		EPA 335.4	DAW	1	PASI-G
40196093013	**MW-112**	EPA 6010	TXW	3	PASI-G
		EPA 8260	SMT	64	PASI-G
		EPA 335.4	DAW	1	PASI-G
40196093014	**MW-113**	EPA 6010	TXW	3	PASI-G
		EPA 8260	SMT	64	PASI-G
40196093015	**BD-1**	EPA 6010	TXW	3	PASI-G
		EPA 8260	SMT	64	PASI-G
		EPA 335.4	DAW	1	PASI-G
40196093016	**TB**	EPA 8260	SMT	64	PASI-G

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

SUMMARY OF DETECTION

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40196093001	**W-2**					
EPA 6010	Iron, Dissolved	1900	ug/L	100	10/02/19 00:47	
EPA 6010	Manganese, Dissolved	271	ug/L	5.0	10/02/19 00:47	
40196093003	**W-15**					
EPA 6010	Manganese, Dissolved	4.8J	ug/L	5.0	10/02/19 00:52	
40196093004	**MW-101**					
EPA 6010	Manganese, Dissolved	3.0J	ug/L	5.0	10/02/19 00:54	
40196093005	**MW-103**					
EPA 6010	Chromium, Dissolved	4.4J	ug/L	10.0	10/02/19 01:02	
EPA 6010	Manganese, Dissolved	4.1J	ug/L	5.0	10/02/19 01:02	
40196093006	**MW-104**					
EPA 6010	Chromium, Dissolved	3.8J	ug/L	10.0	10/02/19 01:04	
EPA 6010	Iron, Dissolved	2750	ug/L	100	10/02/19 01:04	
EPA 6010	Manganese, Dissolved	244	ug/L	5.0	10/02/19 01:04	
40196093007	**MW-106**					
EPA 6010	Manganese, Dissolved	55.2	ug/L	5.0	10/02/19 01:07	
40196093008	**MW-107**					
EPA 6010	Chromium, Dissolved	1300	ug/L	10.0	10/02/19 01:09	
EPA 6010	Manganese, Dissolved	3.5J	ug/L	5.0	10/02/19 01:09	
EPA 8260	1,1-Dichloroethane	10.9	ug/L	2.5	10/02/19 00:58	
EPA 8260	1,1-Dichloroethene	9.5	ug/L	2.5	10/02/19 00:58	
EPA 8260	cis-1,2-Dichloroethene	1.2J	ug/L	2.5	10/02/19 00:58	
EPA 8260	1,1,1-Trichloroethane	96.2	ug/L	2.5	10/02/19 00:58	
EPA 8260	Trichloroethene	308	ug/L	2.5	10/02/19 00:58	
40196093009	**MW-108**					
EPA 6010	Iron, Dissolved	37.9J	ug/L	100	10/02/19 01:12	
EPA 6010	Manganese, Dissolved	79.9	ug/L	5.0	10/02/19 01:12	
40196093010	**MW-109**					
EPA 6010	Chromium, Dissolved	339	ug/L	10.0	10/02/19 01:14	
EPA 6010	Manganese, Dissolved	18.3	ug/L	5.0	10/02/19 01:14	
EPA 8260	1,1-Dichloroethane	2.3	ug/L	1.0	10/01/19 23:00	
EPA 8260	1,1-Dichloroethene	1.3	ug/L	1.0	10/01/19 23:00	
EPA 8260	1,1,1-Trichloroethane	23.2	ug/L	1.0	10/01/19 23:00	
EPA 8260	Trichloroethene	35.3	ug/L	1.0	10/01/19 23:00	
40196093011	**MW-110**					
EPA 6010	Iron, Dissolved	1080	ug/L	100	10/02/19 02:35	
EPA 6010	Manganese, Dissolved	542	ug/L	5.0	10/02/19 02:35	
EPA 8260	1,1-Dichloroethane	3.3	ug/L	1.0	10/01/19 23:20	
EPA 8260	1,1,1-Trichloroethane	1.6	ug/L	1.0	10/01/19 23:20	
EPA 8260	Trichloroethene	0.86J	ug/L	1.0	10/01/19 23:20	
40196093012	**MW-111**					
EPA 6010	Chromium, Dissolved	76.3	ug/L	10.0	10/02/19 02:43	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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SUMMARY OF DETECTION

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40196093012	**MW-111**					
EPA 6010	Manganese, Dissolved	2.7J	ug/L	5.0	10/02/19 02:43	
EPA 8260	1,1-Dichloroethane	0.72J	ug/L	1.0	10/01/19 23:40	
EPA 8260	1,1-Dichloroethene	0.82J	ug/L	1.0	10/01/19 23:40	
EPA 8260	1,1,1-Trichloroethane	5.1	ug/L	1.0	10/01/19 23:40	
EPA 8260	Trichloroethene	24.2	ug/L	1.0	10/01/19 23:40	
40196093013	**MW-112**					
EPA 6010	Chromium, Dissolved	305	ug/L	10.0	10/02/19 02:45	
EPA 6010	Iron, Dissolved	30.6J	ug/L	100	10/02/19 02:45	
EPA 6010	Manganese, Dissolved	283	ug/L	5.0	10/02/19 02:45	
EPA 8260	1,1-Dichloroethane	0.61J	ug/L	1.0	10/02/19 00:00	
EPA 8260	1,1-Dichloroethene	0.40J	ug/L	1.0	10/02/19 00:00	
EPA 8260	cis-1,2-Dichloroethene	14.8	ug/L	1.0	10/02/19 00:00	
EPA 8260	1,1,1-Trichloroethane	0.58J	ug/L	1.0	10/02/19 00:00	
EPA 8260	Trichloroethene	87.7	ug/L	1.0	10/02/19 00:00	
40196093014	**MW-113**					
EPA 6010	Chromium, Dissolved	759	ug/L	10.0	10/02/19 02:48	
EPA 6010	Iron, Dissolved	855	ug/L	100	10/02/19 02:48	
EPA 6010	Manganese, Dissolved	5010	ug/L	5.0	10/02/19 02:48	
EPA 8260	1,1-Dichloroethane	48.3	ug/L	1.0	10/02/19 00:39	
EPA 8260	1,2-Dichloroethane	0.37J	ug/L	1.0	10/02/19 00:39	
EPA 8260	1,1-Dichloroethene	29.5	ug/L	1.0	10/02/19 00:39	
EPA 8260	cis-1,2-Dichloroethene	5.2	ug/L	1.0	10/02/19 00:39	
EPA 8260	trans-1,2-Dichloroethene	1.2J	ug/L	3.6	10/02/19 00:39	
EPA 8260	1,1,1-Trichloroethane	114	ug/L	1.0	10/02/19 00:39	
EPA 8260	Trichloroethene	41.4	ug/L	1.0	10/02/19 00:39	
40196093015	**BD-1**					
EPA 6010	Chromium, Dissolved	63.3	ug/L	10.0	10/02/19 02:50	
EPA 6010	Manganese, Dissolved	1.5J	ug/L	5.0	10/02/19 02:50	
EPA 8260	1,1-Dichloroethane	1.0	ug/L	1.0	10/02/19 00:19	
EPA 8260	1,1-Dichloroethene	0.69J	ug/L	1.0	10/02/19 00:19	
EPA 8260	1,1,1-Trichloroethane	6.5	ug/L	1.0	10/02/19 00:19	
EPA 8260	Trichloroethene	27.9	ug/L	1.0	10/02/19 00:19	

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PROJECT NARRATIVE

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Method: **EPA 6010**
Description: 6010 MET ICP, Dissolved
Client: Terracon, Inc. - Franklin
Date: October 11, 2019

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

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

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

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

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

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

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

Additional Comments:

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PROJECT NARRATIVE

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Method: **EPA 8260**
Description: 8260 MSV
Client: Terracon, Inc. - Franklin
Date: October 11, 2019

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

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

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

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

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

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

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

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

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

Additional Comments:

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PROJECT NARRATIVE

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: Terracon, Inc. - Franklin
Date: October 11, 2019

General Information:
4 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

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

Sample Preparation:
The samples were prepared in accordance with EPA 335.4 with any exceptions noted below.

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

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

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

Additional Comments:

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

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: W-2 **Lab ID: 40196093001** Collected: 09/25/19 12:48 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1		10/02/19 00:47	7440-47-3	
Iron, Dissolved	**1900**	ug/L	100	29.6	1		10/02/19 00:47	7439-89-6	
Manganese, Dissolved	**271**	ug/L	5.0	1.1	1		10/02/19 00:47	7439-96-5	

Sample: W-8 **Lab ID: 40196093002** Collected: 09/25/19 14:40 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1		10/02/19 00:49	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 00:49	7439-89-6	
Manganese, Dissolved	**<1.1**	ug/L	5.0	1.1	1		10/02/19 00:49	7439-96-5	

Sample: W-15 **Lab ID: 40196093003** Collected: 09/25/19 14:10 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1		10/02/19 00:52	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 00:52	7439-89-6	
Manganese, Dissolved	**4.8J**	ug/L	5.0	1.1	1		10/02/19 00:52	7439-96-5	

Sample: MW-101 **Lab ID: 40196093004** Collected: 09/25/19 11:50 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1		10/02/19 00:54	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 00:54	7439-89-6	
Manganese, Dissolved	**3.0J**	ug/L	5.0	1.1	1		10/02/19 00:54	7439-96-5	

Sample: MW-103 **Lab ID: 40196093005** Collected: 09/25/19 15:38 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**4.4J**	ug/L	10.0	2.5	1		10/02/19 01:02	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 01:02	7439-89-6	
Manganese, Dissolved	**4.1J**	ug/L	5.0	1.1	1		10/02/19 01:02	7439-96-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-104 **Lab ID: 40196093006** Collected: 09/25/19 15:31 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**3.8J**	ug/L	10.0	2.5	1		10/02/19 01:04	7440-47-3	
Iron, Dissolved	**2750**	ug/L	100	29.6	1		10/02/19 01:04	7439-89-6	
Manganese, Dissolved	**244**	ug/L	5.0	1.1	1		10/02/19 01:04	7439-96-5	

Sample: MW-106 **Lab ID: 40196093007** Collected: 09/25/19 14:30 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1		10/02/19 01:07	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 01:07	7439-89-6	
Manganese, Dissolved	**55.2**	ug/L	5.0	1.1	1		10/02/19 01:07	7439-96-5	

