

**Notice:** Use this form to request a **written response (on agency letterhead)** from the Department of Natural Resources (DNR) regarding technical assistance, a post-closure change to a site, a specialized agreement or liability clarification for Property with known or suspected environmental contamination. A fee will be required as is authorized by s. 292.55, Wis. Stats., and NR 749, Wis. Adm. Code., unless noted in the instructions below. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records law [ss. 19.31 - 19.39, Wis. Stats.].

## Definitions

**"Property"** refers to the subject Property that is perceived to have been or has been impacted by the discharge of hazardous substances.

**"Liability Clarification"** refers to a written determination by the Department provided in response to a request made on this form. The response clarifies whether a person is or may become liable for the environmental contamination of a Property, as provided in s. 292.55, Wis. Stats.

**"Technical Assistance"** refers to the Department's assistance or comments on the planning and implementation of an environmental investigation or environmental cleanup on a Property in response to a request made on this form as provided in s. 292.55, Wis. Stats.

**"Post-closure modification"** refers to changes to Property boundaries and/or continuing obligations for Properties or sites that received closure letters for which continuing obligations have been applied or where contamination remains. Many, but not all, of these sites are included on the GIS Registry layer of RR Sites Map to provide public notice of residual contamination and continuing obligations.

## Select the Correct Form

This form should be used to request the following from the DNR:

- Technical Assistance
- Liability Clarification
- Post-Closure Modifications
- Specialized Agreements (tax cancellation, negotiated agreements, etc.)

**Do not use this form if one of the following applies:**

- Request for an **off-site liability exemption or clarification** for Property that has been or is perceived to be contaminated by one or more hazardous substances that originated on another Property containing the source of the contamination. Use DNR's Off-Site Liability Exemption and Liability Clarification Application Form 4400-201.
- Submittal of an Environmental Assessment for the **Lender Liability Exemption**, s 292.21, Wis. Stats., **if no response or review by DNR is requested**. Use the Lender Liability Exemption Environmental Assessment Tracking Form 4400-196.
- Request for an **exemption to develop on a historic fill site** or licensed landfill. Use DNR's Form 4400-226 or 4400-226A.
- **Request for closure** for Property where the investigation and cleanup actions are completed. Use DNR's Case Closure - GIS Registry Form 4400-202.

**All forms, publications and additional information are available on the internet at:** [dnr.wi.gov/topic/Brownfields/Pubs.html](http://dnr.wi.gov/topic/Brownfields/Pubs.html).

## Instructions

1. Complete sections 1, 2, 6 and 7 for all requests. Be sure to provide adequate and complete information.
2. Select the type of assistance requested: Section 3 for technical assistance or post-closure modifications, Section 4 for a written determination or clarification of environmental liabilities; or Section 5 for a specialized agreement.
3. Include the fee payment that is listed in Section 3, 4, or 5, unless you are a "Voluntary Party" enrolled in the Voluntary Party Liability Exemption Program **and** the questions in Section 2 direct otherwise. Information on to whom and where to send the fee is found in Section 8 of this form.
4. Send the completed request, supporting materials and the fee to the appropriate DNR regional office where the Property is located. See the map on the last page of this form. A paper copy of the signed form and all reports and supporting materials shall be sent with an electronic copy of the form and supporting materials on a compact disk. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>

The time required for DNR's determination varies depending on the complexity of the site, and the clarity and completeness of the request and supporting documentation.

# Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 2 of 7

## Section 1. Contact and Recipient Information

### Requester Information

This is the person requesting technical assistance or a post-closure modification review, that his or her liability be clarified or a specialized agreement and is identified as the requester in Section 7. DNR will address its response letter to this person.

Last Name Belew	First Mike	MI	Organization/ Business Name CBC DT LLC
Mailing Address 4706 Broadway, Suite 240		City Kansas City	State MO
		ZIP Code 64112	
Phone # (include area code) (816) 531-2082	Fax # (include area code)	Email mbelew@usfpc.com	

The requester listed above: (select all that apply)

- Is currently the owner
  Is considering selling the Property  
 Is renting or leasing the Property
  Is considering acquiring the Property  
 Is a lender with a mortgagee interest in the Property  
 Other. Explain the status of the Property with respect to the applicant:

Developing the property

### Contact Information (to be contacted with questions about this request)

Select if same as requester

Contact Last Name Wise	First Nicole	MI	Organization/ Business Name Environmental Works, Inc.
Mailing Address 1731 Locust Street		City Kansas City	State MO
		ZIP Code 64108	
Phone # (include area code) (816) 285-8410	Fax # (include area code)	Email nwise@environmentalworks.com	

### Property Owner (if different from requester)

Contact Last Name	First	MI	Organization/ Business Name Pine Ridge Homes, Inc.
Mailing Address		City Beaver Dam	State WI
		ZIP Code 53916	
Phone # (include area code)	Fax # (include area code)	Email	

## Section 2. Property Information

Property Name Former Monarch Development, Lot 8	FID No. (if known)
BRRTS No. (if known) 03-14-001263	Parcel Identification Number 206-1214-3342-107
Street Address N Spring Street	City Beaver Dam
	State WI
	ZIP Code 53916
County Dodge	Municipality where the Property is located <input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village of Beaver Dam
	Property is composed of: <input checked="" type="radio"/> Single tax parcel <input type="radio"/> Multiple tax parcels
	Property Size Acres 1.26

# Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 3 of 7

1. Is a response needed by a specific date? (e.g., Property closing date) Note: Most requests are completed within 60 days. Please plan accordingly.

No  Yes

Date requested by: 06/02/2023

Reason: Construction starting soon

2. Is the "Requester" enrolled as a Voluntary Party in the Voluntary Party Liability Exemption (VPLE) program?

No. **Include the fee that is required for your request in Section 3, 4 or 5.**

Yes. **Do not include a separate fee.** This request will be billed separately through the VPLE Program.

Fill out the information in Section 3, 4 or 5 which corresponds with the type of request:

**Section 3. Technical Assistance or Post-Closure Modifications;  
Section 4. Liability Clarification; or Section 5. Specialized Agreement.**

## Section 3. Request for Technical Assistance or Post-Closure Modification

Select the type of technical assistance requested: [Numbers in brackets are for WI DNR Use]

- No Further Action Letter (NFA) (Immediate Actions) - NR 708.09, [183] - Include a fee of \$350. Use for a written response to an immediate action after a discharge of a hazardous substance occurs. Generally, these are for a one-time spill event.
- Review of Site Investigation Work Plan - NR 716.09, [135] - **Include a fee of \$700.**
- Review of Site Investigation Report - NR 716.15, [137] - **Include a fee of \$1050.**
- Approval of a Site-Specific Soil Cleanup Standard - NR 720.10 or 12, [67] - **Include a fee of \$1050.**
- Review of a Remedial Action Options Report - NR 722.13, [143] - **Include a fee of \$1050.**
- Review of a Remedial Action Design Report - NR 724.09, [148] - **Include a fee of \$1050.**
- Review of a Remedial Action Documentation Report - NR 724.15, [152] - **Include a fee of \$350**
- Review of a Long-term Monitoring Plan - NR 724.17, [25] - **Include a fee of \$425.**
- Review of an Operation and Maintenance Plan - NR 724.13, [192] - **Include a fee of \$425.**

Other Technical Assistance - s. 292.55, Wis. Stats. [97] (For request to build on an abandoned landfill use Form 4400-226)

- Schedule a Technical Assistance Meeting - **Include a fee of \$700.**
- Hazardous Waste Determination - **Include a fee of \$700.**
- Other Technical Assistance - **Include a fee of \$700.** Explain your request in an attachment.

Post-Closure Modifications - NR 727, [181]

- Post-Closure Modifications: Modification to Property boundaries and/or continuing obligations of a closed site or Property; sites may be on the GIS Registry. This also includes removal of a site or Property from the GIS Registry. **Include a fee of \$1050, and:**
  - Include a fee of \$300 for sites with residual soil contamination; and
  - Include a fee of \$350 for sites with residual groundwater contamination, monitoring wells or for vapor intrusion continuing obligations.

Attach a description of the changes you are proposing, and documentation as to why the changes are needed (if the change to a Property, site or continuing obligation will result in revised maps, maintenance plans or photographs, those documents may be submitted later in the approval process, on a case-by-case basis).

## Section 4. Request for Liability Clarification

Select the type of liability clarification requested. Use the available space given or attach information, explanations, or specific questions that you need answered in DNR's reply. Complete Sections 6 and 7 of this form. [Numbers in brackets are for DNR Use]

**Technical Assistance, Environmental Liability  
Clarification or Post-Closure Modification Request**

Form 4400-237 (R 10/21)

Page 4 of 7

"Lender" liability exemption clarification - s. 292.21, Wis. Stats. [686]

❖ **Include a fee of \$700.**

Provide the following documentation:

- (1) ownership status of the real Property, and/or the personal Property and fixtures;
- (2) an environmental assessment, in accordance with s. 292.21, Wis. Stats.;
- (3) the date the environmental assessment was conducted by the lender;
- (4) the date of the Property acquisition; for foreclosure actions, include a copy of the signed and dated court order confirming the sheriff's sale.
- (5) documentation showing how the Property was acquired and the steps followed under the appropriate state statutes.
- (6) a copy of the Property deed with the correct legal description; and,
- (7) the Lender Liability Exemption Environmental Assessment Tracking Form (Form 4400-196).
- (8) If no sampling was done, please provide reasoning as to why it was **not** conducted. Include this either in the accompanying environmental assessment or as an attachment to this form, and cite language in s. 292.21(1)(c)2.,h.-i., Wis. Stats.:
  - h. The collection and analysis of representative samples of soil or other materials in the ground that are suspected of being contaminated based on observations made during a visual inspection of the real Property or based on aerial photographs, or other information available to the lender, including stained or discolored soil or other materials in the ground and including soil or materials in the ground in areas with dead or distressed vegetation. The collection and analysis shall identify contaminants in the soil or other materials in the ground and shall quantify concentrations.
  - i. The collection and analysis of representative samples of unknown wastes or potentially hazardous substances found on the real Property and the determination of concentrations of hazardous waste and hazardous substances found in tanks, drums or other containers or in piles or lagoons on the real Property.

"Representative" liability exemption clarification (e.g. trustees, receivers, etc.) - s. 292.21, Wis. Stats. [686]

❖ **Include a fee of \$700.**

Provide the following documentation:

- (1) ownership status of the Property;
- (2) the date of Property acquisition by the representative;
- (3) the means by which the Property was acquired;
- (4) documentation that the representative has no beneficial interest in any entity that owns, possesses, or controls the Property;
- (5) documentation that the representative has not caused any discharge of a hazardous substance on the Property; and
- (6) a copy of the Property deed with the correct legal description.

Clarification of local governmental unit (LGU) liability exemption at sites with: (select all that apply)

- hazardous substances spills - s. 292.11(9)(e), Wis. Stats. [649];
- Perceived environmental contamination - [649];
- hazardous waste - s. 292.24 (2), Wis. Stats. [649]; and/or
- solid waste - s. 292.23 (2), Wis. Stats. [649].

❖ **Include a fee of \$700, a summary of the environmental liability clarification being requested, and the following:**

- (1) clear supporting documentation showing the acquisition method used, and the steps followed under the appropriate state statute(s).
- (2) current and proposed ownership status of the Property;
- (3) date and means by which the Property was acquired by the LGU, where applicable;
- (4) a map and the ¼, ¼ section location of the Property;
- (5) summary of current uses of the Property;
- (6) intended or potential use(s) of the Property;
- (7) descriptions of other investigations that have taken place on the Property; and
- (8) (for solid waste clarifications) a summary of the license history of the facility.

**Section 4. Request for Liability Clarification (cont.)**

Lease liability clarification - s. 292.55, Wis. Stats. [646]

❖ **Include a fee of \$700 for a single Property, or \$1400 for multiple Properties and the information listed below:**

- (1) a copy of the proposed lease;
- (2) the name of the current owner of the Property and the person who will lease the Property;
- (3) a description of the lease holder's association with any persons who have possession, control, or caused a discharge of a hazardous substance on the Property;
- (4) map(s) showing the Property location and any suspected or known sources of contamination detected on the Property;
- (5) a description of the intended use of the Property by the lease holder, with reference to the maps to indicate which areas will be used. Explain how the use will not interfere with any future investigation or cleanup at the Property; and
- (6) all reports or investigations (e.g. Phase I and Phase II Environmental Assessments and/or Site Investigation Reports conducted under s. NR 716, Wis. Adm. Code) that identify areas of the Property where a discharge has occurred.

General or other environmental liability clarification - s. 292.55, Wis. Stats. [682] - Explain your request below.

❖ **Include a fee of \$700 and an adequate summary of relevant environmental work to date.**

No Action Required (NAR) - NR 716.05, [682]

❖ **Include a fee of \$700.**

Use where an environmental discharge has or has not occurred, and applicant wants a DNR determination that no further assessment or clean-up work is required. Usually this is requested after a Phase I and Phase II environmental assessment has been conducted; the assessment reports should be submitted with this form. This is not a closure letter.

Clarify the liability associated with a "closed" Property - s. 292.55, Wis. Stats. [682]

❖ **Include a fee of \$700.**

- Include a copy of any closure documents if a state agency other than DNR approved the closure.

---

Use this space or attach additional sheets to provide necessary information, explanations or specific questions to be answered by the DNR.

**Section 5. Request for a Specialized Agreement**

Select the type of agreement needed. Include the appropriate draft agreements and supporting materials. Complete Sections 6 and 7 of this form. More information and model draft agreements are available at: [dnr.wi.gov/topic/Brownfields/Igu.html#tabx4](http://dnr.wi.gov/topic/Brownfields/Igu.html#tabx4).

Tax cancellation agreement - s. 75.105(2)(d), Wis. Stats. [654]

❖ **Include a fee of \$700, and the information listed below:**

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

Agreement for assignment of tax foreclosure judgement - s.75.106, Wis. Stats. [666]

❖ **Include a fee of \$700, and the information listed below:**

- (1) Phase I and II Environmental Site Assessment Reports,
- (2) a copy of the Property deed with the correct legal description.

Negotiated agreement - Enforceable contract for non-emergency remediation - s. 292.11(7)(d) and (e), Wis. Stats. [630]

❖ **Include a fee of \$1400, and the information listed below:**

- (1) a draft schedule for remediation; and,
- (2) the name, mailing address, phone and email for each party to the agreement.

# Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 6 of 7

## Section 6. Other Information Submitted

Identify all materials that are included with this request.

Send both a paper copy of the signed form and all reports and supporting materials, and an electronic copy of the form and all reports, including Environmental Site Assessment Reports, and supporting materials on a compact disk.

Include one copy of any document from any state agency files that you want the Department to review as part of this request. The person submitting this request is responsible for contacting other state agencies to obtain appropriate reports or information.

Phase I Environmental Site Assessment Report - Date: 04/14/2023

Phase II Environmental Site Assessment Report - Date: 05/14/2009

Legal Description of Property (required for all liability requests and specialized agreements)

Map of the Property (required for all liability requests and specialized agreements)

Analytical results of the following sampled media: Select all that apply and include date of collection.

Groundwater  Soil  Sediment  Other medium - Describe: \_\_\_\_\_

Date of Collection: 04/19/2009

A copy of the closure letter and submittal materials

Draft tax cancellation agreement

Draft agreement for assignment of tax foreclosure judgment

Other report(s) or information - Describe: Materials Management Plan

For Property with newly identified discharges of hazardous substances only: Has a notification of a discharge of a hazardous substance been sent to the DNR as required by s. NR 706.05(1)(b), Wis. Adm. Code?

Yes - Date (if known): \_\_\_\_\_

No

**Note:** The Notification for Hazardous Substance Discharge Form - Non-Emergency Only (Form 4400-225) is accessible through the RR Program Submittal Portal application. Directions for using the form and the Submittal Portal application are available on the [Submittal Portal web page](#).

## Section 7. Certification by the Person who completed this form

I am the person submitting this request (requester)

I prepared this request for: Mike Belew  
Requester Name

I certify that I am familiar with the information submitted on this request, and that the information on and included with this request is true, accurate and complete to the best of my knowledge. I also certify I have the legal authority and the applicant's permission to make this request.

Valerie Gibson

Signature

5/22/23

Date Signed

Project Manager

Title

(816) 285-8410

Telephone Number (include area code)

# Technical Assistance, Environmental Liability Clarification or Post-Closure Modification Request

Form 4400-237 (R 10/21)

Page 7 of 7

## Section 8. DNR Contacts and Addresses for Request Submittals

Send or deliver one paper copy and one electronic copy on a compact disk of the completed request, supporting materials, and fee to the region where the property is located to the address below. Contact a [DNR regional brownfields specialist](#) with any questions about this form or a specific situation involving a contaminated property. For electronic document submittal requirements see: <http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf>.

### DNR NORTHERN REGION

Attn: RR Program Assistant  
Department of Natural Resources  
223 E Steinfest Rd Antigo, WI 54409

### DNR NORTHEAST REGION

Attn: RR Program Assistant  
Department of Natural Resources  
2984 Shawano Avenue  
Green Bay WI 54313

### DNR SOUTH CENTRAL REGION

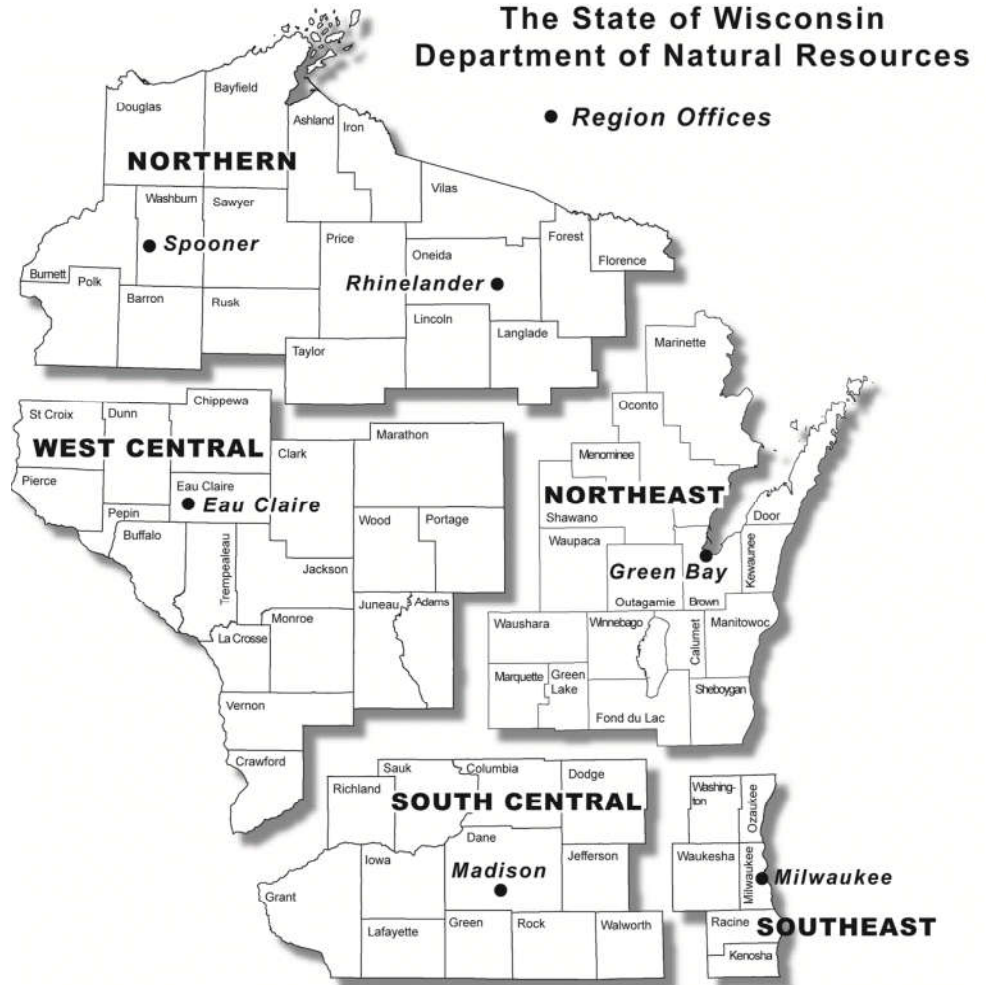
Attn: RR Program Assistant  
Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg WI 53711

### DNR SOUTHEAST REGION

Attn: RR Program Assistant  
Milwaukee DNR Office  
1027 West St. Paul Ave  
Milwaukee WI 53233

### DNR WEST CENTRAL REGION

Attn: RR Program Assistant  
Department of Natural Resources  
1300 Clairemont Ave.  
Eau Claire WI 54702



*Note: These are the Remediation and Redevelopment Program's designated regions. Other DNR program regional boundaries may be different.*

DNR Use Only			
Date Received	Date Assigned	BRRTS Activity Code	BRRTS No. (if used)
DNR Reviewer		Comments	
Fee <input type="radio"/> Yes <input type="radio"/> No	Fee Amount \$	Date Additional Information Requested	Date Requested for DNR Response Letter
Date Approved	Final Determination		



ENVIRONMENTAL WORKS

Science. Safety. Grit. Ingenuity.

## MATERIALS MANAGEMENT PLAN

### FORMER MONARCH DEVELOPMENT LOT 8 EAST MAIN STREET AND NORTH SPRING STREET BEAVER DAM, WISCONSIN DNR BRRTS #03-14-001263

**Prepared For:**

CBC Real Estate Group, LLC  
Kansas City, Missouri

**Prepared by:**

Environmental Works, Inc.  
Kansas City, Missouri

EWI Project #231816

May 22, 2023

Prepared by:

Ms. Valerie Gibson  
Project Manager

Reviewed by:

Ms. Gracie Tiffany  
Operations Manager-Assessment



## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>I</b>
<b>LIST OF APPENDICES</b> .....	<b>II</b>
<b>LIST OF ACRONYMS</b> .....	<b>III</b>
<b>1.0 INTRODUCTION</b> .....	<b>4</b>
1.1 Site Description And Known Or Suspected areas of chemicals of concern .....	4
1.2 Objectives .....	5
<b>2.0 MMP APPLICABILITY AND GENERAL CONTRACTOR SAFETY</b> .....	<b>7</b>
2.1 Regulated Substances .....	7
2.2 Proposed Construction .....	7
2.3 General Health And Safety Requirements .....	7
2.4 General Contractor Awareness Training .....	8
2.5 Regulatory Notification Procedures .....	8
<b>3.0 SOIL MANAGEMENT</b> .....	<b>10</b>
3.1 Work Areas Impacted by Regulated Substances.....	10
3.2 Stockpile Management .....	11
3.3 Disposition and Reuse of Excavated Soil.....	11
3.4 Soil Disposal .....	11
3.5 Off-Site Migration .....	12
3.6 Imported Soil .....	12
<b>4.0 GROUNDWATER MANAGEMENT PROCEDURES</b> .....	<b>14</b>
<b>5.0 WASTE MANAGEMENT PROCEDURES</b> .....	<b>15</b>
5.1 Vapor Management and Barrier Cap .....	15
5.2 Unusual Conditions.....	15
<b>6.0 HEALTH AND SAFETY</b> .....	<b>16</b>
6.1 Personal Protective Equipment.....	16
6.2 Worker Training Requirements .....	16
<b>7.0 CONTACT INFORMATION</b> .....	<b>17</b>

**8.0 LIMITATIONS..... 18**  
**9.0 REFERENCES ..... 19**

## LIST OF FIGURES

Figure 1 Site Redevelopment Plan

## LIST OF APPENDICES

Appendix A April 1, 2008, WDNR Final Case Closure with Land Use Limitations or  
Conditions Malleable Iron Range  
Appendix B May 14, 2009, Shaw Environmental, Inc. Summary of Lot 8 Geoprobe  
Investigation  
Appendix C April 14, 2023, EWI, Phase I Environmental Site Assessment, Unoccupied Land,  
South of East Main Street and North Spring Street Beaver Dam, Wisconsin  
(Executive Summary)

## LIST OF ACRONYMS

bgs	Below ground surface
BMP	Best management practices
COC	Chemical of concern
EP	Environmental professional
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
EWI	Environmental Works, Inc.
ft	Feet
HAZWOPER	Hazardous Waste Operations and Emergency Response
OSHA	Occupational Health & Safety Administration
PCL	Protective Concentration Levels
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RCL	Residual Contaminant Levels
SF	Square foot
MMP	Materials Management Plan
TCLP	Toxicity characteristic leaching procedure
US EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WDNR	Wisconsin Department of Natural Resources

## 1.0 INTRODUCTION

Environmental Works, Inc. (EWI) was retained by CBC Real Estate Group, LLC (CBC) (Client) to prepare a Materials Management Plan (MMP) for construction activities planned for the property ("Site" or "Subject Property") located at South of East Main Street and North Spring Street in Beaver Dam, Dodge County, Wisconsin (see Figure 1). The Subject Property consists of a 1.25-acre parcel of unoccupied grass-covered land, located in an area of commercial land, and is owned by Pine Ridge Homes Inc.

This MMP will assist future owners, operators, developers and others by providing a general outline of activities that should be implemented during intrusive activities that occur at the Site. Any entity performing the intrusive activities described below, including but not limited to, personnel from the local municipality, environmental consultants, construction contractors, utility contractors, developers, and future owners are recommended to follow the procedures outlined in this MMP. Contact information for EWI staff to assist with implementing MMP activities is provided in Section 4.0.

### 1.1 SITE DESCRIPTION AND KNOWN OR SUSPECTED AREAS OF CHEMICALS OF CONCERN

The Monarch Malleable Iron Range factory (MAFCO) operated on an 8.5-acre property at 715 North Spring Street, Beaver Dam, Wisconsin, which included the Subject Property (Lot 8). Beginning as early as 1896, MAFCO manufactured coal, wood, gas, and electric heaters, stoves and ranges and later expanded to include refrigerators, furnaces, washing machines, irons, and other household products. Manufacturing processes included foundry operations, painting, paint stripping, electroplating, acid treatment, porcelain enameling, and assembly. The appliances that withstood heat were manufactured with asbestos insulation, which lead to lawsuits and ultimately MAFCO's bankruptcy in the 1970s. The factory went out of business in 1985.

Features on the Subject Property in 1909 were MAFCO buildings and a dwelling that was removed by 1914 for additional MAFCO development and a rail spur. MAFCO buildings contained foundries, various sheds, and a manufacturing building. Deconstruction of the MAFCO facility began in the 1990s. By 2005, the Subject Property consisted of unoccupied grass-covered lot through the present day.

The MAFCO facility had multiple spills, leaks, violations, and documented environmental issues requiring remediation of contaminated soil and groundwater. Soil was contaminated with volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and metals. Groundwater was contaminated with VOCs, notably benzene, trichloroethene (TCE), tetrachloroethene (PCE). Environmental remediation included excavating a PCB spill in 1984, removal of underground storage tanks (USTs), cleanup of petroleum from leaking underground storage tanks (LUSTs), and soil vapor extraction.

Groundwater monitoring wells were installed throughout the MAFCO property and were monitored through December 2006. Groundwater monitoring data was provided in the WDNR Conditional Closure Decision dated April 1, 2008 (Appendix A). Two (2) groundwater monitoring wells were on the Subject Property (RWD-2 and RWA-1), See Figure 1. In 2006, the only groundwater exceedance of WDNR Enforcement Standards on the Site was vinyl chloride reported from RWD-2, located near the southeast corner of the Subject Property at 1.3 parts per billion (ppb) above the Enforcement Standard 0.2

microgram per liter ( $\mu\text{g/L}$ , comparable to ppb). Reported groundwater concentrations in 2006 are below the Environmental Protection Agency (EPA) Vapor Intrusion Screening Levels (VISLs).

In other areas of the MAFCO property, concentrations of contaminants of concern exceeded WDNR Enforcement Standards in 2006, however, the MAFCO facility was granted final case closure in April 2008 by the WDNR with Land Use Limitations and Conditions, which included establishing an MMP for use during construction.

Following case closure, a subsurface investigation was completed for the Subject Property reported in *Summary of the Subject Property (Lot 8) Geoprobe Investigation* was completed by Shaw Environmental, Inc. dated May 14, 2009 (Appendix B). During this investigation, 23 soil borings were advanced. Soil samples were analyzed for arsenic, cadmium, chromium, lead, PAHs, and VOCs. Laboratory analytical results indicated arsenic was detected in the soil at the Site above WDNR Non-Residential Direct Contact Residual Contaminant Levels (RCLs), below the background threshold concentration. The majority of PAH results were within the top 2 feet of the soil profile.

The Phase I Environmental Site Assessment (ESA) completed by EWI dated April 14, 2023 (Appendix C), reviewed the Site history and data and identified the following CREC and VEC for the Subject Property:

1. MAFCO operated from at least 1896 until 1985 and had multiple spills, leaks, violations, and documented environmental issues requiring remediation of contaminated soil and groundwater. In April 2008, the MAFCO property was granted final case closure with Land Use Limitations and Conditions approved by the WDNR. The Subject Property (Lot 8) had confirmed residual soil contamination below RCLs, including metals, PAHs, and VOCs. The most recent groundwater data for the Subject Property (2006) included relatively low concentrations of VOCs below WDNR enforcement standards, besides vinyl chloride. Few VOCs exceeded WDNR Enforcement Standards on surrounding properties. VOC exceedances could be a potential vapor source for the Subject Property. Long-term manufacturing operations, confirmed soil and groundwater contamination, and continuing Land Use Restrictions are considered a CREC and VEC to the Subject Property.

According to the Final Case Closure from the WDNR dated April 1, 2008, the conditions of site closure, pursuant to s. 292.12 Wisconsin Statutes stipulates that residual contamination in soil is present, therefore, if contaminated soil is excavated, the property owner must sample soil for laboratory analysis of Contaminants of Concern (COCs), which include PAHs, VOCs, and metals (lead, cadmium, chromium, and arsenic). If contamination is present, then contaminated materials must be appropriately handled and safety considerations be communicated and addressed, as detailed in this MMP.

## 1.2 OBJECTIVES

The following objectives are intended for the MMP:

- Provide general guidance to the construction general contractor (GC) as to the known locations of regulated substances in the surface or subsurface that could constitute either hazardous or non-hazardous conditions when the soil is excavated.

- Identify specific work areas in which regulated substances may be encountered in the surface or subsurface.
- Describe the intent and approach of an environmental oversight program supporting planned construction activities. This includes monitoring environmental conditions during excavation activities.
- Develop and document a process for segregating, handling and managing potentially impacted surface or subsurface soils excavated from the Site, if encountered or suspected. This includes subsequent soil waste determination and profiling to determine potential reuse and /or disposal options.

Based on information discussed in this plan, hazardous materials or suspected hazardous materials may be encountered. In such cases, worker protection requirements may be required to comply with the United States Occupational Health & Safety Administration (OSHA) guidelines for Hazardous Waste Operations and Emergency Response (HAZWOPER) as specified in 1910.120, or other OSHA standards. Every company who employs personnel is the responsible party for conformance to OSHA regulatory compliance. Persons who work on this Site are recommended to contact their company health and safety (H&S) representative regarding OSHA compliance. The following sections of this MMP provide information regarding EWI's recommendations for proper waste management and disposal procedures necessary to minimize risk to human health and the environment.

## 2.0 MMP APPLICABILITY AND GENERAL CONTRACTOR SAFETY

### 2.1 REGULATED SUBSTANCES

The Site, identified as Lot 8 of the MAFCO facility in Beaver Dam, Wisconsin, had confirmed residual soil and groundwater contamination. In 2009, soil contamination was limited to residual PAHs, VOCs, and metals below WDNR Non-Residential Direct Contact RCLs. In 2006, analytical results were reviewed from two (2) Site monitoring wells, RWD-2 and RWA-1. The only exceedance was from RWD-2, near the southeast corner of the Subject Property, with vinyl chloride at 1.3 ppb above the Enforcement Standard 0.2 µg/L, though below EPA VISLs. Health considerations are as follows:

**Arsenic:** short-term exposure to inorganic arsenic can cause nausea, vomiting, diarrhea, weakness, loss of appetite, cough, chest pain, giddiness, headache, and breathing difficulty (dyspnea). Long-term exposure to inorganic arsenic can cause weakness, nausea, vomiting, diarrhea, skin and eye irritation, hyperpigmentation, thickening of the palms and soles (hyperkeratosis), contact dermatitis, skin sensitization, warts, ulceration and perforation of the nasal septum, and numbness and weakness in the legs and feet.

**PAHs:** According to the WDNR, occupational and chronic exposure to PAHs may cause cancer. Several PAHs have been shown to cause lung and skin cancer in laboratory animals. People who have worked in industries where they had regular exposure to very high levels developed tar warts and skin cancer. Extracts of various types of smoke containing PAHs caused lung tumors in laboratory animals. A person's lungs, liver, skin, and kidneys can be damaged by exposure.

**Vinyl chloride:** lassitude (weakness, exhaustion), abdominal pain, gastrointestinal bleeding, enlarged liver, pallor or cyanosis of extremities.

**VOCs:** According the EPA, health affects from VOC exposure include eye, nose and throat irritation headaches, loss of coordination and nausea, damage to liver, kidney, and central nervous system. Symptoms of VOC exposure include conjunctival irritation, nose and throat discomfort, headache, allergic skin reaction, dyspnea, declines in serum cholinesterase levels, nausea, emesis, epistaxis, fatigue, and dizziness.

Due to residual contamination in soil, as stipulated by the WDNR, during proposed excavations at the Subject Project, removed soil must be analyzed for the Subject Property COCs and handled according to this MMP.

### 2.2 PROPOSED CONSTRUCTION

Proposed construction includes a 10,000 square foot (SF) commercial building, a parking lot along the northwest and northeast sides of the building, a loading zone along the northeastern side of the building, and a pathway to a dumpster pad along the southeastern side of the building.

### 2.3 GENERAL HEALTH AND SAFETY REQUIREMENTS

The GC and associated trade partners are responsible for complying with the OSHA requirements for Construction Project Sites and general Hazard Communication. Therefore, any health and safety

procedures established by the GC for general construction activities are not the responsibility of the Client, civil design firm, or the owner's Environmental Professional (EP).

Personal protective equipment (PPE) for general construction activities will be in accordance with the GC health & safety plan. The GC personnel will initially utilize level D PPE. The EP or designated environmental representative for the GC may upgrade PPE if work conditions warrant. For further details see Section 6.0.

Excavation work where impacts were identified should be conducted using caution, monitored by onsite personnel and should be in accordance with this MMP. As environmental contamination involving regulated hazardous substances is documented at the Site in soil and groundwater, workers must follow the guidance of their designated company health and safety plan/process to ensure compliance with OSHA regulations.

## **2.4 GENERAL CONTRACTOR AWARENESS TRAINING**

Due to the presence of contaminated soil identified on the Subject Property, EWI recommends awareness training for key GC personnel, field managers and associated subcontractors prior to initiating field grading and excavation activities. The training topics include:

- General content of this MMP and compliance requirements;
- Site history as it relates to the presence of regulated substances and the expected general location(s) of regulated potential hazardous and non-hazardous substances in the surface and subsurface;
- Instruction on how to identify suspect environmental conditions by visual and olfactory methods;
- The overall approach to providing both full-time or as-needed environmental oversight as described in Section 3.2;
- Introduction of monitoring instrumentation;
- Work flow and communication;
- General discussion on identified contaminants and health and safety best practices;
- General discussion on PPE requirements, and;
- Field procedures as described in Section 3 of this document.

## **2.5 REGULATORY NOTIFICATION PROCEDURES**

This MMP and a Post-Closure Modification (PCM) form will be submitted to the WDNR for approval prior to construction on the Subject Property. In the event that soil or groundwater is moved offsite for reuse, sale or disposal additional testing will be required to document and ensure proper management of materials in compliance with state and federal regulations.



Upon completion of construction activities at the Subject Property, EWI will provide a report of field activities, documenting handling and disposal of contaminated materials. Supporting documentation will include landfill disposal tickets, photographs of field activities, and analytical results of waste materials.

### **3.0 SOIL MANAGEMENT**

Environmental investigations completed at the Site indicate VOCs, PAHs, and metals are present in soil. In order to protect public health and the environment, impacted or suspect impacted materials should be properly managed and handled during construction activities at the Site.

Construction activities that involve potential exposure, contact, or handling of impacted or suspect impacted soil or groundwater within the boundary of the Subject Property will require consideration for control of exposure to construction workers and the public. Furthermore, any activity that involves the removal/disposal, or offsite reuse of impacted soil or groundwater and incidental surface water will require the use of appropriate procedures. Any entity performing the intrusive activities described below, including but not limited to, personnel from the local municipality, environmental consultants, construction contractors, utility contractors, developers, and future owners are recommended to follow the procedures outlined in this MMP.

