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December 14, 2011  
(1177)

RE: Remedial Investigation (RI) Report – Revision 2 and  
Response to September 9, 2011 USEPA Comments on RI Report – Revision 1  
Stevens Point Former Manufactured Gas Plant (MGP) Site, Stevens Point, Wisconsin  
**WIN000509983**

Dear Ms. Patterson:

On behalf of Integrys Business Support, LLC (IBS), which manages the former Stevens Point Manufactured Gas Plant (MGP) site on behalf of Wisconsin Public Service Corporation (WPSC), Natural Resource Technology, Inc. (NRT) is submitting the RI Report – Revision 2 for the above referenced site.

This letter provides responses to the September 9, 2011 United States Environmental Protection Agency (USEPA) comments on the May 27, 2011 RI Report - Revision 1. Responses to each comment are summarized herein and they have been incorporated into RI Report – Revision 2, which is attached. For ease of review, all USEPA comments are bulleted and italicized; the IBS response is noted below the comment.

**General Comments:**

- *A determination of the appropriate RSLs may potentially affect other sections of the RI/FS not specifically indicated in these comments.*

**Response:** RI Report – Revision 2 incorporates the recent Multi-Site programmatic changes to the screening levels for naphthalene and ethylbenzene. These revised screening levels were included in a discussion with USEPA, IBS, CH2MHill (USEPA's oversight contractor), NRT, and Exponent (IBS's risk assessor) on September 28, 2011 with internal follow up calls into early November 2011. The soil and vapor intrusion figures and tables have been modified to reflect the use of the carcinogenic RSLs for these two parameters.

- *OW-5 is, in some places, called OW-5R; similarly with OW-7 and OW-7A, and PW-12 and PW-12B. Either explain what the difference in terminology signifies, or use consistent terminology.*

**Response:** Terminology and labeling for the various sampling points has been revised as appropriate for consistency throughout the document.

- *Table of Contents - The title of Figure 5 should be updated to match the title on the figure.*

**Response:** The Table of Contents has been corrected to reflect the appropriate title for Figure 5.

- *4.1 Soil - If screening levels for the soil-to-groundwater pathway are not appropriate to apply at this Site, include a discussion in support of this. A figure showing the sampling locations where there are exceedances of soil contamination levels and exceedances of groundwater contamination levels together would help the reader visualize their relative distribution.*

**Response:** The site monitoring well network provides a direct measure of whether soil contaminants are adversely impacting site groundwater; thus, the RSLs for the protection of groundwater are not necessary as discussed in Section 4.1.

Figure 41 has been added and is discussed in Section 5.3. This figure shows the March 2011 benzene and naphthalene groundwater plumes in relation to soils that exceed the residential screening levels.

- *4.2.2 Groundwater Quality and Trends - Page 40, paragraph 1. It is unclear what the significance is of a "non-stable" trend. If it is no different from "no trend", use "no trend".*

**Response:** A "non-stable" trend (which is taken from the Mann-Kendall analyses) indicates concentrations vary too much to determine whether there is a correlation over the time period evaluated. While similar to a "no trend" result, it is an indication of the parameters variability which precludes a definitive determination. This has been explained in the text.

- *4.4 Vapor Intrusion Sampling Results - Methane, oxygen and carbon dioxide analysis data are presented in Table 20, but they have not been incorporated into the discussion. Discuss the relevance and/or implications of these data.*

**Response:** Methane, carbon dioxide, oxygen are all gases associated with aerobic biodegradation. While the biodegradation processes vary greatly, frequently the final product of degradation is an increase in carbon dioxide or methane and decreasing oxygen concentrations. Section 4.4 has been revised to include a brief discussion of relative oxygen and carbon dioxide concentrations across the site (methane was always below the detection limit, which ruled out methanogenesis occurring at the site).

- *4.4 Vapor Intrusion Sampling Results - Pending the discussion about RSLs: The residential air quality RSL for naphthalene is 0.072, leading to shallow and deep soil gas screening levels of 0.72 and 7.2, respectively. However, in Table 20, the detection limits for naphthalene for shallow gas are above these levels, so EPA cannot adequately evaluate whether the screening level was exceeded.*

**Response:** The laboratory detection limits, which ranged from 1.9 to 2.4  $\mu\text{g}/\text{m}^3$ , were adequate when the sampling was completed in January and March 2011. At that time, the naphthalene (non-cancer) screening values were 31 and 310  $\mu\text{g}/\text{m}^3$ , as documented in the April 20, 2011 RAF Addendum. Also, as noted in Section 3.5 of Appendix H, the detection limit for naphthalene was considered adequate for purposes of the baseline risk assessment.

Baseline Risk Assessment (BLRA) Section 4.1.2 indicates the potential risk from benzene and naphthalene is slightly above  $1 \times 10^{-6}$  ( $2 \times 10^{-6}$ ) near well OW-9, the location with the highest benzene and naphthalene groundwater concentrations. Based on this evaluation, MGP-related groundwater contamination does not appear to be a source of chemical vapors above the health-based vapor intrusion screening values. If additional vapor intrusion sampling is necessary, the laboratory will be required to provide the appropriate detection limits based on the 0.72  $\mu\text{g}/\text{m}^3$  screening level.

- *5.3.2 Groundwater - The conclusion that "MNA indicator parameters generally suggest biodegradation is actively occurring within the plume" is in opposition to the statement in Section 4.2.2 (page 41, last bullet) that "The MNA geochemical parameters are confounding..." Section 4.2.2 concludes that "...natural attenuation factors are present and the plume is stable..." , which is not the same as biodegradation. Clarify the text.*



**Response:** The statements regarding MNA, biodegradation, and plume stability have been reviewed and revised to show consistency with the definition of MNA. By definition, MNA includes “a variety of physical, chemical, or biological processes that ...reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or groundwater. These in-situ processes include biodegradation; dispersion; dilution; sorption; volatilization; radioactive decay; and chemical or biological stabilization, transformation, or destruction of contaminants.”<sup>1</sup>

Site data indicate MNA is occurring and the plume is stable based on the following:

1. Concentrations for side and downgradient wells, some of which have been sampled consistently since 2000 or earlier.
2. The two rounds of sampling at wells OW-18 through OW-21 (on the leading edge of the plume).
3. The fact increasing trends observed at a limited number of wells central to the historic MGP site (OW-5R, OW-9, and OW-10) have not been observed at other down gradient locations over an extended time period.
  - *6.3 Preliminary Remedial Action Objectives - There is no Section 6.1 of the FS; receptors are identified in Section 2.1.*

**Response:** This reference to Section 2.1 of the FS has been corrected.

- *Figure 5 – GG-1, GG-2, GG-3, GG-4 and GG-9 were analyzed, but are not shown on the figure.*

**Response:** Groundwater grab sampling locations (GG-1 to GG-4 and GG-9) have been added to Figure 5.

- *Figures 9 and 10 - Pending the outcome of the RSL determination: Update the legends on Figures 9 and 10 of the RI to show the updated soil RSLs.*

**Response:** The carcinogenic RSL for naphthalene has been added to these figures.

- *Figures 28 and 29 - The data do not appear in the printed copies, although they do appear in the pdf versions.*

**Response:** Figures 28 and 29 have been reprinted and now show the data boxes on the report hard copies.

- *Table 5 - The Wisconsin groundwater pathway screening benchmarks are listed, but are nowhere discussed in the text. Their relevance (or lack thereof) should be described in the text if they are presented in the table.*
- *Table 5 - EPA RSLs for protection of groundwater are omitted. If Wisconsin groundwater pathway screening levels are included, EPA RSLs should also be included.*

**Response:** Table 5 comments are addressed together. The comprehensive monitoring well network present at the site provides a direct measure of whether soil contaminants are contaminating site groundwater. Also, NR720 RCLs for groundwater protection have only been established for BTEX compounds. Based on these facts, and the generalization that soil concerns focus on direct contact exposure pathways, the NR720 RCLs have been removed from Table 5. There is no need to include the USEPA RSLs for the protection of

<sup>1</sup> U.S. Environmental Protection Agency, 1999, OSWER Directive 9200.4-17P -- Use of monitored natural attenuation at Superfund, RCRA corrective action, and underground storage tank sites -- April 21, 1999: Office of Solid Waste and Emergency Response, 41 p.



groundwater because the groundwater monitoring well network provides a direct measured of groundwater quality.

- *Table 11 - Per our discussions on August 25 and September 8, 2011, include the slope of the regression line for which the  $r^2$  value is shown. Include the 95% confidence interval for the slope, and the maximum and minimum slopes that result from that interval. An example of these calculations is attached to these comments. (See also the comments for Appendix C of the FS, below).*
- *Table 11 - The criteria for characterizing a relationship as "None", "Moderate", and "Strong" are unclear.*

**Response:** Table 11 comments are addressed together. The maximum and minimum slopes for the 95% confidence limits that form the "confidence belt" on each graph (Appendix N) have been calculated and included on Table 11. These slope values further inform whether there is any correlation between the various parameters (benzene/naphthalene concentrations versus either time or groundwater elevations). The "None", "Moderate", and "Strong" qualifiers have been eliminated from Table 11 based on inclusion of the calculated slope values for the confidence limits.

- *Appendix H - Attachment A: Pending the outcome of the discussion about RSLs: In 2009, all 10 EPA Regions adopted a standard list of RSLs. In December, 2010, Integrys agreed to use the most recent RSL list as screening levels. The RSLs have implications for various figures, tables, and text in both the RI and the FS. All figures and tables that depict or present information based on the old RSLs should be updated. If the revised screening data suggest modifications of or additions to the discussion and conclusion sections of the risk assessment, those sections should be modified.*

**Response:** Attachment A tables were revised to include the most current RSLs along with an updated comparison of the screening results. The BLRA - Revision 2 screening assessment included the cancer-based RSL for naphthalene and ethylbenzene. The revised screening analysis did not affect the overall BLRA conclusions. The appropriate tables and figures within the RI Report – Revision 2 were modified to include these naphthalene and ethylbenzene screening levels.

- *Appendix H - Tables A-6, A-7, A-10 and A-11: A comparison of the new naphthalene soil screening levels with the maximum detected level shows that exceedances of the screening level by 1-2 orders of magnitude have been detected.*

**Response:** The Attachment A tables were updated to include a comparison to the cancer-based RSL for naphthalene and ethylbenzene. Also, a comparison to the non-carcinogenic RSL was completed for purposes of the uncertainty analysis. The uncertainty analysis addresses the issues surrounding the carcinogenicity assessment for these two analytes. Text was added to the Attachment A uncertainty assessment to discuss the issues related to the on-going reassessment of the carcinogenicity of naphthalene and ethylbenzene.

- *Appendix H - Page 8, second paragraph, from the third sentence on: the text seems to say groundwater contamination is not near existing buildings, then goes on to say that groundwater contamination has migrated below and near buildings. Clarify this discussion.*

**Response:** Section 2.3.2 of Appendix H has been clarified to indicate groundwater contamination does not exist in close proximity to buildings in most areas of the site. The vapor intrusion investigation focused on the area where groundwater contamination **was** in close proximity to buildings.



- *Appendix H - Figure 1 and Table 1 are inconsistent. For example, Table 1 shows that the ingestion, dermal contact, and inhalation-direct contact pathways are potentially complete under current use scenario, and the inhalation-indoor intrusion pathway as incomplete under current and future use scenario for construction workers. Figure 1 shows all these pathways as currently not complete, while in the future, they are unlikely, but possible. Resolve the inconsistencies between the figure and table, and the text that describes exposure pathways.*

**Response:** Inconsistencies between Table 1 and Figure 1 have been corrected.

- *Appendix H - Tables B-10 and B-11: are there additional monitoring wells and piezometers that should be listed here? Table 9 of the RI lists many more samples.*

**Response:** Tables B-10 and B-11 focus on a screening assessment for the subset of wells in the off-property area where the vapor intrusion investigation was performed. The following note has been added to each table to clarify this point; it reads: "The sample locations presented represent the monitoring wells located in the area where the vapor intrusion investigation was performed."

- *Appendix N - See comments below related to Appendix C of the FS.*

**Response:** The comments and response concerning FS Appendix C are stated below.

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The following comments were provided by USEPA on Feasibility Study (FS) – Revision 1, but they are also appropriately addressed in RI Report – Revision 2. Therefore, the following FS Report – Revision 1 comments and responses have also been addressed in RI Report – Revision 2.

- *1.3.1 Site description (also RI section 1.3.3) - There is no mention of how MGP residuals came to impact the pond and the river. Include any relevant historical information that may account for this including:*
  - *Water from the slough was pumped into the area that is now the pond.*
  - *Moses Creek location prior to diversion, its connection with the slough and pond, year of diversion.*

**Response:** Section 1.3.3 of RI Report – Revision 2 has been updated with additional historic information to address these comments.

- *4.2.3 MNA – GW.*
  - *EPA disagrees that Appendix N clearly shows that benzene and naphthalene concentrations are declining (See the comments for Table 11 of the RI above. The confidence intervals of the slopes should be used to determine whether and where concentrations are declining.)*

**Response:** The maximum and minimum slope for the confidence interval has been calculated and included on Table 11. These results have been used to further evaluate whether benzene and/or naphthalene concentrations are increasing, stable, or decreasing at specific wells across the site.