Sample: MW-107 **Lab ID: 40196093008** Collected: 09/25/19 16:43 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**1300**	ug/L	10.0	2.5	1		10/02/19 01:09	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 01:09	7439-89-6	
Manganese, Dissolved	**3.5J**	ug/L	5.0	1.1	1		10/02/19 01:09	7439-96-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.62**	ug/L	2.5	0.62	2.5		10/02/19 00:58	71-43-2	
Bromobenzene	**<0.60**	ug/L	2.5	0.60	2.5		10/02/19 00:58	108-86-1	
Bromochloromethane	**<0.91**	ug/L	12.5	0.91	2.5		10/02/19 00:58	74-97-5	
Bromodichloromethane	**<0.91**	ug/L	3.0	0.91	2.5		10/02/19 00:58	75-27-4	
Bromoform	**<9.9**	ug/L	33.1	9.9	2.5		10/02/19 00:58	75-25-2	
Bromomethane	**<2.4**	ug/L	12.5	2.4	2.5		10/02/19 00:58	74-83-9	
n-Butylbenzene	**<1.8**	ug/L	5.9	1.8	2.5		10/02/19 00:58	104-51-8	
sec-Butylbenzene	**<2.1**	ug/L	12.5	2.1	2.5		10/02/19 00:58	135-98-8	
tert-Butylbenzene	**<0.76**	ug/L	2.5	0.76	2.5		10/02/19 00:58	98-06-6	
Carbon tetrachloride	**<0.41**	ug/L	2.5	0.41	2.5		10/02/19 00:58	56-23-5	
Chlorobenzene	**<1.8**	ug/L	5.9	1.8	2.5		10/02/19 00:58	108-90-7	
Chloroethane	**<3.4**	ug/L	12.5	3.4	2.5		10/02/19 00:58	75-00-3	
Chloroform	**<3.2**	ug/L	12.5	3.2	2.5		10/02/19 00:58	67-66-3	
Chloromethane	**<5.5**	ug/L	18.2	5.5	2.5		10/02/19 00:58	74-87-3	
2-Chlorotoluene	**<2.3**	ug/L	12.5	2.3	2.5		10/02/19 00:58	95-49-8	
4-Chlorotoluene	**<1.9**	ug/L	6.3	1.9	2.5		10/02/19 00:58	106-43-4	
1,2-Dibromo-3-chloropropane	**<4.4**	ug/L	14.7	4.4	2.5		10/02/19 00:58	96-12-8	
Dibromochloromethane	**<6.5**	ug/L	21.7	6.5	2.5		10/02/19 00:58	124-48-1	
1,2-Dibromoethane (EDB)	**<2.1**	ug/L	6.9	2.1	2.5		10/02/19 00:58	106-93-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-107 **Lab ID: 40196093008** Collected: 09/25/19 16:43 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Dibromomethane	**<2.3**	ug/L	7.8	2.3	2.5		10/02/19 00:58	74-95-3	
1,2-Dichlorobenzene	**<1.8**	ug/L	5.9	1.8	2.5		10/02/19 00:58	95-50-1	
1,3-Dichlorobenzene	**<1.6**	ug/L	5.2	1.6	2.5		10/02/19 00:58	541-73-1	
1,4-Dichlorobenzene	**<2.4**	ug/L	7.9	2.4	2.5		10/02/19 00:58	106-46-7	
Dichlorodifluoromethane	**<1.2**	ug/L	12.5	1.2	2.5		10/02/19 00:58	75-71-8	
1,1-Dichloroethane	**10.9**	ug/L	2.5	0.68	2.5		10/02/19 00:58	75-34-3	
1,2-Dichloroethane	**<0.70**	ug/L	2.5	0.70	2.5		10/02/19 00:58	107-06-2	
1,1-Dichloroethene	**9.5**	ug/L	2.5	0.61	2.5		10/02/19 00:58	75-35-4	
cis-1,2-Dichloroethene	**1.2J**	ug/L	2.5	0.68	2.5		10/02/19 00:58	156-59-2	
trans-1,2-Dichloroethene	**<2.7**	ug/L	9.1	2.7	2.5		10/02/19 00:58	156-60-5	
1,2-Dichloropropane	**<0.71**	ug/L	2.5	0.71	2.5		10/02/19 00:58	78-87-5	
1,3-Dichloropropane	**<2.1**	ug/L	6.9	2.1	2.5		10/02/19 00:58	142-28-9	
2,2-Dichloropropane	**<5.7**	ug/L	18.9	5.7	2.5		10/02/19 00:58	594-20-7	
1,1-Dichloropropene	**<1.4**	ug/L	4.5	1.4	2.5		10/02/19 00:58	563-58-6	
cis-1,3-Dichloropropene	**<9.1**	ug/L	30.2	9.1	2.5		10/02/19 00:58	10061-01-5	
trans-1,3-Dichloropropene	**<10.9**	ug/L	36.4	10.9	2.5		10/02/19 00:58	10061-02-6	
Diisopropyl ether	**<4.7**	ug/L	15.7	4.7	2.5		10/02/19 00:58	108-20-3	
Ethylbenzene	**<0.55**	ug/L	2.5	0.55	2.5		10/02/19 00:58	100-41-4	
Hexachloro-1,3-butadiene	**<3.0**	ug/L	12.5	3.0	2.5		10/02/19 00:58	87-68-3	
Isopropylbenzene (Cumene)	**<0.98**	ug/L	12.5	0.98	2.5		10/02/19 00:58	98-82-8	
p-Isopropyltoluene	**<2.0**	ug/L	6.7	2.0	2.5		10/02/19 00:58	99-87-6	
Methylene Chloride	**<1.5**	ug/L	12.5	1.5	2.5		10/02/19 00:58	75-09-2	
Methyl-tert-butyl ether	**<3.1**	ug/L	10.4	3.1	2.5		10/02/19 00:58	1634-04-4	
Naphthalene	**<2.9**	ug/L	12.5	2.9	2.5		10/02/19 00:58	91-20-3	
n-Propylbenzene	**<2.0**	ug/L	12.5	2.0	2.5		10/02/19 00:58	103-65-1	
Styrene	**<1.2**	ug/L	3.9	1.2	2.5		10/02/19 00:58	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.67**	ug/L	2.5	0.67	2.5		10/02/19 00:58	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.69**	ug/L	2.5	0.69	2.5		10/02/19 00:58	79-34-5	
Tetrachloroethene	**<0.82**	ug/L	2.7	0.82	2.5		10/02/19 00:58	127-18-4	
Toluene	**<0.43**	ug/L	12.5	0.43	2.5		10/02/19 00:58	108-88-3	
1,2,3-Trichlorobenzene	**<1.6**	ug/L	12.5	1.6	2.5		10/02/19 00:58	87-61-6	
1,2,4-Trichlorobenzene	**<2.4**	ug/L	12.5	2.4	2.5		10/02/19 00:58	120-82-1	
1,1,1-Trichloroethane	**96.2**	ug/L	2.5	0.61	2.5		10/02/19 00:58	71-55-6	
1,1,2-Trichloroethane	**<1.4**	ug/L	12.5	1.4	2.5		10/02/19 00:58	79-00-5	
Trichloroethene	**308**	ug/L	2.5	0.64	2.5		10/02/19 00:58	79-01-6	
Trichlorofluoromethane	**<0.54**	ug/L	2.5	0.54	2.5		10/02/19 00:58	75-69-4	
1,2,3-Trichloropropane	**<1.5**	ug/L	12.5	1.5	2.5		10/02/19 00:58	96-18-4	
1,2,4-Trimethylbenzene	**<2.1**	ug/L	7.0	2.1	2.5		10/02/19 00:58	95-63-6	
1,3,5-Trimethylbenzene	**<2.2**	ug/L	7.3	2.2	2.5		10/02/19 00:58	108-67-8	
Vinyl chloride	**<0.44**	ug/L	2.5	0.44	2.5		10/02/19 00:58	75-01-4	
m&p-Xylene	**<1.2**	ug/L	5.0	1.2	2.5		10/02/19 00:58	179601-23-1	
o-Xylene	**<0.65**	ug/L	2.5	0.65	2.5		10/02/19 00:58	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		2.5		10/02/19 00:58	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		2.5		10/02/19 00:58	1868-53-7	
Toluene-d8 (S)	101	%	70-130		2.5		10/02/19 00:58	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-108 **Lab ID: 40196093009** Collected: 09/25/19 12:43 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1		10/02/19 01:12	7440-47-3	
Iron, Dissolved	**37.9J**	ug/L	100	29.6	1		10/02/19 01:12	7439-89-6	
Manganese, Dissolved	**79.9**	ug/L	5.0	1.1	1		10/02/19 01:12	7439-96-5	

Sample: MW-109 **Lab ID: 40196093010** Collected: 09/26/19 08:50 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**339**	ug/L	10.0	2.5	1		10/02/19 01:14	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 01:14	7439-89-6	
Manganese, Dissolved	**18.3**	ug/L	5.0	1.1	1		10/02/19 01:14	7439-96-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/01/19 23:00	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/01/19 23:00	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/01/19 23:00	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/01/19 23:00	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/01/19 23:00	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/01/19 23:00	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:00	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/01/19 23:00	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/01/19 23:00	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/01/19 23:00	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:00	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/01/19 23:00	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/01/19 23:00	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/01/19 23:00	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/01/19 23:00	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/01/19 23:00	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/01/19 23:00	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/01/19 23:00	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/01/19 23:00	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/01/19 23:00	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:00	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/01/19 23:00	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/01/19 23:00	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/01/19 23:00	75-71-8	
1,1-Dichloroethane	**2.3**	ug/L	1.0	0.27	1		10/01/19 23:00	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:00	107-06-2	
1,1-Dichloroethene	**1.3**	ug/L	1.0	0.24	1		10/01/19 23:00	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/01/19 23:00	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/01/19 23:00	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:00	78-87-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-109 **Lab ID: 40196093010** Collected: 09/26/19 08:50 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/01/19 23:00	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/01/19 23:00	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/01/19 23:00	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/01/19 23:00	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/01/19 23:00	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/01/19 23:00	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/01/19 23:00	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/01/19 23:00	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/01/19 23:00	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/01/19 23:00	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/01/19 23:00	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/01/19 23:00	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/01/19 23:00	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/01/19 23:00	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/01/19 23:00	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/01/19 23:00	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:00	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/01/19 23:00	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/01/19 23:00	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/01/19 23:00	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/01/19 23:00	120-82-1	
1,1,1-Trichloroethane	**23.2**	ug/L	1.0	0.24	1		10/01/19 23:00	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/01/19 23:00	79-00-5	
Trichloroethene	**35.3**	ug/L	1.0	0.26	1		10/01/19 23:00	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/01/19 23:00	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/01/19 23:00	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/01/19 23:00	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/01/19 23:00	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/01/19 23:00	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		10/01/19 23:00	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		10/01/19 23:00	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		10/01/19 23:00	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		10/01/19 23:00	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		10/01/19 23:00	2037-26-5	