Intrusive activities include any of the following activities that disturb soil or retrieve groundwater from the Site:

- Environmental or geotechnical drilling and sampling.
- Utility installation and repairs.
- Soil excavation.
- Dewatering or groundwater management.
- Foundation removal, excavation, and grading work.

The above examples are not an all-inclusive list.

#### **3.1 WORK AREAS IMPACTED BY REGULATED SUBSTANCES**

Due to former operations on the property involving various hazardous substances, during soil excavation the GC and construction personnel should observe soil for staining, discoloration, stressed vegetation, and note strong odors or symptoms of exposure described in Section 2.1. If these conditions are discovered, personnel must pause work and alert the GC or EWI at the contact information provided in Section 7.0. It is not anticipated that EWI will provide continuous oversight during excavation activities for the purposes of soil management activities, the area of concern consists of the entirety of the Subject Property.

Should impacted soils be encountered, or if material is to be removed during construction activities, the material should be segregated into 250 cubic yard (yd<sup>3</sup>) stockpiles and placed on and covered with low permeability cover material (plastic sheeting).

Prior to removal or reuse of soils they should be appropriately sampled for contamination to determine future use options. EWI has been retained to conduct on-call sample collection, consulting, and disposal support at the Site. Contacts for these services are provided in Section 7.0.

### **3.2 STOCKPILE MANAGEMENT**

Soil and other waste materials that are suspected or confirmed to be impacted should be managed appropriately to avoid potentially mobilizing contaminants in environmental media and/or creating exposure as outlined below.

1. Suspected or confirmed contamination should be segregated and staged onsite in stockpiles no greater than 250 CY.
2. Areas where suspected or confirmed contamination are encountered should be avoided as best possible to avoid tracking contamination to other non-impacted areas of the Site.
3. Soil stockpiles should be placed on top of and covered with 10-millimeter or thicker polyethylene sheeting.
4. Stockpile covering should be in good condition and securely anchored to minimize release or runoff from the stockpile.
5. Contact EWI representatives and inform of Site conditions encountered. Based upon the conditions EWI will mobilize to the Site to document and collect samples to determine disposal or reuse options for contaminated materials.
6. If soils are approved for offsite use or disposal by EWI, soil transport vehicles for should be covered with a tarp to minimize dust and vapor emissions to the atmosphere during transport.
7. Any demolition debris (e.g. building foundations) if encountered, planned for offsite transport should have gross quantities of soil removed prior to leaving the Site.

### **3.3 DISPOSITION AND REUSE OF EXCAVATED SOIL**

Any soils suspected of impact by COCs that are planned for reuse should be segregated and tested prior to reuse. This is a conservative measure to minimize the risk of exposure or cross-contamination of potentially elevated levels of contaminant concentrations. EWI recommends that suspect impacted soils be screened in the field for VOCs and samples for COCs. If indications of impact are encountered and confirmed by soil sample analysis, composite samples should be collected for each 250 CY of stockpiled soil for laboratory analysis of COCs as determined by the EP or contractors' environmental representative(s). Soil reuse will be determined after evaluation of analytical results.

### **3.4 SOIL DISPOSAL**

Although COCs in soil are not expected to present a risk of exposure to construction workers, soil in some areas may contain concentrations which require special consideration for disposal. While

concentrations may be below the appropriate RCLs, the soil may be considered hazardous waste if it exceeds the "Rule of 20"<sup>1</sup> or based on toxicity characteristics.

For any impacted materials considered for off-site disposal, sampling and analysis of relevant waste characterization parameters should be completed to determine waste classification and disposal requirements. Following sampling activities analytical results are anticipated to take seven (7) business days for standard turnaround time. Upon request, EWI will mobilize to the Site to perform waste characterization subject to the following requirements.

1. If soil is classified as hazardous waste, the soil will be sent to a Resource Conservation and Recovery Act (RCRA) Subtitle C permitted facility.
2. Soil that is classified as non-hazardous waste may be disposed at a permitted landfill as Subtitle D Special Waste. This waste type will require special waste authorization from WDNR prior to disposal. Waste authorization is anticipated in 4 working days or less from receipt of analytical results.

### **3.5 OFF-SITE MIGRATION**

In order to prevent the off-site migration of contaminants, stormwater and sediment should be properly controlled. The general procedures should include the following:

1. Stormwater best management practices (BMPs) and other pollution control measures outlined in the site-specific construction stormwater pollution prevention plan (SWPPP) should be followed. Site inspections should be conducted at least once per seven calendar days or immediately following rainfall events to ensure proper installation, operation, and maintenance of BMPs. Any BMP conditions requiring correction should be addressed immediately.
2. Visible dust emissions from soil suspected or confirmed to be contaminated that is observed migrating off-site should be addressed immediately by wetting the material or changing work practices to avoid generating dust.
3. In the event equipment or vehicles are suspected to have tracked through impacted or suspect impacted soils on the Site, soil should be removed from equipment and vehicles through dry or wet removal methods prior to leaving the Site. Decontamination waste should be managed appropriately as indicated in Sections 3.4, 3.5 and 3.6.

### **3.6 IMPORTED SOIL**

Any soil imported from off-site for use as backfill must be tested for or provided documentation as clean fill. One composite sample of the soil to be imported, unless already documented, must be collected for

---

<sup>1</sup>The "Rule of 20" is a screening level by which the result of toxicity characteristic leaching procedure (TCLP) analysis of soil can be estimated by dividing the result of metals analysis by 20. The result is then compared to the TCLP regulatory threshold. An exceedance requires the soil to be analyzed by the TCLP method to confirm or deny if the waste is hazardous.

every 500 cubic yards. Each composite sample must consist of one aliquot of soil per 100 cubic yards. Sampling rates may be adjusted based on the presence of varying soil types or sources. Each composite sample must be analyzed for the following chemicals:

1. TPH-GRO by Method 8260 and TPH-DRO by Method 8270
2. VOCs by EPA Method 8260

Other analytes may be added if historic activities at the backfill source may have impacted the soil. Results must be compared to the EPA RSLs. Soils with analyte concentrations below the EPA RSLs for residential land use may be used as backfill on-site.

## 4.0 GROUNDWATER MANAGEMENT PROCEDURES

According to the WDNR Well Records Search, depth to groundwater in the region of the Site ranges from 14 feet below ground level surface (bgs) to 85 feet bgs. Groundwater will not likely be encountered, however, if encountered or if rainwater collects in excavation pits and requires removal, water must be properly handled, stored, characterized and disposed to ensure compliance with the WDNR's Final Case Closure with Land Use Limitations or Conditions letter dated April 1, 2008. WDNR stipulates that encountered groundwater planned for offsite disposal should be containerized and sampled for analysis of VOCs, PAHs, and metals to determine appropriate management or disposal.

Surface water, pit water or perched water required for removal from the Site should be treated in a similar manner as groundwater. The general procedures should include the following:

1. Prior to construction activities, the GC will determine logistics and potential storage capacity requirements for groundwater pumped from the excavation area.
2. If signs of visible contamination or waste materials are encountered during any intrusive activity, the EP or contractors' environmental representative(s) should be notified to ensure proper handling and disposal, as necessary.
3. Water that is collected or removed from excavations should be containerized pending a determination of disposal requirements.
4. Water that contacts impacted/waste material should be collected and containerized pending a determination of disposal requirements.
5. Containerized water should be sampled and analyzed for relevant waste characterization parameters to determine waste classification and disposal requirements. This may include analysis for COCs as required by the disposal facility.
6. Liquids that are determined to classify as a hazardous waste will be sent to a RCRA permitted disposal facility.
7. Liquid wastes that are determined to be non-hazardous may be disposed to an off-site permitted disposal facility, a nearby sanitary sewer, and/or treated and discharged on-site, pending approval from appropriate regulatory entities.

## **5.0 WASTE MANAGEMENT PROCEDURES**

### **5.1 VAPOR MANAGEMENT AND BARRIER CAP**

Though not required by the WDNR, in order to prevent vapor intrusion to the Site building, EWI will install a Drago Wrap Liner in the Site building. No other vapor barriers or caps are planned or required at the Site.

### **5.2 UNUSUAL CONDITIONS**

If visual or olfactory site conditions indicate contamination of different source described in historical background or underground structures, such as underground storage tanks, are discovered, contact the EP or contractors' environmental representative(s).

## **6.0 HEALTH AND SAFETY**

This MMP does not include specific procedures to protect employees from all the physical hazards (excavation wall cave in, working around heavy equipment, utility-related hazards, etc.). As each excavation is unique in its scope and purpose, physical hazards should be assessed and a plan to mitigate the hazards developed by the excavation contractor) in a separate HASP. Excavations should comply with local, State, and Federal requirements.

### **6.1 PERSONAL PROTECTIVE EQUIPMENT**

PPE for general construction activities will be in accordance with the GC's health & safety plan.

For construction activities where personnel are in contact with suspected contamination or where minimal physical contact with soil cuttings or groundwater occurs, the GC personnel should utilize modified level D PPE. The Levels of Protection for Modified Level D PPE are defined as follows:

Work uniform – In addition to the GC's PPE when personnel are in contact with suspected contamination:

- Disposable chemical resistant outer gloves, neoprene or nitrile
- Boots with steel toe, chemical resistant boots
- Hard hat (in the vicinity of construction operations)
- Safety glasses or goggles (as needed in the vicinity of construction operations)
- Hearing protection (as needed in the vicinity of construction operations)

Higher levels of PPE are not anticipated for this project; however, the GC will determine appropriate level, if necessary.

### **6.2 WORKER TRAINING REQUIREMENTS**

If the GC determines a higher level of PPE is necessary due to suspected contamination, onsite safety supervisors should be compliant with OSHA regulations on hazardous waste operations, 29 CFR Part 1910.120 (e): 40 hours initial instruction (followed by 24 hours of supervised field experience), and 8 hours annual refresher training. Supervisors will have copies of current training documentation on-site.

All employees who are involved in on site excavation activities should have reviewed this MMP.



## 7.0 CONTACT INFORMATION

For consulting support, soil/groundwater testing or disposal coordination please contact the following  
EWI staff:

### **Environmental Works, Inc.**

Kansas City Office  
1731 Locust Street  
Kansas City, Missouri 64108

Valerie Gibson, Project Manager  
Cell: 217-721-7454  
Email: [vgibson@environmentalworks.com](mailto:vgibson@environmentalworks.com)

Gracie Tiffany, Project Manager  
Cell: 913-299-5709  
Email: [gtiffany@environmentalworks.com](mailto:gtiffany@environmentalworks.com)

Nick Godfrey, Program Manager – Due Diligence  
Direct: 816-285-8432  
Cell: 913-269-1885  
Email: [ngodfrey@environmentalworks.com](mailto:ngodfrey@environmentalworks.com)

## **8.0 LIMITATIONS**

This plan has been prepared expressly for CBC. This plan has been prepared in accordance with generally accepted environmental practices and represents a good faith effort to include all relevant and factual data available in accordance with an agreement with CBC. The procedures presented in this plan are based solely upon the information identified in our assessments referenced in Section 1.0. The management procedures are intended exclusively for the purpose outlined herein and at the Site location and project indicated. No other warranty, expressed or implied, is made as to the contents, summary and conclusions presented herein. This plan is intended for the sole use of CBC, the Site General Contractor, development team and trade partners. This plan may not be appropriate to satisfy the need of other users, and any use or reuse of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

## 9.0 REFERENCES

Summary of Lot 8 Geoprobe Investigation, Former MIR Site Beaver Dam, Wisconsin, BRRTS# 03-14-001263; prepared by Shaw Environmental, Inc, May 14, 2009.

Final Case Closure with Land Use Limitations of Conditions, Malleable Iron Range (Former), 715 N. Spring Street, Beaver Dam, Wisconsin, WDNR BRRTS# 03-14-001263; WDNR, April 1, 2008.

Phase I ESA of Unoccupied Land, South of East Main Street and North Spring Street Beaver Dam, Wisconsin; by EWI on April 14, 2023.

Wisconsin Department of Natural Resources, Groundwater Standards,  
<https://dnr.wisconsin.gov/topic/Groundwater/CurrentStandards.html>

Wisconsin Department of Natural Resources, Soil Residual Contaminant Levels,  
<https://dnr.wisconsin.gov/topic/Brownfields/soil.html>

**FIGURE**

Aug 31, 2022 8:51 am  
Z:\RIC Design\2022-0111\Beaver Dam, WI\DWG\Concepts\22-0111\_BeaverDam-Concept02.dwg



Nearby Address  
806 US-151 BUS, Beaver Dam, WI 53916

Site Data Table  
Proposed Overall Lot Area - 1.25 Acres

Building Area - 10,500 SF

Parking Count Legend

- ADA Stall Count x
- Standard Stall Count x

Site Parking Table:

Proposed Building Area:	10,500 sqft
Parking Required:	N/A
Parking Provided:	48 Stalls + 2 ADA Stalls

General Notes

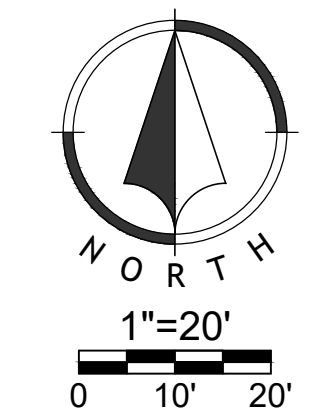
1. HVAC Units to be placed on roof of Building.
2. Existing Zoning: C (Commercial)
3. Setbacks:  
Front: 30'  
Side: 0'  
Rear: 15'
4. Parking Required: N/A

PROJECT #:  
BEAVER DAM, WI STORE  
DESIGN PRELIMINARY SITE  
PLAN APPROVAL  
DATE

D.S.D.: \_\_\_\_\_

C.D.O.: \_\_\_\_\_

NO.	BY	GD	DATE	REVISION



## **Appendix A**

April 1, 2008, WDNR Final Case Closure with Land Use Limitations or  
Conditions Malleable Iron Range

**GIS REGISTRY INFORMATION**

SITE NAME: Malleable Iron Range  
 BRRTS #: 314001263 FID # (if appropriate): \_\_\_\_\_  
 COMMERCE # (if appropriate): 53916204115  
 CLOSURE DATE: 04/01/2008  
 STREET ADDRESS: 715 N. Spring Street  
 CITY: Beaver Dam

SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection): X= 614331 Y= 332841

CONTAMINATED MEDIA: Groundwater  Soil  Both

OFF-SOURCE GW CONTAMINATION >ES:  Yes  No

IF YES, STREET ADDRESS 1: 138 & 143 East Mackie Street

GPS COORDINATES (meters in WTM91 projection): X= 614384 Y= 332651

OFF-SOURCE SOIL CONTAMINATION >Generic or Site-Specific RCL (SSRCL):  Yes  No

IF YES, STREET ADDRESS 1: \_\_\_\_\_

GPS COORDINATES (meters in WTM91 projection): X= \_\_\_\_\_ Y= \_\_\_\_\_

CONTAMINATION IN RIGHT OF WAY:  Yes  No

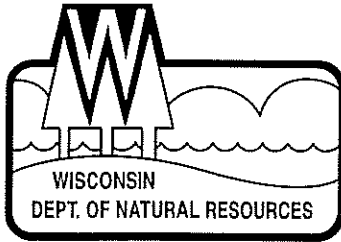
**DOCUMENTS NEEDED:**

- Closure Letter, and any conditional closure letter or denial letter issued
- Copy of most recent deed, including legal description, for all affected properties
- Certified survey map or relevant portion of the recorded plat map (if referenced in the legal description) for all affected properties
- County Parcel ID number, if used for county, for all affected properties
- Location Map which outlines all properties within contaminated site boundaries on USGS topographic map or plat map in sufficient detail to permit the parcels to be located easily (8.5x14" if paper copy). If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200' of the site.
- Detailed Site Map(s) for all affected properties, showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. (8.5x14", if paper copy) This map shall also show the location of all contaminated public streets, highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 ESs and soil contamination exceeding ch. NR 720 generic or SSRCLs.
- Tables of Latest Groundwater Analytical Results (no shading or cross-hatching)
- Tables of Latest Soil Analytical Results (no shading or cross-hatching)
- Isoconcentration map(s), if required for site investigation (SI) (8.5x14" if paper copy). The isoconcentration map should have flow direction and extent of groundwater contamination defined. If not available, include the latest extent of contaminant plume map.
- GW: Table of water level elevations, with sampling dates, and free product noted if present
- GW: Latest groundwater flow direction/monitoring well location map (should be 2 maps if maximum variation in flow direction is greater than 20 degrees)
- SOIL: Latest horizontal extent of contamination exceeding generic or SSRCLs, with one contour
- Geologic cross-sections, if required for SI. (8.5x14' if paper copy)
- RP certified statement that legal descriptions are complete and accurate
- Copies of off-source notification letters (if applicable)
- Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW)
- Copy of (soil or land use) deed restriction(s) or deed notice if any required as a condition of closure
- Copy of any maintenance plan referenced in the deed restriction.

**GIS Registry Information – Malleable Iron Range (Former) – WDNR # 03-14-001263**

<u>Property Deeds</u>	Too numerous to include all property deeds on the registry. See WDNR case file.
<u>Groundwater Monitoring Data</u>	Too numerous to include all groundwater monitoring data for all monitoring wells on the registry. Data tables for 22 wells are on the registry. See WDNR case file for additional data.
<u>Soil Sampling Data</u>	Additional soil data tables are in the WDNR case file.
<u>Notice of Residual Groundwater Contamination</u>	A copy of the letter sent to 106 E. Main Street, Beaver Dam, Wisconsin, is included on the registry. Similar letters were sent to 913 N. Spring St., 609 N. Spring St., 603 N. Spring St., 329 Jackson St., 210 E. Main St. and P.O. Box 596, Beaver Dam. See WDNR case file.
<u>Lost Monitoring Wells</u>	A copy of the letter sent to 106 E. Main Street, Beaver Dam, is included in the registry. Similar letters were sent to 609 N. Spring St., Beaver Dam. See WDNR case file.





## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Matthew J. Frank, Secretary  
Lloyd L. Eagan, Regional Director

South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397  
Telephone 608-275-3266  
FAX 608-275-3338  
TTY Access via relay - 711

April 1, 2008

John Corey  
Dodge County Corporation Counsel  
127 East Oak Grove Street  
Juneau, WI 53039

SUBJECT: Final Case Closure with Land Use Limitations or Conditions  
Malleable Iron Range (Former), 715 N. Spring Street, Beaver Dam,  
Wisconsin  
WDNR BRRTS Activity # 03-14-001263

Dear Mr. Corey:

On August 15, 2007, the South Central Region Closure Committee reviewed the above referenced case for closure. This committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On August 27, 2007, you were notified that the Closure Committee had granted conditional closure to this case. The subject property is also known as the Monarch Iron Range property and in 1995, the property was platted into 11 lots and the plat is called Monarch Development.

On February 25, 2008, the Department received correspondence indicating that you have complied with the requirements of closure. The conditions of closure were proper abandonment of monitoring wells and remediation wells, notification to owners of the platted lots within the boundaries of the former Malleable Iron Range property where monitoring wells that could not be located of their future liability associated with those wells, and disposal of investigation/remediation wastes.

Based on the correspondence and data provided, it appears that your case meets the requirements of ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time.

### GIS Registry

The conditions of case closure set out below in this letter require that your site be listed on the Remediation and Redevelopment Program's GIS Registry. The specific reasons are summarized below:

- Residual soil contamination exists that must be properly managed should it be excavated or removed
- Groundwater contamination is present above Chapter NR 140 enforcement standards
- One or more monitoring wells were not located and must be properly abandoned if found

Information that was submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit the RR Sites Map page at <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. If your property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line <http://dnr.wi.gov/org/water/dwg/3300254.pdf> or at the web address listed above for the GIS Registry.

#### Closure Conditions

Please be aware that pursuant to s. 292.12 Wisconsin Statutes, compliance with the requirements of this letter is a responsibility to which you, other current property owners and any subsequent property owners must adhere. If these requirements are not followed or if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment, the Department may take enforcement action under s. 292.11 Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property or this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code.

#### Remaining Residual Soil Contamination

Residual soil contamination remains at various locations over the entire property as indicated in the information submitted to the Department of Natural Resources. If soil is excavated in the future, then pursuant to ch. NR 718 or, if applicable, ch. 289, Stats., and chs. 500 to 536, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. Any soil that is excavated must be sampled and analyzed for polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and metals (lead, cadmium, chromium, arsenic). If sampling confirms that contamination is present, the property owner at the time of excavation will need to determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans. Direct contact threats must be addressed in any future redevelopment of the property.

#### Remaining Residual Groundwater Contamination

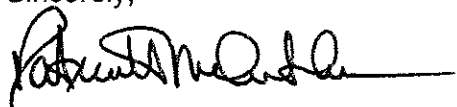
Groundwater impacted by petroleum and/or chlorinated volatile organic compound contamination greater than enforcement standards set forth in ch. NR140, Wis. Adm. Code, is present on the subject property and the off-site properties located at 138 and 143 East Mackie Streets. Off-site property owners have been notified of the presence of groundwater contamination. For more detailed information regarding the locations where groundwater samples have been collected (i.e., monitoring well locations) and the associated contaminant concentrations, refer to the Remediation and Redevelopment Program's GIS Registry at the RR Sites Map page at <http://dnr.wi.gov/org/aw/rr/gis/index.htm>.

Monitoring Wells That Could Not be Properly Abandoned

Your consultant, Victoria Loveland of Shaw Environmental, notified the Department that monitoring wells G101, G103, MW-27 and MW-28 could not be properly abandoned because they had been lost due to being paved over, covered or removed during site development activities. Monitoring well G101 is located on Lot 9 and the parcel is currently owned by Dodge Central Credit Union. Monitoring wells G103 and MW-28 are located on Lot 6 and the parcel is currently owned by Castle Monarch, LLC. Monitoring well MW-27 is on the parcel currently owned by Recheck's Food Pride. A map showing the location of the wells is attached. Your consultant has made a reasonable effort to locate the lost wells to determine whether they were properly abandoned but has been unsuccessful in those efforts. You need to understand that in the future you may be held liable for any problems associated with the monitoring wells if they create a conduit for contaminants to enter groundwater. If in the future any of the lost groundwater monitoring wells are found, the then current owner of the property or parcel will be required to notify the Department and to properly abandon the wells in compliance with the requirements in ch. NR 141, Wis. Adm. Code, and to submit the required documentation of that abandonment to the Department.

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Denise Nettesheim at (608) 275-3209.

Sincerely,



Patrick McCutcheon  
Team Supervisor  
South Central Region Remediation & Redevelopment

Attachment

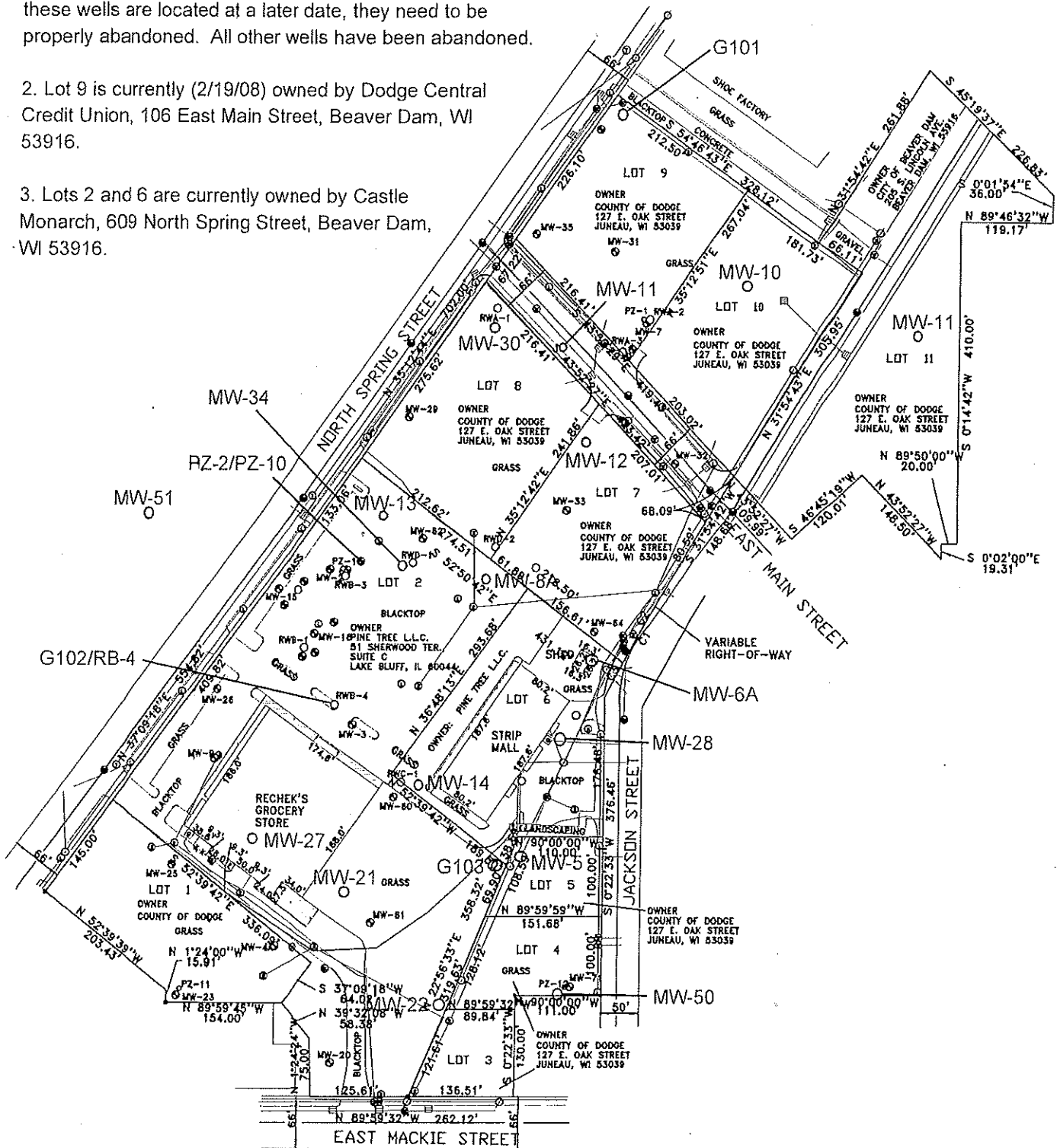
cc: Victoria Loveland, Shaw Environmental, 831 Critter Court, Suite 400, Onalaska, WI 54650-8674  
Daniel & Kathleen Wackett, 143 East Mackie Street, Beaver Dam, WI 53916  
Lee Bronson, 329 Jackson Street, Beaver Dam, WI 53916  
Castle Monarch LLC, 609 North Spring Street, Beaver Dam, WI 53916  
Castle Monarch LLC, 1400 E. Fox Lane, Fox Point, WI 53217  
Dodge Central Credit Union, 106 E. Main Street, Beaver Dam, WI 53916  
Jesse Dretske, 210 East Main Street, Beaver Dam, WI 53916  
GEN3, LLC, 603 North Spring Street, Beaver Dam, WI 53916  
GEN3, LLC, P.O. Box 31, Waupun, WI 53963  
Recheck's Food Pride, 609 North Spring Street, Beaver Dam, WI 53916  
Westfall Masonry LLC, Paul Nooyen, 6919 Donnybill Road, DeForest, WI 53532  
Weyenberg Warehouse Apartments LLC, 913 North Spring Street, Beaver Dam, WI 53916  
Weyenberg Warehouse Apartments LLC, P.O. Box 1547, Madison, WI 53701  
Case File

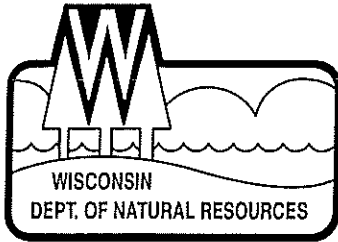
NOTES:

1. Monitoring wells G101, G103, MW-27, and MW28 were not able to be located during well abandonment activities. If these wells are located at a later date, they need to be properly abandoned. All other wells have been abandoned.

2. Lot 9 is currently (2/19/08) owned by Dodge Central Credit Union, 106 East Main Street, Beaver Dam, WI 53916.

3. Lots 2 and 6 are currently owned by Castle Monarch, 609 North Spring Street, Beaver Dam, WI 53916.





## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
Lloyd L. Eagan, Regional Director

South Central Region Headquarters  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711-5397  
Telephone 608-275-3266  
FAX 608-275-3338  
TTY Access via relay - 711

August 27, 2007

John Corey  
Dodge County Corporation Counsel  
127 East Oak Grove Street  
Juneau, WI 53039

Subject: Conditional Closure Decision With Requirements to Achieve Final Closure  
Malleable Iron Range, Site D (non-petroleum contamination), 715 N. Spring  
Street, Beaver Dam, Wisconsin  
WDNR BRRTS Activity # 03-14-001263

Dear Mr. Corey:

On August 15, 2007, the South Central Region Closure Committee reviewed your request for closure of the case described above. This committee reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the closure committee has determined that the environmental contamination on the site from the former manufacturing operations at the site appears to have been investigated and remediated to the extent practicable under site conditions. Your case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code and will be closed if the following conditions are satisfied:

### **MONITORING WELL ABANDONMENT**

The monitoring wells, soil vapor extraction wells, air sparge wells, groundwater extraction wells and any other wells at the site must be properly abandoned in compliance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment must be submitted to me on Form 3300-5B found at [www.dnr.state.wi.us/org/water/dwg/gw/](http://www.dnr.state.wi.us/org/water/dwg/gw/) or provided by the Department of Natural Resources.

### **PURGE WATER, WASTE AND SOIL PILE REMOVAL**

Any remaining purge water, waste and/or soil piles generated as part of site investigation or remediation activities must be removed from the site and disposed of or treated in accordance with Department of Natural Resources' rules. Once that work is completed, please send appropriate documentation regarding the treatment or disposal of the remaining purge water, waste and/or soil piles.

When the above conditions have been satisfied, please submit the appropriate documentation (for example, well abandonment forms, disposal receipts, copies of correspondence, etc.) to verify that applicable conditions have been met, and your case will be closed. Due to the presence of groundwater contamination above ch. NR 140, Wis. Adm. Code, Enforcement Standards, the subject property and the off-site properties at 138 and 143 East Mackie Streets will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Also, due to the presence of soil contamination, the subject property will be listed on the

GIS registry for soil. Information that was submitted with your closure request application will be included on the GIS Registry. To review the site on the GIS Registry web page, visit <http://maps.dnr.state.wi.us/brrts>. In addition, there will be land use controls required for the subject property.

Section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement. If there is equipment purchased with PECFA funds remaining at the site, contact the Commerce PECFA Program to determine the method for salvaging the equipment.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

We appreciate your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at (608) 275-3209.

Sincerely,



Denise Nettlesheim  
Hydrogeologist  
Bureau for Remediation & Redevelopment

cc: Victoria Loveland, Shaw Environmental, 831 Critter Court, Suite 400, Onalaska, WI  
54650-8674  
Daniel & Kathleen Wackett, 143 East Mackie Street, Beaver Dam, WI 53916  
Case File

# MONARCH DEVELOPMENT

PART OF BLOCK 7, BICKNELL'S ADDITION, LOT 13 OF BLOCK 3, ROSE AND FARRINGTON'S ADDITION, BLOCK 1, MACKIE'S ADDITION, SUBDIVISION OF LOTS 3, 4, AND 13 OF MACKIE'S ADDITION, PART OF OUTLOT 79 AND PART OF OUTLOT 80 IN THE THIRD WARD, ALL OF BLOCK 5, ROSE AND FARRINGTON'S ADDITION, VACATED EAST MAIN STREET, VACATED JACKSON STREET, A PART OF VACATED EAST MAIN STREET, AND PART OF THE FORMER CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD RIGHT OF WAY, ALL BEING IN PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4, THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 AND THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4; OF SECTION 33, TOWN 12 NORTH, RANGE 14 EAST, CITY OF BEAVER DAM, DODGE COUNTY, WISCONSIN.

**OWNER'S CERTIFICATE**

ATTWNEY E. HOGLUND, REGISTERED LAND SURVEYOR OF THE STATE OF WISCONSIN, HEREBY CERTIFY THAT BY THE DIRECTION OF RALPH E. SHARP, JR., AGENT FOR DODGE COUNTY, A WISCONSIN MUNICIPAL CORPORATION, 127 E. OAK STREET, JUNEAU, WISCONSIN 53039, PART OWNER, I HAVE REVEYED, DIVIDED, AND MAPPED THE PLAT OF MONARCH DEVELOPMENT LOCATED IN PART OF BLOCK 7, BICKNELL'S ADDITION, LOT 13 OF BLOCK 3, ROSE AND FARRINGTON'S ADDITION, BLOCK 1, MACKIE'S ADDITION, SUBDIVISION OF LOTS 3, 4, AND 13 OF MACKIE'S ADDITION, PART OF OUTLOT 79 AND PART OF OUTLOT 80 IN THE THIRD WARD, ALL OF BLOCK 5, ROSE AND FARRINGTON'S ADDITION, VACATED EAST MAIN STREET SHOWN HEREON VACATED ON AUGUST 28, 1920; VACATED JACKSON STREET PER RESOLUTION 77595 AND AS RECORDED IN VOLUME 849 OF RECORDS ON PAGE 13 AND 14 AND THAT PART OF VACATED JACKSON STREET LYING SOUTHERLY OF EAST MAIN STREET SHOWN HEREON; A PART OF VACATED EAST MAIN STREET PER RESOLUTION 77595 AND AS RECORDED IN VOLUME 849 OF RECORDS ON PAGES 13 AND 14 AND PART OF VACATED CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD PER VOLUME 852 OF RECORDS ON PAGE 590. ALL BEING A PART OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4, THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 AND THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4; OF SECTION 33, TOWN 12 NORTH, RANGE 14 EAST, CITY OF BEAVER DAM, DODGE COUNTY, WISCONSIN. THE PARCEL IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 33; THENCE, ALONG THE EAST LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 33, S. 00°10'32"E, 2657.61 FEET TO THE EAST 1/4 CORNER OF SAID SECTION 33; THENCE S. 65°58'51"W, 1979.05 FEET TO THE POINT OF BEGINNING, LYING ON THE WESTERLY RIGHT-OF-WAY LINE OF PRAIRIE STREET; THENCE, ALONG SAID SOUTHWESTERLY RIGHT-OF-WAY LINE, S. 45°19'37"E, 109.47 FEET TO THE WEST RIGHT-OF-WAY LINE OF NORTH LINCOLN AVENUE; THENCE, ALONG SAID WEST LINE, S. 00°01'54"E, 36.00 FEET; THENCE N. 85°46'42"W, 119.17 FEET; THENCE S. 00°14'42"W, 410.00 FEET; THENCE N. 85°50'00"W, 20.00 FEET; THENCE S. 00°02'00"E, 11 FEET; THENCE N. 43°52'27"W, 148.50 FEET; THENCE S. 46°45'19"W, 120.01 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF EAST MAIN STREET; THENCE, ALONG SAID NORTHEASTERLY LINE, N. 43°52'27"W, 109.89 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF THE CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD AS VACATED BY VOLUME 852 OF RECORDS ON PAGES 591; THENCE, ALONG SAID EASTERLY RIGHT-OF-WAY LINE, S. 31°54'42"W, 148.68 FEET TO A POINT OF CURVATURE OF A CURVE TO THE LEFT, HAVING A RADIUS OF 2832.00 FEET AND A CHORD WHICH RAYS S. 30°05'42.5"W, 179.55 FEET; THENCE SOUTHWESTERLY, 179.58 FEET ALONG THE ARC SAID CURVE THROUGH A CENTRAL ANGLE OF 03°37'59" TO ITS INTERSECTION WITH THE WEST RIGHT-OF-WAY LINE OF JACKSON STREET; THENCE, ALONG SAID WEST RIGHT-OF-WAY LINE, S. 00°22'33"W, 378.46 FEET TO THE NORTH LINE OF THE PARCEL, DESCRIBED IN VOLUME 704 OF RECORDS ON PAGE 574; THENCE, ALONG SAID NORTH LINE AND THE NORTH LINE OF THE PARCEL, DESCRIBED IN VOLUME 704 RECORDS ON PAGE 673, N. 50°00'00"W, 111.00 FEET TO THE WEST LINE OF LAST SAID PARCEL; THENCE, ALONG SAID WEST LINE AND ITS SOUTHERLY EXTENSION, S. 00°22'33"W, 190.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF EAST MACKIE STREET; THENCE, ALONG SAID NORTH LINE, S. 19°52'14"W, 261.12 FEET; THENCE N. 01°24'14"W, 15.00 FEET; THENCE N. 39°32'08"W, 58.18 FEET; THENCE N. 89°49'45"W, 154.00 FEET; THENCE N. 01°24'14"W, 15.91 FEET; THENCE N. 51°39'42"W, 203.43 FEET TO THE SOUTHEASTERLY RIGHT-OF-WAY LINE OF NORTH SPRING STREET; THENCE, ALONG SAID EASTERLY RIGHT-OF-WAY LINE, N. 37°09'18"E, 354.82 FEET; THENCE, CONTINUING ALONG SAID EASTERLY RIGHT-OF-WAY LINE, N. 35°12'44"E, 702.00 FEET TO THE CENTERLINE OF VACATED EAST MAIN STREET AS RECORDED IN VOLUME 849 OF RECORDS ON PAGES 13 AND 14; THENCE, ALONG THE CENTERLINE, S. 54°49'43"E, 328.12 FEET TO ITS INTERSECTION WITH THE WESTERLY RIGHT-OF-WAY LINE OF AFORESAID VACATED CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD; THENCE, ALONG SAID WESTERLY RIGHT-OF-WAY LINE, N. 31°54'42"E, 261.88 FEET TO ITS INTERSECTION WITH AFORESAID SOUTHWESTERLY RIGHT-OF-WAY LINE OF PRAIRIE STREET; THENCE, ALONG SAID WESTERLY RIGHT-OF-WAY LINE, S. 45°19'37"E, 117.36 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 715,371 SQUARE FEET OR 16,4226 TOTAL ACRES, MORE OR LESS. THE LOTS ARE ORIENTED TO THE EAST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 33, WHICH IS TURNED TO BEAR S. 00°10'32"E.