Localized groundwater flow conditions, which are a result of the dam and ponded segment of the Wisconsin River adjacent to the site, have resulted in the convergence of two flow regimes in the vicinity of the site (see Section



4.2.1.1). These conditions influence the migration of groundwater contaminants and the overall plume stability. This is reflected in the variability of groundwater concentrations at wells centrally located to the historic MGP operations.

- *Page 26, sentence below the last bullet point: Considering that the downgradient edge of the plume was just recently characterized, there are not enough groundwater sampling results over time to support the statement that the plume is stable.*

**Response:** This statement in RI Report – Revision 2 Section 4.2.2 has been qualified to state that plume stability at the leading edge is based on two sampling rounds at wells OW-18 through OW-21. However, as mentioned above, plume stability is also based on observed conditions for wells that have been monitored for longer periods of time, and the increasing trends observed at a limited number of locations central to the historic MGP site have not been observed at down gradient locations.

■ *Appendix C, Groundwater Analysis*

- *Page 1-5: Present the criteria by which the MGP residuals in the former slough can be characterized as "deminimus", or strike this word from the text. Because many samples exceed RSLs, EPA would not characterize the residuals as "deminimus".*

**Response:** The word "deminimus" has been removed from Section 4.2.2.

Please contact Mr. Naren Prasad of IBS at 312.240.4569 if you should have any questions or require additional information.

Sincerely,

NATURAL RESOURCE TECHNOLOGY, INC.

Handwritten signature of Eric P. Kovatch in black ink.

Eric P. Kovatch, PG, PH  
Senior Hydrogeologist

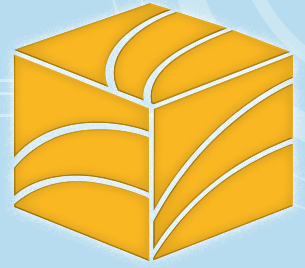
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cc: Ms. Leslie Patterson, USEPA (2 hard copies & 2 CD copies)  
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## **REMEDIAL INVESTIGATION REPORT**

**Wisconsin Public Service Corporation  
Stevens Point Former Manufactured Gas Plant Site  
Stevens Point, Wisconsin**

**Project No: 1177**

**Revision &  
8 YW a VYf % , 2011**



**ENVIRONMENTAL CONSULTANTS**



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## REMEDIAL INVESTIGATION REPORT

**WISCONSIN PUBLIC SERVICE CORPORATION  
STEVENS POINT FORMER MANUFACTURED GAS PLANT SITE  
STEVENS POINT, WISCONSIN  
WIN000509983**

**Project No. 1177**

**Prepared For:**

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**Revision 2  
December 14, 2011**

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Appendix C: 2007, 2008, and 2011 Wells/Piezometers Boring Logs, Construction & Development Forms, and Abandonment Forms

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Appendix F: Consolidated Water Power Company River Discharge and Surface Water Elevation Data with River Cross Sectional Area and Flow Calculations.

Appendix G: Current and Future Land Use and Reuse Assessment

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**SHEETS**

Sheet 1 Geologic Cross-Sections  
Sheet 2 Sediment Analytical Results – Organics

# ACRONYMS

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µg/L	Micrograms Per Liter
bgs	Below Ground Surface
B(a)P	Benzo(a)pyrene
BLRA	Baseline Risk Assessment
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
CERCLA (" Superfund")	Comprehensive Environmental Response, Compensation, and Liability Act
cfs	Cubic feet per second
cm/sec	Centimeters per second
COPCs	Contaminants of Potential Concern
CSM	Generalized Conceptual Site Model
CWG	Carburetted Water Gas
CWPC	Consolidated Water Power Company
DGPS	Differential Global Position System
DLs	Detection Limits
DO	Dissolved Oxygen
DQOs	Data Quality Objectives
EDI	Edi Engineering & Science, Inc
ES	NR 140 Enforcement Standard
ESB	Equilibrium Sediment Partitioning Benchmark
FS	Feasibility Study
FSP	Multi Site Field Sampling Plan
Ft/sec	Feet per second
HASP	Multi Site Health and Safety Plan
IBS	Integrays Business Support, LLC
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
mg/kg	Milligrams Per Kilogram
MGP	Manufactured Gas Plant
MNA	Monitored Natural Attenuation
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NCP	National Contingency Plan
NGVD	National Geodetic Vertical Datum
NRT	Natural Resource Technology, Inc
ORP	Oxidation-Reduction Potential
Pace	Pace Analytical Services
PAHs	Polynuclear Aromatic Hydrocarbons
PEC	Probable Effect Concentration
POTW	Publicly Owned Treatment Works
PQLs	Project Quantitation Limits
PVOCs	Petroleum Volatile Organic Compounds
QA/QC	Quality Assurance/Quality Control
QAPP	Multi Site Quality Assurance Project Plan
RAF	Multi Site Risk Assessment Framework

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RAO	Remedial Action Objective
RBC	Risk-based concentration
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RI/FS	Remedial Investigation and Feasibility Study
RLs	Reporting Limits
Settlement Agreement	Settlement Agreement and Administrative Order on Consent
SHS	Simon Hydro Search, Inc
SOW	Statement of Work
SSB	Soil and/or sediment screening benchmarks
SSWP	Site-specific Work Plan
SWT	Surface Water Sampling Transects
TEC	Threshold Effects Concentration
TOC	Total Organic Carbon
USEPA	United States Environmental Protection Agency
USFWS	US Fish and Wildlife Service
UTM	Universal Transverse Mercator
Veolia	Veolia ES Special Services, Inc.
VOCs	Volatile Organic Compounds
WCCS-PC	Wisconsin County Coordinate System datum for Portage County
WDNR	Wisconsin Department of Natural Resources
WPSC	Wisconsin Public Service Corporation

# 1 INTRODUCTION

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## 1.1 Background

This report presents the Remedial Investigation and Feasibility Study (RI/FS) site investigation work completed at the Wisconsin Public Service Corporation (WPSC), a subsidiary of Integrys Energy Group, former manufactured gas plant (MGP) site located in Stevens Point, Wisconsin (Figure 1). Activities described herein were performed in accordance with the April 26, 2007 RI/FS Site Specific Work Plan Revision 1 (SSWP) submitted on behalf of Integrys Business Support, LLC (IBS), managing the site for WPSC, prepared by Natural Resource Technology, Inc. (NRT). The United States Environmental Protection Agency (USEPA) conditionally approved the SSWP on July 11, 2007.

The SSWP and RI work were performed in accordance with the Statement of Work (SOW) attached to the Settlement Agreement and Administrative Order on (Settlement Agreement) between the USEPA and WPSC, CERCLA Docket No. V-W-06-C-847, effective May 5, 2006. The Stevens Point site is one of six WPSC former MGP sites addressed by the Settlement Agreement and SOW. Under the AOC/SOW, a generic approach to addressing the sites has been developed (the Multi-Site approach), which may be modified to account for site-specific differences that may exist at a particular MGP site.

As discussed in the SSWP (NRT, April 2007) and the Completion Report (NRT, June 2006), substantial RI and response actions were performed prior to WPSC's transferring this site from the state program of Wisconsin Department of Natural Resources (WDNR) to USEPA. The SSWP included an approach to assessing media and/or areas of the site that may pose a potential risk human health and/or the environment, based on the conclusions of the Completion Report (NRT, June 2006). The RI work built upon previous data and information, as well as reports prepared by WPSC, and was completed in accordance applicable federal regulations, including Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or "Superfund") as amended by SARA and the National Contingency Plan (NCP).

This report presents soil, soil vapor, groundwater, sediment, surface and storm water data collected as part of the RI/FS investigation activities between June 2007 and March 2011.



## 1.2 Work Objective

The overall objective of the RI/FS activities was to evaluate the nature and extent of MGP residuals in soil, groundwater, sediment, and surface water and to support human health and ecological risk assessments and feasibility studies. The results of the RI will be used to evaluate whether further evaluation or remedial actions are warranted at the site. Evaluation of remedial actions, if necessary, will be presented in the FS.

As described in the SSWP (NRT, April 2007) and Completion Report (NRT, June 2006), the media that required further assessment and/or were not fully addressed by previous work with respect to public health, welfare or the environment included the following:

- Off-property surface soil sampling in Pfiffner Pioneer Park (adjacent to remedial action excavation areas) and off-property subsurface soil sampling in the parking lot to assess conditions in these areas and provide additional data for assessment of alternatives and pathways;
- Evaluate concentration trends and the extent of MGP residuals in groundwater, and interaction with the storm sewer system;
- Assess potential ongoing sources in the vicinity of the Pioneer Park pond and the Wisconsin River, near the discharge of the former slough, that may be affecting the pond and river sediments;
- Evaluate the distribution of Contaminants of Potential Concern (COPCs) in river and pond sediments to assess the COPC distribution and potential risk to human health and the benthic community;
- Evaluate the COPC distribution in surface water to assess potential risk to human health; and
- Evaluate vapor concentrations from soil and groundwater data to assess the potential for vapor migration to occur if future buildings are to be constructed at the Site.

## 1.3 Site Background

This section summarized background information presented in the SSWP. Refer to the SSWP for additional detail.

Owner/Operator:	Wisconsin Public Service Corporation, a subsidiary of Integrys Energy Group, managed by IBS Contact: Mr. Naren Prasad (312.240.4569) 130 E. Randolph Dr. Chicago, IL 60601
Site Location:	T24N, R8E, Section 32 1111 Crosby Avenue Stevens Point, Wisconsin Portage County (Figure 1)
USEPA ID (WDNR BRRTS #)	WIN000509983 (02-50-000079)

As presented in the SSWP, the following definitions are used herein:

- Facility – Refers to the former WPSC MGP structures and related areas;
- Property – Refers to the land currently owned by WPSC (Figure 2); and
- Site – Refers to areas where contamination related to the former MGP has been discovered through site investigation activities completed to-date. These areas include the facility and property as well as portions of Pfiffner Pioneer Park, the City, and privately owned land south and west of the property, and near shore sediments within the Wisconsin River.

### 1.3.1 Site Description

The former Stevens Point MGP is located on WPSC property in Stevens Point, Wisconsin (Figure 1) and encompasses approximately 3 acres (Figure 2). The property is currently a grass covered lot with a mild slope towards the Wisconsin River. It is bounded by Crosby Avenue to the west; a City of Stevens Point parking lot to the south and east; and residential properties, West Street, and an apartment building to the north. Pfiffner Pioneer Park, owned by the city, lies west of the property across Crosby Avenue and is bordered on the west by the Wisconsin River. The western WPSC property boundary is located approximately 300 feet east of the Wisconsin River (Figure 2). The majority of the former MGP structures were located between 300 and 500 feet east of the river, predominantly on the western side of the WPSC property, situated on slightly more than 1.5 acres (Figure 3).

The site currently consists of an open field (WPSC property), a portion of the adjacent City park (Pfiffner Pioneer Park which is a total of approximately 6 acres), a City asphalt parking lot (the parking lot is a total of approximately 1.5 acres), the northwest corner of the shopping mall parking lot, and adjacent streets. There are no buildings or structures on the WPSC property. An open-air band shell and the Riverfront Art Center are located within the City park adjacent to the Wisconsin River and the pond (Figure 2).

Thirty-four(34) monitoring wells are located in the vicinity of the site, covering approximately 40 acres (Figure 2); however, well OW-7 has not been sampled since 1998 when it was replaced by OW-7A, so only 33 well are considered active at the site. Wells are located on the WPSC property as well as on public and private property to the east, west, and south. Including the areas where MGP-affected soils and groundwater are located, the overall site size is less than seven acres.

There are no surface water bodies on the WPSC property. The site includes areas adjacent to the Wisconsin River and a small decorative pond located off property, adjacent to the Riverfront Art Center. The pond is hydraulically connected to the Wisconsin River by a narrow channel located under the former railroad tracks that has been converted into a walking and bike path and parallels the Wisconsin River (Figure 2). The pond is a remnant of the former slough. The former slough was filled in as part of the City's storm sewer reconstruction project between 1981 and 1985, with the exception of the western end of the slough which was partially filled to create the pond. The pond was created by separating the former slough into two portions with a sheet pile wall. The bottom of the pond is at an elevation of approximately 1082 feet while the bottom of the former slough is at an elevation of approximately 1072 to 1075 feet. There is no obvious entry point for the pond and the area surrounding it is maintained as park land with benches; the grass is mowed up to the edge of the pond and there is no aquatic vegetation along the pond banks.

The Wisconsin River is approximately 900 feet across with a strong current, and water depths exceeding four feet occurring just off-shore in the vicinity of the former MGP facility and slough. Lawn is maintained up to the bank of the Wisconsin River, and there is no beach area or obvious location to easily access the Wisconsin River. Based on the results of the 2007 investigation (Section 4), the site includes approximately 0.6 acre in the Wisconsin River, extending a distance of approximately 200 along the river bank and 120 feet into the river.