Sample: MW-110 **Lab ID: 40196093011** Collected: 09/26/19 12:03 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1		10/02/19 02:35	7440-47-3	
Iron, Dissolved	**1080**	ug/L	100	29.6	1		10/02/19 02:35	7439-89-6	
Manganese, Dissolved	**542**	ug/L	5.0	1.1	1		10/02/19 02:35	7439-96-5	

REPORT OF LABORATORY ANALYSIS

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

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-110 **Lab ID: 40196093011** Collected: 09/26/19 12:03 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/01/19 23:20	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/01/19 23:20	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/01/19 23:20	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/01/19 23:20	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/01/19 23:20	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/01/19 23:20	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:20	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/01/19 23:20	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/01/19 23:20	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/01/19 23:20	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:20	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/01/19 23:20	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/01/19 23:20	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/01/19 23:20	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/01/19 23:20	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/01/19 23:20	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/01/19 23:20	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/01/19 23:20	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/01/19 23:20	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/01/19 23:20	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:20	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/01/19 23:20	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/01/19 23:20	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/01/19 23:20	75-71-8	
1,1-Dichloroethane	**3.3**	ug/L	1.0	0.27	1		10/01/19 23:20	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:20	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/01/19 23:20	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/01/19 23:20	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/01/19 23:20	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:20	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/01/19 23:20	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/01/19 23:20	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/01/19 23:20	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/01/19 23:20	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/01/19 23:20	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/01/19 23:20	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/01/19 23:20	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/01/19 23:20	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/01/19 23:20	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/01/19 23:20	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/01/19 23:20	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/01/19 23:20	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/01/19 23:20	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/01/19 23:20	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/01/19 23:20	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/01/19 23:20	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-110 **Lab ID: 40196093011** Collected: 09/26/19 12:03 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:20	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/01/19 23:20	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/01/19 23:20	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/01/19 23:20	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/01/19 23:20	120-82-1	
1,1,1-Trichloroethane	**1.6**	ug/L	1.0	0.24	1		10/01/19 23:20	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/01/19 23:20	79-00-5	
Trichloroethene	**0.86J**	ug/L	1.0	0.26	1		10/01/19 23:20	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/01/19 23:20	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/01/19 23:20	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/01/19 23:20	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/01/19 23:20	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/01/19 23:20	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		10/01/19 23:20	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		10/01/19 23:20	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/01/19 23:20	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/01/19 23:20	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		10/01/19 23:20	2037-26-5	
335.4 Cyanide, Total	Analytical Method: EPA 335.4 Preparation Method: EPA 335.4								
Cyanide	**<0.0068**	mg/L	0.023	0.0068	1	10/03/19 10:35	10/03/19 15:08	57-12-5	

Sample: MW-111 **Lab ID: 40196093012** Collected: 09/26/19 09:34 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**76.3**	ug/L	10.0	2.5	1		10/02/19 02:43	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 02:43	7439-89-6	
Manganese, Dissolved	**2.7J**	ug/L	5.0	1.1	1		10/02/19 02:43	7439-96-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/01/19 23:40	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/01/19 23:40	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/01/19 23:40	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/01/19 23:40	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/01/19 23:40	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/01/19 23:40	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:40	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/01/19 23:40	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/01/19 23:40	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/01/19 23:40	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:40	108-90-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-111 **Lab ID: 40196093012** Collected: 09/26/19 09:34 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/01/19 23:40	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/01/19 23:40	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/01/19 23:40	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/01/19 23:40	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/01/19 23:40	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/01/19 23:40	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/01/19 23:40	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/01/19 23:40	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/01/19 23:40	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 23:40	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/01/19 23:40	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/01/19 23:40	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/01/19 23:40	75-71-8	
1,1-Dichloroethane	**0.72J**	ug/L	1.0	0.27	1		10/01/19 23:40	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:40	107-06-2	
1,1-Dichloroethene	**0.82J**	ug/L	1.0	0.24	1		10/01/19 23:40	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/01/19 23:40	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/01/19 23:40	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:40	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/01/19 23:40	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/01/19 23:40	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/01/19 23:40	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/01/19 23:40	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/01/19 23:40	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/01/19 23:40	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/01/19 23:40	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/01/19 23:40	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/01/19 23:40	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/01/19 23:40	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/01/19 23:40	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/01/19 23:40	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/01/19 23:40	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/01/19 23:40	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/01/19 23:40	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/01/19 23:40	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 23:40	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/01/19 23:40	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/01/19 23:40	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/01/19 23:40	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/01/19 23:40	120-82-1	
1,1,1-Trichloroethane	**5.1**	ug/L	1.0	0.24	1		10/01/19 23:40	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/01/19 23:40	79-00-5	
Trichloroethene	**24.2**	ug/L	1.0	0.26	1		10/01/19 23:40	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/01/19 23:40	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/01/19 23:40	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/01/19 23:40	95-63-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-111 **Lab ID: 40196093012** Collected: 09/26/19 09:34 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/01/19 23:40	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/01/19 23:40	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		10/01/19 23:40	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		10/01/19 23:40	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/01/19 23:40	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/01/19 23:40	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		10/01/19 23:40	2037-26-5	
335.4 Cyanide, Total	Analytical Method: EPA 335.4 Preparation Method: EPA 335.4								
Cyanide	**<0.0068**	mg/L	0.023	0.0068	1	10/03/19 10:35	10/03/19 15:11	57-12-5	

Sample: MW-112 **Lab ID: 40196093013** Collected: 09/26/19 10:28 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**305**	ug/L	10.0	2.5	1		10/02/19 02:45	7440-47-3	
Iron, Dissolved	**30.6J**	ug/L	100	29.6	1		10/02/19 02:45	7439-89-6	
Manganese, Dissolved	**283**	ug/L	5.0	1.1	1		10/02/19 02:45	7439-96-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/02/19 00:00	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/02/19 00:00	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/02/19 00:00	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/02/19 00:00	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/02/19 00:00	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/02/19 00:00	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:00	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/02/19 00:00	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/02/19 00:00	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/02/19 00:00	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:00	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/02/19 00:00	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/02/19 00:00	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/02/19 00:00	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/02/19 00:00	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/02/19 00:00	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/02/19 00:00	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/02/19 00:00	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/02/19 00:00	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/02/19 00:00	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:00	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/02/19 00:00	541-73-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-112 **Lab ID: 40196093013** Collected: 09/26/19 10:28 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/02/19 00:00	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/02/19 00:00	75-71-8	
1,1-Dichloroethane	**0.61J**	ug/L	1.0	0.27	1		10/02/19 00:00	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/19 00:00	107-06-2	
1,1-Dichloroethene	**0.40J**	ug/L	1.0	0.24	1		10/02/19 00:00	75-35-4	
cis-1,2-Dichloroethene	**14.8**	ug/L	1.0	0.27	1		10/02/19 00:00	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/02/19 00:00	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/02/19 00:00	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/02/19 00:00	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/02/19 00:00	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/02/19 00:00	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/02/19 00:00	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/02/19 00:00	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/02/19 00:00	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/02/19 00:00	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/02/19 00:00	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/02/19 00:00	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/02/19 00:00	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/02/19 00:00	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/02/19 00:00	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/02/19 00:00	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/02/19 00:00	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/02/19 00:00	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/02/19 00:00	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/19 00:00	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/02/19 00:00	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/02/19 00:00	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/02/19 00:00	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/02/19 00:00	120-82-1	
1,1,1-Trichloroethane	**0.58J**	ug/L	1.0	0.24	1		10/02/19 00:00	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/02/19 00:00	79-00-5	
Trichloroethene	**87.7**	ug/L	1.0	0.26	1		10/02/19 00:00	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/02/19 00:00	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/02/19 00:00	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/02/19 00:00	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/02/19 00:00	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/02/19 00:00	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		10/02/19 00:00	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		10/02/19 00:00	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		10/02/19 00:00	460-00-4	
Dibromofluoromethane (S)	105	%	70-130		1		10/02/19 00:00	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		10/02/19 00:00	2037-26-5	
335.4 Cyanide, Total	Analytical Method: EPA 335.4 Preparation Method: EPA 335.4								
Cyanide	**<0.0068**	mg/L	0.023	0.0068	1	10/03/19 10:35	10/03/19 15:11	57-12-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-113 **Lab ID: 40196093014** Collected: 09/26/19 11:20 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**759**	ug/L	10.0	2.5	1		10/02/19 02:48	7440-47-3	
Iron, Dissolved	**855**	ug/L	100	29.6	1		10/02/19 02:48	7439-89-6	
Manganese, Dissolved	**5010**	ug/L	5.0	1.1	1		10/02/19 02:48	7439-96-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/02/19 00:39	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/02/19 00:39	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/02/19 00:39	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/02/19 00:39	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/02/19 00:39	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/02/19 00:39	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:39	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/02/19 00:39	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/02/19 00:39	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/02/19 00:39	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:39	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/02/19 00:39	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/02/19 00:39	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/02/19 00:39	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/02/19 00:39	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/02/19 00:39	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/02/19 00:39	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/02/19 00:39	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/02/19 00:39	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/02/19 00:39	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:39	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/02/19 00:39	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/02/19 00:39	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/02/19 00:39	75-71-8	
1,1-Dichloroethane	**48.3**	ug/L	1.0	0.27	1		10/02/19 00:39	75-34-3	
1,2-Dichloroethane	**0.37J**	ug/L	1.0	0.28	1		10/02/19 00:39	107-06-2	
1,1-Dichloroethene	**29.5**	ug/L	1.0	0.24	1		10/02/19 00:39	75-35-4	
cis-1,2-Dichloroethene	**5.2**	ug/L	1.0	0.27	1		10/02/19 00:39	156-59-2	
trans-1,2-Dichloroethene	**1.2J**	ug/L	3.6	1.1	1		10/02/19 00:39	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/02/19 00:39	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/02/19 00:39	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/02/19 00:39	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/02/19 00:39	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/02/19 00:39	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/02/19 00:39	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/02/19 00:39	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/02/19 00:39	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/02/19 00:39	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/02/19 00:39	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/02/19 00:39	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/02/19 00:39	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: MW-113 **Lab ID: 40196093014** Collected: 09/26/19 11:20 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/02/19 00:39	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/02/19 00:39	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/02/19 00:39	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/02/19 00:39	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/02/19 00:39	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/19 00:39	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/02/19 00:39	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/02/19 00:39	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/02/19 00:39	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/02/19 00:39	120-82-1	
1,1,1-Trichloroethane	**114**	ug/L	1.0	0.24	1		10/02/19 00:39	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/02/19 00:39	79-00-5	
Trichloroethene	**41.4**	ug/L	1.0	0.26	1		10/02/19 00:39	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/02/19 00:39	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/02/19 00:39	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/02/19 00:39	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/02/19 00:39	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/02/19 00:39	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		10/02/19 00:39	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		10/02/19 00:39	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/02/19 00:39	460-00-4	
Dibromofluoromethane (S)	111	%	70-130		1		10/02/19 00:39	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		10/02/19 00:39	2037-26-5	