FURTHER CERTIFY THAT THIS PLAT IS A CORRECT REPRESENTATION OF ALL EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND THE SUBDIVISION THEREOF MADE. THAT I FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 136 OF THE WISCONSIN STATE STATUTES AND CHAPTER 18 SUBDIVISION AND PLATTING ORDINANCE OF THE CITY OF BEAVER DAM, DODGE COUNTY, WISCONSIN IN SURVEYING AND PLATTING THE SAME.

DATED THIS 11th DAY OF October, 1995.

REVISED THIS 16th DAY OF October, 1995.

ATTWNEY E. HOGLUND, AT LAND SURVEYOR, S-1910 MID-STATE ASSOCIATES, INC. WARREN STREET, BEAVER DAM, WI 53916



**OWNER'S CERTIFICATE OF DEDICATION**

WE, DODGE COUNTY, A WISCONSIN MUNICIPAL CORPORATION, BEING DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF WISCONSIN, AS OWNER OF ALL OF THE LAND INCLUDED IN THIS PLAT EXCEPT FOR THAT PORTION OF LOT 11 HEREOF THAT IS VACATED JACKSON STREET AND THE CITY OF BEAVER DAM, A MUNICIPAL CORPORATION OF DODGE COUNTY, WISCONSIN, BEING DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF WISCONSIN, AS OWNER OF THAT PART OF LOT 11 HEREOF THAT IS VACATED JACKSON STREET, DO HEREBY CERTIFY THAT SAID CORPORATIONS CAUSED THE LAND DESCRIBED ON THIS PLAT TO BE SURVEYED, DIVIDED, MAPPED AND DEDICATED AS REPRESENTED ON THE PLAT. WE ALSO CERTIFY THAT THIS PLAT IS REQUIRED BY SECTION 235.10 OR 235.12 OF THE REVISED WISCONSIN STATUTES TO BE SUBMITTED TO THE FOLLOWING FOR APPROVAL OR OBJECTION:

- (1) DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION
- (2) CITY OF BEAVER DAM
- (3) DODGE COUNTY PLANNING AND DEVELOPMENT DEPARTMENT

WITNESS THE HAND AND SEAL OF SAID OWNER, AT Beaver Dam, WISCONSIN, ON THIS 20th DAY OF October, 1995.

IN THE PRESENCE OF: DODGE COUNTY, A WISCONSIN MUNICIPAL CORPORATION

BY: Charles E. Swain  
CHARLES E. SWAIN, COUNTY BOARD CHAIRMAN

BY: Dorothy E. Ebert  
DOROTHY E. EBERT, COUNTY CLERK

IN THE PRESENCE OF: CITY OF BEAVER DAM, A MUNICIPAL CORPORATION OF DODGE CO., WI

BY: Steven R. Sabatke  
STEVEN R. SABATKE, MAYOR

BY: Gary H. Dummer  
GARY H. DUMMER, CITY CLERK

STATE OF WISCONSIN, ss  
DODGE COUNTY

PERSONALLY CAME BEFORE ME THIS 20th DAY OF October, 1995, THE ABOVE NAMED CHARLES E. SWAIN AND DOROTHY E. EBERT, TO ME KNOWN TO BE THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

One X. Yehias  
NOTARY PUBLIC, STATE OF WISCONSIN  
MY COMMISSION EXPIRES April 14, 1997.

Document # 816420  
Received this 20th day of Oct, 1995 at 1:28 PM  
and recorded in Vol. 849 of Plats, Page 653  
DODGE COUNTY REGISTER OF DEEDS  
Chris A. Wheaton

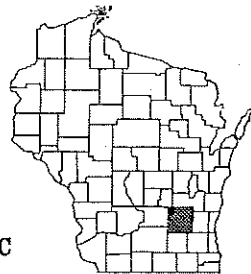
STATE OF WISCONSIN, ss  
DODGE COUNTY

PERSONALLY CAME BEFORE ME THIS 20th DAY OF October, 1995, THE ABOVE NAMED STEVEN R. SABATKE AND GARY H. DUMMER, TO ME KNOWN TO BE THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

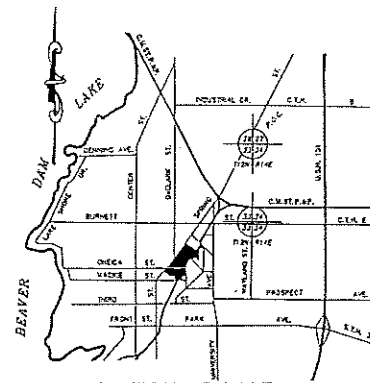
Steven R. Sabatke  
NOTARY PUBLIC, STATE OF WISCONSIN  
MY COMMISSION EXPIRES 1-4-98

There are no objections to this plat with respect to Sects. 235.15, 235.16, 235.20 and 235.21 (1) and (2), Wis. Stats., or by the County Planning Agency.

Certified this 17th day of October, 1995  
Jill Anne A. Stow  
Department of Agriculture, Trade & Consumer Protection



LOCATION MAP  
NOT TO SCALE



VICINITY MAP  
NOT TO SCALE

**TREASURER'S CERTIFICATE**

WE, BEING THE DULY ELECTED, QUALIFIED AND ACTING TREASURERS OF THE CITY OF BEAVER DAM AND COUNTY OF DODGE, DO HEREBY CERTIFY THAT IN ACCORDANCE WITH THE RECORDS IN OUR OFFICES, THERE ARE NO UNREDEEMED TAX SALES AND NO UNPAID TAXES OR SPECIAL ASSESSMENTS AFFECTING ANY OF THE LANDS INCLUDED IN THE PLAT OF "MONARCH DEVELOPMENT".

DATED THIS 20th DAY OF October, 1995. Roy Erickson  
ROY ERICKSON, CITY TREASURER

DATED THIS 20th DAY OF October, 1995. Karen E. Freben  
KAREN FREBER, COUNTY TREASURER

**COMMON COUNCIL RESOLUTION**

RESOLVED, THAT THE PLAT OF MONARCH DEVELOPMENT IN THE CITY OF BEAVER DAM, WISCONSIN, IS HEREBY APPROVED BY THE COMMON COUNCIL OF BEAVER DAM, WISCONSIN.

RESOLUTION NUMBER: 190-95

DATED THIS 20th DAY OF October, 1995. Steven R. Sabatke  
STEVEN R. SABATKE, MAYOR

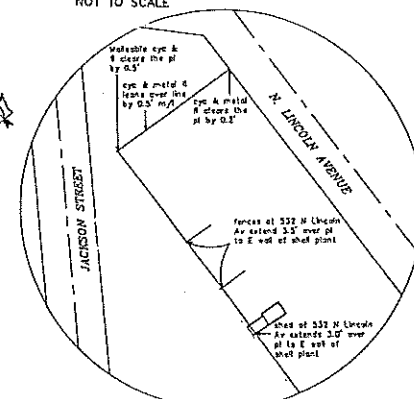
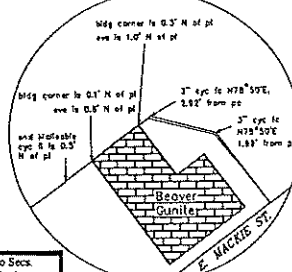
I, HEREBY CERTIFY THAT THE FOREGOING IS A COPY OF A RESOLUTION ADOPTED BY THE COMMON COUNCIL OF THE CITY OF BEAVER DAM, WISCONSIN.

DATED THIS 20th DAY OF October, 1995. Gary H. Dummer  
GARY H. DUMMER, CITY CLERK

DETAIL 2  
NOT TO SCALE

Sketch showing visible encroachments along the surveyed lines of the Middleboro Iron Range Company property and adjoining private property only.

DETAIL 1  
NOT TO SCALE



SHEET 1 OF 2

**MSA** MID-STATE ASSOCIATES, INC.  
Engineers/Architects/Planners/Surveyors  
111 Warren Street Beaver Dam WI 53916 (614-887-4242)  
© 1994 MID-STATE ASSOCIATES

This document is a true and correct reproduction of the record filed in this office.

Certified March 13, 2007  
Chris Planasch  
CHRIS PLANASCH  
Register of Deeds  
Dodge County, Wisconsin

Off. 887/262

Calc A Page 257

# MONARCH DEVELOPMENT

PART OF BLOCK 7, BICKNELL'S ADDITION, LOT 13 OF BLOCK 3, ROSE AND FARRINGTON'S ADDITION, BLOCK 1, MACKIE'S ADDITION, SUBDIVISION OF LOTS 3, 4, AND 13 OF MACKIE'S ADDITION, PART OF OUTLOT 79 AND PART OF OUTLOT 80 IN THE THIRD WARD, ALL OF BLOCK 5, ROSE AND FARRINGTON'S ADDITION, VACATED EAST MAIN STREET, VACATED JACKSON STREET, A PART OF VACATED EAST MAIN STREET, AND PART OF THE FORMER CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD RIGHT OF WAY, ALL BEING IN PART OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4, THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 AND THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4; OF SECTION 33, TOWN 12 NORTH, RANGE 14 EAST, CITY OF BEAVER DAM, DODGE COUNTY, WISCONSIN.

N.E. COR.  
SEC. 33 T.12 N. R. 14 E.  
(3" STEEL CROSS IN CONCRETE, FD.)

N. 1/4 COR.  
SEC. 33 T.12 N. R. 14 E.

ADJUTANT  
GAST LINE OF THE N.E. COR. OF SEC. 33-12-14

There are no objections to this plat with respects to Sects. 236.15, 236.16, 236.20 and 236.21 (1) and (2), Wis. Stats., or by the County Planning Agency.

Certified this 17th day of October, 1995

*Jeanne A. Storm*  
Department of Agriculture, Trade & Consumer Protection

**OWNER AND SUBDIVIDER**  
DODGE COUNTY, A WISCONSIN MUNICIPAL CORPORATION  
C/O CHARLES E. SWAIN, COUNTY BOARD CHAIRMAN  
DOROTHY E. EBERT, COUNTY CLERK  
127 E. OAK STREET  
THIRD FLOOR ADMINISTRATION BLDG.  
JANEAU, WI. 53039-1329

- NOTES:**
1. THIS PLAT IS SUBJECT TO ANY AND ALL ADDITIONAL DEED RESTRICTIONS THAT MAY HAVE BEEN RECORDED PRIOR TO OR CONCURRENT HEREMITH.
  2. THE LOTS OF THIS PLAT ARE SUBJECT TO ANY AND ALL EASEMENTS OR AGREEMENTS, OF RECORD AND/OR FACT, SOME OF WHICH MAY NOT BE DISPECTED HEREIN.
  3. RESIDUAL UTILITY EASEMENTS EXIST WITHIN THE VACATED RAILROAD RIGHT-OF-WAY SHOWN AS RECORDED IN VOLUME 693 OF RECORDS ON PAGES 590-591 AND VACATED EAST MAIN STREET AND VACATED JACKSON STREET PER VOLUME 849 OF RECORDS ON PAGES 13-14.
  4. THIS PLAT INCLUDES LOTS 2 AND 3 OF DODGE COUNTY CERTIFIED SURVEY MAP NO. 2239 AND LOT 1 OF DODGE COUNTY CERTIFIED SURVEY MAP NO. 3634. A LEGAL CONCLUSION WAS MADE THAT THESE CERTIFIED SURVEY MAPS WERE VOID SINCE SECTION 236.34(1) OF THE WISCONSIN STATUTES WERE NOT FOLLOWED IN RELATION TO ALTERING RECORDED PLAT BOUNDARIES AND THEREFOR WERE NOT REFERENCED HEREIN.

FOUND MONUMENTS FALL 1.54 FEET WEST OF EAST R/W OF VACATED JACKSON STREET.

**LEGEND**

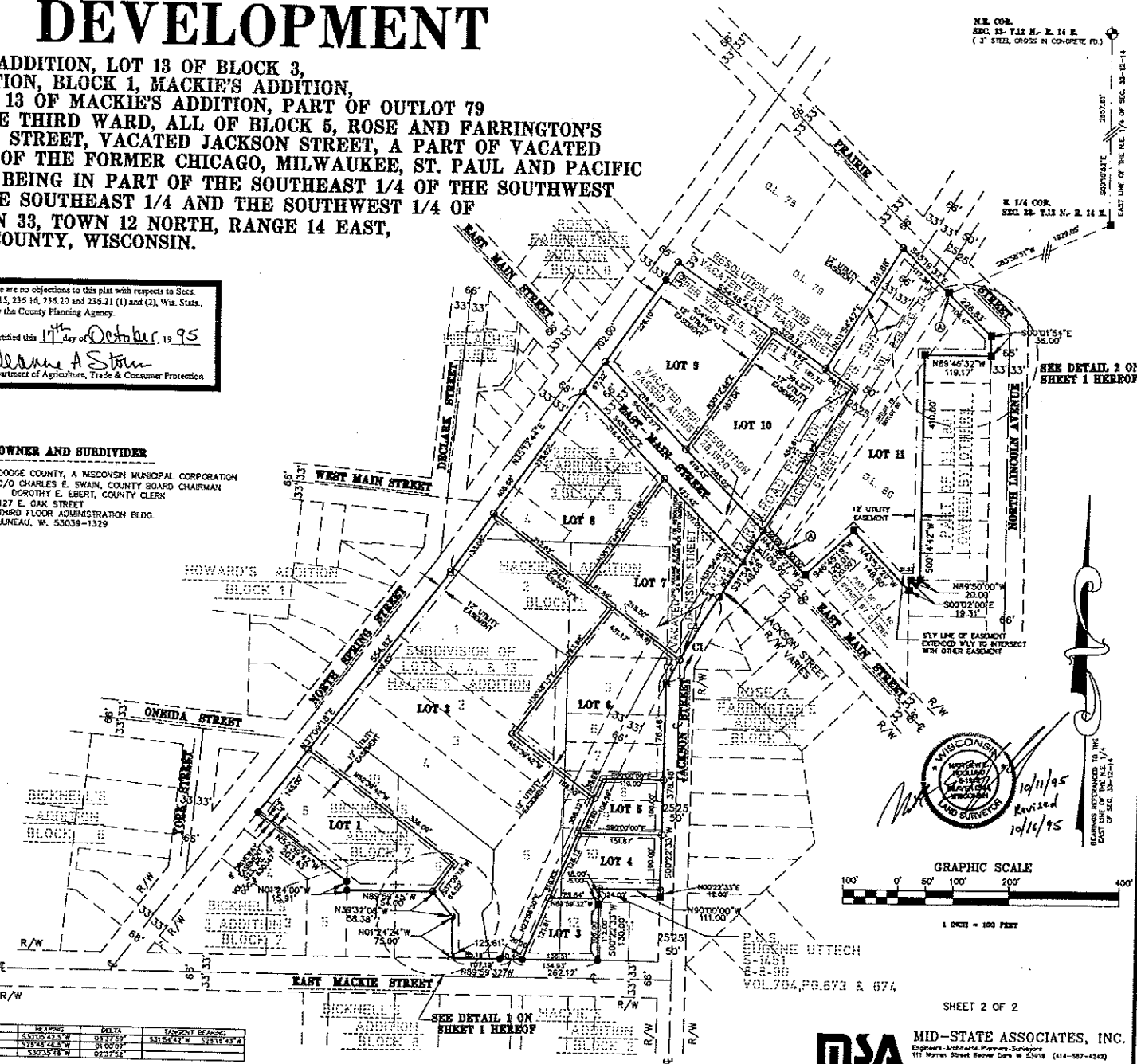
- FD. CUT CROSS IN CONC.
- FD. 5/8" IRON REBAR W/ 125' ALUMINUM CAP
- FD. 5/8" IRON REBAR
- FD. 1" IRON PIPE
- SET 1/4" BY 24" IRON REBAR-4.33 ERS./FT.
- SET 1-1/4" BY 30" IRON REBAR-4.33 ERS./FT.
- ADJUTING SUBDIVISION / R/W LINE
- SECTIONAL SUBDIVISION LINE
- BOUNDARY/LOT LINE
- 12 FOOT UTILITY EASEMENT DESIGNATED ON THIS PLAT - ADJUS BOUNDARY AND R/W LINES - CENTERED 6" EACH SIDE OF INTERIOR LOT LINES

**LOT AREA**

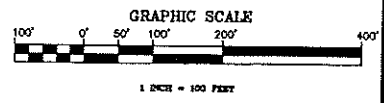
LOT NO.	SQ. FT.	ACRES
1	44,585	1.0236
2	221,308	5.0805
3	12,675	0.2910
4	18,800	0.4316
5	15,084	0.3504
6	60,131	1.3804
7	47,277	1.0853
8	34,983	0.8022
9	52,398	1.2028
10	54,371	1.2482
11	107,946	2.4781
ROADWAY (EAST MAIN ST.)	27,814	0.6385
TOTAL AREA	715,371	16.4226

**CURVE DATA TABLE**

CURVE	LOT	RADIUS	LENGTH	TANGENT	CHORD	BEARING	CHORD BEARING
1	6	2832.00	172.56	89.81	172.56	S80°02'25"W	S11°14'19"W
2	7	2832.00	172.56	89.81	172.56	S80°02'25"W	S11°14'19"W



WISCONSIN  
MID-STATE ASSOCIATES, INC.  
Professional Engineer  
10/11/95  
Revised  
10/16/95



SHEET 2 OF 2

**MSA** MID-STATE ASSOCIATES, INC.  
Engineers, Architects, Planners, Surveyors  
111 Walnut Street, Beaver Dam, WI 53018 (614-387-4242)  
© 1995 MID-STATE ASSOCIATES

off 887/262

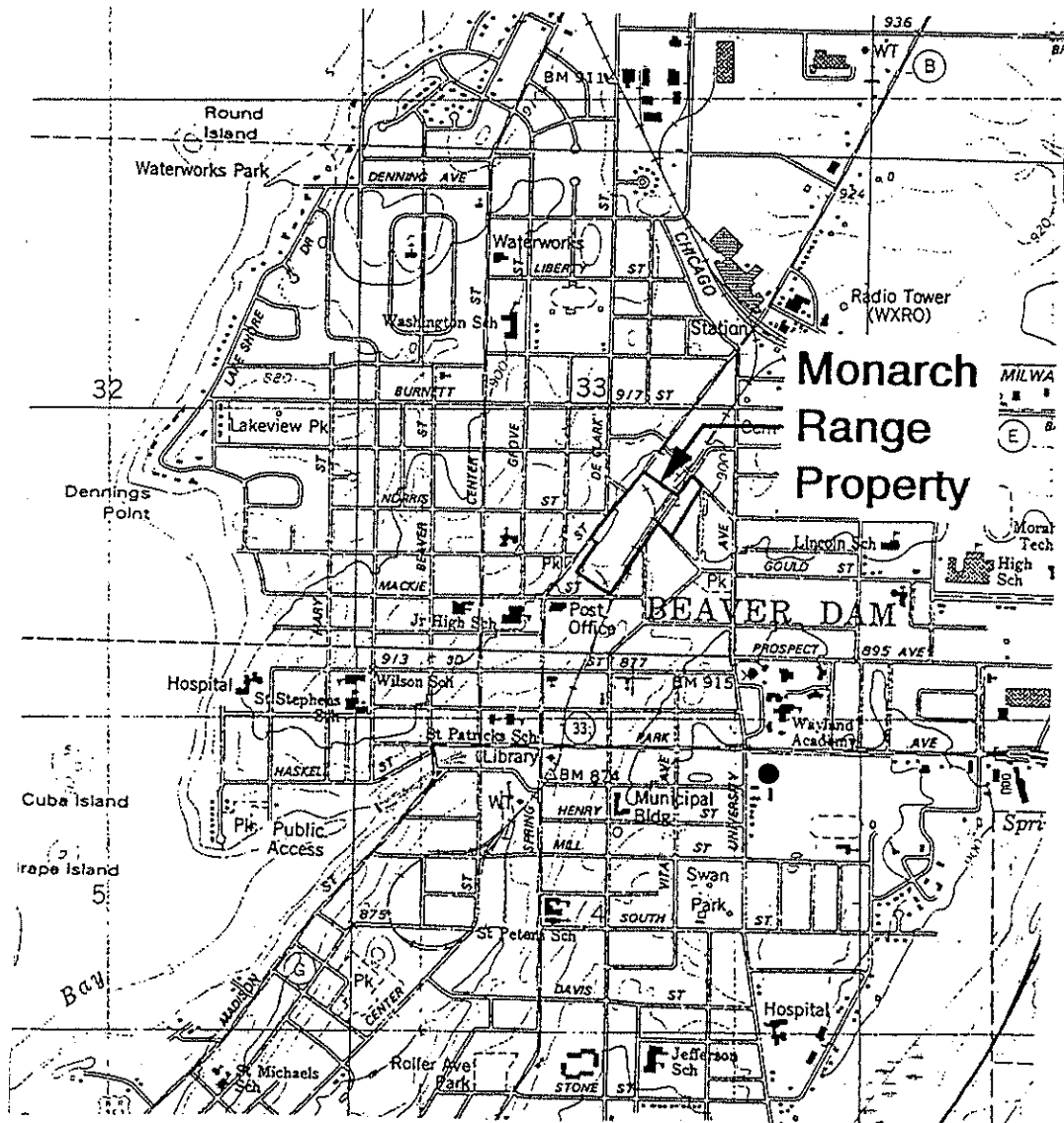
Cab. A Page 257




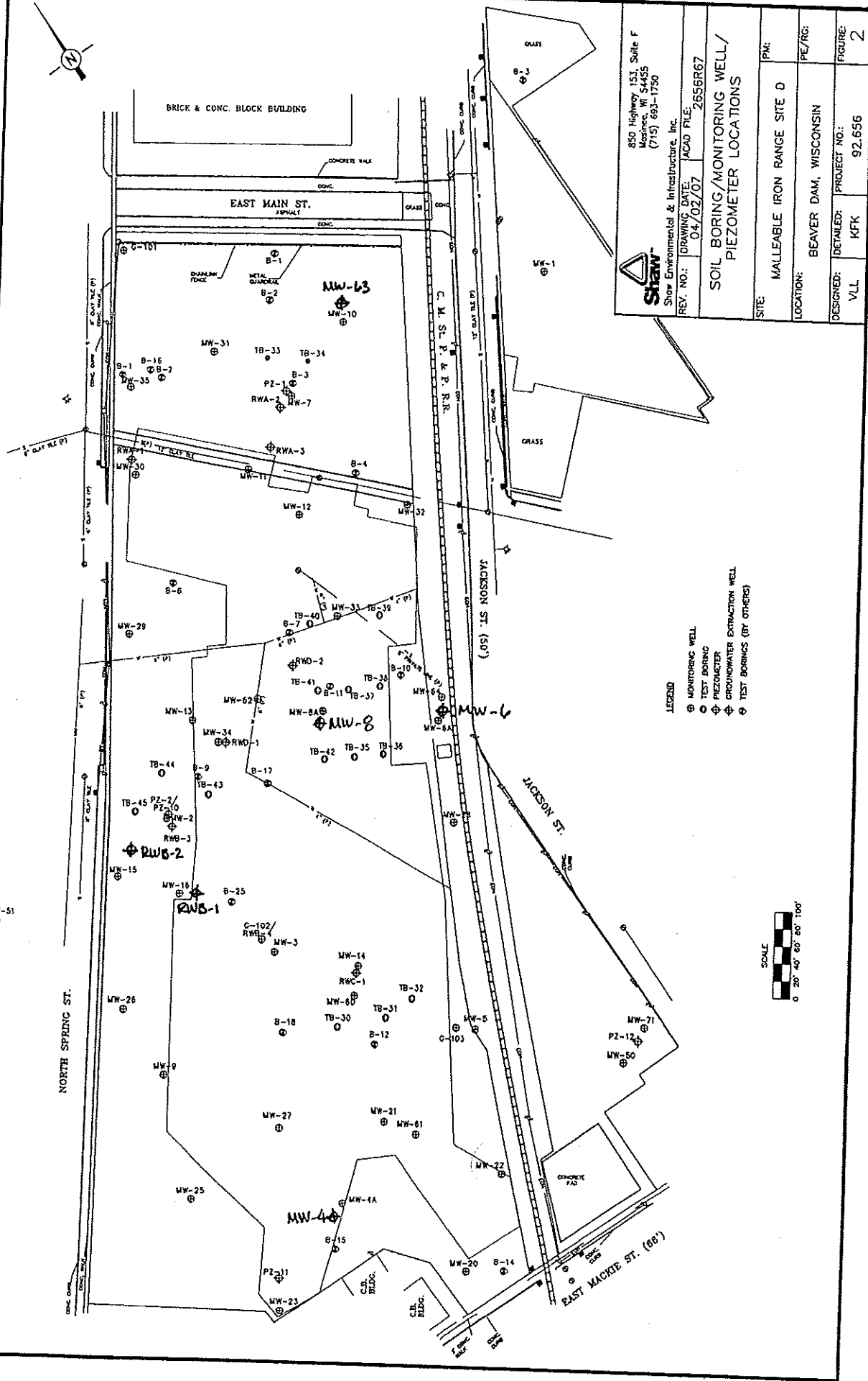
Parcel of Property	Legal Description	Parcel Identification Number	Property Address	Most Recent Deed	Current Owner of Property
Lot 1 of Plat of Monarch Development	Lot 1 of the Plat of Monarch Development located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3334-031	603 N. Spring Street Beaver Dam, WI 53916	Warranty Deed Document No. 1057566	GEN3, LLC, a Wisconsin limited liability company
Lot 2 of Plat of Monarch Development	Lot Two (2) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin, as recorded in Cabinet A of Plats at page 257.	206-1214-3343-000	609 N. Spring Street Beaver Dam, WI 53916	Special Warranty Deed Document No. 1014378	Castle Monarch, LLC, a Wisconsin limited liability company
Lot 3 of Plat of Monarch Development	Lot Three (3) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3343-001	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 4 of Plat of Monarch Development	Lot Four (4) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3343-002	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 5 of Plat of Monarch Development	Lot Five (5) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3343-003	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 6 of Plat of Monarch Development	Lot Six (6) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin, as recorded in Cabinet A of Plats at page 257.	206-1214-3343-004	709 through 719 N. Spring Street Beaver Dam, WI 53916	Special Warranty Deed Document No. 1014378	Castle Monarch, LLC, a Wisconsin limited liability company
Lot 7 of Plat of Monarch Development	Lot Seven (7) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3342-106	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 8 of Plat of Monarch Development	Lot Eight (8) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3342-107	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 9 of Plat of Monarch Development	Lot 9 of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin, as corrected by an Affidavit, dated December 17, 1996, recorded December 17, 1996, in the Office of the Register of Deeds in and for Dodge County, Wisconsin, in Volume 906 of Records, at Pages 416 and 417, both inclusive, as Document No. 837864.	206-1214-3342-108	No address has been assigned	Warranty Deed Document No. 1049442	Dodge Central Credit Union
Lot 10 of Plat of Monarch Development	Lot 10, Plat of Monarch Development, in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3342-109	106 E. Main Street Beaver Dam, WI 53916	Warranty Deed Document No. 873917	Dodge Central Credit Union


Parcel of Property	Legal Description	Parcel Identification Number	Property Address	Most Recent Deed	Current Owner of Property
Lot 1 of Plat of Monarch Development	Lot 1 of the Plat of Monarch Development located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3334-031	603 N. Spring Street Beaver Dam, WI 53916	Warranty Deed Document No. 1057566	GEN3, LLC, a Wisconsin limited liability company
Lot 2 of Plat of Monarch Development	Lot Two (2) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin, as recorded in Cabinet A of Plats at page 257.	206-1214-3343-000	609 N. Spring Street Beaver Dam, WI 53916	Special Warranty Deed Document No. 1014378	Castle Monarch, LLC, a Wisconsin limited liability company
Lot 3 of Plat of Monarch Development	Lot Three (3) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3343-001	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 4 of Plat of Monarch Development	Lot Four (4) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3343-002	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 5 of Plat of Monarch Development	Lot Five (5) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3343-003	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 6 of Plat of Monarch Development	Lot Six (6) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin, as recorded in Cabinet A of Plats at page 257.	206-1214-3343-004	709 through 719 N. Spring Street Beaver Dam, WI 53916	Special Warranty Deed Document No. 1014378	Castle Monarch, LLC, a Wisconsin limited liability company
Lot 7 of Plat of Monarch Development	Lot Seven (7) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3342-106	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 8 of Plat of Monarch Development	Lot Eight (8) of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3342-107	No address has been assigned	Quit Claim Deed Document No. 712394 Document No. 712395 Document No. 812575	Dodge County, Wisconsin
Lot 9 of Plat of Monarch Development	Lot 9 of the Plat of Monarch Development, located in the City of Beaver Dam, Dodge County, Wisconsin, as corrected by an Affidavit, dated December 17, 1996, recorded December 17, 1996, in the Office of the Register of Deeds in and for Dodge County, Wisconsin, in Volume 906 of Records, at Pages 416 and 417, both inclusive, as Document No. 837864.	206-1214-3342-108	No address has been assigned	Warranty Deed Document No. 1049442	Dodge Central Credit Union
Lot 10 of Plat of Monarch Development	Lot 10, Plat of Monarch Development, in the City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3342-109	106 E. Main Street Beaver Dam, WI 53916	Warranty Deed Document No. 873917	Dodge Central Credit Union

Parcel of Property	Legal Description	Parcel Identification Number	Property Address	Most Recent Deed	Current Owner of Property
Lot 11 of plat of "Monarch Development" was divided into two separate lots by a Quit Claim Deed, which was recorded in the Office of the Register of Deeds in and for Dodge County, Wisconsin, as Document No. 911654. After this division into two separate lots by this Quit Claim Deed, the smaller portion of Lot 11 was owned by Weyenberg Warehouse Apartments, LLC, and the larger portion of Lot 11 continued, temporarily, in the ownership of Dodge County, Wisconsin.	A parcel of land being a part of Lot 11 of the Plat of Monarch Development as recorded in Cabinet A of Plats on Page 257 in the Dodge County Register of Deeds Office; and also being a part of the former Chicago, Milwaukee, St. Paul and Pacific Railroad right-of-way; and being located in the City of Beaver Dam, Dodge County, Wisconsin. Said parcel is more particularly described as follows: Commencing at the most Northerly corner of said Lot 11 of Monarch Development; thence S.31° 54' 42" W. along a Westerly line of said Lot 11, 261.88 feet to a point on the Northeasterly line of Lot 10 of said Monarch Development; thence S. 54° 46' 43" E. along the Northeasterly line of said Lot 10, 52.59 feet; thence N. 31° 54' 42" E., parallel with the Westerly right-of-way line of Jackson St., 253.03 feet to the Southwesterly right-of-way line of Prairie St.; thence N. 45° 19' 37" W. along said Southwesterly right-of-way line of Prairie St., 53.83 feet to the point of commencement. Said parcel contains 13,516 sq. ft., more or less (0.31 acres).	206-1214-3342-084	913 N. Spring Street Beaver Dam, WI 53916	Quit Claim Deed Document No. 911654	Weyenberg Warehouse Apartments, LLC
The larger portion of Lot 11 of Plat of Monarch Development was further subdivided into three separate lots by Certified Survey Map No. 5703, which was recorded in the Office of the Register of Deeds in and for Dodge county, Wisconsin, as Document No. 1042122. I will list below, separately, each of these three lots.					
Lot 1 - Part of Lot 11 of Plat of Monarch Development	Lot 1 of Certified Survey Map No. 5703 as recorded in Volume 37 of Certified Surveys on Page 279 as Document No. 1042122; being a part of Lot 11 of Monarch Development and Certified Survey Map No. 5456, City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3342-133	329 Jackson Street Beaver Dam, WI 53916	Warranty Deed Document No. 1073311	Lee W. Bronson
Lot 2 - Part of Lot 11 of Plat of Monarch Development	Parcel shown on Certified Survey Map No. 5456, being a part of Lot 11, Monarch Development, located in part of the Northwest 1/4 of the Southeast 1/4, Section 33, Town 12 North, Range 14 East, City of Beaver Dam, Dodge County, Wisconsin, as recorded in Volume 35 of Surveys at page 14 as Document No. 1013666.	206-1214-3342-134	No address has been assigned	Warranty Deed Document No. 1023640	Westfall Masonry, L.L.C., a Wisconsin limited liability company
Lot 3 - Part of Lot 11 of Plat of Monarch Development	Lot 3 of Certified Survey Map No. 5703 as recorded in Volume 37 of Certified Surveys on Page 279 as Document No. 1042122; being a part of Lot 11 of Monarch Development and Certified Survey Map No. 5456, City of Beaver Dam, Dodge County, Wisconsin.	206-1214-3342-135	210 E. Main Street Beaver Dam, WI 53916	Warranty Deed Document No. 1045579	Jesse M. Dretske, a single person

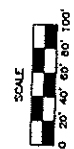


		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		Show Environmental & Infrastructure, Inc.	
REV. NO.:	DRAWING DATE:	ACAD FILE:	
	04/02/07	2656R67	
<b>SITE LOCATION MAP</b>			
SITE:		PM:	
MALLEABLE IRON RANGE SITE D			
LOCATION:		PE/RC:	
BEAVER DAM, WISCONSIN			
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
VLL	KFK	92.656	1



850 Highway 153, Suite F Marshfield, WI 54455 (715) 693-1750  Show Environmental & Infrastructure, Inc.		
REV. NO.:	DRAWING DATE:	ACAD FILE:
	04/02/07	2656R67
<b>SOIL BORING/MONITORING WELL/          PIEZOMETER LOCATIONS</b>		
SITE:	MALLEABLE IRON RANGE SITE D	
LOCATION:	BEAVER DAM, WISCONSIN	
DESIGNED BY:	VLL	KFK
PROJECT NO.:	92.656	
FIGURE:	2	

- LEGEND
- ⊕ MONITORING WELL
  - ⊙ TEST BORING
  - ⊕ PIEZOMETER
  - ⊕ CHRONOWATER EXTRACTION WELL
  - ⊕ TEST BORINGS (BY OTHERS)



**Table 2 (Continued)**  
**Site Investigation Soil Sample Laboratory Analytical Results**  
**(Samples collected by Shaw Environmental)**  
**Malleable Iron Range Site D**  
**Beaver Dam, Wisconsin**