### 1.3.2 Site Utilities

The most significant utility identified to-date is a storm sewer line located just south of the WPSC property boundary (Figure 4), which runs north-south and then angles to the northeast. The storm sewer lines were installed by the City in the 1980s. The City perforated three sections of sewer to facilitate placement of the pipe in the trench at the planned elevation. A video scan of the storm sewers in May 2000 confirmed the perforations. The diameter and lengths of perforated storm sewer are listed below and the locations are shown on Figure 4. The influence of this perforated sewer line on site conditions is discussed in Section 4.2.3.

Pipe Diameter (inches)	Approximate Length (feet)	Sewer Segment (Manholes)
18	117	Upstream of MH-4A
24	190	MH-4A to MH-4
27	154	MH-4 to MH-3

A natural gas line that crosses the property (Figure 4) was installed just prior to soil remediation activities in 1998. This line crossed through Excavation Area #3 (Figure 2 in Appendix A), so soils excavated for the installation of the gas line were disposed off-site, and the line was left undisturbed during the 1998 soil excavation and remediation activities. An underground water line services two hydrants (one near OW-3R/PZ-3B) at the north end of the property (Figure 4).

Within the river, a fiber-optic communications line crosses approximately 80 feet upstream of the US Highway 10 (Hwy 10) bridge. A safe-guard area approximately 40 feet wide extends across the river to protect this line. The approximate line location, as well as the safe-guard area, is shown on the appropriate drawings.

### 1.3.3 Site History

The Stevens Point MGP operated from approximately the 1890s to the late 1940s or early 1950s, using the carburetted water/gas (CWG) method to produce gas primarily from oil (SHS, April 1993). The plant ceased production in the late 1940s to early 1950s when piped natural gas became readily available to the Stevens Point area (EDI, 1986). The former MGP process structures were located on the west side of the facility. The east side of the facility was generally used as storage and disposal areas for MGP process wastes and other materials.

MGP related structures at the facility present on Sanborn maps from 1898, 1912, 1922, 1934, 1945, and 1960 (provided in the Completion Report (NRT, June 2006)) included the following:

- Materials storage building and garage;
- A purifier;
- Two tar wells of unknown size; and
- Eight gas holders (capacities of 4,500 ft<sup>3</sup>, 10,000 ft<sup>3</sup>, two at 19,500 ft<sup>3</sup>, 40,000 ft<sup>3</sup>, 200,000 ft<sup>3</sup>, and two of unknown volumes).

A slough was formerly located along the south property boundary (Figure 2). The slough represented the remains of Moses Creek, a former tributary to the Wisconsin River, and this historically served as a storm water outfall to the Wisconsin River for the City of Stevens Point, as well as for the MGP itself. In 1918, a dam was constructed approximately one-half mile downstream of the site. To prevent river water from filling the slough, a retaining wall was built and the present day pond (which is a remnant of the former slough outlet) was created. In 1922, a pump house (Figure 3) was constructed to pump water from the slough into the pond, where it could discharge into the Wisconsin River. Thus, the slough remained a vital storm water discharge point for downtown Stevens Point through the 1980s. In the 1980s, a new storm sewer main was constructed in the vicinity of the slough. This storm sewer was routed away from the Wisconsin River to an outfall south of the Main Street Dam, and the slough was filled (although the pond remained). The pond bottom is at an elevation of approximately 1082 feet msl; the bottom of the former slough ranges in elevation from approximately 1072 to 1075 feet msl (refer to the site cross sections on Sheet 1).

### 1.3.4 Previous Investigations

The Completion Report (NRT, June 2006) contains detailed information regarding historical site investigation and remedial data as well as a full bibliography of the reports and summaries issued for the Site. Sample locations are provided on Figure 2 in Appendix A.

Site investigation and remediation activities began in the mid-1980s and continue through the present. Investigations completed prior to the soil remediation activities in 1998 focused on determining the presence of former MGP structures, identifying source areas, and an initial groundwater assessment. The WDNR was the regulating agency that oversaw the 1998 remediation activities. Investigation work completed from 1999 to 2002 evaluated the former slough, Wisconsin River and pond sediments

(Appendix A), groundwater infiltration into the perforated the storm sewer, and the overall effect of soil remediation activities on groundwater quality (through March 2011).

### 1.3.5 Previous Response Actions

The Remedial Action Documentation Report (NRT, September 1998) and the Completion Report (NRT, June 2006) contains detailed information regarding previously performed response actions. Excavation areas are provided on Figure 2 in Appendix A. These response actions included:

- Surface Soil Removal. WPSC property-wide scrape of the top four inches of surface material which was used as backfill.
- Source Area Excavation and Management. Excavation, treatment and/or off-site disposal of over 16,000 tons of contaminated soil and debris from the Site between February and June 1998. Areas remediated included the former MGP operations area and vicinity where coal tar and/or other MGP residuals were identified by previous investigation work.
- Former Underground Structure Removal. Removal of former underground structures or remnants of structures that had visible evidence of MGP residuals in soil/debris surrounding or within the former structures.
- Excavation Dewatering and Treatment. Temporary groundwater extraction during source area excavation work to maximize excavation depths and control MGP contaminated groundwater. Water was treated on-site and discharged to the local publicly owned treatment works (POTW).
- Backfilling, Cover, and Surface Restoration. Restoration activities included:
  - Backfilling with clean and/or thermally-treated soil within in the excavation areas;
  - Placement of 2 feet of clean imported fill over the backfilled excavation areas, including both WPSC owned property and disturbed portions of Pfiffner Pioneer Park;
  - Reconstruction and paving of excavated sections of Crosby Avenue; and
  - Placement of 4 inches of imported fine grained topsoil cover, seeding and mulching of the entire property owned by WPSC and placement of sod over imported clean backfilled portions of Pfiffner Pioneer Park.

MGP residuals were observed to have been left in place along the southern boundary of Excavation Area, where the excavation area abuts the parking lot. However, these observed residuals were not deemed significant compared with the volume of soil excavated and treated as part of the response action.



## 1.4 Report Organization

The RI Report is organized as follows:

- Section 2: Site Characteristics
- Section 3: Site Characterization Activities
- Section 4: Investigation Observations and Results
- Section 5: Fate and Transport
- Section 6: Summary and Conclusions
- Section 7: References

## 2 SITE CHARACTERISTICS

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### 2.1 Site Geology and Hydrogeology

The following summary of the regional and local geology and hydrogeology includes information obtained from previous investigations as well as the additional information collected during the RI. The RI boring and sampling locations are shown on Figures 5 and 6.

#### 2.1.1 Regional Setting

The near surface geology of the Stevens Point area is characterized by glacial outwash deposits of sand, gravel, and clay that range up to 50 feet thick. Stratified sand and gravel alluvial deposits also occur along the Wisconsin River.

Precambrian granite (bedrock) underlies the glacially-deposited soils around Stevens Point, and is present at depths of 5 to 30 feet or more below ground surface (bgs). Regionally, the bedrock surface slopes to the east/southeast, along the flank of the Wisconsin Arch (SHS, December 1993). Cambrian sandstones are present at depth (and overlie the Precambrian granite) further south and east of the City of Stevens Point.

Stevens Point is located in the northeastern portion of the Central Wisconsin Sand Plain. The Sand Plain contains two main aquifers, including the highly productive unconsolidated sand and gravel aquifer and the less productive Cambrian sandstone aquifer; the Precambrian rock is generally non-productive wherever it is encountered (SHS, December 1993).

The sand and gravel aquifer is comprised of glacial outwash deposits and alluvial sands and gravels within the Wisconsin River valley. These deposits are highly permeable and wells in this aquifer are capable of yields of 500 to 1,000 gallons per minute. Based on these characteristics, the underlying sandstone aquifer is rarely used as a water source. However, when needed, the Cambrian aquifer is capable of providing adequate water for domestic purposes when fractures within the bedrock are encountered.

Groundwater recharge occurs from precipitation and surface water. Regional groundwater flow is towards the Wisconsin River, unless diverted by human activities such as wells or dams. Local groundwater flow is typically toward smaller surface water discharge points.

### 2.1.2 Local Setting

Soil stratigraphy at the site consists of 1 to 15 feet of miscellaneous fill material overlying high permeability alluvial sand (see boring logs in Appendix B, C, and D). The fill consists of silty sand and gravel with coal fragments, fly ash, broken glass, cinders, bricks, sawdust, and wood chips. Underlying the fill layer is a predominantly fine to medium grained uniform sand or silty sand with trace gravel.

The upland portions of the site where the former slough was located contain between 12 and 18 feet of fill material underlain by a silty layer that varies in thickness from 0 to 4 feet. Alluvial deposits underlie the silty layer. The fill consists of a mixture of foundry sand, alluvial sand, and organic debris.

The sediments of the Wisconsin River, where present, consist of a thin layer of organic debris underlain by up to 10 feet of alluvial sand and gravel or bedrock, depending upon the location (see river logs in Appendix E). The alluvial material consists of well graded, uniform sand with varying amounts of fine gravel, similar to the upland alluvial deposits.

Precambrian bedrock underlies the highly permeable alluvial sands and river sediments. During the July 2007 investigation activities, Precambrian bedrock was encountered in upland and river borings (Figures 5 and 6). In most borings, the bedrock encountered was extremely hard, but in other locations it was weathered and easy to drill and sample. Bedrock samples recovered at the site consisted of felsic to mafic igneous and metamorphic rock, locally referred to as “black granite”. Obtaining samples of this rock over 6-inches in length with roto-sonic drilling methods was not feasible because it damaged the drilling equipment and the required excessive sampling time. In other borings, the weathered bedrock varied in texture from brittle rock fragments to decomposed masses of minerals loosely bound with clay, the latter commonly occurring in the river borings. Subsurface conditions are illustrated in cross sections A-A’, B-B’, and C-C’ (Sheet 1) and bedrock elevations are contoured on Figure 7.

The surface elevation of Precambrian bedrock beneath the Wisconsin River sloped from west to east (cross section A-A’) toward the upland area of the site. The July 2007 river borings (Figure 6) were completed using roto-sonic drilling methods to a depth of 10 feet below the river bottom or to refusal; most borings encountered refusal prior to 10 feet given the shallow depth to rock beneath the river. The river borings encountered Precambrian bedrock at the river bottom elevation near the center of the channel, but it was not encountered in some borings near shore where the drilling was terminated 10 feet below the river bottom elevation. Borings into the weathered bedrock ranged up to 11.5 feet (T1-C1a).

The west to east sloping bedrock elevations beneath the Wisconsin River continued beneath the western portions of the property toward SB-210 (cross section A-A') and along a bedrock valley/trough trending to the southeast. An approximation of this bedrock valley is shown on Sheet 1.

Groundwater flow at the site is generally southeast, away from the Wisconsin River due to the ponded water behind the dam, which is located approximately 0.5 mile downstream of the site. However, historical groundwater flow at the facility, prior to the installation of the dam in 1918 was likely west, toward the river, possibly with a highly localized component to the south toward the former slough. Depth to groundwater varies seasonally from approximately 3 feet bgs in Pfiffner Pioneer Park to 13 feet bgs on the eastern part of the monitoring well network. Groundwater elevations are summarized in Table 1 and on contour maps for many of the 2007 through 2011 groundwater sampling events, which are discussed in more detail in Section 4.2.1. Horizontal groundwater flow velocities across the Site were calculated to range from approximately 35 ft/year (NRT, October 1996) to 130 ft/year (SHS, December 1993). Based on the consistency of the groundwater flow maps through March 2011, it is reasonable to assume these velocity estimates are representative of current site conditions.

## 2.2 Site Topography and Drainage

The Site is generally flat or gently sloping towards the Wisconsin River. Ground surface elevation ranges from approximately 1,090 feet near Water Street (east of the property) to about 1,087 feet in the vicinity of the pond (south of the property). Surface water flow is to the river and/or the local storm sewer system. Only precipitation that falls directly into the park near the river flows to the river. The remaining runoff from the paved surfaces, roads, and grass areas is intercepted by storm sewers located around the Site.

Storm water within the sewers from the northeast, south, and southeast flows to a primary 84-inch line that discharges to the east, and joins with drainage from the north part of City of Stevens Point. Storm water eventually discharges to the river below the dam, in the vicinity of the railroad bridge. No wetlands are present in the vicinity of the Site.