Sample: BD-1 **Lab ID: 40196093015** Collected: 09/26/19 09:34 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010								
Chromium, Dissolved	**63.3**	ug/L	10.0	2.5	1		10/02/19 02:50	7440-47-3	
Iron, Dissolved	**<29.6**	ug/L	100	29.6	1		10/02/19 02:50	7439-89-6	
Manganese, Dissolved	**1.5J**	ug/L	5.0	1.1	1		10/02/19 02:50	7439-96-5	
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/02/19 00:19	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/02/19 00:19	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/02/19 00:19	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/02/19 00:19	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/02/19 00:19	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/02/19 00:19	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:19	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/02/19 00:19	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/02/19 00:19	98-06-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: BD-1 **Lab ID: 40196093015** Collected: 09/26/19 09:34 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/02/19 00:19	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:19	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/02/19 00:19	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/02/19 00:19	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/02/19 00:19	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/02/19 00:19	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/02/19 00:19	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/02/19 00:19	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/02/19 00:19	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/02/19 00:19	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/02/19 00:19	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/02/19 00:19	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/02/19 00:19	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/02/19 00:19	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/02/19 00:19	75-71-8	
1,1-Dichloroethane	**1.0**	ug/L	1.0	0.27	1		10/02/19 00:19	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/19 00:19	107-06-2	
1,1-Dichloroethene	**0.69J**	ug/L	1.0	0.24	1		10/02/19 00:19	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/02/19 00:19	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/02/19 00:19	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/02/19 00:19	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/02/19 00:19	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/02/19 00:19	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/02/19 00:19	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/02/19 00:19	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/02/19 00:19	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/02/19 00:19	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/02/19 00:19	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/02/19 00:19	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/02/19 00:19	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/02/19 00:19	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/02/19 00:19	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/02/19 00:19	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/02/19 00:19	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/02/19 00:19	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/02/19 00:19	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/02/19 00:19	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/02/19 00:19	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/02/19 00:19	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/02/19 00:19	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/02/19 00:19	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/02/19 00:19	120-82-1	
1,1,1-Trichloroethane	**6.5**	ug/L	1.0	0.24	1		10/02/19 00:19	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/02/19 00:19	79-00-5	
Trichloroethene	**27.9**	ug/L	1.0	0.26	1		10/02/19 00:19	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/02/19 00:19	75-69-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: BD-1 **Lab ID: 40196093015** Collected: 09/26/19 09:34 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/02/19 00:19	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/02/19 00:19	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/02/19 00:19	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/02/19 00:19	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		10/02/19 00:19	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		10/02/19 00:19	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/02/19 00:19	460-00-4	
Dibromofluoromethane (S)	106	%	70-130		1		10/02/19 00:19	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		10/02/19 00:19	2037-26-5	
335.4 Cyanide, Total	Analytical Method: EPA 335.4 Preparation Method: EPA 335.4								
Cyanide	**<0.0068**	mg/L	0.023	0.0068	1	10/03/19 10:35	10/03/19 15:12	57-12-5	

Sample: TB **Lab ID: 40196093016** Collected: 09/26/19 00:00 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		10/01/19 18:45	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		10/01/19 18:45	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		10/01/19 18:45	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		10/01/19 18:45	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		10/01/19 18:45	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		10/01/19 18:45	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 18:45	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		10/01/19 18:45	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		10/01/19 18:45	98-06-6	
Carbon tetrachloride	**<0.17**	ug/L	1.0	0.17	1		10/01/19 18:45	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 18:45	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		10/01/19 18:45	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		10/01/19 18:45	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		10/01/19 18:45	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		10/01/19 18:45	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		10/01/19 18:45	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		10/01/19 18:45	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		10/01/19 18:45	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		10/01/19 18:45	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		10/01/19 18:45	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		10/01/19 18:45	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		10/01/19 18:45	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		10/01/19 18:45	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		10/01/19 18:45	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		10/01/19 18:45	75-34-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Sample: TB **Lab ID: 40196093016** Collected: 09/26/19 00:00 Received: 09/27/19 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 18:45	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		10/01/19 18:45	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		10/01/19 18:45	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		10/01/19 18:45	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 18:45	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		10/01/19 18:45	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		10/01/19 18:45	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		10/01/19 18:45	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		10/01/19 18:45	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		10/01/19 18:45	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		10/01/19 18:45	108-20-3	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		10/01/19 18:45	100-41-4	
Hexachloro-1,3-butadiene	**<1.2**	ug/L	5.0	1.2	1		10/01/19 18:45	87-68-3	
Isopropylbenzene (Cumene)	**<0.39**	ug/L	5.0	0.39	1		10/01/19 18:45	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		10/01/19 18:45	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		10/01/19 18:45	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		10/01/19 18:45	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		10/01/19 18:45	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		10/01/19 18:45	103-65-1	
Styrene	**<0.47**	ug/L	1.6	0.47	1		10/01/19 18:45	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		10/01/19 18:45	630-20-6	
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		10/01/19 18:45	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		10/01/19 18:45	127-18-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		10/01/19 18:45	108-88-3	
1,2,3-Trichlorobenzene	**<0.63**	ug/L	5.0	0.63	1		10/01/19 18:45	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		10/01/19 18:45	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		10/01/19 18:45	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		10/01/19 18:45	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		10/01/19 18:45	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		10/01/19 18:45	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		10/01/19 18:45	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		10/01/19 18:45	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		10/01/19 18:45	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		10/01/19 18:45	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		10/01/19 18:45	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		10/01/19 18:45	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		10/01/19 18:45	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		1		10/01/19 18:45	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		10/01/19 18:45	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

QC Batch: 335948 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40196093001, 40196093002, 40196093003, 40196093004, 40196093005, 40196093006, 40196093007, 40196093008, 40196093009, 40196093010

METHOD BLANK: 1950632 Matrix: Water
Associated Lab Samples: 40196093001, 40196093002, 40196093003, 40196093004, 40196093005, 40196093006, 40196093007, 40196093008, 40196093009, 40196093010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	10/02/19 00:08	
Iron, Dissolved	ug/L	<29.6	100	10/02/19 00:08	
Manganese, Dissolved	ug/L	<1.1	5.0	10/02/19 00:08	

LABORATORY CONTROL SAMPLE: 1950633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	500	473	95	80-120	
Iron, Dissolved	ug/L	5000	4930	99	80-120	
Manganese, Dissolved	ug/L	500	450	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1950634 1950635

Parameter	Units	40196011016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	<2.5	500	500	477	479	95	96	75-125	1	20	
Iron, Dissolved	ug/L	1440	5000	5000	6350	6340	98	98	75-125	0	20	
Manganese, Dissolved	ug/L	2500	500	500	2880	2900	76	79	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

QC Batch: 335950 Analysis Method: EPA 6010
QC Batch Method: EPA 6010 Analysis Description: ICP Metals, Trace, Dissolved
Associated Lab Samples: 40196093011, 40196093012, 40196093013, 40196093014, 40196093015

METHOD BLANK: 1950639 Matrix: Water
Associated Lab Samples: 40196093011, 40196093012, 40196093013, 40196093014, 40196093015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	10/02/19 02:30	
Iron, Dissolved	ug/L	<29.6	100	10/02/19 02:30	
Manganese, Dissolved	ug/L	<1.1	5.0	10/02/19 02:30	

LABORATORY CONTROL SAMPLE: 1950640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	500	475	95	80-120	
Iron, Dissolved	ug/L	5000	4900	98	80-120	
Manganese, Dissolved	ug/L	500	448	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1950641 1950642

Parameter	Units	40196093011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	<2.5	500	500	491	482	98	96	75-125	2	20	
Iron, Dissolved	ug/L	1080	5000	5000	6100	6100	100	100	75-125	0	20	
Manganese, Dissolved	ug/L	542	500	500	989	986	89	89	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

QC Batch: 335810 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40196093008, 40196093010, 40196093011, 40196093012, 40196093013, 40196093014, 40196093015, 40196093016