Sample Location	Sample Depth	Sample Date	GRO (ppm)	DRO (ppm)	Benzene (ppb)	Ethylbenzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Lead (ppm)	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Mercury (ppm)	Selenium (ppm)	Silver (ppm)
MW-20	2.5-5'	11/16/92	<10	<10	<50	<50	19	<50	2.8	NA	NA	NA	NA	NA	NA	NA
	5-7.5'	11/16/92	<10	<10	<50	<50	23	<50	3.8	NA	NA	NA	NA	NA	NA	NA
MW-21	5-7.5'	11/16/92	<10	<10	<50	<50	14	<50	0.9	NA	NA	NA	NA	NA	NA	NA
	12.5-15'	11/16/92	<10	<10	<50	2	40	15	2.8	NA	NA	NA	NA	NA	NA	NA
MW-22	10-12.5'	11/16/92	<10	<10	<50	8	61	24	4.5	NA	NA	NA	NA	NA	NA	NA
	12.5-15'	11/16/92	<10	<10	<50	<50	12	4	5.6	NA	NA	NA	NA	NA	NA	NA
MW-23	2.5-5'	11/16/92	<10	<10	<50	<50	25	<50	1.2	NA	NA	NA	NA	NA	NA	NA
	10-12.5'	11/16/92	18	<10	<50	7	69	23	4.8	NA	NA	NA	NA	NA	NA	NA
MW-24	MONITORING WELL WAS NEVER INSTALLED															
MW-25	12.5-15'	11/16/92	<50	<50	<50	<50	19	<50	2.8	NA	NA	NA	NA	NA	NA	NA
	18.5-20'	11/16/92	<50	<50	<50	4	47	14	3.7	NA	NA	NA	NA	NA	NA	NA
MW-26	5-7.5'	11/17/92	<50	<50	<50	<50	50	34	1.2	NA	NA	NA	NA	NA	NA	NA
	7.5-10'	11/17/92	<50	<50	<50	<50	56	25	1.4	NA	NA	NA	NA	NA	NA	NA
MW-27	2.5-5'	11/18/92	<50	<50	<50	<50	97	<50	5.9	NA	NA	NA	NA	NA	NA	NA
	5-7.5'	11/18/92	<50	<50	<50	<50	<50	<50	5.3	NA	NA	NA	NA	NA	NA	NA
MW-28	0-2.5'	11/17/92	<50	<50	<50	<50	17	<50	6.0	NA	NA	NA	NA	NA	NA	NA
	5-7.5'	11/17/92	<50	<50	<50	<50	23	<50	2.5	NA	NA	NA	NA	NA	NA	NA
MW-29	2.5-5'	11/17/92	<50	<50	<50	<50	9	<50	5.2	NA	NA	NA	NA	NA	NA	NA
	7.5-10'	11/17/92	<50	<50	<50	5	42	19	0.8	NA	NA	NA	NA	NA	NA	NA
MW-30	13-15'	11/17/92	44	55	<50	9	62	20	1.6	NA	NA	NA	NA	NA	NA	NA
	18-20'	11/17/92	116	27	9	8	67	<50	1.5	NA	NA	NA	NA	NA	NA	NA
MW-31	2.5-5'	11/18/92	NA	<50	<50	145	1,224	<50	4.5	NA	NA	NA	NA	NA	NA	NA
	7.5-10'	11/18/92	NA	<50	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-32	2.5-5'	11/17/92	<50	<50	<50	<50	11	<50	6.6	3.4	69	<1.0	7	0.04	<0.12	<1.0
	13.5-15'	11/17/92	<50	<50	<50	10	42	25	2.3	NA	NA	NA	NA	NA	NA	NA
MW-33	13.5-15'	11/19/92	<50	<50	<50	<50	<50	<50	6.0	5.5	97	<1.0	14	0.04	<0.12	<1.0
	18.5-20'	11/19/92	<50	<50	180	<50	326	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-34	13.5-15'	11/19/92	<50	<50	<50	<50	<50	<50	3.2	NA	NA	NA	NA	NA	NA	NA
	18.5-20'	11/19/92	<50	<50	<50	<50	<50	<50	4.2	NA	NA	NA	NA	NA	NA	NA
MW-35	2.5-5'	11/18/92	<50	<50	<50	<50	24	11	0.8	NA	NA	NA	NA	NA	NA	NA
	5-7.5'	11/18/92	<50	<50	<50	<50	31	3	3.5	NA	NA	NA	NA	NA	NA	NA
MW-50	8.5-10	08/12/93	<50	<50	<50	<50	<50	<50	2.3	NA	NA	NA	NA	NA	NA	NA
	13.5-15	08/12/93	<50	<50	<50	<50	<50	<50	5.6	NA	NA	NA	NA	NA	NA	NA
MW-51	6-7.5	08/12/93	<50	<50	<50	<50	<50	<50	4.1	NA	NA	NA	NA	NA	NA	NA
	18.5-20	08/12/93	<50	<50	<50	<50	<50	<50	3.8	NA	NA	NA	NA	NA	NA	NA
MW-60	3-5'	01/28/97	NA	NA	<81	<81	<81	<81	NA	NA	NA	NA	NA	NA	NA	NA
	5-7'	01/28/97	NA	NA	<25	<25	<25	<50	NA	NA	NA	NA	NA	NA	NA	NA
MW-71	NO SAMPLES COLLECTED															
PZ-10	8.5-10	12/15/92	NA	NA	NA	NA	NA	NA	10	NA	NA	NA	NA	NA	NA	NA
PZ-12	NO SAMPLES COLLECTED															
NR720 Standards/TCLP Limit*			100	100	5.5	2,900	1,500	4,100	50	5	100	1	5	0.02	1	5
NR 746.06 Table 1 Values			--	--	8,500	4,600	38,000	42,000	--	--	--	--	--	--	--	--
NR 746.06 Table 2 Values			--	--	1,100	--	--	--	--	--	--	--	--	--	--	--

NOTES:

NA: Not available

NA: Not available

GRO: Gasoline range organics

DRO: Diesel range organics

\* A TCLP test typically involves a twenty-fold dilution of the sample with respect to the procedures utilized. Therefore, it is reasonable to assume that only sample concentrations greater than 20 times the TCLP limit are likely to exceed the regulated standard.

Samples collected for metals analysis were all obtained from 0-2.5 feet

**Table 2**  
**Site Investigation Soil Sample Laboratory Analytical Results**  
**(Samples collected by Shaw Environmental)**  
**Malleable Iron Range Site D**  
**Beaver Dam, Wisconsin**

Sample Location	Sample Depth	Sample Date	GRO (ppm)	DRO (ppm)	Benzene (ppb)	Ethylbenzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Lead (ppm)	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Mercury (ppm)	Selenium (ppm)	Silver (ppm)
TB-30	7.5-10'	11/18/92	<10	<10	<50	<50	<50	<50	-	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	11/18/92	<10	<10	<50	<50	<50	<50	4.1	NA	NA	NA	NA	NA	NA	NA
TB-31	7.5-10'	11/19/92	<10	<10	<50	<50	<50	<50	2.7	NA	NA	NA	NA	NA	NA	NA
	10-12.5'	11/19/92	<10	<10	<50	<50	240	<50	4.3	NA	NA	NA	NA	NA	NA	NA
TB-32	8.5-10'	11/19/92	<10	<10	<50	<50	<50	<50	4.4	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	11/19/92	<10	<10	<50	<50	<50	<50	3.0	NA	NA	NA	NA	NA	NA	NA
TB-33	8.5-10'	11/19/92	<10	<10	139	<50	168	<50	3.0	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	11/19/92	<10	<10	<50	<50	<50	<50	3.6	NA	NA	NA	NA	NA	NA	NA
TB-34	13.5-15'	11/19/92	<10	<10	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
	18.5-20'	11/19/92	<10	295	125	<50	270	<50	0.9	NA	NA	NA	NA	NA	NA	NA
TB-35	11-12.5'	11/19/92	<10	<10	<50	<50	<50	<50	2.2	2.7	110	<1.0	10	0.01	<0.12	<1.0
	13.5-15'	11/19/92	<10	<10	<50	<50	<50	<50	4.0	NA	NA	NA	NA	NA	NA	NA
TB-36	2.5-5'	11/19/92	<10	<10	<50	<50	<50	<50	5.2	5.2	110	<1.0	14	0.04	<0.12	<1.0
	5-7.5'	11/19/92	<10	<10	279	224	1,037	793	11.6	NA	NA	NA	NA	NA	NA	NA
TB-37	11-12.5'	11/19/92	83	19	<50	<50	<50	<50	2.3	3.5	85	<1.0	11	0.04	<0.12	<1.0
	13.5-15'	11/19/92	<10	<10	<50	<50	327	<50	3.6	NA	NA	NA	NA	NA	NA	NA
TB-38	7.5-10'	11/19/92	<10	<10	<50	<50	474	<50	18.8	2.7	110	<1.0	7	0.02	<0.12	<1.0
	12.5-15'	11/19/92	<10	<10	<50	<50	<50	<50	2.9	NA	NA	NA	NA	NA	NA	NA
TB-39	11-12.5'	11/19/92	<10	<10	<50	<50	<50	<50	1.7	3.9	95	<1.0	5	0.02	<0.12	<1.0
	12.5-15'	11/19/92	<10	<10	<50	158	456	619	2.5	NA	NA	NA	NA	NA	NA	NA
TB-40	5-7.5'	11/19/92	<10	528	<50	<50	<50	<50	1.2	4.4	87	<1.0	12	0.03	<0.12	<1.0
	12.5-15'	11/19/92	84	1,651	<50	<50	<50	<50	2.6	NA	NA	NA	NA	NA	NA	NA
TB-41	7.5-10'	11/19/92	511	3,715	<50	251	<50	<50	2.5	4.4	74	<1.0	10	0.03	<0.12	<1.0
	10-12.5'	11/19/92	879	5,805	<50	546	<50	611	2.6	NA	NA	NA	NA	NA	NA	NA
TB-42	6-7.5'	11/19/92	<10	88	<50	<50	<50	<50	NA	2.5	100	<1.0	5	<0.01	<0.12	<1.0
	8.5-10'	11/19/92	<10	<10	<50	<50	<50	<50	2.3	NA	NA	NA	NA	NA	NA	NA
TB-43	8.5-10'	11/19/92	<10	<10	115	<50	229	<50	2.2	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	11/19/92	<10	<10	<50	<50	<50	<50	2.8	NA	NA	NA	NA	NA	NA	NA
TB-44	6-7.5'	11/19/92	<10	<10	<50	<50	<50	<50	1.0	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	11/19/92	<10	<10	<50	<50	<50	<50	2.9	NA	NA	NA	NA	NA	NA	NA
TB-45	6-7.5'	11/19/92	<10	37	<50	<50	<50	<50	6.0	NA	NA	NA	NA	NA	NA	NA
	8.5-10'	11/19/92	<10	<10	<50	<50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA
NR720 Standards/TCLP Limit*			100	100	5.5	2,900	1,500	4,100	50	5	100	1	5	0.02	1	5
NR 746.06 Table 1 Values			--	--	8,500	4,600	38,000	42,000	--	--	--	--	--	--	--	--
NR 746.06 Table 2 Values			--	--	1,100	--	--	--	--	--	--	--	--	--	--	--

**NOTES:**

**Bold** indicates value exceeds its respective standard

GRO: Gasoline range organics

NA: Not available

DRO: Diesel range organics

\* A TCLP test typically involves a twenty-fold dilution of the sample with respect to the procedures utilized. Therefore, it is reasonable to assume that only sample concentrations greater than 20 times the TCLP limit are likely to exceed the regulated standard. Samples collected for metals analysis were all obtained from 0-2.5 feet

**Table 1 (Continued)**  
**Site Investigation Soil Sample Laboratory Analytical Results**  
**(Samples collected by EEA and KEE)**  
**Malleable Iron Range Site D**  
**Beaver Dam, Wisconsin**

Sample Location	Sample Depth	Sample Date	GRO (ppm)	DRO (ppm)	Benzene (ppb)	Ethylbenzene (ppb)	Toluene (ppb)	Xylenes (ppb)	TCE (ppb)	Lead (ppm)	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Mercury (ppm)	Selenium (ppm)	Silver (ppm)	
MW1	7.5-10'	7/22/91	NA	NA	<1.2	<1.2	<1.2	<1.2	<1.2	2.9	14.5	121	0.091	17.1	<0.14	0.025	0.306	
MW2	7.5-10'	7/22/91	1,060	NA	<1,100	91,000	170,000	240,000	<1,100	12,400	NA	NA	NA	NA	NA	NA	NA	
MW3	3.5-5'	7/23/91	NA	NA	NA	NA	NA	NA	NA	19.6	10.3	155	0.426	23.6	0.215	0.131	0.17	
	7.5-10'	7/23/91	<4.5	16	<1.1	<1.1	2.3	2.2	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	
MW4	3.5-5'	7/25/91	NA	NA	<1.1	<1.1	2.3	<1.1	11	3.0	4.01	94.6	<0.057	16.9	<0.123	0.023	1.78	
MW5	5-7.5'	7/23/91	NA	NA	<1.1	<1.1	3.4	2.2	6.9	2.7	3.86	109	0.058	13.4	<0.120	0.017	0.117	
MW6	5-7.5'	7/24/91	NA	NA	<1.2	<1.2	<1.2	<1.2	<1.1	66.7	9.43	150	1.76	29.9	1.46	0.146	1.72	
MW7	NA	7/24/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW8	1-2.5'	8/22/91	NA	NA	NA	NA	NA	NA	NA	9.5	1.19	89.3	<0.118	32	0.069	0.065	1.31	
	7.5-10'	8/22/91	NA	765	16	<11	<11	390	<11	NA	NA	NA	NA	NA	NA	NA	NA	
MW9	1-2.5'	8/22/91	NA	NA	NA	NA	NA	NA	NA	2.3	0.4	62.6	<0.113	19.2	0.064	0.022	2.26	
	13.5-15'	8/22/91	<5.2	<10.4	<10	<10	20	<20	<10	NA	NA	NA	NA	NA	NA	NA	NA	
MW10	1-3'	3/9/92	<6.3	<6.3	<13	<13	<13	<13	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3.5-5.5'	3/9/92	NA	NA	NA	NA	NA	NA	NA	7.8	NA	NA	NA	NA	NA	NA	NA	
MW11	3.5-5.5'	3/9/92	<5.8	<5.8	<12	<12	<12	<12	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6-8'	3/9/92	NA	NA	NA	NA	NA	NA	NA	2.3	NA	NA	NA	NA	NA	NA	NA	
MW12	6-8'	3/10/92	<5.7	<5.7	<11	<11	<11	<11	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8.5-10'	3/10/92	NA	NA	NA	NA	NA	NA	NA	2.1	NA	NA	NA	NA	NA	NA	NA	
MW13	6-8'	3/10/92	<5.7	<5.7	<11	<11	<11	<11	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	8.5-10'	3/10/92	NA	NA	NA	NA	NA	NA	NA	2.1	NA	NA	NA	NA	NA	NA	NA	
MW14	16-17.5'	3/11/92	12	88	<14	<14	<14	<14	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	13.5-15'	3/11/92	NA	NA	NA	NA	NA	NA	NA	2.7	NA	NA	NA	NA	NA	NA	NA	
MW15	8.5-10.1'	3/12/92	<5.6	<5.6	<11	<11	<11	<11	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11-13'	3/12/92	NA	NA	NA	NA	NA	NA	NA	3.3	NA	NA	NA	NA	NA	NA	NA	
MW16	11-13'	3/12/92	<5.6	<5.6	<11	<11	<11	<11	NA	2.1	NA	NA	NA	NA	NA	NA	NA	
P1	8.5-10.1'	3/11/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
P2	8.5-10.1'	3/11/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NR720 Standards/TCLP Limit*			100	100	5.5	2,900	1,500	4,100	--	50	5	100	1	5	0.02	1	5	
NR 746.06 Table 1 Values			--	--	8,500	4,600	38,000	42,000	--	--	--	--	--	--	--	--	--	--
NR 746.06 Table 2 Values			--	--	1,100	--	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:

Bold indicates value exceeds NR 720 standard

NA: Not available

GRO: Gasoline range organics

DRO: Diesel range organics

\* A TCLP test typically involves a twenty-fold dilution of the sample with respect to the procedures utilized. Therefore, it is reasonable to assume that only sample concentrations greater than 20 times the TCLP limit are likely to exceed the regulated standard.



**Table 1**  
**Site Investigation Soil Sample Laboratory Analytical Results**  
**(Samples collected by EEA and KEE)**  
**Malleable Iron Range Site D**  
**Beaver Dam, Wisconsin**

Sample Location	Sample Depth	Sample Date	GRO (ppm)	DRO (ppm)	Benzene (ppb)	Ethylbenzene (ppb)	Toluene (ppb)	Xylenes (ppb)	TCE (ppb)	Lead (ppm)	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Mercury (ppm)	Selenium (ppm)	Silver (ppm)
B1	1-3.5'	7/30/91	NA	NA	<1.3	1.4	6.8	5.6	<1.3	NA	NA	NA	NA	NA	NA	NA	NA
	5-7.5'	7/30/91	NA	NA	NA	NA	NA	NA	NA	7.4	12.3	113	<0.124	33.4	<0.114	0.013	0.805
B2	3.5-5'	7/29/91	NA	98	<1.0	<1.0	1.2	<3.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
B3	7.5-10'	7/29/91	<b>261</b>	NA	<7.0	<7.0	<7.0	<21	<7.0	NA	NA	NA	NA	NA	NA	NA	NA
B4	1-3.5'	7/29/91	NA	NA	NA	NA	NA	NA	NA	1.3	13.1	157	<0.130	34.5	<0.117	0.012	1.24
	7.5-10'	7/29/91	NA	NA	<7.0	<7.0	<7.0	<28	<7.0	NA	NA	NA	NA	NA	NA	NA	NA
B5	BORING WAS NEVER INSTALLED																
B6	5-7.5'	7/29/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	7/29/91	NA	NA	<7.0	<7.0	<7.0	<28	<7.0	1.3	NA	NA	NA	NA	NA	NA	NA
B7	5-7.5'	7/26/91	NA	NA	NA	NA	NA	NA	NA	-	NA	NA	NA	NA	NA	NA	NA
B8	BORING WAS NEVER INSTALLED																
B9	3.5-5'	7/29/91	NA	NA	NA	NA	NA	NA	NA	7.9	10.3	175	<0.131	33.4	<0.136	0.026	1.44
	17.5-20'	7/29/91	NA	NA	<130	390	140	740	<130	NA	NA	NA	NA	NA	NA	NA	NA
B10	5-7.5'	7/29/91	NA	NA	<7.0	<7.0	<7.0	<28	<7.0	<1.16	7	120	<0.116	18.7	<0.106	0.018	2.1
B11	1-3.5'	7/29/91	NA	NA	NA	NA	NA	NA	NA	624	8.8	1,170	4.7	30.5	0.122	0.398	1.52
	5-7.5'	7/29/91	NA	NA	210	160	<7.0	1,170	<7.0	NA	NA	NA	NA	NA	NA	NA	NA
B12	13.5-15'	7/26/91	NA	NA	<7.0	<7.0	<7.0	<28	<7.0	1.8	5.38	113	<0.117	14.6	<0.116	0.018	3.51
B13	BORING WAS NEVER INSTALLED																
B14	3.5-5'	7/26/91	NA	NA	NA	NA	NA	NA	NA	17.6	5.1	45.3	<0.114	19.9	<0.108	0.102	0.793
	5-7.5'	7/26/91	NA	NA	<7.0	<7.0	<7.0	<28	<7.0	NA	NA	NA	NA	NA	NA	NA	NA
B15	5-7.5'	8/21/91	NA	NA	<1.0	<13	<13	<26	<130	NA	NA	NA	NA	NA	NA	NA	NA
B16	13.5-15'	8/21/91	NA	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B17	1-3.5'	8/22/91	NA	NA	NA	NA	NA	NA	NA	7.8	1.13	133	<0.104	28.2	0.068	0.052	1.1
	11-13.5'	8/22/91	NA	<11.2	<11	<11	20	<22	<11	NA	NA	NA	NA	NA	NA	NA	NA
B18	3.5-5'	8/23/91	NA	NA	NA	NA	NA	NA	NA	3.1	0.679	93	<0.124	22.9	<0.044	0.037	0.803
	11-13.5'	8/23/91	NA	<11.1	<11	<11	19	<22	<11	NA	NA	NA	NA	NA	NA	NA	NA
B19	8.5-10.'	3/12/92	<6.4	<6.4	<13	<13	<13	<26	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11-12.5'	3/12/92	NA	NA	NA	NA	NA	NA	NA	4.6	NA	NA	NA	NA	NA	NA	NA
B20	11-12.5'	3/12/92	<5.9	<5.9	<12	<12	<12	<12	NA	NA	NA	NA	NA	NA	NA	NA	NA
	13.5-14'	3/12/92	NA	NA	NA	NA	NA	NA	NA	3.2	NA	NA	NA	NA	NA	NA	NA
B21	11-12.5'	3/12/92	<5.7	<5.7	<11	<11	<11	<11	NA	NA	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	3/12/92	NA	NA	NA	NA	NA	NA	NA	2.5	NA	NA	NA	NA	NA	NA	NA
B22	11-12.5'	3/12/92	<5.3	<5.3	<11	<11	<11	<11	NA	NA	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	3/12/92	NA	NA	NA	NA	NA	NA	NA	5.2	NA	NA	NA	NA	NA	NA	NA
B23	13.5-15'	3/12/92	<5.6	<5.6	<11	<11	<11	<11	NA	NA	NA	NA	NA	NA	NA	NA	NA
	16-17.5'	3/12/92	NA	NA	NA	NA	NA	NA	NA	3.1	NA	NA	NA	NA	NA	NA	NA
B24	8.5-10.'	3/13/92	<5.7	<5.7	<11	<11	<11	<11	NA	2.1	NA	NA	NA	NA	NA	NA	NA
	11-12.5'	3/13/92	NA	NA	NA	NA	NA	NA	NA	2.7	NA	NA	NA	NA	NA	NA	NA
B25	11-12.5'	3/13/92	<5.6	<5.6	<11	<11	<11	<11	NA	NA	NA	NA	NA	NA	NA	NA	NA
	13.5-15'	3/13/92	NA	NA	NA	NA	NA	NA	NA	2.3	NA	NA	NA	NA	NA	NA	NA
NR720 Standards/TCLP Limit*			100	100	5.5	2,900	1,500	4,100	-	50	5	100	1	5	0.02	1	5
NR 746.06 Table 1 Values			--	--	8,500	4,600	38,000	42,000	--	--	--	--	--	--	--	--	--
NR 746.06 Table 2 Values			--	--	1,100	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:

Bold indicates value exceeds NR 720 standard  
 NA: Not available

GRO: Gasoline range organics  
 DRO: Diesel range organics

\* A TCLP test typically involves a twenty-fold dilution of the sample with respect to the procedures utilized. Therefore, it is reasonable to assume that only sample concentrations greater than 20 times the TCLP limit are likely to exceed the regulated standard.

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 RWD-2  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<i>0.4</i>	<0.38	1.3	<1.1	<0.14	<0.65	<0.35	<0.63	<0.63	8.9	2.5	2.2	<0.18	<1.2	0.39	<0.20	0.29	<0.22	<0.35	NA	
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	<i>0.28</i>	<0.25	0.15	<0.25	<0.25	<0.20	0.19	1.9	1.9	1.9	0.61	2.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NA	
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	0.46	<0.38	<0.39	<1.1	<0.14	0.41	0.51	1.5	1.5	4.4	2.1	8.6	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	NA	
08/02/99	0.34	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.37	1.6	1.6	<0.79	4.9	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA	
11/17/99	<i>0.45</i>	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	<i>0.62</i>	2.8	1.4	6.2	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA	
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.50	<0.5	<5.0	<5.0	1.24	<0.140	<5.0	<0.60	<0.50	<5.0	<5.0	<5.0	NA	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	2.9	4.5	2.9	3.9	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	NA	
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	1.8	8.6	8.1	19	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	NA	
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<i>0.64</i>	<0.83	<0.89	0.41	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<i>0.91</i>	<0.83	<0.89	0.73	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<0.48	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	<i>0.51</i>	1.7	1.1	1.3	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

**Table 8**  
**Postremedial Groundwater Sample Laboratory Analytical Results**  
**RWD-1**  
**Malleable Iron Range Site D**  
**Beaver Dam, Wisconsin**

Date	Benzene	Ethyl-benzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<0.31	<0.38	<0.71	<1.1	<0.14	<0.65	<0.35	<0.63	9.8	2.0	0.55	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	NA	
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	5.6	0.75	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NA
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	12	2.1	0.6	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	NA	
08/02/99	0.62	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	1.6	1.6	<0.79	3.2	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA	
11/17/99	0.27	<0.32	<0.27	<0.67	<0.32	0.56	<0.35	<0.43	3.3	1.3	<0.79	0.71	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA	
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.00	<0.500	2.1	<5.0	<5.0	<0.170	<0.140	<5.0	<5.00	<0.500	<5.00	<5.00	<5.00	NA	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	4.48	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	NA	
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.53	<0.68	<0.25	4.0	<1.0	0.32	<0.23	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	NA	
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	16	5.6	2.7	6.1	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.29	NA	
05/14/03	0.48	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	0.98	<0.83	<0.89	0.29	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	0.82	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	1.2	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	11	1.7	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:  
All results are reported in ppb  
**Bold** indicates value equals or exceeds the NR 140 ES  
*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard  
PAL: Preventive action limit  
PCE: Tetrachloroethene

TCE: Trichloroethene  
DCE: Dichloroethene  
NS: Not sampled

MTBE: Methyl-t-butyl-ether  
TMB: Trimethylbenzenes  
NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 RWC-1  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<0.62	<0.76	1.4	<2.2	<0.28	<1.30	<0.70	<1.3	<1.3	37	37	24	<0.36	<2.4	<0.76	<0.40	<0.56	<0.44	<0.70	NA	
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	0.6	<0.50	<0.20	<0.50	<0.50	0.28	1.4	<0.50	19	18	13	210	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	
04/21/98	0.5	<0.25	0.13	<0.25	<0.25	<0.20	0.25	<0.25	67	96	48	120	<0.25	<0.25	<0.25	<0.25	<0.25	0.65	1.1	NA	
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	<1.6	<1.9	<2.0	<5.5	<0.70	<3.2	4.2	<3.2	13	14	9.9	140	<0.90	<6.0	<1.9	<1.0	<1.4	<1.1	<1.8	NA	
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	12	47	49	100	<0.35	<0.54	<0.61	<0.30	<0.30	0.54	0.88	NA	
11/17/99	0.6	<0.64	<0.54	<1.34	<0.64	<0.98	<0.70	<0.86	18	20	30	340	<0.70	<1.1	<1.2	<0.60	<0.60	0.94	1.6	NA	
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	NS	NS	0.84	<5.0	<5.0	12.6	<0.140	<5.0	NS	NS	NS	NS	NS	NA	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.50	2.88	10.9	16.6	158	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	NA	
05/23/01	<1.3	<0.6	<1.1	<3.7	<2.7	<2.5	<3.4	<1.3	6.2	14	17	47	<1.6	<1.2	<1.2	<1.1	<1.5	<1.3	<1.5	NA	
06/13/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	
05/14/03	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	NA	
06/16/04	<0.41	0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	53	79	61	22	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	1.6	<0.45	<0.48	1.2	3.5	16	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	1.3	<0.45	0.66	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 RWB-3  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethyl-benzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<b>8.4</b>	3.1	7.8	14	<0.14	7.13	1.4	<0.63	4.8	1.3	0.52	<0.46	0.22	<1.2	<0.38	<0.20	0.53	<0.22	<0.35	NA	
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	<b>2,500</b>	<b>600</b>	<b>1,100</b>	<b>2,000</b>	<2.5	<b>545</b>	<b>81</b>	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	NA
04/21/98	<b>420</b>	<b>150</b>	<b>210</b>	<b>550</b>	<1.2	<b>230</b>	<b>41</b>	<1.2	<b>13</b>	<b>1.8</b>	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	NA
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	<b>1,700</b>	<b>980</b>	<b>1,200</b>	<b>4,000</b>	<3.5	<b>1,110</b>	<b>180</b>	<16	<12	<5.8	<9.8	<12	<4.5	<30	<9.5	<5.0	<7.0	<5.5	<8.8	NA	
08/02/99	<b>1,700</b>	<b>540</b>	<b>500</b>	<b>1,450</b>	<3.2	<b>525</b>	<b>92</b>	<4.3	<b>7.0</b>	<2.8	<7.9	<2.0	<3.5	<5.4	<6.1	<3.0	<3.0	<3.4	<3.0	NA	
11/17/99	<b>1,100</b>	<b>390</b>	<b>290</b>	<b>980</b>	<3.2	<b>279</b>	<b>62</b>	<4.3	<3.7	<2.8	<7.9	<2.0	<3.5	<5.4	<6.1	<3.0	<3.0	<3.4	<3.0	NA	
05/24/00	<b>495</b>	<50	<50	<50	<5.0	<100	<80.0	<5.0	<5.0	<50	<50	<1.70	<1.40	<50	<6.0	<5.0	<50.0	<50.0	<50.0	NA	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<b>2,380</b>	<b>855</b>	<b>495</b>	<b>2,440</b>	<0.101	<b>811.4</b>	<b>94.1</b>	<0.5	<0.50	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	NA	
05/23/01	<b>2,000</b>	<b>810</b>	<b>650</b>	<b>3,180</b>	<27	<b>1,600</b>	<b>160</b>	<b>13</b>	<18	<50	<12	<12	<16	<12	<b>37</b>	<11	<1.5	<13	<15	NA	
06/13/02	<b>2,400</b>	<b>550</b>	<b>330</b>	<b>1,740</b>	<25	<b>610</b>	<b>73</b>	<25	<37	<27	<30	<6	<28	<35	<35	<28	<29	<13	<13	NA	
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<b>3.8</b>	<0.83	<0.89	<0.18	0.48	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
06/16/04	<b>370</b>	<b>380</b>	<b>150</b>	<b>940</b>	<6.1	<b>815</b>	<b>100</b>	<4.5	<4.8	<8.3	<8.9	<1.8	<3.7	<9.7	<2.4	<9.7	<0.90	<0.87	<0.95	NA	
05/24/05	<b>750</b>	<b>680</b>	<b>150</b>	<b>1,660</b>	<6.1	<b>838</b>	<b>140</b>	<4.5	<4.8	<8.3	<8.9	<1.8	<3.7	<9.7	<2.4	<9.7	<0.90	<0.87	<0.95	NA	
12/20/06	<b>330</b>	<b>56</b>	<b>72</b>	<b>231</b>	<3.0	<b>205</b>	<b>30</b>	<2.2	<2.4	<4.1	<4.4	<0.90	<1.8	<4.8	<1.2	<2.8	<4.5	<4.4	<4.8	NA	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	NA	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

**Table 8**  
**Postremedial Groundwater Sample Laboratory Analytical Results**  
**RWA-3**  
**Malleable Iron Range Site D**  
**Beaver Dam, Wisconsin**

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<0.62	<0.76	<0.78	<2.2	<0.28	<1.30	<0.70	<1.3	<1.3	4.8	1.1	<0.92	<0.36	<2.4	<0.76	<0.40	<0.56	<0.44	<0.70	NA	
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	0.21	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	<b>190</b>	<i>10</i>	4.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NA	
04/21/98	<b>5.3</b>	<0.50	<0.20	<0.50	<0.50	<0.40	<0.20	<0.50	<b>170</b>	<i>12</i>	<i>11</i>	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NA	
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	<0.10	<0.38	<0.39	<1.1	<0.14	<0.65	1.8	<0.63	<b>54</b>	<i>20</i>	<i>21</i>	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	NA	
08/02/99	<b>65</b>	0.75	0.47	<0.67	<0.32	<0.49	<0.35	<b>59</b>	<b>59</b>	<i>12</i>	<i>21</i>	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA	
11/17/99	4.8	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<b>41</b>	<b>41</b>	<i>19</i>	<i>23</i>	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<3.4	<3.0	NA	
05/24/00	<b>24.1</b>	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	<b>31.1</b>	<i>15.4</i>	<i>23.7</i>	<b>3.01</b>	<0.14	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	NA	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	<b>10</b>	<i>18.2</i>	<i>30.8</i>	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	NA	
05/23/01	2.7	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	<b>21</b>	5.8	9.1	<b>0.76</b>	<0.32	<0.24	<i>0.81</i>	<0.21	<0.29	<0.25	<0.29	NA	
06/13/02	<b>6.2</b>	<2.5	<3.2	<7.1	<2.5	<5.7	<7.0	<2.5	<b>22</b>	4.7	8.2	<0.6	<2.8	<3.5	<3.5	<2.8	<2.9	<1.3	<1.3	NA	
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<b>6.7</b>	6.4	8.5	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
06/16/04	1.6	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<b>3.9</b>	<0.83	0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
05/24/05	1.7	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<b>1.2</b>	4.5	6.6	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	<b>2.0</b>	4.3	8.1	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

**Notes:**

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

**Table 8**  
**Postremedial Groundwater Sample Laboratory Analytical Results**  
**RWA-2**  
**Malleable Iron Range Site D**  
**Beaver Dam, Wisconsin**

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	0.4	<0.38	0.63	<1.1	<0.14	<0.65	<0.35	<0.63	65	1.7	0.82	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	NA	
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	<b>500</b>	<b>380</b>	<b>1,100</b>	<b>1,000</b>	<2.5	314	130	<2.5	9.3	55	24	8.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	NA	
04/21/98	<b>590</b>	<b>570</b>	<b>1,700</b>	<b>1,600</b>	<5.0	422	140	<5.0	67	28	20	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	<b>1,100</b>	<b>690</b>	<b>1,600</b>	<b>1,800</b>	<3.5	438	120	<16	<12	18	16	<12	<4.5	<30	<9.5	<5.0	<7.0	<5.5	<8.8	NA	
08/02/99	<b>920</b>	<b>900</b>	<b>2,000</b>	<b>2,160</b>	<8.0	730	160	<11	23	<7.0	<20	<5.0	<8.8	<14	<15	<7.5	<7.5	<8.5	7.5	NA	
11/17/99	<b>1,100</b>	<b>960</b>	<b>1,500</b>	<b>2,030</b>	<3.2	613	160	16	16	9.6	12	<2.0	<3.5	<5.4	<0.32	<3.0	<3.0	<3.4	<0.30	NA	
05/24/00	<b>476</b>	<b>161</b>	<b>611</b>	<b>484</b>	<5.0	83.5	<80	<5.0	6.77	<50	<50	3.93	<1.40	<50	<6.0	<5.0	<50.0	<50.0	<50.0	NA	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<b>1,200</b>	45.9	912	<b>2,510</b>	<0.101	919	186	<0.5	3.91	9.01	5.43	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	NA	
05/23/01	<b>410</b>	<b>350</b>	<b>220</b>	<b>345</b>	<27	240	<34	<13	<13	<50	<12	<12	<16	<12	<12	<11	<15	<13	<15	NA	
06/13/02	<b>440</b>	<b>280</b>	<b>520</b>	<b>1,280</b>	<10	420	67	<10	<15	<11	<12	<2.4	<11	<14	<14	<11	<11	<5.2	<5.2	NA	
05/14/03	<b>200</b>	<b>330</b>	98	405	<1.2	210	30	<0.90	<0.96	<1.7	<1.8	<0.36	<0.74	<1.9	<0.48	<1.1	<1.8	<1.7	<1.9	NA	
06/16/04	<b>270</b>	<b>620</b>	<b>220</b>	<b>670</b>	<3.0	328	71	<2.2	<2.4	<4.1	<4.4	<0.90	<1.8	<4.8	<1.2	<2.8	<4.5	<4.4	<4.8	NA	
05/24/05	<b>180</b>	<b>700</b>	<b>520</b>	<b>1,530</b>	<6.1	456	110	<4.5	<4.8	<8.3	<8.9	<1.8	<3.7	<9.7	<2.4	<5.6	<9.0	<8.7	<9.5	NA	
12/20/06	<b>140</b>	<b>610</b>	<b>320</b>	<b>1,140</b>	<3.0	308	170	<2.2	<2.4	<4.1	<4.4	<0.90	<1.8	<4.8	<1.2	<0.56	<0.90	<0.87	<0.95	NA	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard  
PAL: Preventive action limit  
PCE: Tetrachloroethene