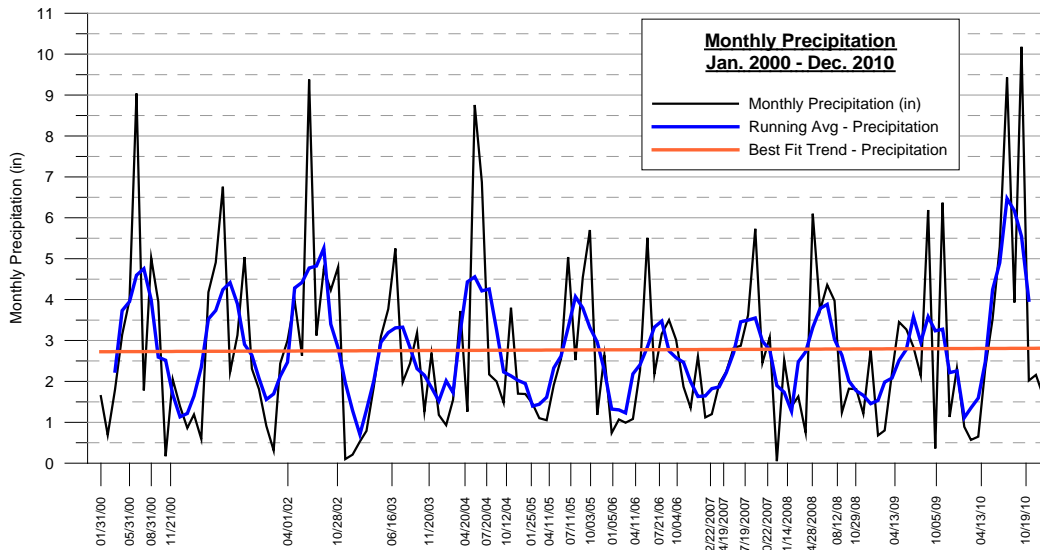
## 2.3 Climate

The climate of the Stevens Point area was described in the SSWP. In summary, the average monthly temperature ranges from about 13°F in January to about 70°F in July and almost 70 percent of the total annual rainfall generally occurs between May and October. Overall, the mean average temperature for the area is approximately 44°F and the average precipitation for Stevens Point is over 32 inches per year, as indicated on the table below.

**Average Monthly Precipitation (1971 – 2000)<sup>1</sup>**

Jan	1.11	May	3.63	Sep	3.78
Feb	0.98	Jun	3.66	Oct	2.31
Mar	1.95	Jul	4.12	Nov	2.27
Apr	2.87	Aug	4.11	Dec	1.34

Monthly precipitation from January 1, 2000 through December 31, 2010, which generally correlates with site activities completed after soil remediation in 1998, is plotted below<sup>2</sup>

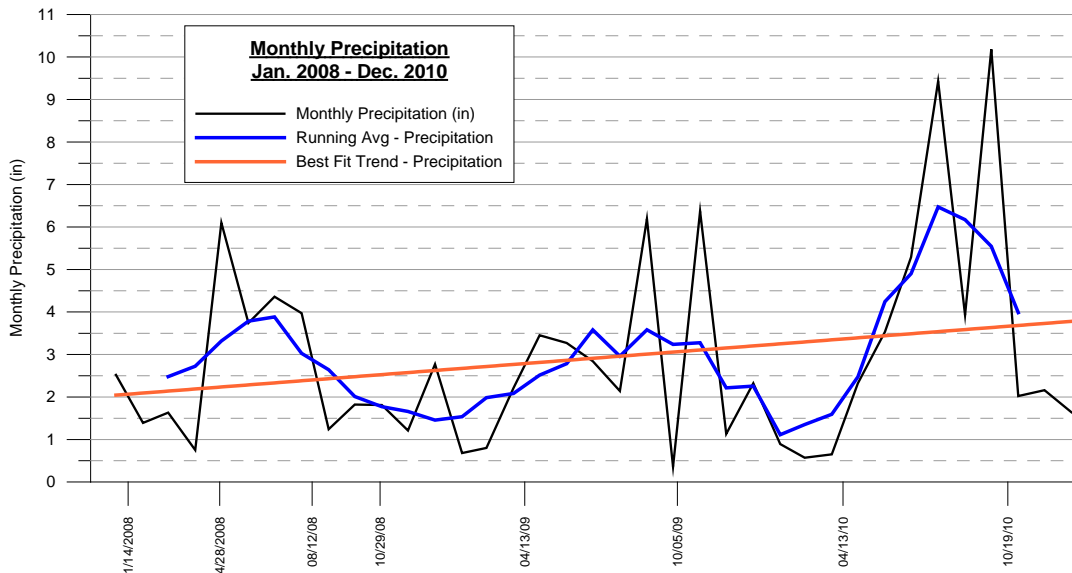
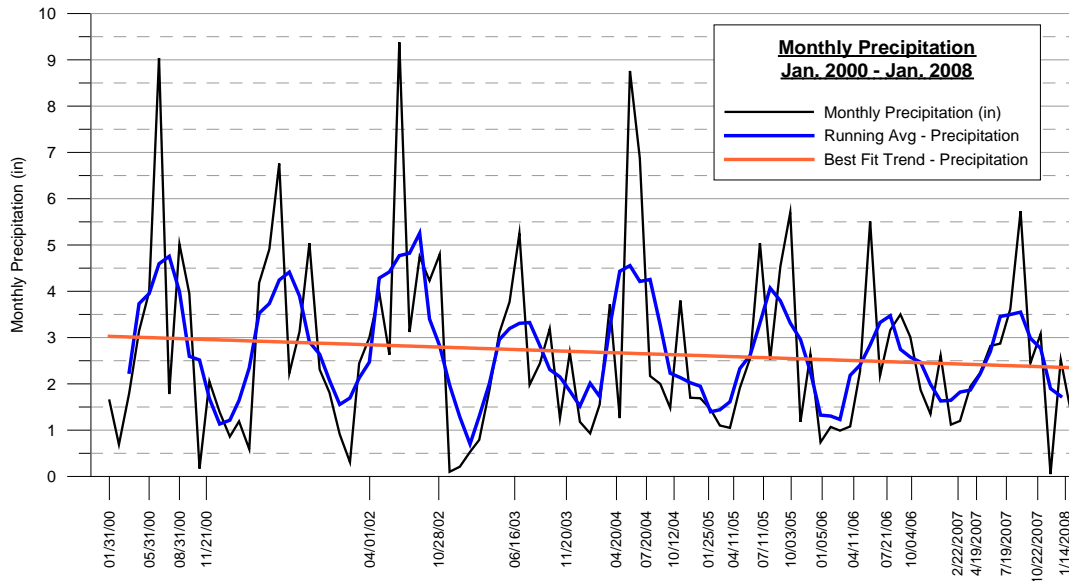


Both a running average and a regression (best fit) plot have been added to help show how precipitation totals have decreased over this period. The running average was calculated using a five-month window. This means the values from the two month prior to and the two months following the current month were used to calculate the “average” precipitation for a point in time. This removed much of the volatility from the plot due to excessively wet or dry months during any single period. The best fit plot provides an indicator of whether the overall precipitation trend is increasing or decreasing.

The RI originally evaluated data through January 2008, and the monthly precipitation from January 1, 2000 through January 31, 2008 was plotted (below). To evaluate overall precipitation changes between 2008 and 2010, the long term and short term plots for 2000 to 2008 and 2008 to 2010 are shown.

<sup>1</sup> Midwest Regional Climate Center. Stevens Point, Wisconsin. Station 478171. Historical Climate Data 1971-2000. website - [http://mcc.sws.uiuc.edu/climate\\_midwest/historical/precip/wi/478171\\_psum.html](http://mcc.sws.uiuc.edu/climate_midwest/historical/precip/wi/478171_psum.html)

<sup>2</sup> National Climatic Data Center. Station Coopid 478171. National Oceanic and Atmospheric Administration. Washington D.C. website - <http://hurricane.ncdc.noaa.gov/dly/DLY?randomnum=73415805W62257>.



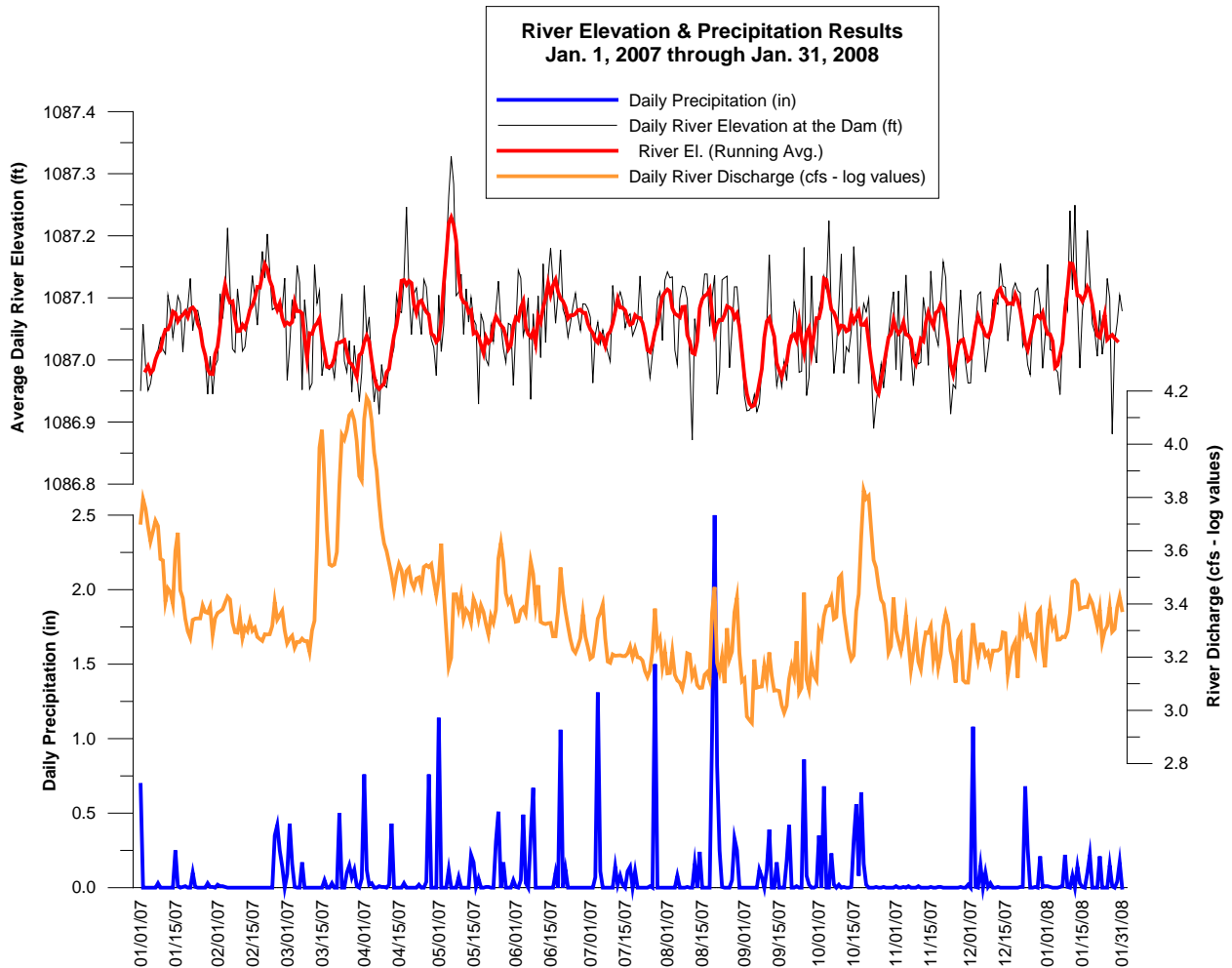
The significance of the 2000 to 2008 and 2008 to 2010 plots is represented by the best fit trend line. Between 2000 and 2008, overall precipitation changes from approximately 3 inches per month to an estimated 2.5 inches per month. However, between 2008 and 2010, the overall monthly precipitation value represented by the best-fit trend line changed almost two inches (from slightly more than 2 inches to just less than 4 inches) per month. These plots show the precipitation variability much better than the single plot for the period January 2000 through December 2010.



## 2.4 Surface Water Flow

River discharge and elevation data at the dam during the RI in 2006 and 2007 was obtained from the Consolidated Water Power Company (CWPC), which operates the dam located just downstream of the site (Appendix F). Daily discharge values for 2006/2007 ranged from 897 cubic feet per second (cfs) to over 19,700 cfs. CWPC also provided hourly elevation data from January 1, 2007 through January 31, 2008 which showed the river elevation varying within a narrow range of 1086.72 and 1087.52 feet.

Daily precipitation, daily discharge, and daily average river elevation are plotted below. There appears to be little correlation between rainfall, river discharge, and pool elevation.



The only data CWPC was able to provide since 2008 include the daily discharge readings at the Stevens Point Dam. The monthly averages for January 2007 through December 2010 are summarized on tables in Appendix F. The average monthly results indicate discharge is generally greatest during March or April of the year while the lowest discharge values are generally observed in September or later in the year (results for 2010 were skewed due to a large storm event that occurred on September 23 and 24, 2010).

Year	Annual Average Discharge (cfs)	Annual Minimum Discharge (cfs)	Annual Maximum Discharge (cfs)
2007	2,689	897 (Sept. 4)	14,970 (Apr. 2)
2008	3,526	562 (Jan. 23)	39,250 (Apr. 20)
2009	2,387	710 (Jan. 5)	18,630 (Apr. 28)
2010	4,303	690 (May 29)	59,863 (Sept. 24)

## 2.5 Population and Land Use

The population of the City of Stevens Point is approximately 26,700, based on the 2010 U.S. census. The City of Stevens Point Zoning Department indicates land use around the Site includes single and multi-family housing, commercial, and recreational areas (Figure 2). The former MGP facility and WPSC property are zoned “Commercial”. Areas that border Water Street and Crosby Avenue to the east and south are zoned “Central Business”, while Pfiffner Park is zoned “Conservancy”. Additional information regarding land use, zoning, ordinances, etc. is included in the Current and Future Land Use and Reuse Assessment (Appendix G).