METHOD BLANK: 1950094 Matrix: Water
Associated Lab Samples: 40196093008, 40196093010, 40196093011, 40196093012, 40196093013, 40196093014, 40196093015, 40196093016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	10/01/19 17:07	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	10/01/19 17:07	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	10/01/19 17:07	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	10/01/19 17:07	
1,1-Dichloroethane	ug/L	<0.27	1.0	10/01/19 17:07	
1,1-Dichloroethene	ug/L	<0.24	1.0	10/01/19 17:07	
1,1-Dichloropropene	ug/L	<0.54	1.8	10/01/19 17:07	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	10/01/19 17:07	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	10/01/19 17:07	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	10/01/19 17:07	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	10/01/19 17:07	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	10/01/19 17:07	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	10/01/19 17:07	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	10/01/19 17:07	
1,2-Dichloroethane	ug/L	<0.28	1.0	10/01/19 17:07	
1,2-Dichloropropane	ug/L	<0.28	1.0	10/01/19 17:07	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	10/01/19 17:07	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	10/01/19 17:07	
1,3-Dichloropropane	ug/L	<0.83	2.8	10/01/19 17:07	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	10/01/19 17:07	
2,2-Dichloropropane	ug/L	<2.3	7.6	10/01/19 17:07	
2-Chlorotoluene	ug/L	<0.93	5.0	10/01/19 17:07	
4-Chlorotoluene	ug/L	<0.76	2.5	10/01/19 17:07	
Benzene	ug/L	<0.25	1.0	10/01/19 17:07	
Bromobenzene	ug/L	<0.24	1.0	10/01/19 17:07	
Bromochloromethane	ug/L	<0.36	5.0	10/01/19 17:07	
Bromodichloromethane	ug/L	<0.36	1.2	10/01/19 17:07	
Bromoform	ug/L	<4.0	13.2	10/01/19 17:07	
Bromomethane	ug/L	<0.97	5.0	10/01/19 17:07	
Carbon tetrachloride	ug/L	<0.17	1.0	10/01/19 17:07	
Chlorobenzene	ug/L	<0.71	2.4	10/01/19 17:07	
Chloroethane	ug/L	<1.3	5.0	10/01/19 17:07	
Chloroform	ug/L	<1.3	5.0	10/01/19 17:07	
Chloromethane	ug/L	<2.2	7.3	10/01/19 17:07	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	10/01/19 17:07	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	10/01/19 17:07	
Dibromochloromethane	ug/L	<2.6	8.7	10/01/19 17:07	
Dibromomethane	ug/L	<0.94	3.1	10/01/19 17:07	
Dichlorodifluoromethane	ug/L	<0.50	5.0	10/01/19 17:07	
Diisopropyl ether	ug/L	<1.9	6.3	10/01/19 17:07	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

METHOD BLANK: 1950094 Matrix: Water
Associated Lab Samples: 40196093008, 40196093010, 40196093011, 40196093012, 40196093013, 40196093014, 40196093015, 40196093016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.22	1.0	10/01/19 17:07	
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	10/01/19 17:07	
Isopropylbenzene (Cumene)	ug/L	<0.39	5.0	10/01/19 17:07	
m&p-Xylene	ug/L	<0.47	2.0	10/01/19 17:07	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	10/01/19 17:07	
Methylene Chloride	ug/L	<0.58	5.0	10/01/19 17:07	
n-Butylbenzene	ug/L	<0.71	2.4	10/01/19 17:07	
n-Propylbenzene	ug/L	<0.81	5.0	10/01/19 17:07	
Naphthalene	ug/L	<1.2	5.0	10/01/19 17:07	
o-Xylene	ug/L	<0.26	1.0	10/01/19 17:07	
p-Isopropyltoluene	ug/L	<0.80	2.7	10/01/19 17:07	
sec-Butylbenzene	ug/L	<0.85	5.0	10/01/19 17:07	
Styrene	ug/L	<0.47	1.6	10/01/19 17:07	
tert-Butylbenzene	ug/L	<0.30	1.0	10/01/19 17:07	
Tetrachloroethene	ug/L	<0.33	1.1	10/01/19 17:07	
Toluene	ug/L	<0.17	5.0	10/01/19 17:07	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	10/01/19 17:07	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	10/01/19 17:07	
Trichloroethene	ug/L	<0.26	1.0	10/01/19 17:07	
Trichlorofluoromethane	ug/L	<0.21	1.0	10/01/19 17:07	
Vinyl chloride	ug/L	<0.17	1.0	10/01/19 17:07	
4-Bromofluorobenzene (S)	%	99	70-130	10/01/19 17:07	
Dibromofluoromethane (S)	%	107	70-130	10/01/19 17:07	
Toluene-d8 (S)	%	103	70-130	10/01/19 17:07	

LABORATORY CONTROL SAMPLE: 1950095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.8	112	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	56.1	112	70-130	
1,1,2-Trichloroethane	ug/L	50	55.2	110	70-130	
1,1-Dichloroethane	ug/L	50	66.0	132	73-150	
1,1-Dichloroethene	ug/L	50	49.1	98	73-138	
1,2,4-Trichlorobenzene	ug/L	50	48.5	97	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	55.0	110	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	54.6	109	70-130	
1,2-Dichlorobenzene	ug/L	50	51.1	102	70-130	
1,2-Dichloroethane	ug/L	50	61.0	122	75-140	
1,2-Dichloropropane	ug/L	50	58.1	116	73-135	
1,3-Dichlorobenzene	ug/L	50	51.1	102	70-130	
1,4-Dichlorobenzene	ug/L	50	50.8	102	70-130	
Benzene	ug/L	50	58.6	117	70-130	
Bromodichloromethane	ug/L	50	53.6	107	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

LABORATORY CONTROL SAMPLE: 1950095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/L	50	44.5	89	68-129	
Bromomethane	ug/L	50	26.4	53	18-159	
Carbon tetrachloride	ug/L	50	57.4	115	70-130	
Chlorobenzene	ug/L	50	53.9	108	70-130	
Chloroethane	ug/L	50	40.3	81	53-147	
Chloroform	ug/L	50	57.4	115	74-136	
Chloromethane	ug/L	50	36.0	72	29-115	
cis-1,2-Dichloroethene	ug/L	50	54.0	108	70-130	
cis-1,3-Dichloropropene	ug/L	50	48.0	96	70-130	
Dibromochloromethane	ug/L	50	49.4	99	70-130	
Dichlorodifluoromethane	ug/L	50	38.1	76	10-130	
Ethylbenzene	ug/L	50	55.1	110	80-124	
Isopropylbenzene (Cumene)	ug/L	50	55.1	110	70-130	
m&p-Xylene	ug/L	100	106	106	70-130	
Methyl-tert-butyl ether	ug/L	50	56.0	112	54-137	
Methylene Chloride	ug/L	50	52.7	105	73-138	
o-Xylene	ug/L	50	54.6	109	70-130	
Styrene	ug/L	50	50.4	101	70-130	
Tetrachloroethene	ug/L	50	54.6	109	70-130	
Toluene	ug/L	50	55.5	111	80-126	
trans-1,2-Dichloroethene	ug/L	50	59.0	118	73-145	
trans-1,3-Dichloropropene	ug/L	50	50.7	101	70-130	
Trichloroethene	ug/L	50	55.7	111	70-130	
Trichlorofluoromethane	ug/L	50	42.0	84	76-147	
Vinyl chloride	ug/L	50	40.6	81	51-120	
4-Bromofluorobenzene (S)	%			109	70-130	
Dibromofluoromethane (S)	%			104	70-130	
Toluene-d8 (S)	%			104	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1950684 1950685

Parameter	Units	40196093010 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	23.2	50	50	78.2	78.8	110	111	70-130	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	56.1	55.3	112	111	70-130	2	20	
1,1,2-Trichloroethane	ug/L	<0.55	50	50	55.9	56.1	111	111	70-137	0	20	
1,1-Dichloroethane	ug/L	2.3	50	50	65.0	64.7	125	125	73-153	0	20	
1,1-Dichloroethene	ug/L	1.3	50	50	48.4	47.7	94	93	73-138	2	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	50.2	50.7	100	101	70-130	1	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	55.6	55.9	111	112	58-129	1	20	
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	53.6	55.4	107	111	70-130	3	20	
1,2-Dichlorobenzene	ug/L	<0.71	50	50	50.7	50.8	101	102	70-130	0	20	
1,2-Dichloroethane	ug/L	<0.28	50	50	60.1	60.3	120	121	75-140	0	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	58.2	58.3	116	117	71-138	0	20	

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1950684 1950685

Parameter	Units	40196093010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,3-Dichlorobenzene	ug/L	<0.63	50	50	51.4	51.7	103	103	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	51.0	51.0	102	102	70-130	0	20	
Benzene	ug/L	<0.25	50	50	56.4	56.5	113	113	70-130	0	20	
Bromodichloromethane	ug/L	<0.36	50	50	55.5	54.5	111	109	70-130	2	20	
Bromoform	ug/L	<4.0	50	50	45.9	44.3	92	89	68-129	3	20	
Bromomethane	ug/L	<0.97	50	50	27.9	29.8	56	60	15-170	6	20	
Carbon tetrachloride	ug/L	<0.17	50	50	55.3	54.8	111	110	70-130	1	20	
Chlorobenzene	ug/L	<0.71	50	50	54.3	54.2	109	108	70-130	0	20	
Chloroethane	ug/L	<1.3	50	50	38.5	39.2	77	78	51-148	2	20	
Chloroform	ug/L	<1.3	50	50	55.5	55.1	110	109	74-136	1	20	
Chloromethane	ug/L	<2.2	50	50	34.1	34.0	68	68	23-115	0	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	52.2	51.6	104	103	70-131	1	20	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	49.7	49.0	99	98	70-130	1	20	
Dibromochloromethane	ug/L	<2.6	50	50	49.6	49.5	99	99	70-130	0	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	36.5	35.2	73	70	10-132	4	20	
Ethylbenzene	ug/L	<0.22	50	50	54.4	55.4	109	111	80-125	2	20	
Isopropylbenzene (Cumene)	ug/L	<0.39	50	50	53.8	55.3	108	111	70-130	3	20	
m&p-Xylene	ug/L	<0.47	100	100	106	109	106	109	70-130	2	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	53.7	54.7	107	109	51-145	2	20	
Methylene Chloride	ug/L	<0.58	50	50	53.6	51.8	107	104	73-140	3	20	
o-Xylene	ug/L	<0.26	50	50	52.5	54.2	105	108	70-130	3	20	
Styrene	ug/L	<0.47	50	50	39.3	39.4	79	79	70-130	0	20	
Tetrachloroethene	ug/L	<0.33	50	50	53.3	54.1	107	108	70-130	2	20	
Toluene	ug/L	<0.17	50	50	54.6	56.1	109	112	80-131	3	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	58.0	55.7	116	111	73-148	4	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	50.7	50.9	101	102	70-130	1	20	
Trichloroethene	ug/L	35.3	50	50	88.9	91.2	107	112	70-130	3	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	41.3	40.7	83	81	74-147	1	20	
Vinyl chloride	ug/L	<0.17	50	50	37.7	36.6	75	73	41-129	3	20	
4-Bromofluorobenzene (S)	%						104	105	70-130			
Dibromofluoromethane (S)	%						97	99	70-130			
Toluene-d8 (S)	%						100	102	70-130			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