TCE: Trichloroethene  
DCE: Dichloroethene  
NS: Not sampled

MTBE: Methyl-t-butyl-ether  
TMB: Trimethylbenzenes  
NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 RWA-1  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethyl-benzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	<b>15</b>	<0.23	<0.39	<b>0.63</b>	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	NA
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	<0.10	<0.25	<0.10	<0.25	<0.25	0.13	0.2	<0.25	4.2	0.58	<0.25	<b>0.28</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NA
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	<0.20	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	2.2	2.2	0.41	<0.39	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	NA
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.37	<0.37	<0.28	<0.79	<b>0.24</b>	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA
11/17/99	<0.27	<0.32	<0.27	<0.67	NA	NA	NA	NA	2.0	<0.28	<0.79	<b>0.23</b>	<0.35	<0.54	NA	NA	NA	NA	NA	NA
05/24/00	<0.5	<5.0	<5.0	<5.0	0.654	<10	<8.0	<0.50	<0.5	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	NA
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	<i>0.98</i>	<5.0	<5.0	<b>0.65</b>	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	NA
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	<i>0.88</i>	<1.0	<0.23	<0.23	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	NA
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	<i>1.3</i>	<0.53	<0.59	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	NA
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<0.48	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<i>1.4</i>	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<i>0.91</i>	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	<i>1.5</i>	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available



Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-64  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	90	7.6	0.91	<0.46	<0.18	<0.38	<1.2	<0.20	0.29	0.22	<0.35	NA	
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	0.11	<0.25	0.3	<0.25	<0.25	<0.20	<0.10	<0.25	91	4.7	0.44	1.1	<0.25	<0.25	<0.25	<0.25	0.54	<0.25	<0.25	NA	
04/21/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	35	0.97	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NA
07/23/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	39	1.2	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NA
11/10/98	<0.20	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	41	1.7	<0.39	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	NA	
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	24	0.4	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA	
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	71	2.6	<0.79	0.48	<0.35	<0.54	<0.61	<0.30	0.32	<0.34	<0.30	NA	
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	7.18	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	NA	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	56.3	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	NA	
05/23/01	<1.3	<0.6	<1.1	<3.7	<2.7	<2.5	<3.4	<1.3	19	<5	<1.2	<1.2	<1.6	<1.2	<1.2	<1.1	<1.5	<1.3	<1.5	NA	
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	37	<0.53	<0.59	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	NA	
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	31	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	43	1.4	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	49	0.99	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	38	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	NA	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-62  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	0.59	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	3.9	0.61	<0.39	<0.46	0.24	<0.38	<0.38	<0.20	0.48	<0.22	<0.35	879.75
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	0.15	<0.25	0.29	<0.25	<0.25	<0.20	<0.10	<0.25	3.6	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	878.41
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	<0.25	<0.25	<0.10	<0.25	<0.25	<0.10	<0.10	<0.25	15	1.6	0.44	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	879.75
11/10/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	13	2.6	1.0	0.59	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	881.48
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	3.1	<0.28	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	878.63
05/24/00	<0.5	<5.0	<5.0	<5.0	1.3	<10.0	<8.0	<0.5	1.04	<5.0	<5.0	1.04	<0.140	<5.0	<0.6	<05.0	<5.0	<5.0	<5.0	880.75
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	3.3	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	878.61
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	2.4	1.4	0.63	2.8	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	880.93
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	7.8	1.3	<0.59	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	NA
05/14/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	1.1	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	885.66
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	1.0	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.58
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	<0.48	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	880.14
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-61  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethyl-benzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	3.7	0.45	<0.39	NS	NS	NS	NS	NS	NS	NS	NS	NS	879.70
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	<0.10	<0.25	0.23	<0.25	<0.25	<0.20	<0.10	<0.25	15	0.44	<0.25	<0.25	0.41	<0.25	<0.25	<0.25	NS	NS	NS	NS	878.49
04/21/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.10	<0.10	<0.25	28	2.5	1.4	<0.25	0.45	<0.25	<0.25	<0.25	1.5	<0.25	<0.25	<0.25	880.15
07/23/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	14	1.5	0.88	<0.25	0.23	<0.25	<0.25	<0.25	2	<0.25	<0.25	<0.25	879.58
11/10/98	<0.20	<0.38	<0.39	<1.1	<0.14	<0.65	1.1	<0.63	12	<0.20	<0.39	<0.46	0.37	<1.2	<0.38	<0.20	1.4	<0.22	<0.35	<0.35	878.61
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	21	21	1.4	1.4	<0.20	<0.35	<0.54	<0.61	<0.30	21	<0.34	<0.30	<0.30	881.26
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	18	0.61	<0.79	<0.20	0.42	<0.54	<0.61	<0.30	1.8	<0.34	<0.30	<0.30	878.67
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.00	1.67	1.67	<5.0	<5.0	<0.170	<0.140	<5.0	<0.600	<0.500	<5.00	<5.00	<5.00	<5.00	880.63
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	16.5	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	<5.0	878.70
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	19	1.2	1.3	<0.23	0.34	<0.24	<0.24	<0.21	2	<0.25	<0.29	<0.29	880.78
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	20	1.0	0.66	<0.12	<0.56	<0.69	<0.69	<0.55	1.5	<0.26	<0.26	<0.26	880.25
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	9.7	<0.83	<0.89	<0.18	0.4	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	<0.95	879.37
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	9.8	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	<0.95	885.03
05/24/05	<0.41	<0.54	<0.67	<1.8	<0.61	<1.8	<0.74	<0.45	3.9	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	<0.95	885.14
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	7.6	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	<0.95	879.93
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard  
 PAL: Preventive action limit  
 PCE: Tetrachloroethene

TCE: Trichloroethene  
 DCE: Dichloroethene  
 NS: Not sampled

MTBE: Methyl-t-butyl-ether  
 TMB: Trimethylbenzenes  
 NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-60  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.10	<0.10	<0.25	<i>0.88</i>	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NA
11/10/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.29	<0.35	<0.43	1.3	<0.28	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	882.84
11/17/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.50	<0.5	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	877.16
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	<0.36	<1.0	<0.23	<0.23	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	884.38
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	<0.73	<0.53	<0.59	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	NA
05/14/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
06/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
05/24/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	1.6	1.7	<0.89	0.7	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	881.95
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

**Table 8**  
**Postremedial Groundwater Sample Laboratory Analytical Results**  
**PZ-12**  
**Malleable Iron Range Site D**  
**Beaver Dam, Wisconsin**

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	24	24	0.7	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	NA
11/10/98	<0.20	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	17	17	0.75	<0.39	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	<0.25	879.49
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	38	1.4	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	<0.25	878.58
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	44	1.7	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	<0.25	881.24
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	2.82	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	<0.25	878.61
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	880.68
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	44	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	<0.25	NA
05/23/01	<1.3	<0.6	<1.1	<3.7	<2.7	<2.4	<3.4	<1.3	33	<5	<1.2	<1.2	<1.6	<1.2	<1.2	<1.1	<1.5	<1.3	<1.5	<0.25	878.71
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	40	<0.53	<0.59	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	<0.25	880.84
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	46	1.5	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	<0.25	882.23
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	43	1.5	1.0	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	<0.25	879.38
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	41	1.4	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	<0.25	885.05
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	15	1.1	1.8	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	<0.25	879.60
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	<0.95	880.01
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	-

**Notes:**

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard  
PAL: Preventive action limit  
PCE: Tetrachloroethene

TCE: Trichloroethene  
DCE: Dichloroethene  
NS: Not sampled

MTBE: Methyl-t-butyl-ether  
TMB: Trimethylbenzenes  
NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 PZ-10 (Deep)  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
04/21/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	1.0	0.66	2.8	4.1	<0.14	1.1	0.41	<0.63	4.8	<0.23	<0.39	<0.46	<0.18	<1.2	<0.38	<2.20	<0.28	<0.22	<0.35	875.44	
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	3.7	0.5	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	878.86	
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	23	1.6	<0.79	0.33	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	866.90	
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	7.26	7.26	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	877.70	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	6.24	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	875.17	
05/23/01	<0.25	<0.12	<0.22	<0.77	<0.53	<0.50	<0.68	<0.25	4.4	<1.0	<0.23	<0.23	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	877.86	
06/13/02	<2.2	<2.5	<3.2	<7.1	<2.5	<5.7	<7	<2.5	31	<2.7	<3	<0.6	<2.8	<3.5	<3.5	<2.8	<2.9	<1.3	<1.3	876.61	
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	5.3	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	875.62	
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	9.2	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	882.31	
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	2.9	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	876.56	
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	2.7	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	876.98	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:

All results are reported in ppb  
**Bold** indicates value equals or exceeds the NR 140 ES  
*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard  
 PAL: Preventive action limit  
 PCE: Tetrachloroethene

TCE: Trichloroethene  
 DCE: Dichloroethene  
 NS: Not sampled

MTBE: Methyl-t-butyl-ether  
 TMB: Trimethylbenzenes  
 NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 PZ-10 (Shallow)  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	<0.50	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	100	8.5	1.2	<0.50	<1.0	<4.0	<4.0	<1.0	<1.0	<1.0	<1.0	865.33
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	65	6.3	0.88	<0.46	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	867.40
07/24/97	<0.31	<0.38	<0.39	<1.1	NA	NA	NA	NA	34	3.8	0.49	<0.46	<0.18	<0.38	NA	NA	NA	NA	NA	867.45
12/30/97	<0.10	<0.25	1.6	<0.25	<0.25	<0.10	<0.10	<0.25	14	0.92	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	864.44
04/21/98	<0.10	<0.25	0.59	1.7	<0.25	1.84	1.5	<0.25	70	5.0	0.82	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	869.43
07/23/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	68	68	4.4	0.6	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	866.65
11/10/98	0.88	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	3.2	<0.23	<0.39	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	877.05
08/02/99	0.7	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	12	3.3	3.1	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	884.36
11/17/99	11	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	6.4	0.51	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	868.51
05/24/00	29.2	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	0.688	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	NA	NA	870.56
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	15.4	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.50	6.35	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	868.55
05/23/01	0.84	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	19	3.5	1.4	<0.23	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	870.80
06/13/02	15	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	18	2.3	0.71	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	870.92
05/14/03	110	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	7.4	1.5	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	869.28
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	2.0	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	875.50
05/24/05	400	<1.4	<1.7	<6.7	<1.5	<5.5	<1.8	<1.1	2.0	<2.1	<2.2	<0.45	<0.92	<2.4	<0.60	<1.4	<2.2	<2.2	<2.4	869.53
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	<0.48	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	871.90
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:  
 All results are reported in ppb  
**Bold** indicates value equals or exceeds the NR 140 ES  
*italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard  
 PAL: Preventive action limit  
 PCE: Tetrachloroethene

TCE: Trichloroethene  
 DCE: Dichloroethene  
 NS: Not sampled

MTBE: Methyl-t-butyl-ether  
 TMB: Trimethylbenzenes  
 NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 PZ-1  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)	
10/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	<b>58</b>	4.6	3.2	<b>2.9</b>	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	879.84	
07/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	<b>44</b>	4.1	37	<b>4.0</b>	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	880.23	
12/30/97	0.29	<0.25	0.2	<0.25	<0.25	0.22	<0.10	<0.25	<b>54</b>	4.9	3.5	<b>2.7</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	878.46	
04/21/98	<0.10	<0.25	0.34	<0.25	<0.25	<0.20	<0.10	<0.25	<b>92</b>	2.4	1.3	<b>0.97</b>	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	882.75	
07/23/98	<0.20	<0.50	<0.20	0.78	<0.50	<0.40	0.7	<0.50	<b>150</b>	2.8	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	880.65	
11/10/98	<0.20	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	<b>27</b>	2.7	2.6	<b>2.6</b>	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	878.77	
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<b>86</b>	<b>86</b>	3.8	2.1	<b>1.1</b>	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	883.3	
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<b>54</b>	<b>54</b>	2.5	2.9	<b>1.5</b>	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	880.09	
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	<b>70.7</b>	<5.0	<5.0	<b>3.03</b>	<0.14	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	882.21	
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	<b>75.4</b>	<5.0	<5.0	<b>1.76</b>	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	880.17	
05/23/01	<1.3	<0.6	<1.1	<3.7	<2.7	<2.4	<3.4	<1.3	<b>46</b>	<5	1.5	<1.2	<1.6	<1.2	<1.2	<1.1	<1.5	<1.3	<1.5	882.02	
06/13/02	<4.3	<4.9	<6.3	<14.5	<4.9	<11.4	<14	<4.9	<b>100</b>	<5.3	<5.9	<1.2	<5.6	<6.9	<6.9	<5.5	<5.7	<2.6	<2.6	881.25	
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<b>27</b>	2.3	1.8	<b>0.57</b>	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	880.90	
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<b>40</b>	1.3	0.98	<b>0.27</b>	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	887.70	
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<b>39</b>	1.6	<0.89	<b>0.51</b>	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	881.70	
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	<b>35</b>	1.1	<0.89	<b>0.19</b>	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	882.14	
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-	
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-	

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available



Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-33  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	<0.50	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	<1.0	2.6	15	18	<1.0	<4.0	<4.0	<1.0	<1.0	<1.0	<1.0	880.51
03/24/97	0.38	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	1.7	1.7	19	12	29	<0.18	<0.38	<0.38	<0.20	<0.11	<0.22	<0.35	881.86
07/24/06	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	<0.63	1.6	1.4	8.0	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	882.33
12/30/97	0.55	<0.25	0.2	<0.25	<0.25	<0.20	<0.10	1.2	1.2	13	6.8	15	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	881.08
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	0.55	2.0	6.3	12	<0.25	6.8	3.0	<0.25	0.51	6.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	879.77
11/10/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.37	<0.37	0.57	<0.79	4.0	<0.35	<0.54	<0.61	<0.30	<0.30	>0.34	<0.30	881.42
11/17/99	0.32	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	<0.37	6.3	4.0	17	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	878.67
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	<0.5	<5.0	<5.0	5.05	<0.140	<5.0	<0.6	<0.5	<0.5	<5.0	<5.0	880.85
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	880.85
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	<0.50	<5.0	<5.0	1.66	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	NS	NA
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	<0.36	2.0	2.1	21	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	877.86
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	<0.73	2.3	2.0	16	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	881.13
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<0.48	<0.83	<0.89	1.5	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	880.25
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	4.2	3.6	1.6	1.9	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.47
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	<0.48	<0.83	<0.89	4.9	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	885.68
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	<0.48	<0.83	<0.89	4.3	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.69
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-32  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	<0.50	<1.0	<1.0	<3.0	<1.0	NA	<1.0	NA	3.9	<1.0	NA	0.6	NA	NA	NA	NA	NA	NA	NA	NA
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	1.4	1.0	<0.23	<0.39	<0.46	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.325	881.44
07/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	1.2	<0.49	<0.23	<0.39	<0.46	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	880.69
12/30/97	<0.10	<0.25	0.29	<0.25	<0.25	<0.35	<0.10	1.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	878.45
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	5.7	5.7	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	879.72
11/10/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	1.6	<0.37	<0.28	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	881.42
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	36	36	0.51	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	878.65
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	2.15	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	880.81
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	84.5	<5.0	<5.0	<0.214	<0.237	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	878.66
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	0.61	1.1	<1.0	<0.23	<0.23	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	881.21
06/13/02	<2.2	<2.5	<3.2	<7.1	<2.5	<5.7	<7	<2.5	25	<2.7	<3	<0.6	<2.8	<3.5	<3.5	<2.8	<2.9	<1.3	<1.3	881.26
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	3.2	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.50
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<0.24	<0.74	<0.45	19	1.7	0.94	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	881.91
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	8.9	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.70
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	8.7	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	880.06
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-26  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	<0.50	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	4.9	<1.0	<1.0	<0.50	1.5	<4.0	<4.0	1.0	<1.0	<1.0	<1.0	884.65
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	3.7	0.28	<0.39	<0.46	1.4	<0.38	<0.38	0.46	<0.28	<0.20	<0.22	885.94
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	<0.10	<0.25	0.37	<0.25	<0.25	<0.20	<0.10	<0.25	4.4	<0.25	<0.25	<0.25	1.4	<0.25	<0.25	0.44	<0.25	<0.25	<0.25	884.61
04/21/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	4.2	0.42	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	888.81
07/23/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
11/10/98	<0.20	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	3.5	<0.20	<0.39	<0.46	1.8	<1.2	<0.38	0.23	<0.28	<0.22	<0.35	884.75
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	3.6	<0.28	<0.79	<0.20	<0.35	<0.54	<0.61	<0.30	0.3	<0.34	<0.30	NA
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	4.0	<0.28	<0.79	<0.20	1.3	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	2.31	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	886.96
12/19/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	2.8	<1.0	<0.23	<0.23	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	887.07
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	3.5	<0.53	<0.59	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	886.32
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	2.7	<0.83	<0.89	<0.18	1.5	<0.97	<0.24	0.7	<0.90	<0.87	<0.95	885.57
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	0.87	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	891.82
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	1.5	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	885.81
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	0.95	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	886.21
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-25  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	<0.50	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	2.5	<1.0	<1.0	<0.50	1.1	<4.0	<4.0	<1.0	2.5	<1.0	<1.0	878.54
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	2.1	<0.23	<0.39	<0.46	0.69	<0.38	<0.38	0.27	0.28	<0.22	<0.35	879.80
07/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	1.1	<0.23	<0.39	<0.46	1.1	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	880.27
12/30/97	<0.10	<0.25	0.62	<0.25	<0.25	<0.20	<0.10	1.4	1.4	<0.25	<0.25	<0.25	1.1	<0.25	<0.25	0.32	<0.25	<0.25	<0.25	878.49
04/21/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
07/23/98	<0.10	<0.25	<0.120	<0.25	<0.25	<0.20	<0.10	<0.25	0.76	<0.25	<0.25	<0.25	0.87	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	882.62
11/10/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
08/02/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	0.64	<0.28	<0.79	<0.20	1.0	<0.54	<0.61	0.31	<0.30	NA	NA	881.35
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	0.88	0.88	<0.28	<0.79	<0.20	1.1	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	878.66
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	<0.5	<5.0	<5.0	<0.170	1.62	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	880.77
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	<0.50	<5.0	<5.0	<0.214	2.32	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	878.72
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	0.5	<1.0	<0.23	<0.23	1.9	<0.24	<0.24	0.24	<0.29	<0.25	<0.29	880.86
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	<0.73	<0.53	<0.59	<0.12	1.2	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	881.56
05/14/03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
06/16/04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
05/24/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/20/06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-20  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	<0.50	<1.0	<1.0	<3.0	<1.0	2.2	<1.0	<1.0	35	1.4	1.5	0.89	<1.0	<4.0	<4.0	<1.0	<1.0	<1.0	<1.0	878.68
03/24/97	<0.31	0.44	<0.39	<1.1	<0.14	0.78	<0.35	17	17	0.95	0.55	<0.46	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	879.63
07/24/97	<0.31	0.84	<0.39	1.8	<0.14	0.65	<0.35	<0.63	3.0	0.38	<0.39	<0.46	<0.18	0.46	0.46	<0.20	<0.28	<0.22	<0.35	880.05
12/30/97	0.19	<0.25	0.58	0.96	<0.25	0.39	0.47	<0.25	5.1	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	878.47
04/21/98	0.56	90	4.6	230	<0.25	5.48	0.66	<0.25	9.2	0.82	0.57	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	881.82
07/23/98	<0.10	3.6	0.66	12	<0.25	5.48	0.66	<0.25	21	1.5	1.5	<2.5	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	879.47
11/10/98	2.8	3.2	15	20	<0.14	6.8	1.3	<0.63	2.8	<0.23	<0.39	<0.46	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	878.60
08/02/99	<0.27	11	1.0	24.8	<0.32	5.92	1.1	<0.43	18	1.2	1.5	0.28	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	880.97
11/17/99	<0.27	<0.32	<0.27	0.52	<0.32	<0.49	<0.35	<0.43	4.3	<0.28	<0.79	0.29	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	878.62
05/24/00	<0.5	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.5	8.16	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	880.42
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.50	5.64	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	878.71
05/23/01	0.37	15	1.1	37.1	<0.53	9.5	1.0	<0.25	16	<1.0	0.56	0.36	1.2	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	880.60
06/13/02	<0.43	5.7	4.1	23.3	<0.49	6.07	1.5	<0.49	20	1.6	<0.59	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	882.01
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	1.3	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.28
06/16/04	<0.41	14	<0.67	32.3	<0.61	25.6	6.2	<0.45	1.2	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	884.00
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<0.97	<0.74	<0.45	11	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	873.84
12/20/06	<0.41	0.73	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	8.8	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.83
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard  
 PAL: Preventive action limit  
 PCE: Tetrachloroethene

TCE: Trichloroethene  
 DCE: Dichloroethene  
 NS: Not sampled

MTBE: Methyl-t-butyl-ether  
 TMB: Trimethylbenzenes  
 NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-15  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	<0.50	<1.0	<1.0	<3.0	<1.0	<2.0	<1.0	<1.0	4.2	<1.0	<1.0	<0.50	<1.0	<4.0	<4.0	<1.0	<1.0	<1.0	<1.0	878.45
03/24/97	<0.31	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	2.2	<0.23	<0.39	<0.46	0.39	<0.38	<0.38	<0.20	0.5	<0.22	<0.35	879.77
07/24/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/30/97	0.1	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	5.0	0.3	<0.25	1.5	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	878.40
04/21/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	6.5	1.0	0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	882.67
07/23/98	<0.10	<0.25	<0.10	<0.25	<0.25	<0.20	<0.10	<0.25	4.7	0.72	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	879.58
11/10/98	<0.20	<0.38	<0.39	<2.2	<0.14	<0.65	<0.35	<0.63	4.1	<0.23	<0.39	<0.46	0.23	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	878.57
08/02/99	1.2	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	11	5.4	1.7	0.7	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	NA
11/17/99	<0.27	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	5.7	2.7	0.8	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	887.40
05/24/00	2.47	<5.0	<5.0	<5.0	<0.5	<10.0	<8.0	<0.43	4.72	<5.0	<5.0	<0.170	<0.140	<5.0	<0.6	<0.5	<5.0	<5.0	<5.0	880.70
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<0.50	<5.0	<5.0	<5.0	<0.101	<10.0	<8.0	<0.5	4.04	<5.0	<5.0	<0.214	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	878.64
05/23/01	<0.25	<0.12	<0.22	<0.74	<0.53	<0.50	<0.68	<0.25	6.6	1.3	0.52	<0.23	<0.32	<0.24	<0.24	<0.21	<0.29	<0.25	<0.29	880.88
06/13/02	<0.43	<0.49	<0.63	<1.45	<0.49	<1.14	<1.4	<0.49	8.4	0.87	<0.59	<0.12	<0.56	<0.69	<0.69	<0.55	<0.57	<0.26	<0.26	NA
05/14/03	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	3.9	<0.83	<0.89	<0.18	1.0	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.41
06/16/04	<0.41	<0.54	<0.67	<2.63	<0.61	<0.24	<0.74	<0.87	1.4	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	885.63
05/24/05	<0.41	<0.54	<0.67	<2.63	<0.61	<1.8	<0.74	<0.45	1.6	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	879.69
12/20/06	<0.41	<0.54	<0.67	<2.63	<0.61	<1.80	<0.74	<0.45	1.1	<0.83	<0.89	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	880.03
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard

PAL: Preventive action limit

PCE: Tetrachloroethene

TCE: Trichloroethene

DCE: Dichloroethene

NS: Not sampled

MTBE: Methyl-t-butyl-ether

TMB: Trimethylbenzenes

NA: Not analyzed/Not available

Table 8  
 Postremedial Groundwater Sample Laboratory Analytical Results  
 MW-7  
 Malleable Iron Range Site D  
 Beaver Dam, Wisconsin

Date	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	TMBs	Naphthalene	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroform	Chloroethane	Chloromethane	Bromodichloromethane	1,1,1-Trichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Groundwater Elevations (MSL)
10/28/96	<b>63</b>	54	9.6	21	<1.0	26.3	9.6	<1.0	170	37	<1.0	<5.0	<1.0	<4.0	<4.0	<1.0	<1.0	<1.0	<1.0	875.70
03/24/97	<b>9</b>	14	9.2	16	<0.14	7.8	2.6	300	300	2.5	4	<0.46	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	877.05
07/24/97	2.4	<0.38	<0.39	<1.1	<0.14	<0.65	<0.35	<0.63	370	25	9.1	0.56	<0.18	<0.38	<0.38	<0.20	<0.28	<0.22	<0.35	877.43
12/30/97	<b>38</b>	29	2.4	2.5	<0.25	0.31	0.18	<0.25	79	210	98	1.4	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	875.57
04/21/98	<b>100</b>	<b>180</b>	64	170	<1.2	51.2	18	<1.2	77	84	41	2.9	<0.25	<0.25	<1.2	<1.2	<1.2	<1.2	<1.2	879.95
07/23/98	<b>180</b>	<b>200</b>	57	140	<1.2	51.2	18	<1.2	49	69	42	16	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	876.79
11/10/98	56	58	2.9	65.6	<0.14	39.5	13	<0.63	18	53	35	8.2	<0.18	<1.2	<0.38	<0.20	<0.28	<0.22	<0.35	875.86
08/02/99	2.9	<0.32	<0.27	<0.67	<0.32	<0.49	<0.35	<0.43	<0.27	3.8	2.5	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	881.05
11/17/99	140	200	14	36.4	<0.32	41.4	8.4	13	13	33	24	<0.20	<0.35	<0.54	<0.61	<0.30	<0.30	<0.34	<0.30	878.61
05/24/00	<b>64.4</b>	134	69.7	296	<5.0	86.8	<80.0	<5.0	8.13	<50	<50	7.27	<1.40	<50	<6.0	<5.0	<5.0	<5.0	<5.0	880.44
08/03/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA
12/19/00	<b>53.5</b>	121	8.86	70.3	<0.101	174.9	30.6	<0.5	5.64	41.2	14	11.3	<0.196	<5.0	<0.237	<0.48	<5.0	<5.0	<5.0	877.86
05/23/01	79	510	100	600	<27	1,030	150	<13	<18	<50	<12	<12	<16	<12	<12	<11	<15	<13	<15	881.65
06/13/02	120	230	32	254	<4.9	253	36	<4.9	19	<5.3	<5.9	<1.2	<5.6	<6.9	<6.9	<5.5	<5.7	<2.6	<2.6	880.38
05/14/03	30	290	47	390	<3.0	920	150	<2.2	2.5	9.3	<4.4	<0.90	<1.8	<4.8	<1.2	<2.8	<4.5	<4.4	<4.8	877.42
06/16/04	21	590	170	1,070	<4.3	1,210	270	<4.5	<4.5	<8.3	<8.9	<0.90	<3.7	<9.7	<2.4	<5.6	<9.0	<8.7	<9.5	885.62
05/24/05	25	20	4.3	55.8	<1.2	138	14	<0.9	3.3	<1.7	<1.8	<0.36	<0.74	<1.9	<0.48	<1.1	<1.8	<1.7	<1.9	879.61
12/20/06	22	13	2.3	20.8	<0.61	26	6.2	<0.45	11	1.8	2.3	<0.18	<0.37	<0.97	<0.24	<0.56	<0.90	<0.87	<0.95	880.08
NR 140 PAL	0.5	140	200	1,000	12	96	8	0.5	0.5	7	20	0.02	0.6	80	0.3	0.06	40	125	15	-
NR 140 ES	5	700	1,000	10,000	60	480	40	5	5	70	100	0.2	6	400	3	0.6	200	1,250	75	-

Notes:

All results are reported in ppb

**Bold** indicates value equals or exceeds the NR 140 ES

*Italic* indicates value equals or exceeds the NR 140 PAL

ES: Enforcement standard  
 PAL: Preventive action limit  
 PCE: Tetrachloroethene

TCE: Trichloroethene  
 DCE: Dichloroethene  
 NS: Not sampled

MTBE: Methyl-t-butyl-ether  
 TMB: Trimethylbenzenes  
 NA: Not analyzed/Not available

Table 5  
Remedial Excavation Soil Sample Laboratory Analytical Results  
Malleable Iron Range Site D  
Beaver Dam, Wisconsin

SAMPLE ID	GRO (ppm)	DRO (ppm)	Benzene	Ethylbenzene	Toluene	Xylenes
NORTHERN EXCAVATION AREA						
N-B-2.5-16	<5.0	<100	<5.0	<5.0	<5.0	<15
N-BC-2-16	<5.0	<100	<5.0	<5.0	<5.0	<15
N-BC-2.5-20	<5.0	<100	<5.0	<5.0	<5.0	<15
N-BC-3-16	<5.0	<100	<5.0	<5.0	<5.0	<15
N-BC-2.5-15	NA	710	NA	NA	NA	NA
N-C-2.5-16	<5.0	<100	<5.0	<5.0	<5.0	<15
N-G-2.5-15	NA	670	NA	NA	NA	NA
N-G-2.5-18	<5.0	<100	<5.0	<5.0	<5.0	<15
N-GH-2.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
N-FG-2.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
N-G-3-15	<5.0	<100	<5.0	<5.0	<5.0	<15
N-G-2-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SOUTHERN EXCAVATION AREA						
S-A-2-7	<5.0	<100	<5.0	<5.0	<5.0	<15
S-AB-1-7	<5.0	<100	<5.0	<5.0	<5.0	<15
S-B-1-6	<5.0	<100	<5.0	<5.0	<5.0	<15
S-B-1-11	<5.0	<100	<5.0	<5.0	<5.0	<15
S-B-1.5-7	21	<100	<5.0	<5.0	<5.0	<15
S-BC-1-7	<5.0	<100	<5.0	<5.0	<5.0	<15
S-C-2-6	<5.0	<100	<5.0	<5.0	<5.0	<15
SOUTH-CENTRAL EXCAVATION AREA						
SC-AB-2-15	<5.0	<100	<5.0	<5.0	<5.0	<25
SC-B-2-19	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-B-2-18	NA	410	NA	NA	NA	NA
SC-B-2-15	<5.0	140	<5.0	<5.0	<5.0	<15
SC-B-6-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-BC-0-15	<5.0	<100	<5.0	<5.0	<5.0	<5
SC-BC-1-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-BC-3-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-BC-7.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-BC-6.5-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-BC-7-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-C-0-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-C-2-9	NA	11,000	NA	NA	NA	NA
SC-C-0-13	NA	1,200	NA	NA	NA	NA
SC-C-4-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-C-3-15	NA	660	NA	NA	NA	NA
SC-C-3-18	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-C-(-1)-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-C-2-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-C-7.5-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-C-6.5-8	NA	890	NA	NA	NA	NA
SC-C-6.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-C-5.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-CD-5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-CD-6-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-CD-3-18	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-CD-1-15	32	<100	<25	<25	<25	<25
SC-CD-1-9	NA	470	NA	NA	NA	NA
SC-CD-3-15	NA	140	NA	NA	NA	NA
SC-CD-(-1)-9	NA	130	NA	NA	NA	NA
SC-CD-(-1.5)-14	6.5	<100	<25	<25	<25	<25
SC-CD-(-1)-13	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-CD-3-8	NA	550	NA	NA	NA	NA
SC-CD-(-2)-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-CD-4.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
NR 720 Standard	100	100	6	2,900	1,500	4,100

Notes:

Bold indicates value equals or exceeds the NR720 standard

Samples collected between 6/23/95 and 7/24/95

Sample ID notation: Example SC-D-5-15 where SC=South-central excavation, D=row, 5=column, and 15=depth of sample

GRO: Gasoline range organics

DRO: Diesel range organics



Table 3 (Continued)  
Remedial Excavation Soil Sample Laboratory Analytical Results  
Malleable Iron Range Site D  
Beaver Dam, Wisconsin

SAMPLE ID	GRO (ppm)	DRO (ppm)	Benzene	Ethylbenzene	Toluene	Xylenes
SOUTH-CENTRAL EXCAVATION AREA						
SC-D-6.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-6.5-18	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-0-18	<5.0	<100	<5.0	<5.0	<5.0	46
SC-D-2-5	NA	220	NA	NA	NA	NA
SC-D-(-0.5)-14	<5.0	<100	<25	<25	<25	<75
SC-D-(-0.5)-8	NA	360	NA	NA	NA	NA
CS-D-(-0.5)-15	<5.0	<100	<5.0	<5.0	<5.0	<15
CS-D-5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-(-1)-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-7.5-6	NA	410	NA	NA	NA	NA
SC-D-7.5-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-8-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-4-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-6.5-9	NA	630	NA	NA	NA	NA
SC-D-(0.5)-5	NA	170	NA	NA	NA	NA
SC-D-2-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-3-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-D-6.5-18	<5.0	<100	NA	NA	NA	NA
SC-DE-7-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-DE-1-8	NA	1,200	NA	NA	NA	NA
SC-DE-(0.5)-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-DE-0-15	<5.0	<100	<5.0	<5.0	<5.0	<22
SC-DE-1-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-E-2-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-E-5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-E-6-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-E-6-6	NA	1,200	NA	NA	NA	NA
SC-E-4-6	NA	980	NA	NA	NA	NA
SC-E-5-6	NA	1,400	NA	NA	NA	NA
SC-E-3-6	NA	100	NA	NA	NA	NA
SC-E-(-0.5)-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-E-4-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-E-3-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-E-8-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-E-8-12	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-EF-1.5-15	<5.0	<100	<5.0	<5.0	<5.0	<5
SC-EF-1-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-EF-7-6	NA	150	NA	NA	NA	NA
SC-EF-7-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-F-6-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-F-3-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-F-4-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-F-7.5-6	NA	280	NA	NA	NA	NA
SC-F-7.5-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-F-5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-F-8-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-FG-7.5-6	NA	180	NA	NA	NA	NA
SC-FG-7.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-FG-7-16	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-FG-7.5-6	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-G-1.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
SC-G-7.5-15	<5.0	<100	<5.0	<5.0	<5.0	<15
NR 720 Standard	100	100	6	2,900	1,500	4,100

Notes:

**Bold** indicates value equals or exceeds the NR720 standard

GRO: Gasoline range organics

Samples collected between 6/23/95 and 7/24/95

DRO: Diesel range organics

Sample ID notation: Example SC-D-5-15 where SC=South-central excavation, D=row, 5=column, and 15=depth of sample

Table 5 (Continued)  
Remedial Excavation Soil Sample Laboratory Analytical Results  
Malleable Iron Range Site D  
Beaver Dam, Wisconsin

SAMPLE ID	GRO (ppm)	DRO (ppm)	Benzene	Ethylbenzene	Toluene	Xylenes
CENTRAL EXCAVATION AREA						
C-AB-6.5-9	NA	2,900	NA	NA	NA	NA
C-AB-7-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-A-0-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-AB-0-15	<5.0	<100	<5.0	<5.0	<5.0	<15
C-AB-(0.5)-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-A-6.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-BC-7-12.5	<5.0	<100	<5.0	<5.0	<5.0	<15
C-B-5-12	NA	240	NA	NA	NA	NA
C-AB-6-12	NA	<100	NA	NA	NA	NA
C-BC-6.5-12	NA	<100	NA	NA	NA	NA
C-CD-6.5-10	NA	800	NA	NA	NA	NA
C-HI-6-12	NA	<100	NA	NA	NA	NA
C-FG-6-8	NA	1,900	NA	NA	NA	NA
C-I-6-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-H-6-6	NA	2,000	NA	NA	NA	NA
C-EF-7-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-DE-7-12	NA	330	NA	NA	NA	NA
C-FG-7-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-G-6.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-H-5-12	NA	<100	NA	NA	NA	NA
C-A-4.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-DE-6-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-EF-6-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-A-5.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-H-6.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-A-1.5-12	NA	<100	NA	NA	NA	NA
C-BC-4-12	NA	<100	NA	NA	NA	NA
C-AB-4-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-AB-1.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-BC-1.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-BC-3.5-12	26	<100	<5.0	<5.0	<5.0	<15
C-BC-2.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-AB-3.5-12	NA	2,000	NA	NA	NA	NA
C-A-3.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-CD-3.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-CD-4-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-AB-2.5-9	NA	1,300	NA	NA	NA	NA
C-A-2.5-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-AB-0.5-12	<5.0	<100	<5.5	<25	<25	<75
C-DE-0-12	NA	<100	NA	NA	NA	NA
C-EF-0-12	<5.0	<100	<5.5	<25	<25	<75
C-F-0.5-12	<5.0	<100	<5.5	<25	<25	<75
C-EF-0.5-12	NA	300	NA	NA	NA	NA
C-CD-1-12	NA	<100	NA	NA	NA	NA
C-A-0.5-12	NA	<100	NA	NA	NA	NA
C-DE-0.5-12	<5.0	<100	<5.5	<25	<25	<75
C-BC-0.5-12	NA	<100	NA	NA	NA	NA
C-CD-0.5-12	<5.0	<100	<5.5	<25	<25	<75
C-AB-0-12	NA	2,000	NA	NA	NA	NA
C-BC-0-12	<5.0	<100	<5.5	<25	<25	<75
C-AB-1-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-BC-1-12	<5.0	<100	<5.0	<5.0	<5.0	<15
C-CD-1-12	<5.0	<100	<5.0	<5.0	<5.0	<15
NR 720 Standard	100	100	6	2,900	1,500	4,100