The City of Stevens Point municipal wells are located more than 2.5 miles east of the site. Private well logs were reviewed and it was concluded that these wells were no longer in use (SHS, December 1993).

## 2.6 Cultural and Natural Resource Features

An inquiry made to the US Fish and Wildlife Service (USFWS) indicated that there are no known federally-listed endangered or threatened species or any critical habitat in the area. A review of the state database was also completed and found that there were no state-listed endangered or threatened species in the area. A review of the state Historic Preservation database did not identify any known archeological sites in the area.

Additional information regarding cultural and natural resources are included in the Current and Future Land Use and Reuse Assessment (Appendix G).

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## 3 SITE CHARACTERIZATION ACTIVITIES

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Data needs to characterize the site and evaluate potential human health and ecological risks were identified through a site-specific conceptual site model (CSM). The pre-RI CSM is provided in Appendix H. The pre-RI CSM was developed to reflect conditions observed in the November 1, 2006 site reconnaissance (Section 4.1 of the SSWP, NRT, April 2007) and information from the Completion Report (NRT, June 2006).

The COPCs for each media evaluated in the RI (Section 3.7 of the SSWP, NRT, April 2007) were based on previous analytical results and the previously performed remedial actions. The COPCs analyzed for each media are summarized below.

<u>Media</u>	<u>COPCs</u>
Soil	<u>Adjacent to excavation areas:</u> petroleum volatile organic compounds (PVOCs) and polynuclear aromatic hydrocarbons (PAHs)  <u>Potential Source Areas:</u> PVOCs, PAHs, phenols, inorganics (aluminum, antimony, arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, vanadium, and zinc)
Groundwater	Benzene and PAHs
Sediment	PVOCs, PAHs (including alkylated PAHs), phenols, inorganics (aluminum, antimony, arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, vanadium, and zinc)
Surface Water	PVOCs, PAHs, inorganics (aluminum, antimony, arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, vanadium, and zinc)
Storm Sewer Water	PVOCs and PAHs

RI activities were performed in accordance with the Multi-Site Field Sampling Plan (FSP) – Revision 1 (NRT, April 2007) the Multi-Site Quality Assurance Project Plan (QAPP) – Revision 1 (NRT, December 2006), and the Multi-Site Health and Safety Plan (HASP) – Revision 1 (NRT, December 2006). Modifications to the Multi-Site documents were discussed in the SSWP included in Appendix D of the SSWP (NRT, April 2007).

RI activities are summarized in the following sections with the methodologies, sampling locations and analytical parameters.

### **3.1 Site Surveying and Base Map Development**

WPSC personnel surveyed site features in June and August 2007. The June survey included existing site features and the August survey included soil and groundwater sampling locations in 2007. Survey data was completed to update drawings and base maps to reflect current conditions, particularly in areas not owned by WPSC.

The survey ensured the site features were referenced to the same horizontal and vertical datum and that conversion of these survey points to the USEPA required Universal Transverse Mercator (UTM) projection was consistent. In the field, the Wisconsin County Coordinate System datum for Portage County (WCCS-PC) was used for horizontal control and the 1929 National Geodetic Vertical Datum (NGVD) was used for the vertical datum. The location of all site features in both the UTM and WCCS-PC coordinate systems are included in Appendix I.

### **3.2 Soil and Groundwater Vapor Assessment**

A preliminary screening level assessment to evaluate potential for vapor intrusion was performed and is discussed in Section 4.4. Both on-property and off-property areas are addressed; however, the preliminary screening assessment focuses on areas of the site where buildings are present within the vicinity of the groundwater plume.

### **3.3 Soil Sampling**

Twenty-five soil borings were completed between July 16 and 23, 2007 (Figure 5). Soil samples for laboratory analysis were collected from 20 of these borings. The boring locations were selected based on 1) previous analytical results, 2) the soil remediation activities, and 3) USEPA's conditional approval of the SSWP (NRT, April 2007), dated July 11, 2007. Borings performed for soil sampling purposes include the following:

- SB-301 and SB-302 – surface soil borings located near the northern most property boundary between the WPSC property and the adjacent residential properties;
- SB-303 through SB-308 – surface soil borings located in Pfiffner Pioneer Park for use in risk assessment;

- SB-309 through SB-321 – soil borings located within and adjacent to the former slough to delineate the slough and assess whether source material is located adjacent to the pond that may affect the river and pond sediment quality;
- Piezometer PZ-16B and well OW-17 – borings for monitoring wells were sampled to assess whether a significant source may be located in the vicinity of the former slough outlet; and
- Borings SB-313a and SB-315a were also installed and abandoned due to refusal before reaching the target depth.

Visual and olfactory observations were used to assess the presence/absence of MGP residuals in the subsurface. Samples for laboratory analysis were collected as described in Section 4 of the Multi Site FSP. To satisfy QA/QC requirements, a blind duplicate and a matrix spike/matrix spike duplicate (MS/MSD) sample set was collected for every 20 environmental samples. Equipment blanks were not required because disposable and dedicated sampling equipment was used to collect the samples.

Soil borings were not advanced to the former slough elevation in the pond because there were safety concerns with staging the drill rig along the sheet pile wall. These concerns were raised during the June 13, 2007 meeting with the USEPA and WDNR, and it was agreed to forgo these borings at this time.

Soil boring logs and abandonment forms are included in Appendix B. Selected borings and wells are included on the geologic cross-sections (Sheet 1).

### **3.3.1 Property Boundary and Pfiffner Pioneer Park Surface Soil Sampling**

Surface soil samples were collected using a hand auger as described in Section 4 of the Multi-Site FSP. Sample locations were recorded using a differential GPS (DGPS) unit. Sample locations are shown on Figure 5 and soil boring logs are provided in Appendix B.

Surface soil samples SB-301 and SB-302 were collected near the northern most WPSC property boundary and the adjacent residential properties. Samples from SB-301 and SB-302 were representative of the soils from zero to one foot bgs and were submitted to Pace Analytical Services (Pace) for PVOCs, PAHs, phenols, aluminum, antimony, arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, vanadium, and zinc analysis.

Surface soil samples SB-303 through SB-308 were collected from west of the WPSC property boundary in Pfiffner Pioneer Park for use in the human health risk assessment. Samples from SB-303 through SB-308 were representative of the soils from zero to two feet bgs, which were submitted to Pace for PVOC and PAH analysis.

Surface soil borings were abandoned in accordance with the methods described in Section 4 of the Multi-Site FSP following completion of soil sampling. Abandonment forms are also included in Appendix B.

### **3.3.2 Former Slough Sampling**

Soil borings were advanced to assess soil quality within, beneath and along the side slopes of the former slough and to evaluate whether a source was present for elevated PAH concentrations previously observed in the river and pond sediments. Soil samples from borings SB-309 through SB-321 (Figure 5) were collected using hydraulic push sampling techniques as described in Section 4 of the Multi-Site FSP. Boart Longyear advanced soil borings and the sample locations were surveyed by a WPSC crew. Sample locations are shown on Figure 5 and soil boring logs are provided in Appendix B.

Soil borings SB-309 through SB-318 were advanced on the upland side of the pond, in the vicinity of the retaining wall and up to approximately 100 feet east of the retaining wall. An underground gas line is located between the curb and retaining wall, so only boring SB-318 could be performed in the immediate vicinity of the wall. In general, the borings were advanced to the underlying native sand, with the exception of borings SB-313a, SB-315, and SB-315a which were terminated due to refusal at 5, 13, and 10 feet bgs, respectively. It is assumed SB-313a was advanced outside of the former slough. SB-315 and SB-315a may have encountered fill material or a structure associated with the former pump house.

Borings SB-319, SB-320, and SB-321 were advanced further east in the vicinity of the former slough to assess the presence of MGP residuals in areas where the WPSC property abutted the slough.

Visual and olfactory observations were used to assess the presence/absence of MGP residuals in the subsurface and identify samples for laboratory analysis. Borings with observed impacts were sampled within the impacted interval and below the impacted interval or beneath the base of the former slough to evaluate potential vertical migration. Borings without observable impacts were sampled to confirm that impacts were not present beneath the lowest portion of the former slough along that transect of borings.

Samples were submitted to Pace for analysis of potential source area COPC. Samples were not submitted from SB-309, SB-310, and SB-313 because samples were collected and analyzed from adjacent borings SB-311, SB-312, SB-317, and SB-318. Samples were also not collected for laboratory analysis from SB-313a and SB-315a.

The soil borings were abandoned in accordance with the methods described in Section 4 of the Multi-Site FSP following completion of the soil sampling activities. Abandonment forms are also included in Appendix B.

### 3.3.3 Monitoring Well Soil Sampling

Soil samples from piezometer PZ-16B and OW-17 were collected to document subsurface conditions. Visual and olfactory observations were used to assess the presence/absence of MGP-residuals in the subsurface adjacent to the pond. MGP residuals were not observed in these borings.

Soil samples from the screened intervals of OW-16 and OW-17 were submitted to Pace for laboratory analysis of COPCs to confirm impacts were not present and to characterize the quality of the soil within the screened interval.

The drilling techniques for piezometer PZ-16B and OW-17 are discussed in the following sections.

## 3.4 Groundwater Evaluation

### 3.4.1 Monitoring Well/Piezometer Installation

#### 3.4.1.1 July 2007 Well Installation

Four groundwater monitoring wells (OW-14, OW-15, OW-16, and OW-17) and three piezometers (PZ-14B, PZ-15B, and PZ-16B) were installed in July 2007 (Figure 5). The wells were installed to address the following:

- OW-14/PZ-14B and OW-15/PZ-15B – expand the existing monitoring network and establish the extent of MGP-residuals in groundwater east and south of well nests (downgradient) of the former facility and downgradient of OW-12/PZ-12B where benzene concentrations have frequently exceeded the maximum contaminant levels (MCL); and
- OW-16/PZ-16B and OW-17 – evaluate potential source areas in the vicinity of the pond and assess groundwater gradients along the river bank.

Drilling and well construction were performed in accordance with the methods described in Section 4 of the Multi-Site FSP. Table 1 summarizes the well construction details regarding screen placement, length, and well elevations. The boring logs, construction and development forms, and abandonment forms for the new wells and piezometers are included in Appendix C. Selected wells are also included on the geologic cross-sections (Sheet 1).

Boart Longyear installed the wells and piezometers using roto-sonic drilling methods with the exception of PZ-14B, which was installed using hollow stem auger and air rotary methods. Shallow bedrock (approximately 20 feet bgs) was encountered at wells OW-14 and OW-17. The bedrock was extremely hard, preventing the sonic rotary equipment from penetrating the rock. The soil boring for PZ-14B was

attempted at three different locations within a 40-foot radius of OW-14 using rotary sonic methods without success. The boring was later completed using air-hammer drilling methods to set the well within the bedrock. Proposed piezometer PZ-17B was also attempted at three different locations without success because of the shallow bedrock (Section 2.1.2). This well was not completed because there was not adequate space available for drilling the well using air-hammer techniques.

The new monitoring wells and piezometers terminated at approximate elevations between 1,070 feet and 1,040 feet, respectively, which is similar to the completion elevations for existing site wells/piezometers.

#### **3.4.1.2 October 2008 Well Installation**

Monitoring wells TW-1 and TW-2 were installed in October 2008 to further delineate the groundwater plume following conversations with USEPA (Figure 5). Drilling and well construction were performed in accordance with the methods described in Section 4 of the Multi-Site FSP. Well construction information is on Table 1 and the boring logs, construction, and development forms are provided in Appendix C.

On-Site Environmental Services, Inc. (On-Site) installed the wells using hollow-stem auger drilling methods. Originally intended to be temporary wells to evaluate the groundwater plume, they were converted to permanent, NR141 compliant monitoring wells. The wells terminated at approximate elevations between 1,071.5 and 1,072.2 feet, respectively (Table 1).

#### **3.4.1.3 January 2011 Groundwater Grab Sampling and Monitoring Well Installation**

Following installation of wells TW-1 and TW-2, USEPA requested additional monitoring wells to further define the plume, based on the distance between these wells and other site monitoring wells.

To assist in locating the additional monitoring wells appropriately, groundwater grab samples were collected to assess benzene and naphthalene concentrations between OW-14 and TW-1. Twenty-one grab samples were collected on January 10 and 11, 2011 in the immediate vicinity of Center Point shopping mall and then moving southeast towards TW-1. The first points were located approximately 200 to 300 feet down gradient of OW-14 at the anticipated edge of the groundwater plume (Figure 5). Groundwater grab samples were collected using a GeoProbe SP16 and peristaltic pump as described in the July 2, 2010 response to USEPA and in accordance with the USEPA-approved Standard Operating Procedure (SOP) SAS-05-03. The SP16 has a permanent 3.3 foot (40 inch) screen that was driven to a depth of 17 or 19 feet bgs which, based on groundwater measurements, was screened across the water table when samples were collected.