QUALITY CONTROL DATA

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

QC Batch: 336181 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 40196093011, 40196093012, 40196093013, 40196093015

METHOD BLANK: 1951945 Matrix: Water
Associated Lab Samples: 40196093011, 40196093012, 40196093013, 40196093015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	0.0079J	0.023	10/03/19 15:00	

LABORATORY CONTROL SAMPLE: 1951946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.1	0.10	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1951947 1951948

Parameter	Units	40196107001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0068	0.1	0.1	0.10	0.10	99	96	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1951949 1951950

Parameter	Units	40196343003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.019J	0.2	0.2	0.20	0.20	91	91	90-110	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58117057 NW MAUTHE SUPERFUND
Pace Project No.: 40196093

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40196093001	**W-2**	EPA 6010	335948		
40196093002	**W-8**	EPA 6010	335948		
40196093003	**W-15**	EPA 6010	335948		
40196093004	**MW-101**	EPA 6010	335948		
40196093005	**MW-103**	EPA 6010	335948		
40196093006	**MW-104**	EPA 6010	335948		
40196093007	**MW-106**	EPA 6010	335948		
40196093008	**MW-107**	EPA 6010	335948		
40196093009	**MW-108**	EPA 6010	335948		
40196093010	**MW-109**	EPA 6010	335948		
40196093011	**MW-110**	EPA 6010	335950		
40196093012	**MW-111**	EPA 6010	335950		
40196093013	**MW-112**	EPA 6010	335950		
40196093014	**MW-113**	EPA 6010	335950		
40196093015	**BD-1**	EPA 6010	335950		
40196093008	**MW-107**	EPA 8260	335810		
40196093010	**MW-109**	EPA 8260	335810		
40196093011	**MW-110**	EPA 8260	335810		
40196093012	**MW-111**	EPA 8260	335810		
40196093013	**MW-112**	EPA 8260	335810		
40196093014	**MW-113**	EPA 8260	335810		
40196093015	**BD-1**	EPA 8260	335810		
40196093016	**TB**	EPA 8260	335810		
40196093011	**MW-110**	EPA 335.4	336181	EPA 335.4	336240
40196093012	**MW-111**	EPA 335.4	336181	EPA 335.4	336240
40196093013	**MW-112**	EPA 335.4	336181	EPA 335.4	336240
40196093015	**BD-1**	EPA 335.4	336181	EPA 335.4	336240

Pace Analytical
www.pacelabs.com

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

40196093

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:	Terracon
Branch/Location:	Franklin
Project Contact:	Scott Hodgson
Phone:	414-209-7640
Project Number:	58117057
Project Name:	N.W. Mauthe Superfund
Project State:	Wisconsin
Sampled By (Print):	Krista Kroeninger
Sampled By (Sign):	Krista Kroeninger
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	Terracon
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	Terracon
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

FILTERED? (YES/NO) — Y/N: Y | N | N
PRESERVATION (CODE)* — Pick Letter: D | B | G

Analyses Requested: Metals-Diss. Cr, Fe, Mn | VOCs | Cyanide

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Metals-Diss. Cr, Fe, Mn	VOCs	Cyanide	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	W-2	9/25/19	12:48	GW	1					
002	W-8	9/25/19	1440		1					
003	W-15	9/25/19	1410		1					
004	MW-101	9/25/19	1150		1					
005	MW-103	9/25/19	1538		1					
006	MW-104	9/25/19	1531		1					
007	MW-106	9/25/19	1430		1					
008	MW-107	9/25/19	1643		1	3				
009	MW-108	9/25/19	1243		1					
010	MW-109	9/26/19	850		1	3				
011	MW-110	9/26/19	1203		1	3	1			
012	MW-111	9/26/19	934		1	3	1			
013	MW-112	9/26/19	1028	☆	1	3	1			

9/27/19
AS

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:
Krista Kroeninger	9/26/19 1240	Scott A. Hodgson	9/26/19 1240
Scott A. Hodgson	9/27/19 0830		9/27/19 0930
	9/27/19 1330		9/27/19 1330

PACE Project No.: 40196093
Receipt Temp = 2.0 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical®
www.pacelabs.com

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

40196093

CHAIN OF CUSTODY

(Please Print Clearly)	
Company Name:	Terracon
Branch/Location:	Franklin
Project Contact:	Scott Hodgson
Phone:	414-209-7640
Project Number:	58117057
Project Name:	N.W. Mauthe Superfund
Project State:	Wisconsin
Sampled By (Print):	Krista Kroeninger
Sampled By (Sign):	Krista Kroeninger
PO #:	Regulatory Program:

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

***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

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analyses Requested: Metals - Diss Cr, Fe, Mn	VOCs	Cyanide
					Y/N	Pick Letter	Y	N	N
014	MW-113	9/26/19	1120	GW			1	3	~~K~~ P
015	BD-1	↓	934	GW			1	3	1
016	TB								

Quote #:	
Mail To Contact:	
Mail To Company:	Terracon
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	Terracon
Invoice To Address:	
Invoice To Phone:	

CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	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:
Krista Kroeninger	9/26/19 1240	Scott Hodgson	9/26/19 1240
Scott A. Hodgson	9/27/19 0830		9/27/19 0930
	9/27/19 1330		9/27/19 1330

PACE Project No.: 40196093

Receipt Temp = R01 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present
Intact / Not Intact

C019a(27Jun2006) TB added to COC by lw 9/27/19

Version 6.0 06/14/06

ORIGINAL

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

Sample Preservation Receipt Form

Client Name: Terracon Project # 401960093

All containers needing preservation have been checked and noted below: ☑Yes ☐No ☐N/A Initial when completed: CMC Date/ Time:

Lab Lot# of pH paper: 0450891 Lab Std #ID of preservation (if pH adjusted):

	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN							
001													1																			2.5 / 5 / 10
002													1																			2.5 / 5 / 10
003													1																			2.5 / 5 / 10
004													1																			2.5 / 5 / 10
005													1																			2.5 / 5 / 10
006													1																			2.5 / 5 / 10
007													1																			2.5 / 5 / 10
008													1					3														2.5 / 5 / 10
009													1																			2.5 / 5 / 10
010													1					3														2.5 / 5 / 10
011												1	1					3														2.5 / 5 / 10
012												1	1					3														2.5 / 5 / 10
013												1	1					3														2.5 / 5 / 10
014													1					3														2.5 / 5 / 10
015												1	1					3														2.5 / 5 / 10
016																		2														2.5 / 5 / 10
017																																2.5 / 5 / 10
018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																																2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm): ☐Yes ☑No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3B	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Pace Analytical 1241 Bellevue Street, Green Bay, WI 54302	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: 25Apr2018
	Document No.: **F-GB-C-031-Rev.07**	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40196093

40196093

Client Name: Terracon

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☑ Pace Other:

Tracking #:

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

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

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

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

Cooler Temperature Uncorr: R01 /Corr:

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Person examining contents:
Date: 9/27/19
Initials: DS

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	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC:	☐Yes ☑No ☐N/A	12. 004+005 poly no times Oct 2 TLG
-Includes date/time/ID/Analysis Matrix: W		
Trip Blank Present:	☑Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 433		

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

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: for DM **Date:** 9/30/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Mauthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-2	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH: 14.0	(14.0 − 4.10) .49 = 4.851
DATE: ~~9/2/19~~ 9/25/19--SAH	TIME 11:49 (AM) / PM — DEPTH TO GROUND WATER (FT): 4.10
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 12:48	TOTAL PURGED: 7.0 gallons

TIME	WATER LEVEL (ft)	TEMP. (°C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
Baseline/initial 11:49	4.87	17.97	7.77	1.72	-78	18.54
——	Purg					
12:20	11.26	14.49	7.30	1577	-88.5	3.01
~~12:25~~	11.71	14.14	7.02	1488	-81.6	2.27
12:30	12.01	13.89	6.95	1478	-74.6	0.64
12:35	12.38	13.83	6.92	1477	-71.6	0.39
12:40	~~12.68~~	13.61	6.90	1473	-70.9	0.39
12:45		13.57	6.91	1475	-70.0	0.36

SAMPLE APPEARANCE: VERY TURBID / TURBID / SLIGHTLY TURBID / (CLEAR)	ODOR: YES / (NO) / NOT NOTED	ANALYSES: Diss Cr, Diss Fe, Mn

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (METHOD PERFORMED) *INITIAL TO VERIFY OR NOTE OTHER CLEANING — LEB

COMMENTS:

SAMPLED BY: LEB	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-8	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH: 14.80	(14.80 - 6.12) .49 = 4.253
DATE: 9/25/19	TIME: AM/PM — DEPTH TO GROUND WATER (FT): 6.12
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 1440	TOTAL PURGED: ~5.5 gallons

	TIME	WATER LEVEL	TEMP.(°C)	pH	COND. (mS/cm)	ORP ( )	DO (mg/L)
Baseline	13:31	6.81	17.71	7.43	1.13	62	1.33
		— purge ~4 gallons					
	14:13	11.17	18.34	7.52	0.925	109	3.33
	1418	11.50	17.64	7.28	0.905	108	0.33
	1423	11.90	17.21	7.19	0.973	109	0.00
	1428	12.32	17.15	7.17	0.992	109	0.00
	1433	12.53	17.10	7.16	1.03	108	0.00
	1438	12.64	16.96	7.13	1.07	108	0.00
	1440 — sample						

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)	ODOR: YES (NO) NOT NOTED	ANALYSES: Diss Cr, Diss Fe, Mn

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (METHOD PERFORMED) *INITIAL TO VERIFY OR NOTE OTHER CLEANING

COMMENTS:

SAMPLED BY: KLK	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Mauthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-15	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH: 13.71	(13.71 - 6.65) .49 = 3.459
DATE: 9/25/19	TIME AM/PM
DEPTH TO GROUND WATER (FT): 6.65	
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 1410	TOTAL PURGED: 4 gallons