Notes:

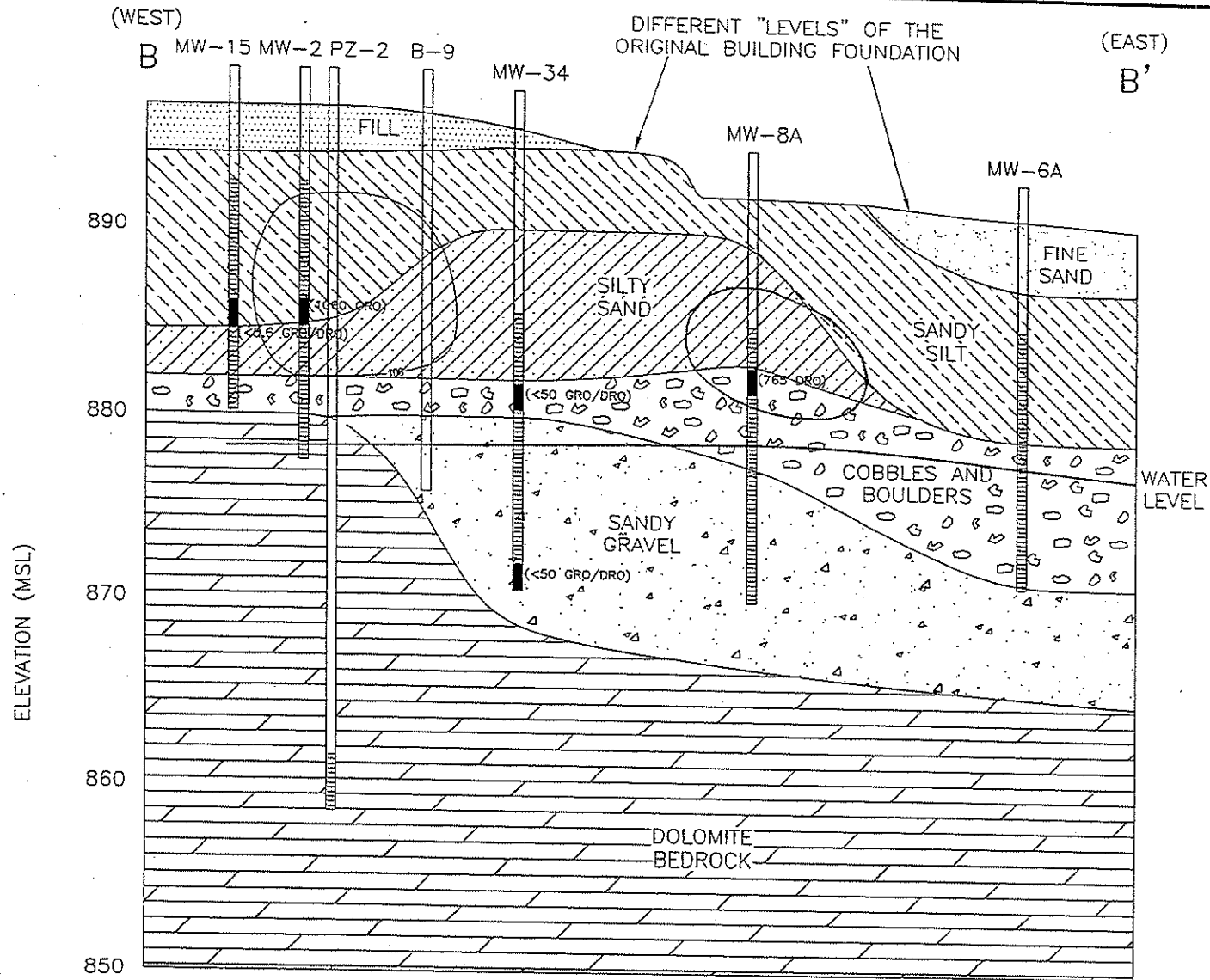
Bold indicates value equals or exceeds the NR720 standard

GRO: Gasoline range organics


Samples collected between 6/23/95 and 7/24/95

DRO: Diesel range organics

Sample ID notation: Example SC-D-5-15 where SC=South-central excavation, D=row, 5=column, and 15=depth of sample



- NOTES:
- NOT TO SCALE
  - CONCRETE AND PAVEMENT HAVE BEEN OMITTED FROM THE FIGURE
  - 100 NR720 STANDARD ISOCONTOUR
  - (100) GRO/DRO CONCENTRATION IN PPM
  - █ SAMPLE INTERVAL

		850 Highway 153, Suite F Madison, WI 53445 (715) 683-1750	
		Shaw Environmental & Infrastructure, Inc.	
REV. NO.:	DRAWING DATE:	ACAD FILE:	
	03/28/07	2656R43a	
<b>PREREMEDIAL SOIL GRO/DRO DISTRIBUTION/GEOLOGIC CROSS-SECTION B-B'</b>			
SITE:	MALLEABLE IRON RANGE SITE D		PM:
LOCATION:	BEAVER DAM, WISCONSIN		PE/RG:
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
VLL	JRD	92.656	9

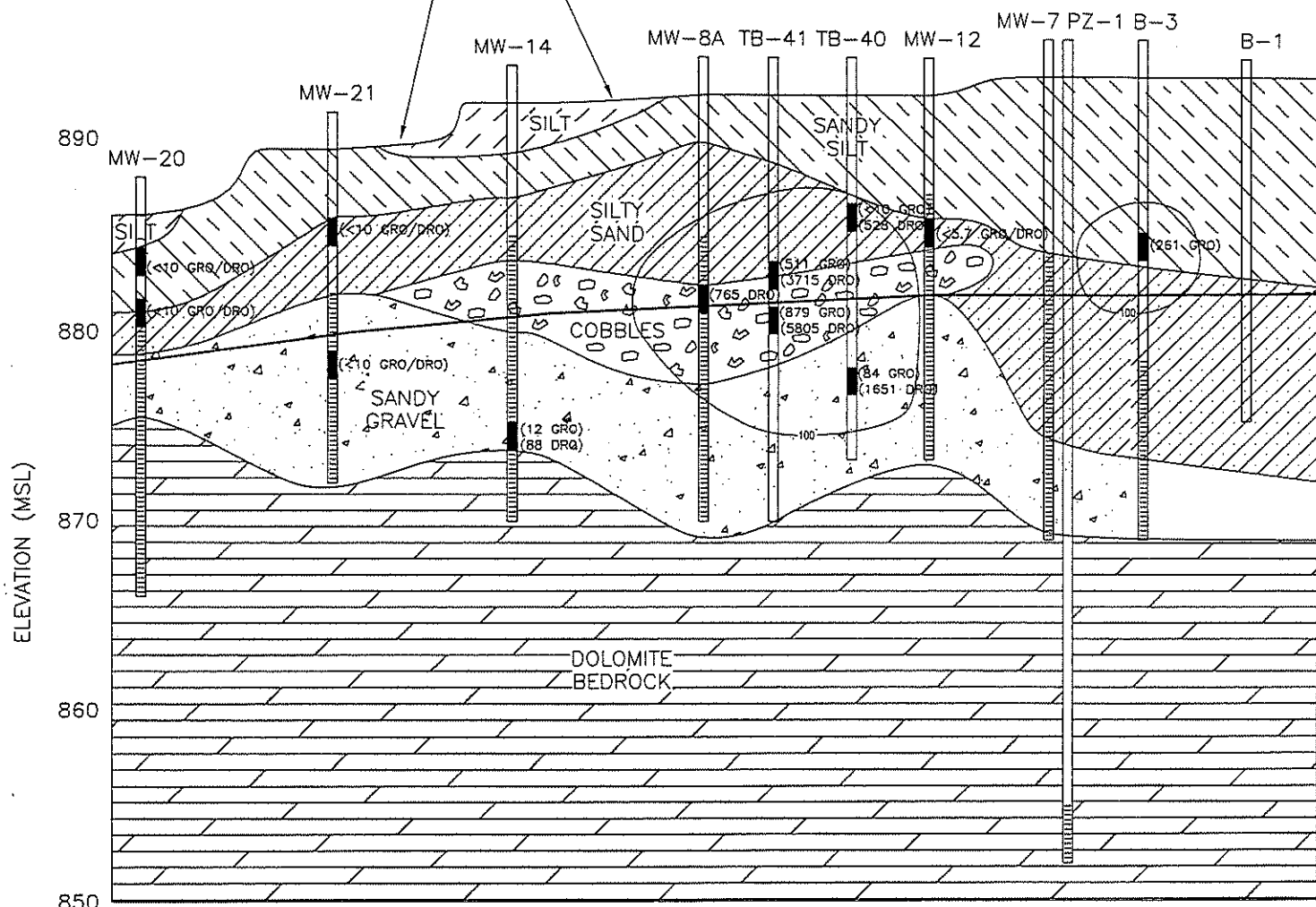
(SOUTH)

(NORTH)

A

A'


DIFFERENT "LEVELS" OF THE ORIGINAL BUILDING FOUNDATION

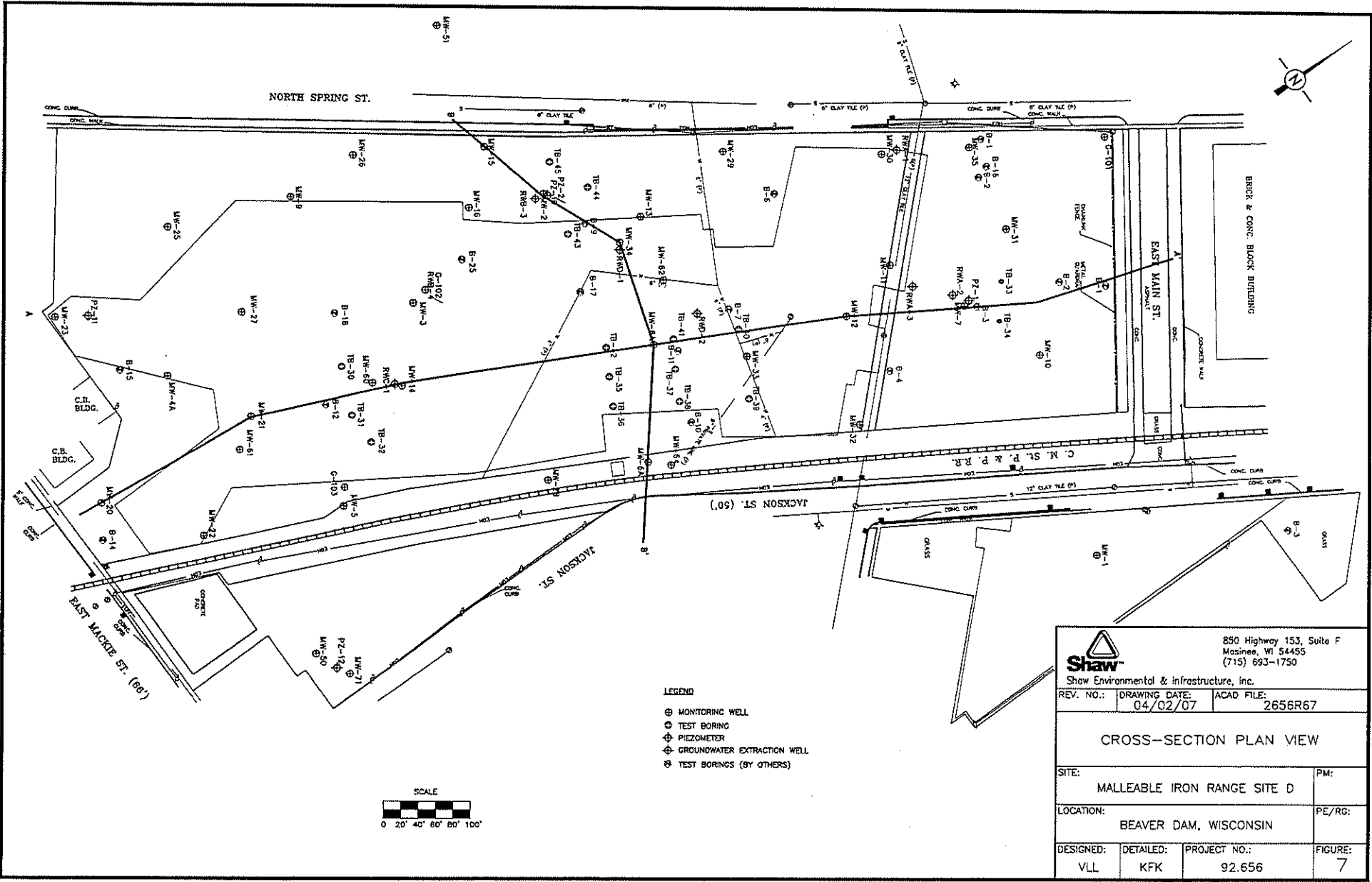



WATER LEVEL

NOTES:

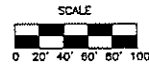
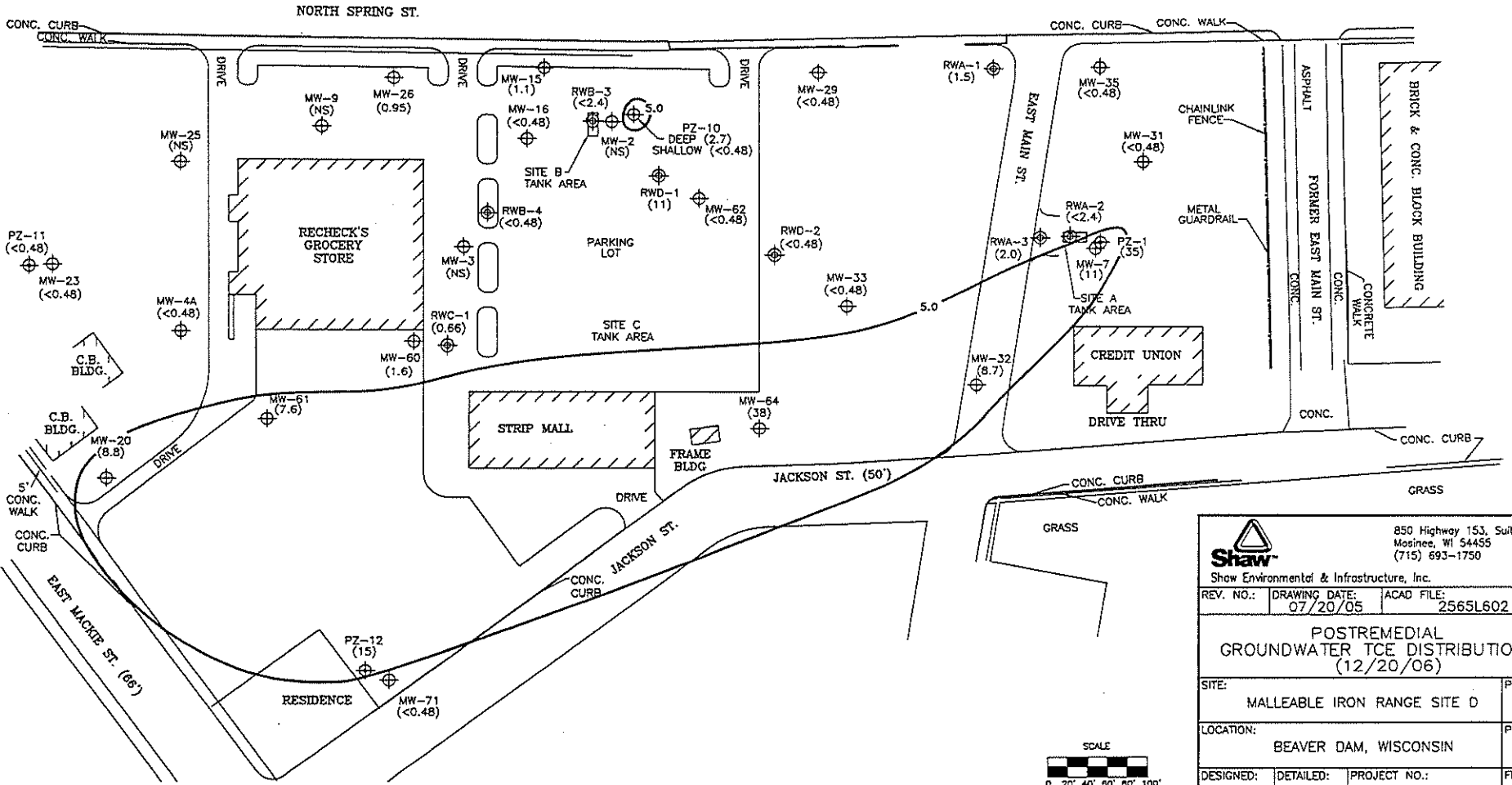
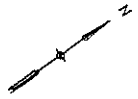
- NOT TO SCALE
- CONCRETE AND PAVEMENT HAVE BEEN OMITTED FROM THE FIGURE
- NR720 STANDARD ISOCONTOUR
- (100) GRO/DRO CONCENTRATION IN PPM
- █ SAMPLE INTERVAL

 <b>Shaw</b> Shaw Environmental & Infrastructure, Inc.		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		REV. NO.:	DRAWING DATE: 03/28/07
PREREMEDIAL SOIL GRO/DRO DISTRIBUTION/GEOLOGIC CROSS-SECTION A-A'			
SITE:	MALLEABLE IRON RANGE SITE D		PM:
LOCATION:	BEAVER DAM, WISCONSIN		PE/RG:
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
VLL	JRD	92.656	8



		850 Highway 153, Suite F Masinee, WI 54455 (715) 693-1750	
		Show Environmental & Infrastructure, Inc.	
REV. NO.:	DRAWING DATE:	ACAD FILE:	
	04/02/07	2656R67	
<b>CROSS-SECTION PLAN VIEW</b>			
SITE:	MALLEABLE IRON RANGE SITE D		PM:
LOCATION:	BEAVER DAM, WISCONSIN		PE/RG:
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
VLL	KFK	92.656	7

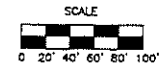
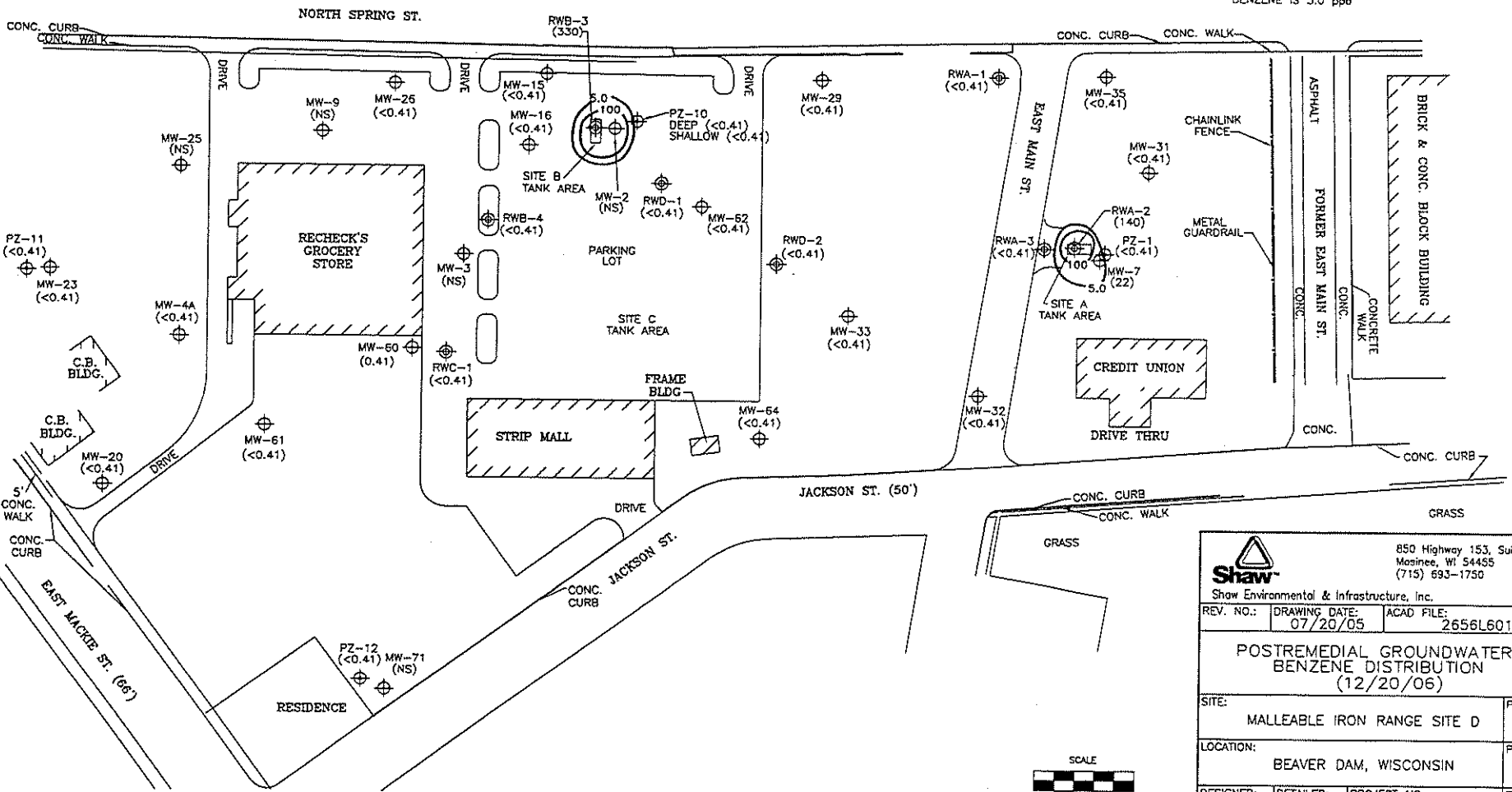
- LEGEND**
- ⊕ MONITORING WELL
  - ⊕ PIEZOMETER
  - ⊕ RECOVERY WELL
  - 5.0 ISOCOCONCENTRATION CONTOUR
  - ( ) TCE CONCENTRATION IN ppb
  - NS NOT SAMPLED
  - NOTE: THE NR140 ENFORCEMENT STANDARD FOR TCE IS 5.0 ppb



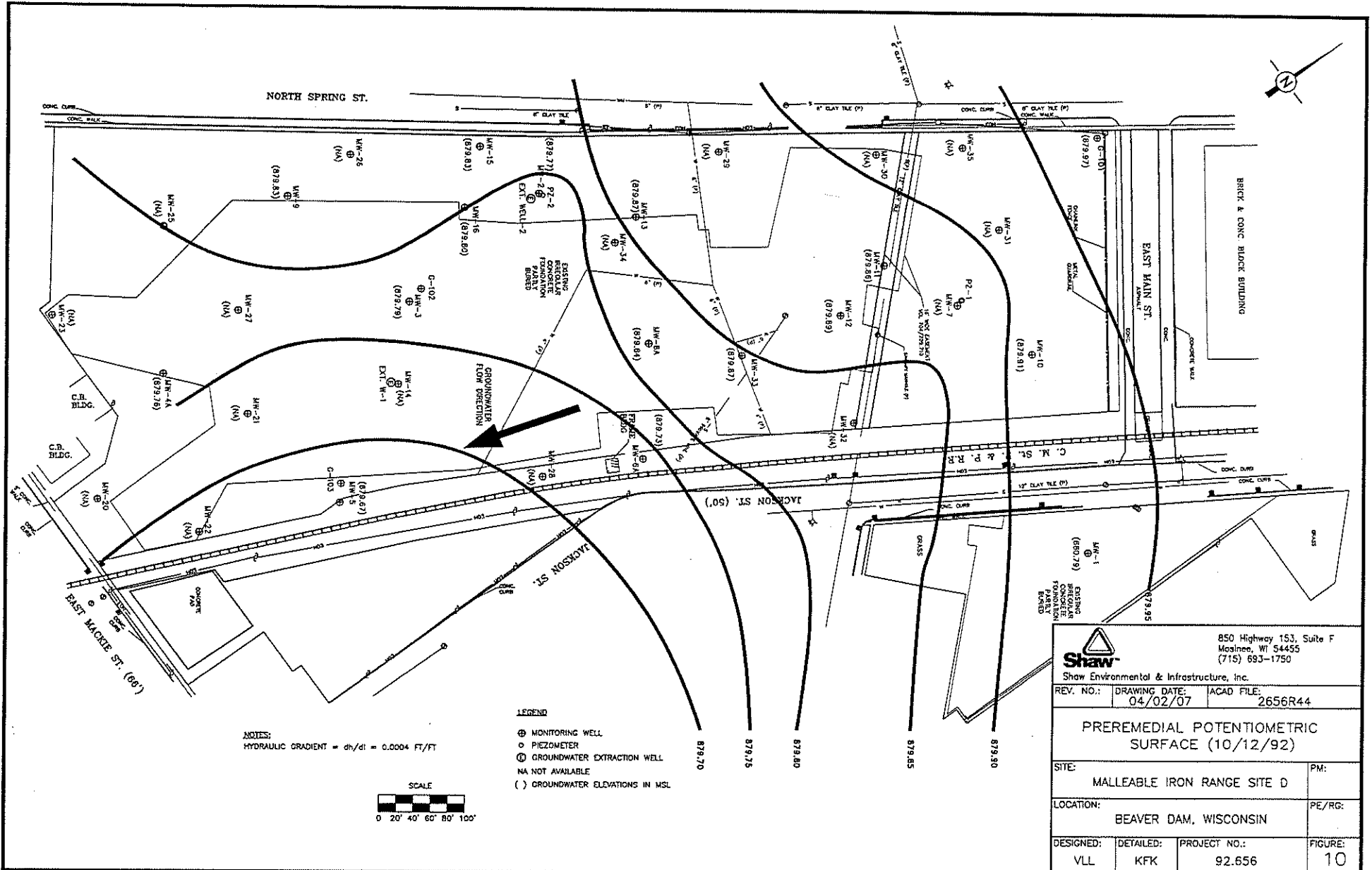
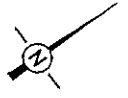
		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		Show Environmental & Infrastructure, Inc.	
REV. NO.:	DRAWING DATE: 07/20/05	ACAD FILE:	2565L602
<b>POSTREMEDIATION GROUNDWATER TCE DISTRIBUTION (12/20/06)</b>			
SITE: MALLEABLE IRON RANGE SITE D		PM:	
LOCATION: BEAVER DAM, WISCONSIN		PE/RG:	
DESIGNED: VLL	DETAILED: KFK	PROJECT NO.:	92.656
			FIGURE: 20

**LEGEND**

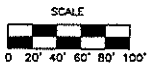
- ⊕ MONITORING WELL
- ⊕ PIEZOMETER
- ⊕ RECOVERY WELL
- 5.0 ISOCONCENTRATION CONTOUR
- ( ) BENZENE CONCENTRATION IN ppb
- NS NOT SAMPLED
- NOTE: THE NR140 ENFORCEMENT STANDARD FOR BENZENE IS 5.0 ppb



		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		Shaw Environmental & Infrastructure, Inc.	
REV. NO.:	DRAWING DATE:	ACAD FILE:	
	07/20/05	2656L601	
<b>POSTREMEDIATION GROUNDWATER BENZENE DISTRIBUTION (12/20/06)</b>			
SITE:		MALLEABLE IRON RANGE SITE D	PM:
LOCATION:		BEAVER DAM, WISCONSIN	PE/RG:
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
VLL	KFK	92.656	19



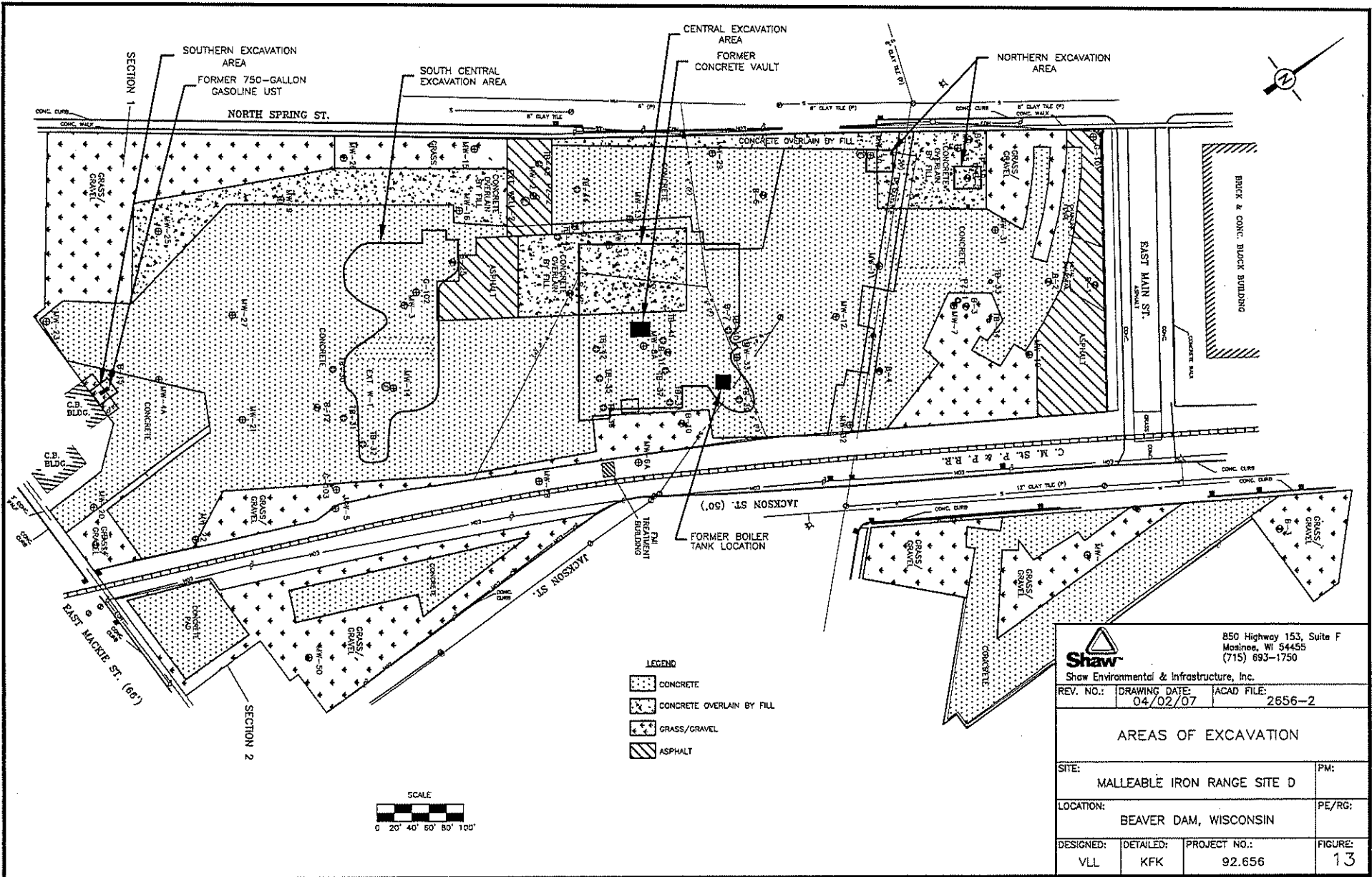
NOTES:  
HYDRAULIC GRADIENT =  $dh/dl = 0.0004$  FT/FT



- LEGEND
- ⊕ MONITORING WELL
  - PIEZOMETER
  - ⊖ GROUNDWATER EXTRACTION WELL
  - NA NOT AVAILABLE
  - ( ) GROUNDWATER ELEVATIONS IN MSL

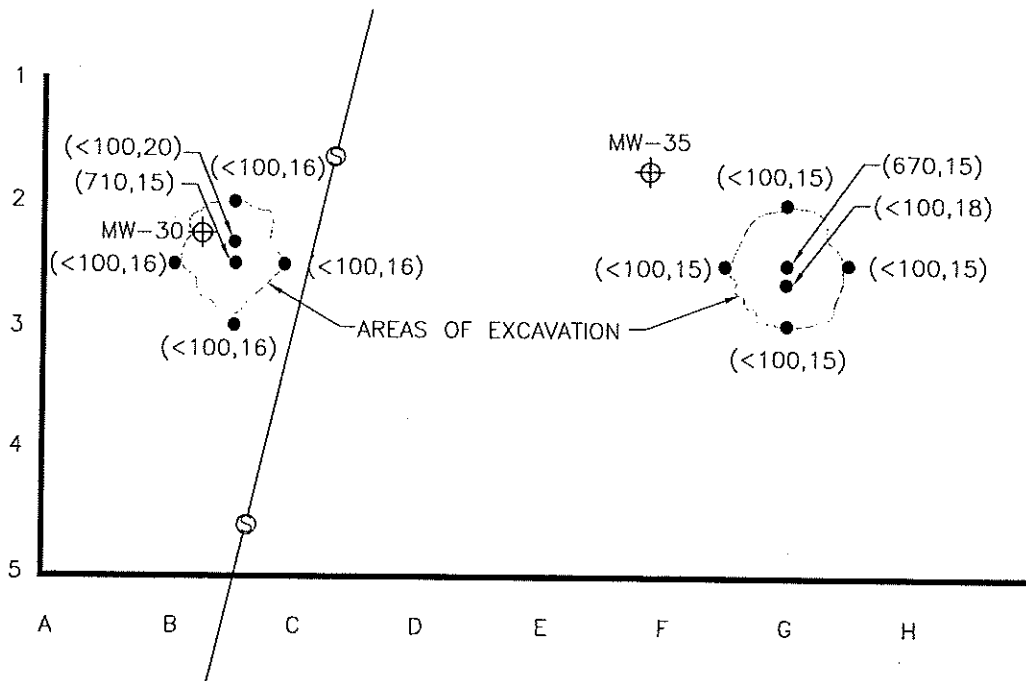
 Shaw Environmental & Infrastructure, Inc.		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		REV. NO.:	DRAWING DATE: 04/02/07
PREREMEDIAL POTENTIOMETRIC SURFACE (10/12/92)			
SITE:	MALLEABLE IRON RANGE SITE D		PM:
LOCATION:	BEAVER DAM, WISCONSIN		PE/RG:
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
VLL	KFK	92.656	10





- LEGEND**
- CONCRETE
  - CONCRETE OVERLAIN BY FILL
  - GRASS/GRAVEL
  - ASPHALT

		850 Highway 153, Suite F Menomonie, WI 54455 (715) 693-1750	
		Show Environmental & Infrastructure, Inc.	
REV. NO.:	DRAWING DATE: 04/02/07	ACAD FILE:	2656-2
<b>AREAS OF EXCAVATION</b>			
SITE:	MALLEABLE IRON RANGE SITE D		PM:
LOCATION:	BEAVER DAM, WISCONSIN		PE/RG:
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
VLL	KFK	92.656	13