Samples were to be analyzed in an iterative approach (i.e., samples nearest OW-14 were analyzed first and all other samples were placed on hold at the laboratory). Nine samples and one duplicate were submitted for rapid turn-around time analysis of benzene and naphthalene using Method 8260 and method detection limits (MDL) of 1 µg/L and 5 µg/L, respectively, for screening purposes. Groundwater grab samples were submitted to Pace Analytical Services (a September 4, 2007 USEPA approved Multi Site Quality Assurance Project Plan – Revision 2 (QAPP) laboratory) under chain of custody procedures described in Section 5, SAS-03-01 and SAS-03-02 of the Multi Site FSP.

Benzene exceeded the MDL in only one of the nine initial samples; naphthalene was below the MDL in all the samples (listed below). The results negated analysis of any additional samples and the locations for four additional monitoring wells (OW--18 through OW-21) were selected based on these results.

Grab Sample Location	Sample Date	Sample Interval	Benzene (µg/L)	Naphthalene (µg/L)
GG001	01/10/11	13 to 17	<0.41	<0.89
GG002	01/10/11	15 to 19	<0.41	<0.89
GG003	01/10/11	15 to 19	0.54	<0.89
GG004	01/10/11	13 to 17	<0.41	<0.89
GG005	01/10/11	13 to 17	<0.41	<0.89
QC01 (GG005)	01/10/11	13 to 17	<0.41	<0.89
GG006	01/10/11	13 to 17	<0.41	<0.89
GG009	01/10/11	13 to 17	<0.41	<0.89
GG010	01/10/11	13 to 17	<0.41	<0.89
GG012	01/11/11	13 to 17	<0.41	<0.89

Monitoring wells OW-18 through OW-21 were installed January 13 and 14, 2011 (Figure 5) by On-Site using hollow-stem auger drilling methods and in accordance with NR141. The wells terminated at elevations between approximately 1,071.3 and 1,071.9. Well construction information is on Table 1 and the boring logs, construction, and development forms are provided in Appendix C.

### 3.4.2 Well Development

Following installation of the groundwater monitoring wells and piezometers, each well was fully developed to remove sediment that may have accumulated during drilling.

Well development was performed at all wells except PZ-14B using a submersible pump as described in Section 4 of the Multi-Site FSP. Piezometer PZ-14B was developed slowly with a peristaltic pump because it could be pumped dry. Purge water was containerized on-site and disposed through the Plover POTW as described in Section 3.8. Well development forms are included in Appendix C.

### 3.4.3 Groundwater Elevation Measurements

Groundwater levels (Table 1) were measured to assess the elevation and direction of groundwater flow on a quarterly basis, concurrent with quarterly groundwater monitoring events. Water levels were collected from all wells and piezometers through march 2011. If applicable, observations regarding the presence of MGP-residuals within a well were recorded on the field sampling forms. Groundwater elevation measurements were collected using a water level tape and recorded on field forms in accordance with the methods described in Section 4 of the Multi-Site FSP.

### 3.4.4 Sampling Schedule and Parameters

Groundwater monitoring continued during the RI to achieve the following objectives:

- To detect changes in environmental conditions (e.g., hydrogeologic, geochemical, or other changes) that may result in an increased risk or exposure potential;
- To identify potentially toxic and/or mobile transformation products;
- To assess plume stability and groundwater concentration trends;
- To ensure downgradient receptors are not detrimentally impacted; and
- To detect new releases of contaminants to the environment that could impact potential remedial action alternatives.

Groundwater sampling has continued using low-flow sampling techniques and has occurred on a quarterly and then semi-annual basis since 2007; two events were completed in 2011 based on submittal of a Feasibility Study (FS) along with this RI Report. The sampling schedule since April 2007 is below.

2007	2008	2009	2010	2011
April July October	January April August October	April October	April October	January March

Wells present prior to July 2007 have continued to be sampled during most events, with the exception of OW-8, which has not been sampled since January 2008 due to its long history of no-detections. Well nest OW-14/PZ-14B was not sampled in January 2008 because snow from the parking lot had been piled over the well nest. In April and July 2008, only wells on the east side of the former MGP site or with COPCs exceeding the groundwater screening levels were sampled; wells and piezometers not sampled during these events included OW-2, OW-4, OW-8, OW-11, PZ-3B, and PZ-11B. These wells have

continued to be sampled since October 2008, and all site wells and piezometers, with the exception of OW-8, were sampled in January and March 2011. Wells TW-1, TW-2, and OW-18 through OW-21 have been sampled during all events since they were installed.

Prior to purging the wells, the depth to water was recorded on field forms. A peristaltic pump and tubing with a flow through cell were used to collect groundwater samples. A groundwater quality meter was used to monitor indicator parameters (pH, temperature, conductivity, oxidation-reduction potential (ORP), and dissolved oxygen (DO) and establish stability in accordance with Section 4 of the Multi-Site FSP.

Observations regarding the presence of MGP residuals during sampling were recorded. MGP residuals were observed in well OW-5R in July and October 2007 and January 2008, but had not been observed at this location prior to or since these events. The observed MGP residuals were small sticky globules in the water and/or smeared on the bottom inch or two of the rigid tubing after sampling was complete.

Beginning in April 2007, groundwater samples were submitted for benzene and PAH analysis. Samples were also consistently submitted for monitored natural attenuation (MNA) parameters, which include:

- Laboratory parameters - alkalinity, dissolved iron, nitrate+nitrite, and sulfate (methane was also analyzed on an annual or semi-annual basis); and
- Field parameters - pH, temperature, DO, ORP, and conductivity.

As defined by USEPA, MNA includes “a variety of physical, chemical, or biological processes that...reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil or groundwater”, and “include biodegradation; dispersion; dilution; sorption; volatilization; ...and chemical or biological stabilization, transformation, or destruction of contaminants.”<sup>3</sup> Thus, evaluating plume stability includes more than just an evaluation of the MNA parameters listed above.

To satisfy QA/QC requirements, a trip blank was submitted with each cooler containing the aqueous benzene samples. One blind duplicate sample was collected for every 10 environmental samples and a MS/MSD sample set was collected for every 20 environmental samples. Equipment blanks were not required because dedicated and disposable sampling equipment was used at each location.

Groundwater sampling logs are included in Appendix J.

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<sup>3</sup> USEPA, 1999, OSWER Directive 9200.4-17P -- Use of monitored natural attenuation at Superfund, RCRA corrective action, and underground storage tank sites -- April 21, 1999: Office of Solid Waste and Emergency Response, 41 p.

### **3.4.5 Aquifer Characterization**

Drilling observations indicated that subsurface materials encountered in the new wells were primarily fine to medium grained sand, similar to the existing wells. Therefore, additional single well aquifer testing was not warranted.

## **3.5 Storm Sewer Sampling and Groundwater Interaction**

Three rounds of storm sewer water samples were collected at manholes MH-1, MH-3, MH-4, and MH-5 (Figure 4) concurrent with the July and October 2007 and January 2008 groundwater sampling event. Manhole MH-3 was not sampled in January 2008 because snow had been piled over the manhole.

Manhole MH-1 served as the background location while the other three manhole locations were used to assess concentrations in water that flows through and from the Site. The storm sewer assessment also evaluated the frequency and duration of groundwater discharge to the storm sewers through the perforations. Water level fluctuations were monitored with a pressure transducer and data logger in well OW-6 from July 2007 through January 2008. The groundwater elevation data from the well was compared to the elevation of the perforated sewer sections to assess the frequency of groundwater flow into the pipe.

The depth of water in the sewer was measured with a water level meter prior to collecting water samples. Storm sewer water samples were collected using a peristaltic pump with tubing as described in Section 4 of the Multi-Site FSP. The open end of the tubing was lowered beneath the water surface, just above the base of the sewer. The tubing was purged a minimum of two “tubing volumes” of water prior to sample collection. Samples were submitted to Pace for analysis of PVOCs and PAHs.

## **3.6 Wisconsin River Assessment**

### **3.6.1 Site Morphology**

River discharge and surface water elevation data were obtained from the CWPC to assist in evaluating the flow characteristics and velocities in this segment of the river, as discussed in Section 2.4.

Surface water elevation data was used to assess the surface water-groundwater interaction. Surface water elevations were obtained from the hourly readings collected at the dam. The river discharge information was used to support the Feasibility Study.

### 3.6.2 Surface Water Sampling

Surface water sampling in the Wisconsin River was completed on three transects (SWT-1 through SWT-3) across the river on July 13, 2007 (Figure 6) to characterize surface water quality for use in the risk assessments. Field crews remobilized on July 20, 2007 and collected additional water because the laboratory was unable to analyze phenol from the original samples.

Surface water transect locations included:

- SWT-1 – represents background water quality, located south of the island, in the vicinity of previously established sediment transect T201;
- SWT-2 – established in the vicinity of previously identified affected sediment, just downstream of the former slough outfall; and
- SWT-3 – represents downstream water quality.

Discrete sub-samples were collected using a peristaltic pump with rigid tubing from three locations along each transect at one-quarter, at one-half, and at three-quarters of the distance across the river. The discrete sub-samples were collected from each transect location at 0.8 times the total water column depth and combined to form the single composite water sample. A flow through cell and water quality probe was used to measure field parameters including pH, temperature, DO, ORP, and conductivity.

Each transect sub-sample location was identified by the “A”, “B”, or “C” suffixes, depending on whether it was located closest to or furthest from the east shore of the river (Figure 6). The surface water sampling locations were recorded using a DGPS as described in Section 7 of the Multi-Site FSP.

Surface water samples were submitted to Pace for analysis of PVOCs, PAHs, phenols, aluminum, antimony, arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, vanadium, and zinc. For QA/QC purposes, one blind duplicate and one trip blank were submitted with the surface water samples.

Surface water sampling logs are provided in Appendix J.

### 3.6.3 Bathymetric and Side Scan Surveys

Veolia ES Special Services, Inc. (Veolia) performed a river bathymetric survey and side scan sonar survey on June 5-6, 2007 (Appendix K). The surveys were completed over the entire width of the river

and extended from the Hwy 10 bridge to a point approximately 1,000 feet upstream thereof on each side of the river. A total of approximately 23 acres were surveyed.

The bathymetric survey was performed using a multi-beam sonar system. The system was real-time corrected for heave, pitch, roll, and heading fluctuations. The side scan survey was performed using a 600kHz sonar set to a 50 meter range. Both systems used DGPS to record locations.

The multi-beam sonar survey provided information necessary to evaluate the river flow velocities and hydrologic characteristics. The side scan survey was completed to provide information pertaining to substrate conditions and the presence of obstacles. The side scan survey did locate “pole-like” obstacles within the river. Both surveys were completed in accordance with SSWP.

Veolia’s report and the Figures of the bathymetric and side scan sonar results are provided in Appendix K.

### **3.6.4 Sediment and Substrate Poling**

Sediment poling was completed on June 13, 2007 and July 9 through 13, 2007 (Figure 8). Sediment poling was used to verify the multi-beam and side scan sonar and assist with identifying sample locations.

Sediment poling locations were established along an initial transect in the same area of coverage by the multi-beam and side scan sonar. A 2-inch diameter aluminum pole was used to probe the river bottom. In addition to soft sediment thickness, sediment observations on the tip of the pole (e.g., presence of clay, sand, etc.) were recorded on the field form.

Initial poling locations were approximately 100-feet apart starting at the shoreline and terminated at either the center of the river or until no soft sediment was observed. If suspected debris was encountered, additional poling was performed in the immediate vicinity (5-foot radius or less) to evaluate the differences. Intermediate sediment poling was performed to refine potential soft sediment volumes if the difference between sediment thicknesses at given locations was significant.

Soft sediment thickness was generally less than 3 inches and often not observed. As summarized on Table 2, the river bottom is generally sandy and gravelly to rocky. The thickest sediment deposits were observed at the mouth of the former slough (5 inches in sediment boring T3-A3).

The poling was completed as described in Section 4 of the Multi-Site FSP and Section 6.7.5 of the SSWP.

### 3.6.5 River Sediment and Bottom Sampling

River sediment and bottom samples were collected from July 9 through 12, 2007 (Figure 6). River sediment and bottom samples were collected to evaluate the following:

- The vertical and horizontal contaminant distribution within the river sediments and bottom materials through chemical analysis;
- Potential risk to human health and ecological receptors; and
- Appropriate remedial action option/alternatives to support an FS.

#### 3.6.5.1 Boring Locations

Background transect T1 and four on-site transects, T2 through T5, were initially established to advance borings and collect sediment and river bottom samples (Figure 6). Each transect initially included four boring locations (“A” through “D”) to focus sampling locations based on previously observed affected sediments. Boring locations with “A” designations were collected adjacent to the eastern shore (within approximately 10 to 20 feet) of the Wisconsin River. The subsequent boring locations (“B” through “D”) were located approximately 100 feet out, along transects, towards the center of the river.

Additional borings were added in an iterative approach to delineate samples with concentrations above the screening levels, based on total PAH concentrations, or where MGP-residuals are visually observed (i.e., sheen, coal tar, etc.). The sediment logs are included in Appendix E.