TIME	WATER LEVEL	TEMP.(° C)	pH	COND. (mS/cm)	ORP ( )	DO (mg/L)
baseline 13:23	7.29	20.30	7.53	1.29	63	0.41
	purge	~3 gallons				
1341	10.55	18.43	7.57	0.712	90	1.78
1346	11.21	18.46	7.55	0.710	85	0.91
1351	11.49	18.67	7.51	0.729	85	0.46
1356	11.63	18.77	7.50	0.760	85	0.48
1401	11.82	18.78	7.47	0.771	85	0.42
1406	11.95	18.77	7.46	0.780	85	0.39
1410	sample					

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID CLEAR

ODOR: YES (NO) NOT NOTED

ANALYSES: Diss Cr, Diss Fe, Mn

CLEANING PERFORMED IN FIELD (METHOD PERFORMED): Alconox and Distilled Water AND Disposable gloves *INITIAL TO VERIFY OR NOTE OTHER CLEANING

COMMENTS:

SAMPLED BY: KLK	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-101	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH:	
DATE: ~~9/2/19~~ 9/25/19--SAH	TIME: AM /PM
	DEPTH TO GROUND WATER (FT):
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 11:50	TOTAL PURGED: 1.5 gallons

TIME	WATER LEVEL	TEMP.(°C)	pH	COND. (us/cm³)	ORP ( )	DO (mg/L)
11:27	5.68	17.94	6.68	7094	106.3	0.58
11:32	7.83	17.94	6.61	7094	94.7	0.41
11:37	8.25	18.03	6.61	7063	90.5	0.35
11:42	8.31	17.66	6.60	7026	88.6	0.32
11:47	8.42	18.22	6.60	7027	84.5	0.38

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)

ODOR: YES (NO) NOT NOTED

ANALYSES: Diss Cr, Diss Fe, Mn

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (METHOD PERFORMED) *INITIAL TO VERIFY OR NOTE OTHER CLEANING

LEB

COMMENTS:

SAMPLED BY: LEB	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON

GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: ~~MW~~-103	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH:	
DATE: ~~9/2~~/19	TIME 15:05 AM /PM
DEPTH TO GROUND WATER (FT):	
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 15:38	TOTAL PURGED: 3 gallons

9/25/19--SAH

TIME	WATER LEVEL	TEMP.(° C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
13:05	5.16	13.13	7.32	713	65.5	3.00
15:10	7.75	12.66	6.97	680	69.2	1.06
15:15	8.68	12.79	6.96	676	67.3	1.06
15:20	8.90	12.87	6.88	641	70.2	1.99
15:25	9.35	13.24	6.86	626	75.2	3.63
15:30	9.89	13.22	6.84	619	80.1	4.88
15:35	10.44	13.88	6.83	606	82.3	4.61

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)

ODOR: YES (NO) NOT NOTED

ANALYSES: Diss Cr, Diss Fe, Mn

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (METHOD PERFORMED) *INITIAL TO VERIFY OR NOTE OTHER CLEANING

LEB

COMMENTS:

SAMPLED BY: LEB	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Mauthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-104	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH:	
DATE: 9/25/19	TIME: AM /PM — DEPTH TO GROUND WATER (FT): 8.18
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 1531	TOTAL PURGED: ~2 gallons

TIME	WATER LEVEL	TEMP.(° C)	pH	COND. ( )	ORP ( )	DO ( )
1456	8.21	17.71	7.29	1.14	-67	0.05
1501	8.84	15.95	7.14	1.16	-66	0.00
1506	9.29	15.05	7.11	1.19	-62	0.00
1511	9.57	14.63	7.09	1.20	-61	0.00
1516	9.73	14.35	7.06	1.19	-65	0.00
1521	9.89	14.34	7.04	1.19	-66	0.00
1526	9.99	14.34	7.06	1.20	-65	0.00
1531	sample					

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)	ODOR: YES (NO) NOT NOTED	ANALYSES: Diss Cr, Diss Fe, Mn

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* *INITIAL TO VERIFY OR NOTE OTHER CLEANING METHOD PERFORMED

COMMENTS:

SAMPLED BY: KLK	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-106	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	(15.10 - 6.22) .49 = 4.3512
WELL DEPTH: 15.10	
DATE: ~~9/2~~ /19 (9/25/19--SAH)	TIME: AM/PM
DEPTH TO GROUND WATER (FT): 6.22	
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 14:30	TOTAL PURGED: 6.5 gallons

	TIME	WATER LEVEL	TEMP.(°C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
Baseline	13:30	6.68	20.20	7.39	1467	-48.2	2.39
	13:57	10.17	19.84	7.25	873	49.2	1.86
	14:02	10.51	19.27	7.07	914	33.1	1.22
	14:07	10.89	19.22	7.03	991	38.5	1.10
	14:12	11.33	19.07	7.01	1085	40.6	0.89
	14:17	12.70	18.86	7.01	1133	35.5	0.61
	14:22	12.08	18.68	7.02	1181	20.2	0.47
	14:27	12.50	18.56	7.04	1201	21.8	0.36

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)

ODOR: YES (NO) NOT NOTED

ANALYSES: Diss Cr, Diss Fe, Mn

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (*INITIAL TO VERIFY OR NOTE OTHER CLEANING METHOD PERFORMED) LEB

COMMENTS:

SAMPLED BY: LEB	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-107	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH:	
DATE: 9/25/19	TIME: AM/PM — DEPTH TO GROUND WATER (FT): 8.68
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 1643	TOTAL PURGED: ~2 gallons

TIME	WATER LEVEL	TEMP.(° C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
16:11	9.46	17.74	7.40	0.932	55	2.23
16:16	10.54	17.27	7.36	0.891	42	0.00
16:21	10.80	15.37	7.39	.942	49	.83
16:26	11.20	15.34	7.37	.946	52	.89
16:31	11.56	15.51	7.36	.942	56	.44
16:36	11.80	15.81	7.34	.938	58	.78
16:41	12.10	16.08	7.33	.934	62	.77
~~16:46~~						
1643	Sample					

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)

ODOR: YES (NO) NOT NOTED

ANALYSES: Diss Cr, Diss Fe, Mn, VOCs

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* *INITIAL TO VERIFY OR NOTE OTHER CLEANING METHOD PERFORMED

ND

COMMENTS:

SAMPLED BY: KW	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-108	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH: 28.0	(28.0 - 6.4) .49 = 10.584 gallons
DATE: 9/25/19	TIME: AM/PM — DEPTH TO GROUND WATER (FT): 6.4
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 12:43	TOTAL PURGED:

Baseline initial

TIME	WATER LEVEL	TEMP.(°)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
11:15	6.7	14.96	7.41	2.961	230	70.4
—	— Purge 10 gallons —					
12:10	15.55	18.52	7.20	2.67	102	1.70
12:15	15.69	18.39	7.11	2.67	97	0.89
12:20	15.9	17.85	7.08	2.70	95	0.67
12:25	16.08	17.68	7.06	2.69	92	0.59
12:30	16.21	17.47	7.07	2.66	89	0.52
12:35	16.35	17.38	7.07	2.66	88	0.50
12:40	16.41	17.20	7.07	2.65	88	0.49
Sample 12:43						

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID CLEAR	ODOR: YES (NO) NOT NOTED	ANALYSES: Diss Cr, Diss Fe, Mn

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* *INITIAL TO VERIFY OR NOTE OTHER CLEANING METHOD PERFORMED

COMMENTS:

SAMPLED BY: KLF	DATE: 9/25/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON

GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-109	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH:	
DATE: ~~9/25/19~~ 9/26/19--SAH	TIME: AM /PM
DEPTH TO GROUND WATER (FT):	
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 8:50	TOTAL PURGED: ~2 gallons

TIME	WATER LEVEL	TEMP.(° C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
8:15	8.73	11.83	7.23	4.94	166	5.32
8:20	9.09	12.03	7.02	4.96	168	3.61
8:25	9:31	12.19	7.05	4.99	169	3.30
8:30	9.57	12.33	7.05	4.99	168	2.86
8:35	9.74	12.37	7.08	5.00	167	2.60
8:40	9.89	12.44	7.09	5.00	167	2.18
8:45	9.99	12.45	7.08	5.00	167	2.16
8:50 – Sample						

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)

ODOR: YES (NO) NOT NOTED

ANALYSES: Diss Cr, Diss Fe, Mn VOCs, Manganese

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (METHOD PERFORMED) *INITIAL TO VERIFY OR NOTE OTHER CLEANING

COMMENTS:

SAMPLED BY: ICM	DATE: 9/26/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Mauthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-110	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH:	
DATE: ~~9/25/19~~ 9/26/19--SAH	TIME 10:47 AM/PM — DEPTH TO GROUND WATER (FT): 5.8
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 12:03	TOTAL PURGED: ~2 gallons

TIME	WATER LEVEL	TEMP.(° C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
11:29	7.3	15.62	6.97	1.12	59	0.00
11:34	8.52	15.56	6.86	1.10	15	0.00
11:39	9.21	15.16	6.90	0.937	-49	0.00
11:44	9.89	15.26	6.95	0.926	-51	0.00
11:49	10.41	15.34	6.95	0.932	-51	0.00
11:54	10.93	15.43	6.93	0.947	-52	0.00
11:59	~~10.97~~ 11.41	15.44	6.92	0.949	-52	0.00
12:03						

SAMPLE APPEARANCE: VERY TURBID / TURBID / SLIGHTLY TURBID / (CLEAR)	ODOR: YES / (NO) / NOT NOTED	ANALYSES: Diss Cr, Diss Fe, Mn VOCs, Cyanide

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (METHOD PERFORMED) *INITIAL TO VERIFY OR NOTE OTHER CLEANING

COMMENTS:

SAMPLED BY: KLK	DATE: 9/26/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-111	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH:	
DATE: ~~9/25/19~~ 9/26/19--SAH	TIME 10:42 AM/PM — DEPTH TO GROUND WATER (FT): 6.10
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 9:34	TOTAL PURGED: ~2 gallons

TIME	WATER LEVEL	TEMP.(° C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
9:00	6.66	12.76	7.60	1.05	139	2.10
9:05	6.90	12.77	7.55	0.950	136	0.00
9:10	7.18	12.97	7.49	0.909	137	0.13
9:15	7.42	13.17	7.46	0.878	137	0.23
9:20	7.70	13.26	7.45	0.864	137	0.27
9:25	7.92	13.51	7.45	0.839	136	0.55
9:30	7.99	13.60	7.46	0.825	135	0.60
Sampled 9:34						