**LEGEND**

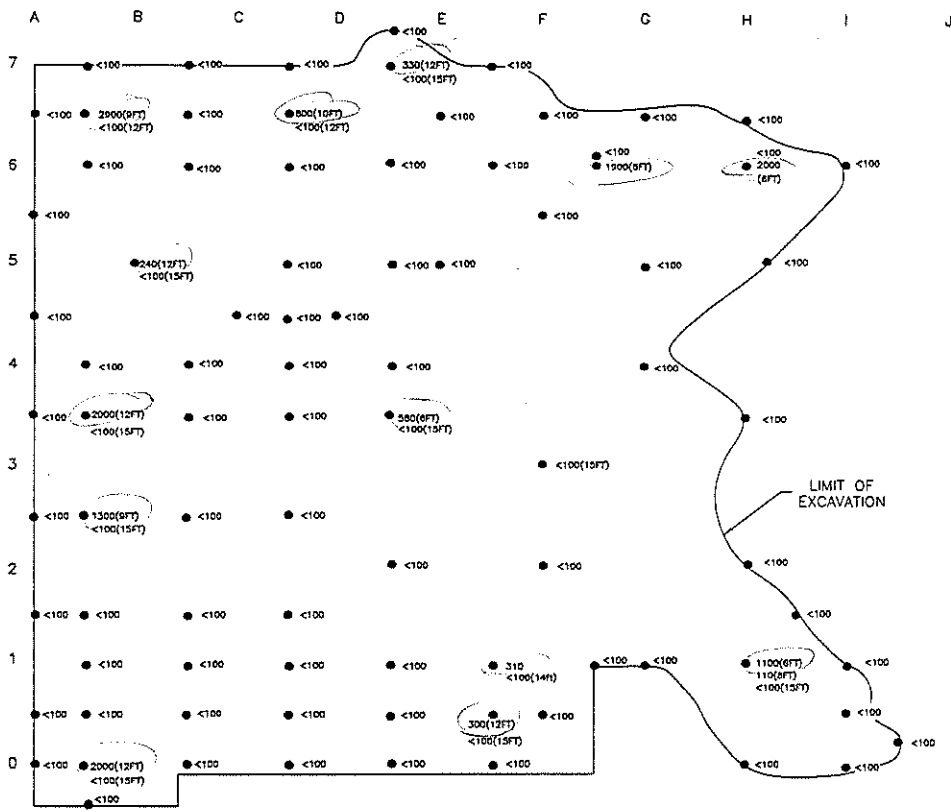
- SAMPLE LOCATION
- ⊕ MONITORING WELL
- ⊙ SANITARY SEWER LINE

(710,15) SOIL DRO CONCENTRATION IN ppm AND SAMPLE DEPTH

SCALE

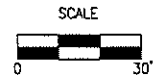



		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		Shaw Environmental & Infrastructure, Inc.	
REV. NO.:	DRAWING DATE:	ACAD FILE:	
	04/02/07	2656-3	
<b>NORTHERN EXCAVATION AREA</b>			
SITE:		PM:	
MALLEABLE IRON RANGE SITE D			
LOCATION:		PE/RG:	
BEAVER DAM, WISCONSIN			
DESIGNED:	DETAILED:	PROJECT NO.:	FIGURE:
VLL	KFK	92.656	14

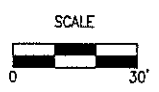
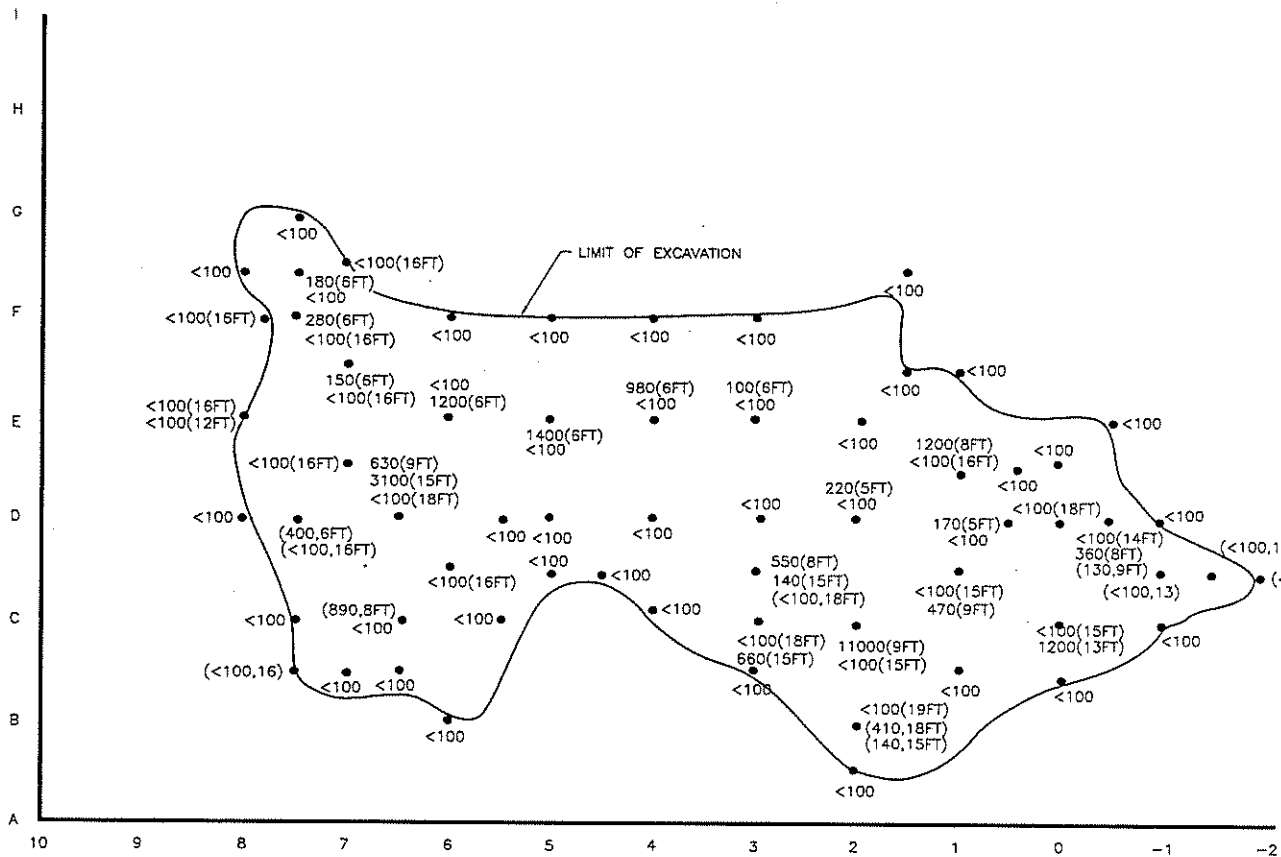



**LEGEND**

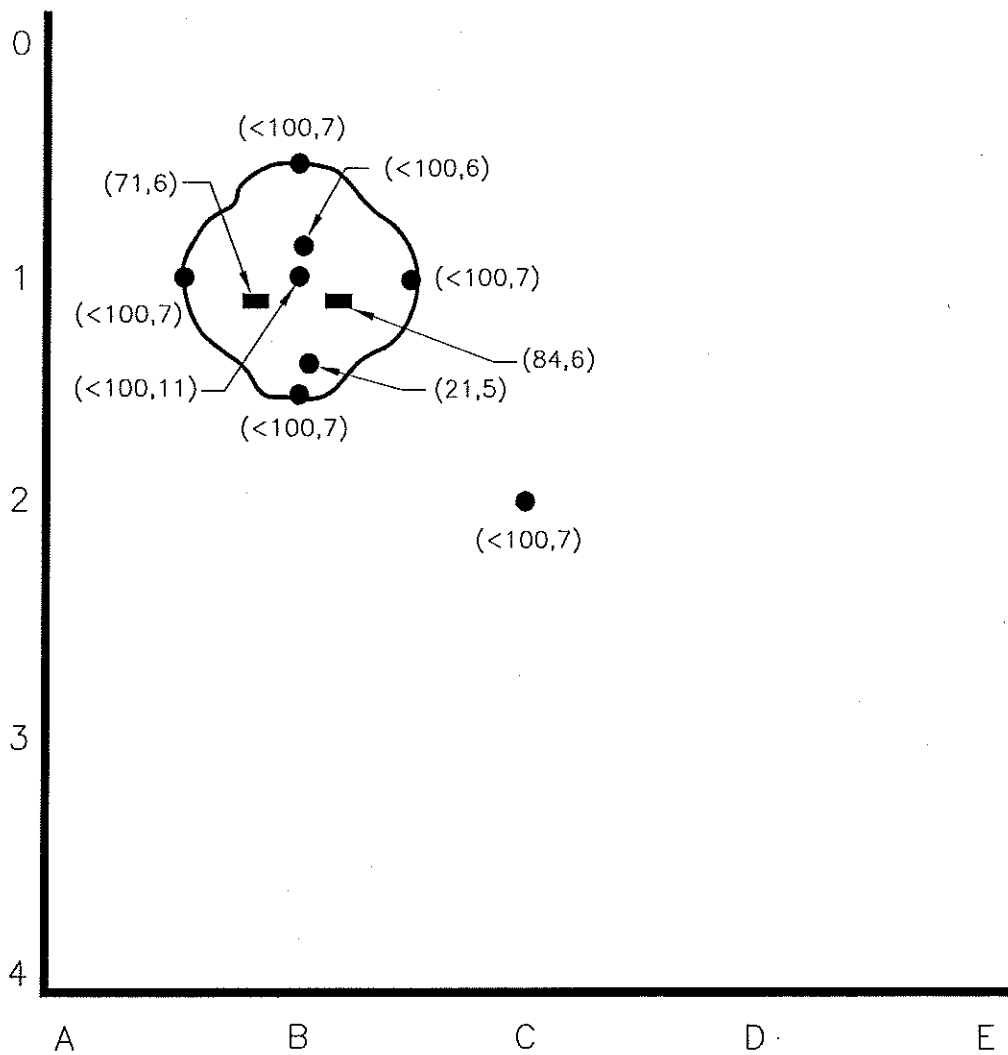
- SAMPLE LOCATION
- 300 (15) SOIL DRO CONCENTRATION IN ppm AND SAMPLE DEPTH
- SAMPLES WERE ACQUIRED FROM A DEPTH OF 12FT UNLESS OTHERWISE STATED



 Shaw Environmental & Infrastructure, Inc.		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		REV. NO.:	DRAWING DATE: 04/02/07
<b>CENTRAL EXCAVATION AREA</b>			
SITE: MALLEABLE IRON RANGE SITE D		PM:	
LOCATION: BEAVER DAM, WISCONSIN		PE/RG:	
DESIGNED: VLL	DETAILED: KFK	PROJECT NO.:	FIGURE: 15
		92.656	



 Shaw Environmental & Infrastructure, Inc.		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		REV. NO.:	DRAWING DATE: 04/02/07
<b>SOUTH CENTRAL EXCAVATION AREA</b>			
SITE: MALLEABLE IRON RANGE SITE D		PM:	
LOCATION: BEAVER DAM, WISCONSIN		PE/RG:	
DESIGNED: VLL	DETAILED: KFK	PROJECT NO.:	FIGURE:
		92.656	16

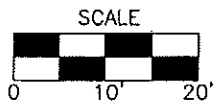



**LEGEND**

■ SAMPLES TAKEN DURING TANK REMOVAL

● SAMPLE LOCATION

(71,15) SOIL GRO CONCENTRATION IN ppm AND SAMPLE DEPTH



 <b>Shaw</b> Shaw Environmental & Infrastructure, Inc.		850 Highway 153, Suite F Mosinee, WI 54455 (715) 693-1750	
		REV. NO.:	DRAWING DATE: 04/02/07
<b>SOUTHERN EXCAVATION AREA</b>			
SITE: MALLEABLE IRON RANGE SITE D		PM:	
LOCATION: BEAVER DAM, WISCONSIN		PE/RG:	
DESIGNED: VLL	DETAILED: KFK	PROJECT NO.: 92.656	FIGURE: 17

March 9, 2007

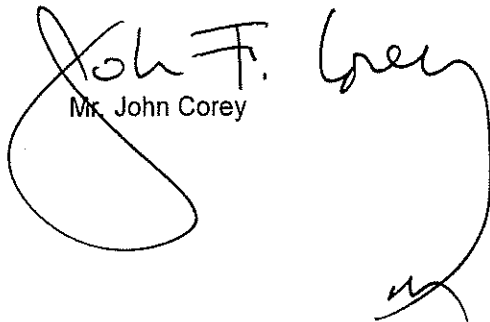
Ms. Denise Nettlesheim  
Wisconsin Department of Natural Resources  
3911 Fish Hatchery Road  
Fitchburg, Wisconsin 53711

**Re: GIS Registry RP Legal Description Signed Statement for the  
Malleable Iron Range Site D, Beaver Dam, WI  
WDNR No. 03-14-0001263  
Shaw Environmental Project No. 124584**

Dear Ms. Nettlesheim:

Please be advised that the legal description for the Malleable Iron Range Site D located in Beaver Dam, Wisconsin, has been attached and is located within the contaminated site boundaries.

Sincerely,

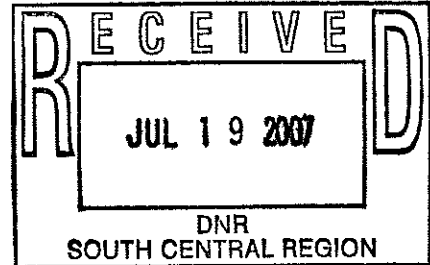
  
Mr. John Corey



July 16, 2007

Mr. and Mrs. Daniel and Kathleen Wackett  
143 East Mackie Street  
Beaver Dam, Wisconsin 53916

**RE: Notice of Residual Groundwater Contamination at the  
Malleable Iron Range Property, Beaver Dam, Wisconsin**



Dear Mr. and Mrs. Wackett:

Groundwater petroleum contamination, in excess of Wisconsin Administrative Code (WAC) NR 140 groundwater enforcement standards (ESs) from the above-referenced property, is present in monitoring wells located on its property boundary and there is the potential that groundwater contamination has migrated onto the rights-of-way of East Mackie Street and Jackson Street, south and east of the site, respectively. Additionally, there is the potential that contamination has migrated onto properties, owned by you, located at 143 East Mackie Street and 138 East Mackie Street. Contamination in the form of trichloroethene exists at concentrations exceeding NR 140 ESs. However, the contaminant plume is receding and trends are decreasing. Conditional case closure from the Wisconsin Department of Natural Resources (WDNR) has been requested. If closure is granted with no additional investigation or cleanup activities required, WDNR reserves the right to reopen the investigation if, in the future, site conditions indicate that any contamination that remains may pose a threat to human health or the environment.

Since the source of groundwater contamination potentially on your property was not caused by your actions, neither you nor any subsequent owner of your property will be held responsible for additional investigation or cleanup of the contamination, if deemed necessary by WDNR, as long as you and any subsequent owners comply with the requirements of Section 292.13, Wisconsin Statutes, including allowing access to your property for environmental investigation or cleanup if access is required. For further information on the requirements of Section 292.13, Wisconsin Statutes, you may call 1-800-367-6076, to obtain a copy of the Wisconsin Department of Natural Resources' (WDNR) publication #RR-589, Fact Sheet 10: Guidance for Dealing with Properties Affected by Off-Site Contamination.

If conditional case closure is granted with groundwater contamination present in excess of an NR 140 ES, the site will be listed on the WDNR's Geographic Information System (GIS) Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in Wisconsin where groundwater contamination above chapter NR 140 ESs was found at the time that the case was closed. This GIS Registry will be available to the general public on the Department of Natural Resources' Internet web site.

Should you or any subsequent property owner wish to construct or reconstruct a well on your property, special well construction standards may be necessary to protect the well from the residual groundwater contamination. Any well driller who proposes to construct a well on your property in the future will first need to call Diggers Hotline (1-800-242-8511) if your property is located outside of the service area of a municipally owned water system, or contact the Drinking Water program within the Department of Natural Resources if your property is located within the designated service area of a municipally owned water system, to determine if there is a need for special well construction standards.

If the site is granted closure, the WDNR will not add this property to the GIS Registry of Closed Remediation Sites for at least 30 days after the date of this letter. As an affected property owner, you have a right to contact the WDNR to provide any technical information that you may have that indicates that this site should not be added to the GIS Registry of Closed Remediation Sites. If you would like to submit any relevant

Mr. and Mrs. Wackett  
July 16, 2007, Page 2

information to the WDNR, you should mail that information to: Ms. Denise Nettesheim, 3911 Fish Hatchery Road, Fitchburg, Wisconsin 53711.

Once the site is closed, you may obtain a copy of the conditional case closure letter by requesting a copy from me, by writing to the agency address given above, or by accessing the WDNR GIS Registry of Closed Remediation Sites on the Internet at [www.dnr.state.wi.us/org/at/et/geo/gwur](http://www.dnr.state.wi.us/org/at/et/geo/gwur). A copy of the closure letter is included as part of the site file on the GIS Registry of Closed Remediation Sites.

If you need more information or have any questions regarding this notification, you may contact me at (715) 849-8986.

Sincerely,  
**Shaw Environmental, Inc.**



Victoria L. Loveland  
Engineer 3

cc: Ms. Denise Nettesheim, WDNR, 3911 Fish Hatchery Road, Fitchburg, WI 53711  
Mr. John Corey, Dodge County Corporate Counsel, 127 East Oak Grove Street, Juneau, WI 53039  
File copy



DOCUMENT NO

STATE BAR OF WISCONSIN FORM 3 - 1982  
QUIT CLAIM DEED FEE

THIS SPACE RESERVED FOR RECORDING DATA

\$ 13  
EXEMPT

COUNTY OF DODGE,

Office of Register of Deeds  
Dodge County, WI  
RECEIVED FOR RECORD  
NOV 28 1990  
at 9:20 o'clock A.M.  
Doris Westra  
DORIS WESTRA - Registrar

quit-claims to DANIEL J. WACKETT and KATHLEEN E. WACKETT, husband and wife, as survivor-ship marital property,

the following described real estate in Dodge County, State of Wisconsin:

The North 24.00 feet of the South 130.00 feet of Lot 11, EXCEPT the East 54.00 feet thereof, also the East 4.00 feet of the North 24.00 feet of the South 130.00 feet of Lot 12, all in Block 1 of Mackie's Addition to Beaver Dam, City of Beaver Dam, Dodge County, Wisconsin.

Atty Steve Hannan  
Es Sec 698  
Beaver Dam, W. 53916-0698

Tax Parcel No:

1/41

This is not homestead property.  
(is) (is not)

Dated this 8 day of November, 1990

June Harkins (SEAL) by Charles E. Swain, County Board Chairman  
Linda J. Niles (SEAL) by Dorothy E. Ebert, County Clerk

AUTHENTICATION

ACKNOWLEDGMENT

Signature(s)

STATE OF WISCONSIN

authenticated this day of 19

DODGE County, Wisconsin  
Personally came before me this 8 day of November, 1990, the above named County of Dodge by Charles E. Swain, its County Board Chairman, and Dorothy E. Ebert, County Clerk.

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not authorized by § 706.06, Wis. Stats.)

to me known to be the person who executed the foregoing instrument and acknowledge the same

THIS INSTRUMENT WAS DRAFTED BY Stephen J. Hannan

Attorney at Law

June L. Harkins  
Notary Public, State of Wisconsin  
My Commission is permanent. (If not, state expiration date: September 19

(Signatures may be authenticated or acknowledged. Both are not necessary.)

DOCUMENT NO. **FEE**  
**13**  
**EXEMPT**

VOL. **704** PAGE **674**  
STATE BAR OF WISCONSIN FORM 3--1982  
QUIT CLAIM DEED  
**705** PAGE **388**

738400

THIS SPACE RESERVED FOR RECORDING DATA

Office of Register of Deeds  
Dodge County, WI  
RECEIVED FOR RECORD

NOV 28 1990  
at **9:20** o'clock **A. M.**  
*Doris Westra*  
DORIS WESTRA - Registrar

RETURN TO  
Atty. Steve Hannan  
P.O. Box 698  
Beaver Dam, WI 53916-0698

Tax Parcel No: **738780**

Office of Register of Deeds  
Dodge County, WI  
RECEIVED FOR RECORD

DEC 12 1990  
at **9:21** o'clock **A. M.**  
*Doris Westra*  
DORIS WESTRA - Registrar

COUNTY OF DODGE,

quit-claims to **DANIEL J. WACKETT**

the following described real estate in **Dodge** County,  
State of Wisconsin:

The North 12.00 feet of the South 130.00  
feet of the East 54.00 feet of Lot 11,  
Block 1 of Mackie's Addition to Beaver  
Dam, City Beaver Dam, Dodge County,  
Wisconsin.

This Deed is being re-recorded to correct the names of the Grantee  
herein.

This is not homestead property.  
(is) (is not)

Dated this **8** day of **November**, 19**90**

COUNTY OF DODGE

*Jane Harkins* (SEAL BY)  
• Jane Harkins  
*Linda J. Niles* (SEAL BY)  
• Linda J. Niles

*Chas. E. Swain* (SEAL)  
• Charles E. Swain, County Board Chairman  
*Dorothy E. Ebert* (SEAL)  
• Dorothy E. Ebert, County Clerk

AUTHENTICATION

ACKNOWLEDGMENT

Signature(s) .....

STATE OF WISCONSIN

authenticated this .....day of ....., 19.....

DODGE.....County. } ss.

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not  
authorized by § 706.06, Wis. Stats.)

Personally came before me this **8** day of  
**November**, 19**90** the above named  
County of Dodge, by **Charles E. Swain**, its  
County Board Chairman, and **Dorothy E. Ebert**,  
its County Clerk,

THIS INSTRUMENT WAS DRAFTED BY  
**Stephen J. Hannan**  
Attorney at Law

to me known to be the person **S** who executed the  
foregoing instrument and acknowledge the same.

*Jane L. Harkins*  
• **Jane L. Harkins**  
Notary Public, State of **Wisconsin**, Wis.  
My Commission is permanent. (If not, state expiration  
date: **September 19** 19**93**)

(Signatures may be authenticated or acknowledged. Both  
are not necessary.)

*page  
204 ocd  
674*

*File*

FEE  
DOCUMENT AND  
EXEMPT

# 8

DANIEL J. WACKETT and KATHEEN E. WACKETT, husband and wife, and each individually, quit-claims to DANIEL J. WACKETT and KATHLEEN E. WACKETT, husband and wife, as survivorship marital property,

Office of Registrar of Deeds  
Dodge County, WI  
RECEIVED FOR RECORD

JUL 22 1991  
at 9:24 o'clock A.M.  
DORIS WESTRA - Registrar

the following described real estate in Dodge County, State of Wisconsin:

Parcel 1:

Beginning at the South East corner of Lot Eleven (11), Block One (1) of Mackie's Addition to Beaver Dam; thence running North on the East line of said lot, a distance of 118 feet; thence West, parallel with South boundary line of said lot, a distance of 54 feet; thence South, parallel with the East boundary line of said lot, a distance of 118 feet to the South boundary line of said lot; thence East, on the South boundary line of said lot, a distance of 54 feet to the place of beginning.

Steve Hannan, Atty.  
P.O. Box 698  
Beaver Dam, WI

Tax Parcel No: .....

Parcel 2:

The North 12.00 feet of the South 130.00 feet of the East 54.00 feet of Lot 11, Block 1 of Mackie's Addition to Beaver Dam, City of Beaver Dam, Dodge County, Wisconsin.

This Deed is given for the purpose of creating a survivorship marital interest between the grantees herein.

This is ..... homestead property.  
(is) (is not)

Dated this 16<sup>th</sup> day of July, 1991

(SEAL) Daniel J. Wackett (SEAL)  
Daniel J. Wackett  
(SEAL) Kathleen E. Wackett (SEAL)  
Kathleen E. Wackett

AUTHENTICATION

Signature(s) of Daniel J. Wackett and Kathleen E. Wackett, husband and wife, and each individually, authenticates this deed as of JULY, 1991.

Stephen J. Hannan  
TITLE: MEMBER STATE BAR OF WISCONSIN

(If not authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY  
Stephen J. Hannan  
Attorney at Law

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN

ss. \_\_\_\_\_ County.

Personally came before me this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_ the above named

to me known to be the person who executed the foregoing instrument and acknowledges the same.

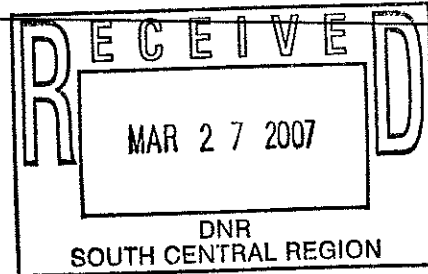
Notary Public \_\_\_\_\_ County, Wis.  
My Commission is permanent. (If not, state expiration date: \_\_\_\_\_, 19\_\_\_\_.)

Handwritten note on the left margin: "At 11:30 AM, 7/22/91, Steve Hannan, Atty."



March 21, 2007

Dodge Central Credit Union  
106 East Main Street  
Beaver Dam, Wisconsin 53916



**RE: Notice of Residual Groundwater Contamination at the  
Malleable Iron Range Property, 715 North Spring Street, Beaver Dam, Wisconsin**

Dear Sir or Madam:

Groundwater petroleum contamination, in excess of Wisconsin Administrative Code (WAC) NR 140 groundwater enforcement standards (ESs) from the above-referenced property, is present in monitoring wells located on its property boundary and there is the potential that groundwater contamination has migrated onto your property or the rights-of-way of East Mackie Street and Jackson Street, south and east of the site, respectively. Contamination in the form of trichloroethene exists at concentrations exceeding NR 140 ESs in several wells (please see the attached figure). However, the contaminant plume is receding and trends are decreasing. Conditional case closure from the Wisconsin Department of Natural Resources (WDNR) will soon be requested. If closure is granted with no additional investigation or cleanup activities required, WDNR reserves the right to reopen the investigation if, in the future, site conditions indicate that any contamination that remains may pose a threat to human health or the environment.

Since the source of groundwater contamination potentially on your property was not caused by your actions, neither you nor any subsequent owner of your property will be held responsible for additional investigation or cleanup of the contamination, if deemed necessary by WDNR, as long as you and any subsequent owners comply with the requirements of Section 292.13, Wisconsin Statutes, including allowing access to your property for environmental investigation or cleanup if access is required. For further information on the requirements of Section 292.13, Wisconsin Statutes, you may call 1-800-367-6076, to obtain a copy of the Wisconsin Department of Natural Resources' (WDNR) publication #RR-589, Fact Sheet 10: Guidance for Dealing with Properties Affected by Off-Site Contamination.

If conditional case closure is granted with groundwater contamination present in excess of an NR 140 ES, the site will be listed on the WDNR's Geographic Information System (GIS) Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in Wisconsin where groundwater contamination above chapter NR 140 ESs was found at the time that the case was closed. This GIS Registry will be available to the general public on the Department of Natural Resources' Internet web site.

Should you or any subsequent property owner wish to construct or reconstruct a well on your property, special well construction standards may be necessary to protect the well from the residual groundwater contamination. Any well driller who proposes to construct a well on your property in the future will first need to call Diggers Hotline (1-800-242-8511) if your property is located outside of the service area of a municipally owned water system, or contact the Drinking Water program within the Department of Natural Resources if your property is located within the designated service area of a municipally owned water system, to determine if there is a need for special well construction standards.

If the site is granted closure, the WDNR will not add this property to the GIS Registry of Closed Remediation Sites for at least 30 days after the date of this letter. As an affected property owner, you have a right to contact the WDNR to provide any technical information that you may have that indicates that this site should not be added to the GIS Registry of Closed Remediation Sites. If you would like to submit any relevant

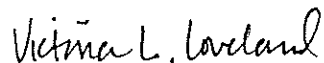
Dodge Central Credit Union  
March 21, 2007, Page 2

information to the WDNR, you should mail that information to: Ms. Denise Nettesheim, 3911 Fish Hatchery Road, Fitchburg, Wisconsin 53711.

Once the site is closed, you may obtain a copy of the conditional case closure letter by requesting a copy from me, by writing to the agency address given above, or by accessing the WDNR GIS Registry of Closed Remediation Sites on the Internet at [www.dnr.state.wi.us/org/at/et/geo/gwur](http://www.dnr.state.wi.us/org/at/et/geo/gwur). A copy of the closure letter is included as part of the site file on the GIS Registry of Closed Remediation Sites.

If you need more information, you may contact me at Shaw Environmental, Inc., 3708 Hilltop Avenue, Wausau, Wisconsin 54401, at (715) 849-8986.

Sincerely,  
**Shaw Environmental, Inc.**

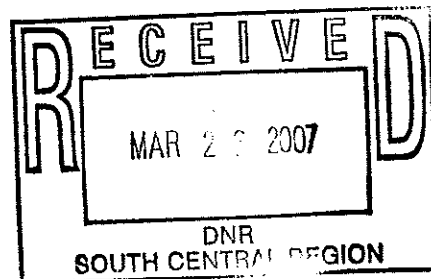


Victoria L. Loveland  
Engineer 3

cc: Ms. Denise Nettesheim, WDNR, 3911 Fish Hatchery Road, Fitchburg, WI 53711  
Mr. John Corey, Dodge County Corporate Counsel, 127 East Oak Grove Street, Juneau, WI 53039

March 21, 2007

Mr. Mike Laue  
Consulting City Engineer  
City of Beaver Dam Engineering Department  
205 South Lincoln Avenue  
Beaver Dam, Wisconsin 53916



**RE: Notice of Residual Groundwater Contamination at the  
Malleable Iron Range Property, 715 North Spring Street, Beaver Dam, Wisconsin**

Dear Mr. Laue:

Groundwater petroleum contamination, in excess of Wisconsin Administrative Code (WAC) NR 140 groundwater enforcement standards (ESs) from the above-referenced property, is present in monitoring wells located on its property boundary and there is the potential that groundwater contamination has migrated onto the rights-of-way of East Mackie Street and Jackson Street, south and east of the site, respectively. Contamination in the form of trichloroethene exists at concentrations exceeding NR 140 ESs. However, the contaminant plume is receding and trends are decreasing. Conditional case closure from the Wisconsin Department of Natural Resources (WDNR) will soon be requested. If closure is granted with no additional investigation or cleanup activities required, WDNR reserves the right to reopen the investigation if, in the future, site conditions indicate that any contamination that remains may pose a threat to human health or the environment.

Since the source of groundwater contamination potentially on your property was not caused by your actions, neither you nor any subsequent owner of your property will be held responsible for additional investigation or cleanup of the contamination, if deemed necessary by WDNR, as long as you and any subsequent owners comply with the requirements of Section 292.13, Wisconsin Statutes, including allowing access to your property for environmental investigation or cleanup if access is required. For further information on the requirements of Section 292.13, Wisconsin Statutes, you may call 1-800-367-6076, to obtain a copy of the Wisconsin Department of Natural Resources' (WDNR) publication #RR-589, Fact Sheet 10: Guidance for Dealing with Properties Affected by Off-Site Contamination.

If conditional case closure is granted with groundwater contamination present in excess of an NR 140 ES, the site will be listed on the WDNR's Geographic Information System (GIS) Registry of Closed Remediation Sites. The information on the GIS Registry includes maps showing the location of properties in Wisconsin where groundwater contamination above chapter NR 140 ESs was found at the time that the case was closed. This GIS Registry will be available to the general public on the Department of Natural Resources' Internet web site.

Should you or any subsequent property owner wish to construct or reconstruct a well on your property, special well construction standards may be necessary to protect the well from the residual groundwater contamination. Any well driller who proposes to construct a well on your property in the future will first need to call Diggers Hotline (1-800-242-8511) if your property is located outside of the service area of a municipally owned water system, or contact the Drinking Water program within the Department of Natural Resources if your property is located within the designated service area of a municipally owned water system, to determine if there is a need for special well construction standards.

If the site is granted closure, the WDNR will not add this property to the GIS Registry of Closed Remediation Sites for at least 30 days after the date of this letter. As an affected property owner, you have a right to contact the WDNR to provide any technical information that you may have that indicates that this site should

Mr. Mike Laue  
March 21, 2007, Page 2

not be added to the GIS Registry of Closed Remediation Sites. If you would like to submit any relevant information to the WDNR, you should mail that information to: Ms. Denise Nettesheim, 3911 Fish Hatchery Road, Fitchburg, Wisconsin 53711.

Once the site is closed, you may obtain a copy of the conditional case closure letter by requesting a copy from me, by writing to the agency address given above, or by accessing the WDNR GIS Registry of Closed Remediation Sites on the Internet at [www.dnr.state.wi.us/org/at/et/qeo/gwur](http://www.dnr.state.wi.us/org/at/et/qeo/gwur). A copy of the closure letter is included as part of the site file on the GIS Registry of Closed Remediation Sites.

If you need more information, you may contact me at Shaw Environmental, Inc., 3708 Hilltop Avenue, Wausau, Wisconsin 54401, at (715) 849-8986.

Sincerely,  
**Shaw Environmental, Inc.**



Victoria L. Loveland  
Engineer 3

cc: Ms. Denise Nettesheim, WDNR, 3911 Fish Hatchery Road, Fitchburg, WI 53711  
Mr. John Corey, Dodge County Corporate Counsel, 127 East Oak Grove Street, Juneau, WI 53039



February 22, 2008

Dodge Central Credit Union  
106 E. Main Street  
Beaver Dam, Wisconsin 53916

**RE: Notice of Lost Monitoring Well at the  
Malleable Iron Range Property, 715 North Spring Street, Beaver Dam, Wisconsin**

Dear Sir or Madam:

On behalf of Dodge County, Shaw Environmental, Inc. (Shaw) has requested closure from the Wisconsin Department of Natural Resources (WDNR) for an environmental site investigation and remediation at the Former Malleable Iron Range Property located in Beaver Dam, Wisconsin. Conditional closure of the site was granted by the WDNR. One of the conditions of closure was to provide documentation to the WDNR that all wells located at the site were properly abandoned. However, due to the age of some of the site monitoring wells and the fact that much of the site has undergone redevelopment, several monitoring wells were not able to be located and subsequently abandoned by Shaw. Therefore, Shaw is notifying you monitoring well G101 may still exist on the parcel owned by you (northern corner of Lot 9 on the attached map). You may be held liable for any problems associated with the lost well if a conduit for contaminants to enter groundwater is created. If, at any time the well is located, the WDNR must be notified, the well must be properly abandoned, and abandonment documentation must be forwarded to the WDNR. A partially completed abandonment form specific to the well located on your property has been attached for submittal to the WDNR in the event the well is located and abandoned. Only the yellow high-lighted portions need to be completed.

If you need more information or have any questions regarding the wells, you may contact me at 715-849-8986 or Denise Nettesheim, WDNR, at 608-275-3209 within thirty days from the date of this letter.

Sincerely,  
**Shaw Environmental, Inc.**

Victoria L. Loveland  
Engineer 3

cc: Ms. Denise Nettesheim, WDNR, 3911 Fish Hatchery Road, Fitchburg, WI 53711  
Mr. John Corey, Dodge County Corporate Counsel, 127 East Oak Grove Street, Juneau, WI 53039



NOTES:

1. Monitoring wells G101, G103, MW-27, and MW28 were not able to be located during well abandonment activities. If these wells are located at a later date, they need to be properly abandoned. All other wells have been abandoned.

2. Lot 9 is currently (2/19/08) owned by Dodge Central Credit Union, 106 East Main Street, Beaver Dam, WI 53916.

3. Lots 2 and 6 are currently owned by Castle Monarch, 609 North Spring Street, Beaver Dam, WI 53916.



NOTES:

1. Monitoring wells G101, G103, MW-27, and MW28 were not able to be located during well abandonment activities. If these wells are located at a later date, they need to be properly abandoned. All other wells have been abandoned.

2. Lot 9 is currently (2/19/08) owned by Dodge Central Credit Union, 106 East Main Street, Beaver Dam, WI 53916.

3. Lots 2 and 6 are currently owned by Castle Monarch, 609 North Spring Street, Beaver Dam, WI 53916.



WELL DETAIL INFORMATION SHEET

JOB NO. 1858

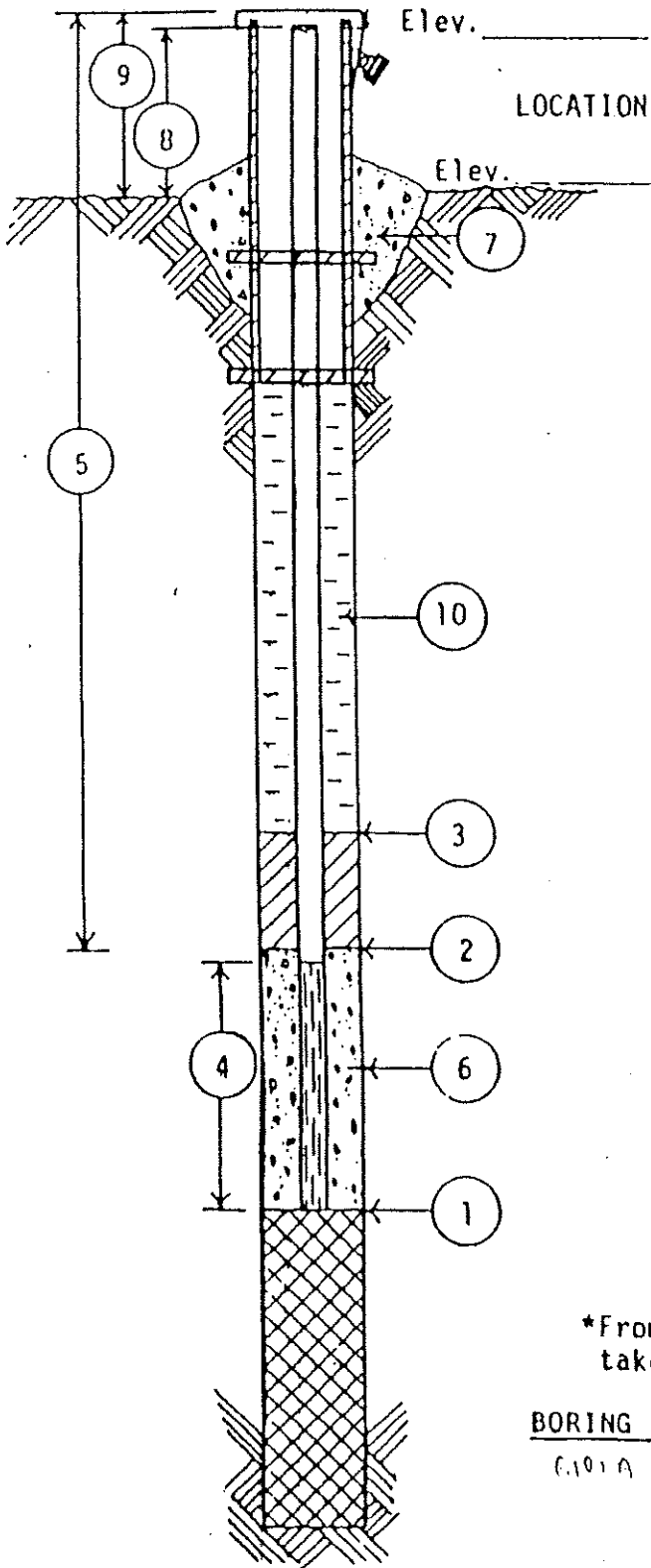
BORING NO. G101

DATE 8-15-89

CHIEF C.B.