New Age/Landmark operated an on-site mobile laboratory operated to provide near real-time analytical results. For purposes of field making decisions, the threshold effect level (TEC, MacDonald et al, 2000) was used to compare total PAH concentrations.

Only one boring was completed on transect T2 because it was determined that the location was further upstream than intended in the SSWP. Transect T6 was added in the approximate location of where T2 was intended. Transect T7 was also added downstream of transect T3 based on visual and olfactory observations of MGP residuals. Additional borings were also added along transects T3 and T4 based on field observations, and a single point (T6T3-A1) was added upstream of transect T3 to provide data regarding the extent of impacts observed in T3-A1 (Figure 6). These data are discussed in Section 4.3.

### **3.6.5.2 Sediment Sampling Methods**

Boart-Longyear performed drilling services from a McMullen-Pitz barge using roto-sonic methods, as described in Section 4 of the Multi-Site FSP. Roto-sonic drilling was selected based on known conditions and because the method returns a largely intact core for the depth of the run, which was generally 10 feet or to refusal, based on the conditions encountered. Sampling locations were recorded using a DGPS unit.

Prior to boring, the water depth and presence of soft sediment was measured using the poling techniques described above. The physical characteristics of the river bottom materials (i.e. rock, sand, wood, etc.) were recorded for each location. The borings were advanced to either refusal or through the surface layer and up to 10 feet into the underlying native soils below. The sediment logs are included in Appendix E.

Samples were visually characterized, logged and sub-sampled in accordance with Section 4 of the Multi-Site FSP. The sediment core was subdivided into the following intervals:

- 0 to 6 inches below mudline
- 6 to 18 inches below mudline
- 18 to 30 inches below mudline
- 30 to 42 inches below mudline
- 42 to 54 inches below mudline, etc.

The 0 to 6 inch interval was collected to assess concentrations to which the benthic community is exposed. The core continued to be subdivided in one-foot intervals thereafter to the bottom. Samples for analysis of PVOCs were collected immediately, while all other COPCs were collected following sample homogenization in dedicated and disposable sample trays, as described in the SSWP.

### **3.6.5.3 Sediment Sample Analysis**

Samples were submitted to the on-site mobile analytical laboratory for PVOCs, parent and alkylated PAHs (total of 34), and phenols. All the samples collected from transect T1, and select samples from transects T3, T4, and T7 were analyzed for inorganic compounds (aluminum, antimony, arsenic, barium, chromium, iron, manganese, nickel, selenium, silver, and vanadium) in the mobile laboratory (New Age/Landmark). Cyanide was submitted to Pace for analysis in a fixed-based laboratory. Analysis of the



inorganic parameters was completed in select samples to assess near-shore concentrations with upstream results from transect T1.

Seven samples from transects T1 and T3 (background and at the mouth of the former slough transects, respectively) were collected for laboratory analysis of total organic carbon (TOC) for potential use in the equilibrium sediment partitioning benchmark (ESB) approach, if necessary. Samples were collected at or near the surface and included T1-A (0-6"), T1-B1 (0-6"), T1-C1a (6-18"), T1-D1 (0-6"), T3-B1 (0-6"), T3-C1 (0-6"), and T3-D1a (0-6"). A portion of the all samples submitted to the mobile laboratory were retained for potential analysis of TOC or soot carbon in a fixed based laboratory in the event the ESB approach would be necessary.

Five composite samples were also collected for geotechnical testing to support the feasibility study from river locations T1-B1 (0-90"), T3-A1 (0-66"), T3-A3 (0-66"), T3-B1 (0-102"), and T4-A1 (0-72"). The geotechnical parameters were tested by CGC, Inc. and included:

- Atterberg limits;
- Grain-size (sieve and hydrometer);
- Specific gravity;
- Organic content by loss-on-ignition; and
- Moisture content.

A composite sample was also prepared for waste characterization by collecting and combining the entire core from 3 different locations in the project area. Pace analyzed the composite sample using Protocol B to identify potential disposal options.

### **3.6.6 Additional Step One Elements for River Sampling**

The SSWP included additional work activities that were to be completed to evaluate potential ecological risks if specific conditions existed at the site. These additional elements included:

- Bioavailability analysis;
- Toxicity testing; and
- Benthic community structure evaluation.

These additional step-one elements were not performed because the extent of MGP-residuals observed in the river, based on visual and/or analytical results, indicated the affected sediment was relatively localized and consistent with previous RI sediment borings.

## **3.7 Pond Assessment**

### **3.7.1 Surface Water Sampling**

One composite water sample, consisting of three grab samples, was collected from the pond on July 20, 2007. The sub-samples were collected at the midpoint of the water column at the same locations where sediments were sampled (Psed-201, Psed-202, and Psed-203, Figure 6).

Surface water samples were collected using the peristaltic pump and flow through cell to monitor water quality parameters (pH, temperature, DO, ORP, and conductivity). The pond water sample was submitted to Pace to be analyzed for PVOCs, PAHs, phenols, aluminum, antimony, arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, vanadium, and zinc.

### **3.7.2 Pond Sediment Poling/Sampling**

Pond sediment samples were collected by NRT personnel on July 11, 2007 by wading into the pond and using a clear PVC tube to collect the sample. The tube was driven into the sediment to refusal, which occurred between 25 and 30 inches at all three locations (Figure 6). The core tube was filled with water, sealed to create a vacuum, and retrieved. Careful observance of the water within the core tube assured that the sediment material was not compacted or compressed during retrieval.

Sediment was extruded from the core, visually characterized, logged (Appendix E), and sub-sampled into the intervals consistent with the river borings. After collecting the PVOC sample, each interval was homogenized in a stainless steel bowl using a stainless steel spoon. A post was driven into the sediment to mark the location for surface water sampling (discussed above), and the locations were recorded using a DGPS unit. New Age/Landmark analyzed the sediment samples in the on-site mobile laboratory for PVOCs, PAHs, phenols, aluminum, antimony, arsenic, barium, cadmium, chromium, copper, cyanide, iron, lead, manganese, mercury, nickel, selenium, silver, vanadium, and zinc.

One composite sediment sample, collected from sampling locations Psed-201 through Psed-203, was analyzed for the geotechnical parameters listed above for use in the FS, because the sediment characteristics were significantly different from those observed in the river.

### 3.8 Vapor Intrusion (VI) Sampling

A Supplemental RI Field Work Technical Memorandum (Appendix O) to address potential vapor intrusion was submitted to USEPA on March 5, 2010 and approved on November 12, 2010. The Technical Memorandum included the rationale for selecting vapor sample locations and constituents to be analyzed.

Pairs of soil vapor probes were installed at 13 locations (SV1 through SV13) between January 10 and 14, 2011. Shallow vapor probes were installed approximately 3 feet bgs and deep probes were installed approximately one to two (1 to 2) feet above the water table. The vapor probes were installed at multiple depths at each location to estimate attenuation effects of the soil column. Probe locations were selected to evaluate potential vapor intrusion where the highest benzene and naphthalene concentrations have been detected in groundwater in the vicinity of nearby buildings (Figure 5):

- SV1 through SV4 – One probe on each side of this commercial building (Figure 5).
- SV5 through SV11 – Seven probes around the former Center Point mall and other nearby buildings to the south (Figure 5).
- SV12 and SV13 – Two probes in the area of highest groundwater concentrations or downgradient thereof. Probe SV12 was installed to assess lateral attenuation in the mall parking lot and is approximately half way between well OW-9 and the mall building (Figure 5). SV13 is within a right-of-way downgradient of well OW-09, the well which typically exhibits the highest benzene and naphthalene concentrations in groundwater (Figure 5).

Soil vapor probes were installed with flush mount covers and sampled in January and March 2011 to assess data consistency and temporal effects. Vapor sampling was conducted during cool months, which are the most conservative conditions when ambient temperatures are generally lowest and contaminant volatilization is likely to be lower in shallow soils compared to warmer months. Soil vapor sampling was performed concurrent with January 2011 and March 2011 groundwater sampling events.

Probes SV2, SV4, and SV13 were installed in grass; all other soil vapor probes were installed beneath pavement in parking areas to simulate sub-slab conditions. The probes were installed by On-Site in accordance with the Multi-Site FSP SOP No. SAS-11-03 using direct-push techniques. The probes consisted of ¼-inch outer diameter Teflon tubing connected to a ¼-inch diameter, 0.5-foot long stainless steel screen with a filter pack and bentonite grout seal. Two probes were nested within the same borehole and separated with bentonite placed between the screens/filter packs to collect two samples at different depths from each location. The tubing remained closed to the atmosphere via a four-way micro-valve and was only opened during soil vapor sampling events.

Soil samples were collected and logged at each vapor probe location during installation (Appendix D). Four samples were collected for grain size analysis, bulk density, specific gravity, and moisture content. These samples were collected from SV4 (3.0-3.5 ft. and 6.5-8.0 ft. bgs), SV7 (11-12 ft. bgs), and SV13 (10-12 ft bgs).

Soil vapor samples were collected in one-liter Summa canisters supplied and certified by the laboratory. Samples were collected in accordance with the procedures and methods described in the Multi-Site FSP SOP Nos. SAS-11-04 (probe sampling) and SAS-11-01 (sub-slab sampling) including proper purge volume, sample collection, flow rate, and vacuum requirements. Mechanical and chemical leak detection testing was conducted using the direct method as described in the above SOPs, including the use of a helium tracer gas, shroud, and field screening to detect the presence of helium in the soil vapor samples. Probe SV5S could not be sampled in March 2011 due to a blocked air line.

Samples were analyzed for benzene and naphthalene. Samples were also analyzed for carbon dioxide, oxygen, and methane for vertical profiling to assess bioattenuation and for quality control purposes. Vapor samples were submitted under chain-of-custody procedures to STAT Analysis Corporation (STAT), a Multi-Site QAPP and USEPA approved laboratory.

### **3.9 Disposal of Investigation-Derived Waste**

Investigative wastes were containerized during site investigation activities prior to off-site disposal. Solid wastes, which included all soil and sediment wastes generated during the investigation activities, were disposed at the Veolia Cranberry Creek landfill in Wisconsin Rapids following receipt of the Protocol B analytical results. Previous site solid wastes have also been disposed at Cranberry Creek.

Purge water from well development and well sampling activities, as well as the waste water from drilling activities, was disposed through the Plover POTW. Representative samples continue to be obtained and provided as required by the disposal authority.

## 4 INVESTIGATION OBSERVATIONS AND RESULTS

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This Section summarizes the nature and extent of MGP residuals in various media (soil, water, sediment, and vapor) within the areas of concern identified in the SSWP CSM (NRT, April 2007). The discussion for each media addresses the potential for residual MGP contaminant sources at the site and physical conditions that may affect their distribution and trends.

### 4.1 Soil

Soil analytical results are compared to soil screening benchmarks (SSBs) listed in Table 3 to identify concentrations that may be of concern with respect to specific receptors or pathways. Source references for the SSBs for each parameter are also listed on Table 3. Locations for areas sampled in 2007 are shown on Figure 5 and corresponding analytical results are summarized for each COPC in Tables 4 through 6. Benzene, benzo(a)pyrene (B(a)P), naphthalene, arsenic, and lead results for the soil samples discussed below are also shown on Figures 9 and 10.

Only the direct contact exposure pathway SSBs (ingestion, dermal, etc.) are included on Tables 4 through 6. SSBs for the protection of groundwater are not included on these tables as the 33 monitoring wells in the site network provide a direct measurement of groundwater quality.

#### 4.1.1 North Property Boundary Surface Soil Sampling

Surface soils at borings SB-301 and SB-302 consisted of silty sands with an organic topsoil layer and well-developed root zone. There were no visual or olfactory indications of MGP residuals. Analytical results indicated the following:

- PAH concentrations at both locations were below MDLs or their respective SSBs (Table 4). MDLs were below the SSBs for the PAHs as well as other analyzed parameters;
- PVOC and phenol concentrations were also below the MDL in both samples (Table 5); and
- Cyanide and metals were below the SSBs (Tables 5 and 6, respectively). The exception was arsenic (690 to 1400 µg/kg), which exceeded the residential SSB (Table 6), but is below typical background concentrations for central Wisconsin (refer to Risk Assessment, Appendix H).

#### 4.1.2 Pfiffner Pioneer Park Surface Soil Sampling

Surface soils in the park (borings SB-303 through SB-308) consisted of silty topsoil underlain by sand fill to a depth of two feet bgs. There were no visual or olfactory indications of MGP residuals in any of the borings completed in the park. Analytical results indicated the following:

- B(a)P concentrations in boring SB-303 exceeded the SSB (Table 4 and Figure 9). All other PAHs in this sample and at other five locations were below the SSB and/or MDL; and
- PVOCs were also below the MDL in these borings (Table 5).

#### 4.1.3 Former Slough Borings

Borings SB-309 through SB-321 were performed to assess soil quality within and beneath the former slough (in the area east of the pond). Most of the borings were terminated in the underlying native sand, with the exception of borings SB-313a, SB-315, and SB-315a, which were terminated due to refusal at 5, 13, and 10 feet bgs, respectively. Borings SB-309 through SB-318 were completed in the vicinity of the pond and borings SB-319 through SB-321 were completed within the former slough at locations near the facility boundary further east and north of the pond (Figure 9).