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)

ODOR: YES (NO) NOT NOTED

ANALYSES: Diss Cr, Diss Fe, Mn VOC, cyanide

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (METHOD PERFORMED) *INITIAL TO VERIFY OR NOTE OTHER CLEANING

COMMENTS:

DUP - BD-1

SAMPLED BY: JCH	DATE: 9/26/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON

GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-~~0~~ 118	SAMPLE POINT DESCRIPTION: @
CASING DIAMETER: 2"	
WELL DEPTH:	
DATE: ~~9/25~~/19	TIME 10:39 AM /PM
	DEPTH TO GROUND WATER (FT):
9/26/19--SAH SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 10:28	TOTAL PURGED: ~2 gallon

TIME	WATER LEVEL	TEMP.(°C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
9:54	4.25	13.65	7.52	1.14	121	0.30
9:59	4.94	13.92	7.36	1.09	108	0.00
10:04	5.41	14.05	7.22	1.08	112	0.00
10:09	5.98	14.22	7.16	1.07	115	0.00
10:14	6.14	14.35	7.16	1.05	118	0.00
10:19	6.28	14.81	7.15	1.04	119	0.00
10:24	6.42	14.82	7.16	1.04	119	0.00
10:28						

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)	ODOR: YES (NO) NOT NOTED	ANALYSES: Diss. Cr, Diss Fe, Mn VOCs, Cromium

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* *INITIAL TO VERIFY OR NOTE OTHER CLEANING METHOD PERFORMED

COMMENTS:

SAMPLED BY: KLK	DATE: 9/26/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

TERRACON — GROUND WATER SAMPLING INFORMATION SHEET

PROJECT NAME: NW. Manthe Superfund Site	PROJECT NO. 58117057
PROJECT LOCATION: Appleton, Wisconsin	
SAMPLE POINT: MW-113	SAMPLE POINT DESCRIPTION:
CASING DIAMETER: 2"	
WELL DEPTH: /	
DATE: ~~9/25/19~~ 9/26/19--SAH	TIME 10:45 AM/PM — DEPTH TO GROUND WATER (FT): 7.0
SAMPLING METHOD: low flow sampling	FLOW RATE: ~200 mL/min.
SAMPLE TIME: 11:20	TOTAL PURGED:

TIME	WATER LEVEL	TEMP.(° C)	pH	COND. (mS/cm)	ORP (mV)	DO (mg/L)
10:48	7.58	15.31	7.47	1.55	130	0.00
10:53	7.86	15.38	7.45	1.29	128	0.00
10:58	8.07	15.48	7.40	1.23	128	0.00
11:03	8.28	15.59	7.39	1.21	127	0.00
11:08	8.54	15.70	7.28	1.18	130	0.00
11:13	8.73	15.76	7.20	1.13	134	0.00
11:18	8.94	15.77	7.19	1.13	134	0.00
11:20						

SAMPLE APPEARANCE: VERY TURBID TURBID SLIGHTLY TURBID (CLEAR)	ODOR: (YES) NO NOT NOTED	ANALYSES: Diss Cr, Diss Fe, Mn @ Cyanid, VOCs

CLEANING PERFORMED IN FIELD: *Alconox and Distilled Water AND Disposable gloves* (METHOD PERFORMED) *INITIAL TO VERIFY OR NOTE OTHER CLEANING

COMMENTS:

SAMPLED BY: KMC	DATE: 9/26/19
REVIEWED BY: Scott D. Hodgson	DATE: 10/31/19

Appendix D

Form 4400-194

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

Remediation Site Progress and Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 1/14)

Notice: Pursuant to ss. NR 700.11(1) and 724.13(3), Wis. Adm. Code, this form is required to be completed or a narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Failure to submit this form as required is a violation and is subject to the penalties as stated in s. 292.99, Wis. Stats. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.). *Unless otherwise noted, all citations refer to Wisconsin Administrative Code.*

GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM: Completion of this form is required under s. NR 700.11(1) and s. NR 724.13(3), Wis. Adm. Code. A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Failure to submit this form as required is a violation of s. NR 700.11(1) and s. NR 724.13(3), Wis. Adm. Code, and is subject to the penalties in s. 292.99, Wis. Stats. This form must be submitted every six months for remediation projects that are regulated under the NR 700 series of Wis. Adm. Code. Specifically, for sites meeting any of the following criteria:

- Any site where a discharge has occurred that report progress in accordance with s. NR 700.11(1), Wis. Adm. Code until site closure is granted. This includes sites where no response activities occurred during the six month reporting period. **Attach, if applicable, a separate brief summary of the work completed during the reporting period and the anticipated future work.**
- Soil or groundwater remediation projects that report operation and maintenance progress in accordance with s. NR 724.13(3), Wis. Adm. Code.

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

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

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

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

Only complete and submit all of page GI-1 and Section E on pages 3 and 4 for sites where a discharge has been reported but no response, monitoring or remediation has begun or occurred during the six month reporting period that are required to report only under s. NR 700.11(1), Wis. Adm. Code and attach, if applicable, a summary of the anticipated future work.

Section GI - General Site Information

A. General Information

1. Site name
N.W. Mauthe Superfund Site (BRRTS #02-45-000127)

2. Reporting period from:	To:	Days in period:
10/01/2018	09/30/2019	365

3. Regulatory agency (enter DNR, DCOM, DATCP and/or other)	4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific)
WDNR/USEPA	02-45-000127

5. Site location

Region	County	Address
Northeast Region	Outagamie	725 S. Outagamie Street, Appleton, Wisconsin

Municipality name ◉ City ○ Town ○ Village	Township	Range ◉E ○W	Section	¼	¼ ¼
Appleton	21 N	17	34	NE	NW

6. Responsible party	7. Consultant
Name: Carol Mauthe	☐ Select if the following information has changed since the last submittal
Mailing address: 194 C S West Avenue, Appleton, Wisconsin 54915	Company name: Terracon Consultants, Inc.
Phone number	Mailing address: 9856 S 57th Street, Franklin, WI 53132
	Phone number: (414) 423-0255

8. Contaminants
chromium, cyanide, chlorinated solvents

9. Soil types (USCS or USDA)
lean clay (CL); silty clay (ML-CL)

10. Hydraulic conductivity(cm/sec):	11. Average linear velocity of groundwater (ft/yr)
3.90 E x 10-7	1.17

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

If yes, give location: Region	County

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

B. Remediation Method

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

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

C. General Effectiveness Evaluation for All Active Systems

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

1. is the system operating at design rates and specifications? ◉ Yes ◯ No

If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.

2. Are modifications to the system warranted to improve effectiveness ◉ Yes ◯ No

If yes, explain:
The Southeast Trench does not drain as effectively as it could because the piping appears to be back-pitched, likely due to differential settling, and/or partial blockages in foundation drains/laterals associated with the residences. May need to develop plans to address these problems.

3. Is natural attenuation an effective low cost option at this time? ◯ Yes ◉ No

4. Is closure sampling warranted at this time? ◯ Yes ◉ No

5. Are there any modifications that can be made to the remediation to improve cost effectiveness? ◯ Yes ◉ No

If yes, explain:

D. Economic and Cost Data to Date

1. Total investigation cost: $0.00

2. Implementation costs (design, capital and installation costs, excluding investigation costs): $0.00

3. Total costs during the previous reporting period: $15,590.93

4. Total costs during this reporting period: $76,192.94

5. Total anticipated costs for the next reporting period: $14,478.87

6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? ◉ Yes ○ No

If yes, explain:

D3: Additional costs related to the PLC power supply alarm; biennial cross-connection inspection; and the initial diagnosis of the sump pit/basement water problem at 801 S Outagamie Street (Beardsley residence).
D4: Installation of a gravity drain system for the sump pit at 801 South Outagamie Street, including additional soil management and reporting, and power failure response/PLC upgrade.

7. If closure is anticipated within 12 months, estimated costs for project closeout: $0.00

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

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

Registered Professional Engineers:

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

Print name	Title
Blaine R. Schroyer, P.E.	Principal/Office Manager
Signature	Date
	11/12/19

Hydrogeologists:

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

Print name	Title
Scott A. Hodgson, P.G.	Senior Project Manager
Signature	Date
Scott A. Hodgson	11/12/19

Scientists:

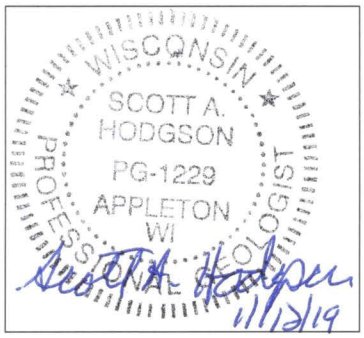
I hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm.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

Print name	Title
Signature	Date

Other Persons:

Print name	Title
Signature	Date

Professional Seal(s), if applicable:



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

A. Groundwater Extraction System Operation:

1. Total number of groundwater extraction wells or trenches available: 3 and the number in use during period: 3

2. Number of days of operation (only list the number of days the system actually operated, if unknown explain:
365

3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:
95

4. Quantity of groundwater extracted during this time period: 1,054,354 gallons

5. Average groundwater extraction rate: 2 gpm

6. Quantity of dissolved phase contaminants removed during this time period in pounds: 3 lbs

B. Free Product Recovery System Operation

1. Is free product (nonaqueous phase liquid) being recovered at this site? ○ Yes ◉ No

If yes, explain:

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

3. Average free product extraction rate: _____ gpm

C. System Effectiveness Evaluation

1. Is a contaminated groundwater plume fully contained in the capture zone? ○ Yes ◉ No

If no, explain:
System designed only for containment

2. If free product is present, is the free product fully contained in capture zone? ○ Yes ○ No

If no, explain:

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

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

a. Contaminant: 5,010 ug/L Manganese in MW-113: 99.00 % for ES; 308 ug/L TCE in MW-113, 99.94% for PAL

b. Percent reduction necessary to reach ch. NR 140 ES and PAL: 99.00 %

c. Maximum contaminant concentration level in any monitoring well of that contaminant: 5,010 µg/L

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

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

System designed only 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.