LOCATION Monarch Plating - Beaver Dam, WI

All depth measurements of well detail assumed to be from ground surface unless otherwise indicated.



- ① DEPTH TO BOTTOM OF WELL POINT OR SLOTTED PIPE 18.8 18' 8" FEET.
- ② DEPTH OF BOTTOM OF SEAL (if installed) 9.8 9' 8" FEET.
- ③ DEPTH TO TOP OF SEAL (if installed) 7.8 7' 8" FEET.
- ④ LENGTH OF WELL POINT, PVC WELL SCREEN OR SLOTTED PIPE 5.0 FEET. (Circle One)
- ⑤ TOTAL LENGTH OF PIPE 14.8 FEET @ 2 IN. DIAMETER.
- ⑥ TYPE OF FILTER MATERIAL AROUND WELL POINT OR SLOTTED PIPE #30 Flint Sand.
- ⑦ CONCRETE CAP,  YES  NO (Circle One)
- ⑧ HEIGHT OF WELL CASING ABOVE GROUND 1.0 FEET.
- ⑨ PROTECTIVE CASING?  YES  NO (Circle One)  
HEIGHT ABOVE GROUND 1.2  
LOCKING CAP?  YES  NO (Circle One)
- ⑩ TYPE OF BACKFILL: Hole Plug  
Quick Set Mortar Drilling

WATER LEVEL CHECKS

\*From top of casing, if protective casing higher, take measurement from top of protective casing.

BORING #	DATE	TIME	DEPTH TO WATER	REMARKS
G101A	8-15-89	-		

WELL DETAIL INFORMATION SHEET

JOB NO. 1858

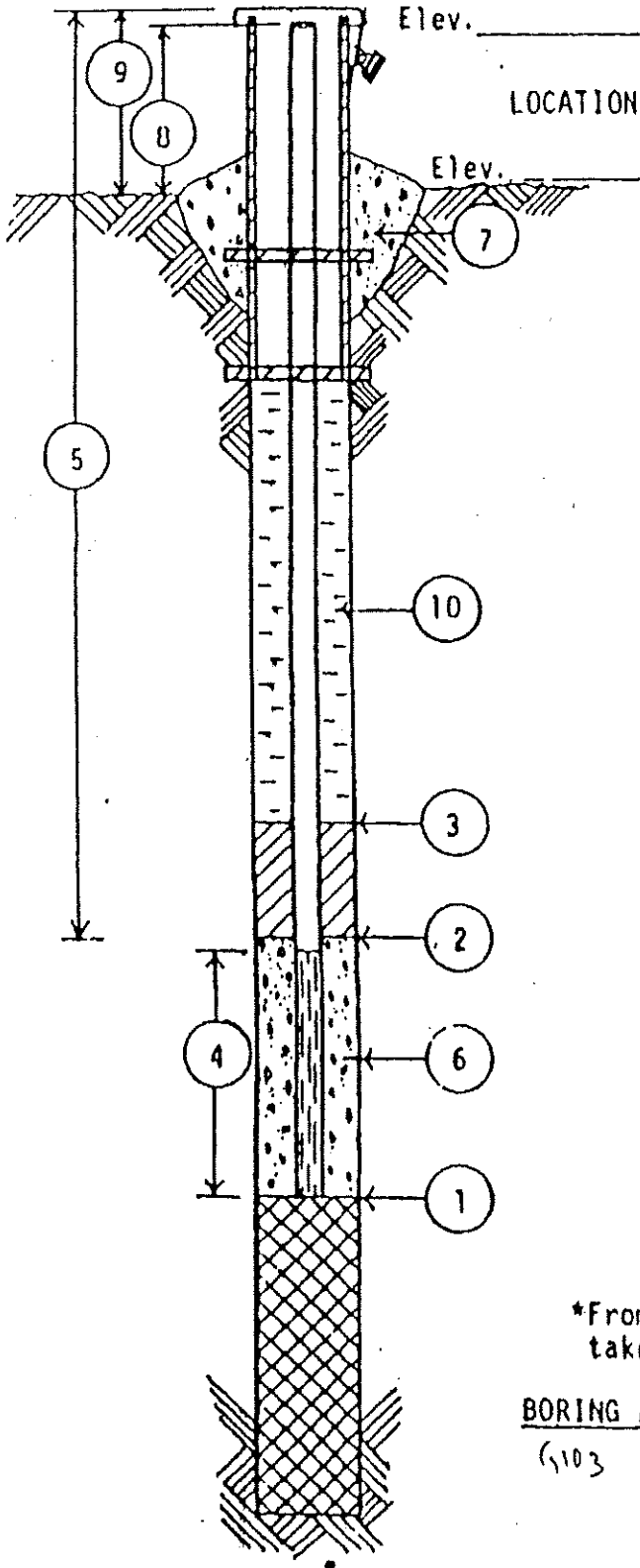
BORING NO. G103

DATE 8-15-89

CHIEF C.B.

LOCATION Monarch Plating - Beaver Dam, WI

All depth measurements of well detail assumed to be from ground surface unless otherwise indicated.



- ① DEPTH TO BOTTOM OF WELL POINT OR SLOTTED PIPE 17.8 FEET.
- ② DEPTH OF BOTTOM OF SEAL (if installed) 10.0 FEET.
- ③ DEPTH TO TOP OF SEAL (if installed) 8.5 8'6" FEET.
- ④ LENGTH OF WELL POINT, PVC WELL SCREEN, OR SLOTTED PIPE 5.0 FEET. (Circle One)
- ⑤ TOTAL LENGTH OF PIPE 13.8 FEET @ 2 IN. DIAMETER.
- ⑥ TYPE OF FILTER MATERIAL AROUND WELL POINT OR SLOTTED PIPE #30 Flint Sand.
- ⑦ CONCRETE CAP,  YES  NO (Circle One)
- ⑧ HEIGHT OF WELL CASING ABOVE GROUND 1.0 FEET.
- ⑨ PROTECTIVE CASING?  YES  NO (Circle One)  
HEIGHT ABOVE GROUND 1.3  
LOCKING CAP?  YES  NO (Circle One)
- ⑩ TYPE OF BACKFILL: Hole Plug

WATER LEVEL CHECKS

\*From top of casing, if protective casing higher, take measurement from top of protective casing.

BORING #	DATE	TIME	DEPTH TO WATER	REMARKS
G103	8-15-89	-	13'4"	

Facility/Project Name <u>M. I. R.</u>	Local Gnd Location of well <u>5000 ft</u> <input checked="" type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W	Well Name <u>MW-27</u>
Facility License, Permit or Monitoring Number	Gnd Origin Location Lat. <u>43 27 52</u> Long. <u>88 50 00</u> or	Wis. Unique Well Number DNR Well Number
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	St. Plane <u>4807.93</u> ft. N. <u>4729.56</u> ft. E.	Date Well Installed <u>11/17/92</u> m m d d y y
Distance Well Is From Waste/Source Boundary <u>UNKNOWN</u> ft.	Section Location of Waste/Source <u>SE 1/4 of SW 1/4 of Sec. 33, T. 12 N., R. 14</u> <input checked="" type="checkbox"/> E <input type="checkbox"/> W.	Well Installed By: (Person's Name and Firm) <u>Chip Johnson</u> <u>Fluid Management, Inc.</u>
Is Well A Point of Enforcement Sta. Application? <u>UNKNOWN</u> <input type="checkbox"/> Yes <input type="checkbox"/> No	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient: s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient: n <input checked="" type="checkbox"/> Not Known	

A. Protective pipe, top elevation	ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation	<u>826.40</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: <u>6.0</u> in. b. Length: <u>3.0</u> ft. c. Material: <u>Steel</u> <input checked="" type="checkbox"/> 04 <u>Other</u> <input type="checkbox"/>
C. Land surface elevation	<u>823.66</u> ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal, bottom	ft. MSL or <u>5</u> ft.	3. Surface seal: <u>Bentonite</u> <input type="checkbox"/> 30 <u>Concrete</u> <input checked="" type="checkbox"/> 01 <u>Other</u> <input type="checkbox"/>
12. USCS classification of soil near screen: GP <input checked="" type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		4. Material between well casing and protective pipe: <u>Bentonite</u> <input checked="" type="checkbox"/> 30 <u>Annular space seal</u> <input type="checkbox"/> <u>Other</u> <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. <u>    </u> Lbs/gal mud weight... Bentonite-sand slurry <input type="checkbox"/> 35 c. <u>    </u> Lbs/gal mud weight... Bentonite slurry <input type="checkbox"/> 31 d. <u>    </u> % Bentonite... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>1.3</u> Ft <sup>3</sup> volume added for any of the above f. How installed: <u>Tremie</u> <input type="checkbox"/> 01 <u>Tremie pumped</u> <input type="checkbox"/> 02 <u>Gravity</u> <input checked="" type="checkbox"/> 08
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>		6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 32 c. <u>    </u> Other <input type="checkbox"/>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99		7. Fine sand material: Manufacturer, product name & mesh size a. <u>BEST -50</u> b. Volume added <u>.64</u> ft <sup>3</sup>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe <u>NA</u>		8. Filter pack material: Manufacturer, product name and mesh size a. <u>BEST -20</u> b. Volume added <u>3.8</u> ft <sup>3</sup>
17. Source of water (attach analysis): <u>NA</u>		9. Well casing: <u>Flush threaded PVC schedule 40</u> <input checked="" type="checkbox"/> 23 <u>Flush threaded PVC schedule 30</u> <input type="checkbox"/> 24 <u>Other</u> <input type="checkbox"/>
E. Bentonite seal, top	ft. MSL or <u>4.0</u> ft.	10. Screen material: <u>PVC</u> a. Screen type: <u>Factory cut</u> <input checked="" type="checkbox"/> 11 <u>Continuous slot</u> <input type="checkbox"/> 01 <u>Other</u> <input type="checkbox"/>
F. Fine sand, top	ft. MSL or <u>6.0</u> ft.	b. Manufacturer <u>Monoflex</u> c. Slot size: <u>0.010</u> in. d. Slotted length: <u>10.0</u> ft.
G. Filter pack, top	ft. MSL or <u>8.0</u> ft.	11. Backfill material (below filter pack): <u>None</u> <input checked="" type="checkbox"/> 14 <u>Other</u> <input type="checkbox"/>
H. Screen joint, top	ft. MSL or <u>10.0</u> ft.	
I. Well bottom	ft. MSL or <u>20.0</u> ft.	
J. Filter pack, bottom	ft. MSL or <u>20.0</u> ft.	
K. Borehole, bottom	ft. MSL or <u>20.2</u> ft.	
L. Borehole, diameter	<u>8 1/4</u> in.	
M. O.D. well casing	<u>2.38</u> in.	
N. I.D. well casing	<u>2.00</u> in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
Signature: David Chip Johnson Firm: Fluid Management, Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5,000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

Facility/Project Name <u>M.I.R.</u>	Local Grid Location of well <u>5020</u> ft. <input checked="" type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> W	RELATIVE STATION <u>5000</u> ft. <input type="checkbox"/> E <input type="checkbox"/> W	Well Name <u>MW-24</u>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat <u>43 27 52</u> Long. <u>86 50 00</u> or	St. Plane <u>4976.75</u> ft. N. <u>5095.46</u> ft. E.	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source <u>SE 1/4 of SW 1/4 of Sec. 33, T. 12 N., R. 12 W.</u> <input checked="" type="checkbox"/> E <input type="checkbox"/> W	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	Date Well Installed <u>11/17/92</u> m m d d v v
Distance Well Is From Waste/Source Boundary <u>UNKNOWN</u> ft.	Is Well A Point of Enforcement Sta. Application? <u>UNKNOWN</u> <input type="checkbox"/> Yes <input type="checkbox"/> No	Well Installed By: (Person's Name and Firm) <u>Chip Johnson</u> <u>Fluid Management, Inc</u>	

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation <u>892.69</u> ft. MSL	2. Protective cover pipe: a. Inside diameter: _____ <u>6.0</u> in. b. Length: _____ <u>2.0</u> ft. c. Material: _____ Steel <input checked="" type="checkbox"/> 04 Other <input type="checkbox"/> _____
C. Land surface elevation <u>899.98</u> ft. MSL	d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
D. Surface seal bottom _____ ft. MSL or <u>5</u> ft.	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/> _____
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input checked="" type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> _____ Other <input type="checkbox"/> _____
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. <u>1.5</u> Ft. <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/> _____	6. Bentonite seal: a. Bentonite granules <input type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/> _____
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	7. Fine sand material: Manufacturer, product name & mesh size a. <u>BEST</u> b. Volume added <u>1.0</u> ft. <sup>3</sup>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe <u>NA</u>	8. Filter pack material: Manufacturer, product name and mesh size a. <u>BEST</u> b. Volume added <u>4.0</u> ft. <sup>3</sup>
17. Source of water (attach analysis): <u>NA</u>	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> _____
E. Bentonite seal, top _____ ft. MSL or <u>20</u> ft.	10. Screen material: <u>PVC</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> _____
F. Fine sand, top _____ ft. MSL or <u>30</u> ft.	b. Manufacturer <u>Mono Flex</u> c. Slot size: _____ <u>0.010</u> in. d. Slotted length: _____ <u>10.0</u> ft.
G. Filter pack, top _____ ft. MSL or <u>40</u> ft.	11. Backfill material (below filter pack): None <input type="checkbox"/> 14 Other <input type="checkbox"/> _____
H. Screen joint, top _____ ft. MSL or <u>50</u> ft.	
I. Well bottom _____ ft. MSL or <u>150</u> ft.	
J. Filter pack bottom _____ ft. MSL or <u>150</u> ft.	
K. Borehole, bottom _____ ft. MSL or <u>155</u> ft.	
L. Borehole, diameter <u>8 1/4</u> in.	
M. O.D. well casing <u>2.38</u> in.	
N. I.D. well casing <u>2.00</u> in.	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: David "Chip" N. Johnson Firm: Fluid Management, Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

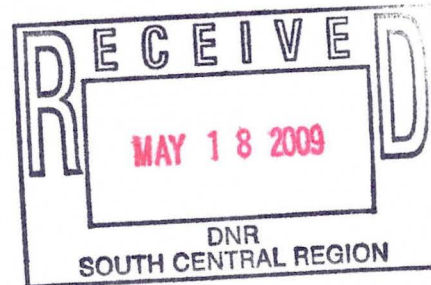
## **Appendix B**

May 14, 2009, Shaw Environmental, Inc. Summary of Lot 8 Geoprobe  
Investigation



May 14, 2009

John Corey  
Dodge County Corporate Counsel  
127 East Oak Grove Street  
Juneau, Wisconsin 53039



**RE: Summary of Lot 8 Geoprobe Investigation  
Former MIR Site, Beaver Dam, Wisconsin  
BRRTS# 03-14-001263**

Dear Mr. Corey:

This letter serves as a summary of the results from the recent soil sampling that was conducted at the former MIR-D site located in Beaver Dam, Wisconsin.

On April 14, 2009, On-Site Environmental, Inc. under the direction of Shaw Environmental, Inc. (Shaw), advanced twenty-three Geoprobe soil borings (GP-1 through GP-23) to characterize the soil at the site and determine the extent of soil contamination. Soil borings GP-1 through GP-4 were advanced to 7 feet below ground surface (bgs) and the remaining nineteen borings (GP-5 through GP-23) were advanced to 1.5 feet bgs. Soil samples were collected from borings GP-1 through GP-4 at two-foot intervals; classified according to the Unified Soil Classification System; and field-screened using a photoionization detector. Two soil sample intervals from these four borings, and one sample from the remaining nineteen borings were submitted to a state-certified laboratory for analysis of the following parameters: arsenic, cadmium, chromium, lead, polynuclear aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs). Soil classification information was recorded on Wisconsin Department of Natural Resources (WDNR) "Soil Boring Log Information" forms. Copies of the soil boring logs and abandonment forms are included in Attachment A. Figure 1 illustrates the site plan view and soil boring locations.

### ***Findings***

In general, soil encountered during the investigation consisted primarily of approximately five feet of silty clay overlying silt to a maximum depth of seven feet bgs. Laboratory analytical results indicated that arsenic, cadmium, chromium, lead, several PAHs, methylene chloride, toluene, and trichlorofluoromethane were detected in the soil at the site. Arsenic was the only metal that exceeded the NR 720.11 residual contaminant level (RCL) for direct contact. The following PAH compounds exceeded their respective suggested non-industrial RCL for direct contact: benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; dibenzo(a,h)anthracene; and indeno(1,2,3-cd)pyrene. Table 1 summarizes the laboratory results. The actual laboratory report is included as Attachment B.

### ***Discussion and Recommendations***

Arsenic was found in every sample collected at the site at concentrations ranging from 1.8 to 5.6 parts per million (ppm). While the arsenic levels do exceed the NR 720 RCL, it also should be noted that arsenic can be naturally occurring in soils in Wisconsin. The levels detected at the



site are similar to background levels observed in other areas of the state, and consistent with concentrations that were observed during the course of the site investigation and remediation that occurred at the site from 1992 to closure in 2008. Additionally, since arsenic levels are consistent across the site in all the borings, they are believed to be representative of naturally-occurring background levels.

The other metals, chromium, cadmium, and lead, were not observed at levels exceeding their respective NR 720 standard.

Based on the soil sampling results, it appears that the majority of the PAHs exceeding regulatory limits are located within the silty clay soils in the top two feet of the soil profile and relatively close to the direct contact standards for each parameter. Benzo(a)pyrene was detected at concentrations an order of magnitude greater than its direct contact value; however, only in about half of the samples collected.

Soil samples from borings GP1 through GP4 were also collected at depths greater than 1.5 feet bgs; however, no contamination (VOCs or PAHs) was detected in the deeper samples (greater than 3 feet bgs) at concentrations exceeding any standard. The direct standard limits only apply to the top four feet of the soil profile.

None of the soil samples collected illustrated concentrations close to the suggested RCLs for groundwater pathway; therefore, there is no concern that the minor residual soil contamination will adversely impact the quality of the groundwater present at, and down gradient of, the site.

Please feel free to contact me at 715-849-8986 if you have any questions regarding the results of the Geoprobe investigation.

Sincerely,  
Shaw Environmental, Inc.



Victoria Loveland  
Engineer 3

cc: Denise Nettesheim, WDNR, 3911 Fish Hatchery Road, Fitchburg, Wisconsin 53711

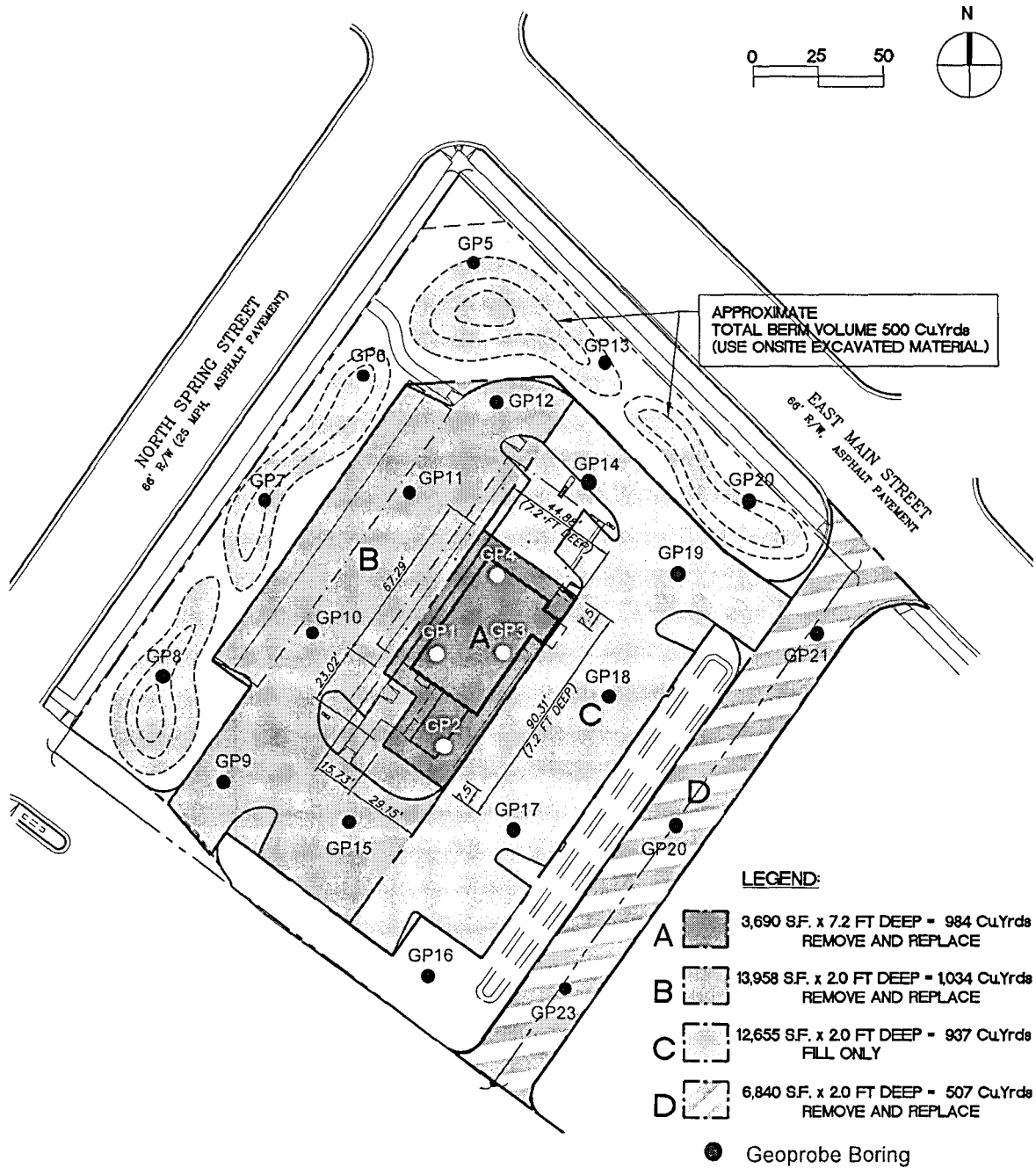


Figure 1  
 Geoprobe Locations  
 MIR Site - Beaver Dam, WI  
 4/19/09



## **Appendix C**

April 14, 2023, EWI, Phase I Environmental Site Assessment,  
Unoccupied Land, South of East Main Street and North Spring Street  
Beaver Dam, Wisconsin



ENVIRONMENTAL WORKS

Science. Safety. Grit. Ingenuity.

# PHASE I ENVIRONMENTAL SITE ASSESSMENT

## Unoccupied Land South of East Main Street and North Spring Street Beaver Dam, Dodge County, Wisconsin



**Prepared For:**  
CBC DT LLC  
Kansas City, Missouri

**Prepared By:**  
Environmental Works, Inc.  
Kansas City, MO

EWI Project # 230878

April 14, 2023



April 14, 2023

EWI Project # 230878

Matt Crawford  
CBC DT LLC  
4706 Broadway, Suite 240  
Kansas City, Missouri 64112

Re: Phase I Environmental Site Assessment, (ESA)  
Unoccupied Land  
South of East Main Street and North Spring Street  
Beaver Dam, Wisconsin

Dear CBC DT LLC,

Please find enclosed one electronic copy of the above-referenced report. Should you have any questions regarding this report, please do not hesitate to contact me at 816-285-8410.

Thank you for your confidence in Environmental Works, Inc. We appreciate the opportunity to assist you with your environmental needs.

**Environmental Works, Inc.**

Joseph Lucke  
Associate Scientist

Nicole Wise  
Project Manager

---

## TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY.....	1
	Historical Records Review Summary.....	1
	Regulated Sites Summary.....	1
	Site Reconnaissance Summary.....	2
	Conclusion and Opinions.....	2
2.0	INTRODUCTION.....	4
	2.1 Purpose.....	4
	2.2 Scope of Work.....	5
	2.3 Significant Assumptions.....	5
	2.4 Special Terms and Conditions.....	5
	2.5 Limitations and Exceptions.....	5
	2.6 User Reliance.....	6
3.0	SITE DESCRIPTION.....	7
	3.1 Location and Legal Description.....	7
	3.2 Current Use of the Subject Property.....	7
	3.3 Description of the Property, Structures and Other Improvements.....	7
	3.4 Site Owner, Property Manager, and Occupant Information.....	7
	3.5 Adjoining Properties and Surrounding Area Use.....	7
	3.6 Physical Setting.....	7
4.0	USER PROVIDED INFORMATION.....	8
	4.1 Title Records.....	8
	4.2 Environmental Liens or Activity and Land Use Limitation (AUL).....	8
	4.3 User's Specialized Knowledge or Experience.....	8
	4.4 Valuation Reduction for Environmental Issues.....	8
	4.5 Reason for Performing the Phase I ESA.....	8
5.0	RECORDS REVIEW.....	9
	5.1 Standard Environmental Records Sources.....	9
	5.1.1 Subject Property Listings.....	10
	5.1.2 Surrounding Property Listings.....	11
	5.2 Additional Environmental Records Sources.....	13
	5.3 Historical Use Information.....	14
	5.3.1 City Directories.....	14
	5.3.2 Subject Property - Historical Use Summary.....	15
	5.3.3 Surrounding Area- Historical Use Summary.....	16
	5.4 Previous Environmental Reports and Other Documentation.....	16
6.0	SITE RECONNAISSANCE.....	18
	6.1 General Site Use Information.....	18
	6.2 Hazardous Substances or Petroleum Products.....	18
	6.3 Underground Storage Tanks (USTs) and Above Ground Storage Tanks (ASTs).....	18
	6.4 Site Observations.....	18
7.0	SITE USE INTERVIEWS.....	20
8.0	VAPOR ENCROACHMENT SCREENING.....	21
9.0	ADDITIONAL SERVICES.....	22
10.0	DEVIATIONS, LIMITING CONDITIONS, AND DATA GAPS.....	23

---

11.0	FINDINGS.....	24
	Historical Records Review Summary.....	24
	Regulated Sites Summary.....	24
	Site Reconnaissance Summary.....	25
12.0	CONCLUSIONS AND OPINIONS.....	26
13.0	QUALIFICATIONS OF THE PERSONNEL PARTICIPATING IN THIS PHASE I ESA.....	27
14.0	SIGNATURES AND CERTIFICATIONS OF THE PERSONNEL RESPONSIBLE FOR THIS REPORT.....	28
15.0	REFERENCES.....	29



## FIGURES

Figure 1.0 - Site Location Map

Figure 2.0 - Site Diagram

Figure 3.0 - Topographic Map

## LIST OF APPENDICES

Appendix A Scope of Work

Appendix B User-Provided Information

Appendix C EDR Radius Map Report with GeoCheck

Appendix D Agency Documentation

Appendix E Historical Documentation

Appendix F Photographic Documentation

Appendix G Resumes of Environmental Personnel Participating in this Environmental Assessment

## 1.0 EXECUTIVE SUMMARY

Environmental Works, Inc. (EWI) was retained by CBC DT LLC on March 9, 2023 to perform a Phase I Environmental Site Assessment (ESA) of the Unoccupied Land located South of East Main Street and North Spring Street in Beaver Dam, Dodge County, Wisconsin (hereinafter referred to as "Subject Property" or "Site"). This report may be relied upon/used by CBC DT LLC and Academy Bank. The Phase I ESA was conducted in conformance with the American Society for Testing Materials International (ASTM) E 1527-21 Standard. The Vapor Encroachment Screening practices were conducted in accordance with ASTM E 2600-15. The purpose of the assessment is to identify recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), historical recognized environmental conditions (HRECs), vapor encroachment conditions (VECs), and potential environmental liabilities associated with the Subject Property.

The summary presented below is general in nature and should not be considered apart from the entire text of the report, with all the qualifications and considerations mentioned therein. Details of our evaluation are discussed throughout and in the appendices of this report.

The Subject Property consists of one (1) 1.25 acre parcel of unoccupied grass-covered land. The Subject Property is owned by Pine Ridge Homes Inc..

### Historical Records Review Summary

According to the first available historical documentation in 1909, a portion of the Malleable Iron Range Co. and a dwelling were illustrated on the Subject Property. The dwelling was set to be removed to build a foundry for the manufacturing facility. Additionally, an oil house and warehouse are illustrated on the Subject Property. By 1914, the previous dwelling had been removed and the Malleable Iron Range Co. foundry was illustrated on the Subject Property as well as a railroad spur (in 1914) and other structures related to manufacturing operations. The Malleable Iron Range Co. manufacturing facility remains present across the Subject Property until its deconstruction beginning in the 1990's. By 2005, the Subject Property consisted of unoccupied grass-covered lot and remains unchanged to the present day.

The surrounding area historically consisted of the Malleable Iron Range Co. manufacturing facility which covered approximately 8.5 acres of land adjoining the Subject Property by 1896. By 1909, Main Street and dwellings were illustrated adjoining the Subject Property to the north. North Spring Street and dwellings were illustrated adjoining the Subject Property to the north and west. By 1924, the Malleable Iron Range Co. facility was illustrated adjoining the Subject Property to the south and east. Main Street was no longer present adjoining the Subject Property to the north and the area consisted of vacant land. Stores are illustrated adjoining the Subject Property at 802 North Spring Street and 804 North Spring Street. By 1945, expansion of the Malleable Iron Range Co. foundry was illustrated to the north of the Subject Property as well as additional storage area for sand and coal. By 2005, the Malleable Iron Range Co. manufacturing facility has been demolished. A commercial shopping center and parking lot was visible adjoining the Subject Property to the southwest. Unoccupied grass covered land was visible adjoining the Subject Property to the east. East Main Street and the current day commercial building is visible adjoining the Subject Property to the north. North Spring Street, commercial, and residential properties are still present adjoining the Subject Property to the west.

### Regulated Sites Summary

The Monarch Malleable Iron Range (also known as MAFCO Inc.) factory operated at 715 North Spring Street, Beaver Dam, WI as early as 1896 and includes the Subject Property (Lot 8). The 430,000 SF factory covered approximately 8.5 acres of land. This factory originally manufactured coal, wood, gas, and electric heaters, stoves and ranges and later expanded to include refrigerators, furnaces, washing machines, irons, and other household products. These industrial appliances used asbestos as insulating material particularly in products that needed to withstand high heat which later led to lawsuits and bankruptcy by the 1970s. The factory went out of business in 1985. Other manufacturing processes at the site included foundry operations, painting, paint stripping, electroplating, acid treatment, porcelain enameling, and assembly.

This facility is listed in the Brownfields and Voluntary Cleanup Program (VCP) as well as the BRRTS, Wisconsin Manifest, Underground Storage Tank (UST), Leaking Underground Storage Tanks (LUST), Solid and Hazardous Waste Information System (SHWIMS), as well as others related to its long-term industrial manufacturing operations. This facility has had multiple spills, leaks, violations, and documented environmental issues requiring remediation of contaminated soil (including VOCs, PAHs and metals) and groundwater (Benzene, Trichloroethene (TCE), Tetrachloroethene (PCE), and others). Previous environmental activities include a polychlorinated biphenyl (PCB) spill and remediation by soil excavation and off-site disposal in 1984, removal of USTs and emergency LUST cleanup of petroleum products in 1987-1990, and other site remediation beginning in 1994. Site remediation included soil vapor extraction, air sparging, groundwater treatment, soil excavation and off site disposal of 20,000 tons of contaminated soil, removal of additional tanks, and installation of monitoring wells, piezometers, and soil borings. These remedial activities were completed by June 1998, the site was monitored until December 2006. In April 2008, the entire Monarch Iron Range Site was granted final case closure with Land Use Limitations and Conditions approved by the WDNR. A Summary of the Lot 8 (Subject Property) Geoprobe Investigation was completed by Shaw Environmental, Inc. on May 14, 2009. On April 14, 2009, twenty-three (23) soil borings (GP-1 through GP-23) were advanced to characterize the soil at the site and determine the extent of soil contamination. Soil borings GP-1 through GP-4 were advanced to 7 feet below ground surface (bgs) and the remaining nineteen borings (GP-5 through GP-23) were advanced to 1.5 feet bgs.

Two soil samples from GP-1 through GP-4, and one sample from the remaining nineteen borings were submitted to a state-certified laboratory for analysis of the following parameters: arsenic, cadmium, chromium, lead, polynuclear aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs). Laboratory analytical results indicated arsenic, cadmium, chromium, lead, several PAHs, methylene chloride, toluene, and trichlorofluoromethane were detected in the soil at the site. Based on the soil sampling results, a majority of the PAHs exceeding regulatory limits are located within the silty clay soils in the top two feet of the soil profile and relatively close to the direct contact standards for each parameter. The most recent groundwater data for the Subject Property included relatively low concentrations of VOCs below WDNR enforcement standards. EWI also reviewed groundwater data for surrounding properties which have concentrations exceeding WDNR enforcement standards.

Based on close proximity, this could be a potential vapor source. Due to the long-term manufacturing operations, identified soil and groundwater contamination, and continuing remedial obligations for Lot 8 and the historical Monarch Malleable Iron Range, this is considered a CREC and VEC to the Subject Property.

Multiple facilities were identified within the approximate minimum search distances from the subject property but do not represent RECs or VECs to the subject property based on distance, topographic gradient, and/or regulatory status.

## Site Reconnaissance Summary

No environmental concerns were identified on the property or on surrounding properties during the Site reconnaissance. No evidence of USTs or ASTs was observed at the Site or the adjoining properties. Evidence of hazardous substances and petroleum products were not observed during the Site reconnaissance.

## Conclusion and Opinions

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 of the Unoccupied Land located South of East Main Street and North Spring Street in Beaver Dam, Dodge County, Wisconsin (the Subject Property or Site). The Vapor Encroachment Screening practices were conducted in accordance with ASTM E 2600-15. Any exceptions to or deviations from this standard are described in Section 10.0 of this report.

The following CREC and VEC were identified for the Subject Property during this assessment:

1) The Monarch Malleable Iron Range (also known as MAFCO Inc.) factory operated at 715 North Spring Street, Beaver Dam, WI since 1896 until 1985 and includes the Subject Property. This facility covered

the surrounding area and has had multiple spills, leaks, violations, and documented environmental issues requiring remediation of contaminated soil and groundwater. In April 2008, the entire Monarch Iron Range Site was granted final case closure with Land Use Limitations and Conditions approved by the Wisconsin Department of Natural Resources (WDNR). The Monarch Malleable Iron Range is currently known as the Monarch Development (Lot 1-Lot 10). The Subject Property (Lot 8) has confirmed soil contamination including: arsenic, cadmium, chromium, lead, several PAHs, methylene chloride, toluene, and trichlorofluoromethane. The most recent groundwater data for the Subject Property included relatively low concentrations of VOCs below WDNR enforcement standards. EWI also reviewed groundwater data for surrounding properties which have concentrations exceeding WDNR enforcement standards. Based on close proximity, this could be a potential vapor source. Due to the long-term manufacturing operations, identified soil and groundwater contamination, and continuing remedial obligations for Lot 8 and the historical Monarch Malleable Iron Range, this is considered a CREC and VEC to the Subject Property.