The fill material in the slough was dominated by sand with wood chips present at various locations and intervals. The slough bottom was generally identified by the presence of visually stained silt/silty soils that exhibited an odor. The silt was typically observed about 14 feet bgs in the vicinity of the pond and at approximately 12 to 13 feet bgs in the borings north and east of this area. Relatively homogeneous native sand and gravel glacial/alluvial deposits were identified beneath the base of the slough, and the slough bottom is below the water table.

Boring observations are summarized below and on Figure 11 for the borings completed in the vicinity and east of the pond. Notable observations include wood and/or wood chips, odor, sheen, and trace MGP residuals at isolated locations. Wood was present where there were observations of odor, sheen, and tar. Observations for borings located further east along the facility boundary are discussed separately below

Boring	Depth	Silt (base)	Wood	Odor	Sheen	Tar
SB-309	20'	14-15'	7.5-14'	7.5-19'	15-19'	Not noted
SB-310	20'	12.5-15'	7.5-10'	7.5-15'	10-12.5'	Not noted
SB-311	20'	14-15'	7.5-14'	13-15'	Not noted	Not noted
SB-312	25'	14-15'	Not noted	8-18.5'	10-18.5'	trace 13-15'
SB-313	20'	13.5-14'	7.5-10'	10-15'	Not noted	Not noted
SB-314	25'	14-15'	10-14'	7.5-20'	Not noted	Not noted
SB-315	13'	Not noted	9-10'	10-13'	10-13'	Not noted
SB-316	25'	14.5-15'	Not noted	15-20'	15-20'	Not noted
SB-317	20'	13-14.5'	5-13'	10-18'	Not noted	Not noted
SB-318	20'	13-15'	5-10'	10-18'	10-18'	trace 13-15'

A naphtha odor commonly associated with MGP residuals was noted in every boring completed in the former slough. Typically, the odor was noted beginning at a depth of approximately 7 to 8 feet bgs and extending to the base of the former slough. The sheen on the soil, which also generally exhibited an MGP odor, was noted in borings centrally located in the slough (Figure 11). The sheen was absent in borings SB-311/SB-314 and SB-313/SB-317 located along the apparent southern and northern edge of the former slough. Trace tar was noted in borings SB-312 and SB-318, with an oilier appearance at SB-312. The trace tar at SB-318 was more viscous, although not completely desiccated. The tar observed in these borings was not present in sufficient quantity to be considered mobile (i.e., non-flowable).

Similar conditions were observed in the borings completed along the southeastern facility boundary adjoining the City parking lot.

Boring	Depth	Silt (base)	Wood	Odor	Sheen	Tar
SB-319	20'	12-18'	Not noted	5-6 & 13-15'	13-15'	trace 13-15'
SB-320	20'	Not noted	15'	5-18'	5-18'	trace 10-15'
SB-321	20'	13-17'	Not noted	12-20'	12-17'	Not noted

Silt was present at depths of 12 to 13 feet bgs in borings SB-319 and SB-321. The silt was not observed in boring SB-320 but the presence of wood at 15 feet bgs in this boring suggests the slough may have extended to this location

MGP odor and sheen were observed in all three borings and trace tar was present in borings SB-319 and SB-320. The tar in SB-319 was viscous similar to SB-318, and a more oily in boring SB-320, similar to SB-312. Although tar was noted in these four borings, it was viscous (i.e. non-flowable) in nature and occurred sporadically, rather than as a continuous layer extending over an appreciable area.

Analytical results are shown on Figures 9 and 10 and indicate the following:

- Select PAHs (benzo(a)anthracene, B(a)P, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and/or naphthalene) exceeded the SSBs at most sampling locations (Table 4). Elevated PAH concentrations did not always correlate to locations where trace tar was observed.
- Field observations strongly suggest MGP residuals are not present at and near the surface in these areas. PAH concentrations exceeded SSBs near the pond in samples from 7 feet bgs to the base of the former slough. PAHs exceeded SSBs from 2 to 6 feet bgs in borings SB-319 and SB-320 further east along the slough; naphthalene exceeded the SSBs near the base of the slough in borings SB-318 through SB-321 (Table 4), where trace tar was observed.
- When present, traces of tar occurred along and near the base of the slough, typically at depths of approximately 10 to 15 feet bgs. All samples collected below 16 feet were below SSBs and/or MDLs, indicating that tar is not migrating vertically.
- Ethylbenzene was the only PVOC that exceeded the SSBs, and these occurrences were at depth in borings SB-318 and SB-319 (Table 5).
- Cyanide and metals were below the SSBs (Tables 5 and 6), with exception of arsenic at concentrations up to 2.5 mg/kg, again, within background range (Appendix H).

#### 4.1.4 Well Boring Sampling Results

Soils encountered at borings OW-16/PZ-16B and OW-17 consisted of the following:

Material	OW-16/PZ-16B	OW-17
	Depth (ft bgs)	Depth (ft bgs)
Top soil and sandy fill	0-8 ft	0-10 ft
Organic silt layer (speculated to be historic sediment).	8-9 ft (50% woody debris)	10-12 ft (40% organics but only trace woody debris)
Elastic silt	Absent	12-14 ft
Sand	9 to 44 ft	14 to 18 ft
Bedrock	44 ft	18 ft

The logs for the borings indicate subsurface conditions differ significantly at these two locations.

Analytical results are shown on Figure 10 and indicate the following:

- PZ-16B (12-14 feet bgs), on the northwest edge of the pond, exceeded SSBs for PAH compounds similar to those in soils east of the pond area. (Table 4). B(a)P is the only PAH that exceeded the SSB in boring OW-17.
- PVOCs were only detected at PZ-16B, and ethylbenzene was the only parameter exceeding the SSBs (Table 5).
- Arsenic exceeded the SSB in all three samples from these two borings (Table 6), at concentrations ranging from 0.8 to 2.6 mg/kg, again below background levels (Appendix H).



## 4.2 Groundwater

This section summarizes groundwater analytical results through March 2011 and concentration trends. This section also discusses the sampling results from the storm sewers in and around the former MGP facility, and a related evaluation of the potential for these lines to act as preferential groundwater migration pathways.

Post-remediation monitoring has been performed to assess the extent of groundwater impacts as well as the efficacy of monitored natural attenuation. Samples have been collected in accordance USEPA and ASTM low-flow sampling methods since November 2003. Groundwater analytical results are compared to either the federal MCL or the State of Wisconsin enforcement standard (ES) for PAHs that do not have a federal MCL.

### 4.2.1 Groundwater Flow Direction and Gradients

#### 4.2.1.1 *Groundwater Flow Direction and Conceptual Model*

Groundwater elevation is measured in all monitoring network wells during each sample event (Table 1). Groundwater flow between July 2007 and March 2011 was eastward, away from the Wisconsin River (Figures 12 through 25). This flow pattern has remained consistent with historic observations; therefore, not all sampling events were mapped.

The easterly flow direction is caused by the river water pooled behind the Main Street dam, 0.5 mile downstream of the site, which is recharging the aquifer. Groundwater elevations at OW-17, about 40 feet from the river, are lower than the average daily flowage elevation on the upstream side of dam, as listed below.

Date	OW-17 Groundwater Elevation (ft)	Flowage Elevation (ft)
July 24, 2007	1,086.37	1,087.01
Oct. 22, 2007	1,086.28	1,086.99
Jan. 14, 2008	1,086.14	1,086.99

As groundwater flows to the east, it eventually turns toward the south around the dam and then flows back to the river downstream of the dam.

The conceptual groundwater flow model (Figure 26) illustrates how local groundwater flow in the vicinity of the facility and regional flow from areas further to the east are diverted toward the south and discharge below the dam. The area where the two flow systems converge will move closer to or further from the

river in response to changes in pool elevation or regional precipitation which is driving hydraulic heads/groundwater levels in the regional flow system.

Data were reviewed for four Stevens Point GIS Registry properties in the site vicinity for which WDNR had approved closure (Appendix L). The generalized direction of groundwater flow (Figure 27) at these sites is consistent with the conceptual model presented herein (Figure 26) as well as the groundwater flow maps shown on Figures 12 through 25. The Lullabye site reflects the regional groundwater flow system, while the WPSC, Schierl, Cooper Oil, and Belts sites are within the local flow system influenced by recharge from the dam.

Based on this conceptual flow model, interpretation of Site data should consider the following:

- The extent to which groundwater flows to the east will be limited by the regional flow system;
- Enhanced dilution and dispersion of dissolved constituents can be expected to occur where groundwater flow from beneath the site converges with the regional flow system; and
- The existing monitoring well network is located appropriately to monitor the dynamics of these converging flow systems.

#### **4.2.1.2 Hydraulic Gradients**

Horizontal gradients measured from the water table contour lines on the shallow groundwater flow maps range from approximately  $6 \times 10^{-3}$  to  $1 \times 10^{-2}$ , and are similar to previous observations. Using historic hydraulic conductivity values, groundwater velocities at the site are high and range from about 40 to 140 ft/year.

Vertical hydraulic gradients are variable across the site (Table 7) and are summarized below.

<b>Well Nest</b>	<b>Vertical Gradient (over time)</b>
OW-3R/PZ-3B	Upward
OW-5R/P-5B	Generally Downward or Flat
OW-7A/PZ-7B	Downward
OW-9/PZ-9B	Generally Flat
OW-10/PZ-10B	Variable (Equally Down, Up & Flat)
OW-11R/PZ-11B	Upward
OW-12/PZ-12B	Variable (Predominantly Up or Flat)
OW-14/PZ-14B	Downward
OW-15/PZ-15B	Flat (Negligible)
OW-16/PZ-16B	Predominantly Upward

Vertical gradients vary in direction and magnitude as groundwater moves across the Site. More of the locations have an upward or flat gradient, which reflects the river as the regional discharge point for groundwater. It appears bedrock competency also strongly influences vertical gradients at the site. Piezometer PZ-14B is completed in extremely competent bedrock and has a consistently very steep downward gradients ranging from 0.1 to 1.0. It appears the bedrock may be comparatively more competent at piezometers P-5B and PZ-7B than at other piezometers (like PZ-9B and PZ-10B, which penetrate a weathered zone before being completed in more massive bedrock). Piezometer PZ-15B is completed in sand, which reflects that the well and piezometer are screened in the same aquifer.

#### **4.2.2 Groundwater Quality and Trends**

Groundwater samples were analyzed for PAHs, benzene, and several MNA indicators including dissolved iron, nitrate/nitrite, sulfate and DO. The analytical results are summarized on Tables 8, 9, and 10. Field parameters (water temperature, conductivity, pH, dissolved oxygen, and oxidation/reduction potential) are also listed on Table 10. The laboratory reports for April 2007 through March 2011 are included in Appendix M and concentration trend plots (regression analyses) are included in Appendix N.

Benzene and naphthalene concentrations in the wells and piezometers through March 2011 are summarized on Figures 28 and 29. Naphthalene is typically the PAH of concern in site groundwater, although B(a)P, benzo(b)fluoranthene, and chrysene are also present at low levels. Groundwater results indicate these PAHs continue to exceed the MCL and/or ES in select site wells (Table 8).

Monitoring wells that historically exceeded the benzene or naphthalene screening levels are highlighted on Figure 28 and the March 2011 groundwater plume in these wells are shown on Figures 30 and 31, respectively. Wells with lower concentrations delineate the groundwater plume to the north, south, east, and west. Downgradient to the east, benzene and naphthalene concentrations in well OW-9 have been generally stable since 2004. Further east in well OW-10, the concentrations have varied since 2004, though concentrations have been decreasing in the last four sampling events. At OW-14, benzene only slightly exceeds the MCL and the benzene and naphthalene trends have been decreasing since this well was installed. Wells OW-15, OW-19, OW-20, OW-21, and TW-2 define the plume to the south and east.

The plume is limited at depth in the aquifer. Piezometer PZ-12B was the only location where benzene exceeded the MCL in March 2011 (Figure 29). Previously, naphthalene exceeded the ES in P-5B and PZ-7B but concentrations were below the ES in March 2011. Low concentrations in the piezometers to the south and east indicate the plume extent is greater near the water table than at depth.

Regression plots were prepared to evaluate the relationship between groundwater concentrations, elevation, and time for monitoring wells and piezometers with either 1) elevated benzene or naphthalene concentrations or 2) which are located within or on the edge of the plume. The 95% confidence limit for the regression line is plotted to provide an additional indicator of correlation; the minimum and maximum slope for the confidence limits were calculated and listed on Table 11. These slope values provide an additional indicator of whether a potential correlation exists between the plotted variables. Precipitation data are illustrated on additional plots for each well. Regression analysis statistics for each well/piezometer are listed on Table 11 and the plots are included in Appendix N.

Evaluating all groundwater data since 2000, monitoring wells OW-9 and OW-10 exhibit potential increasing concentration trends (however, the regression plots appear to have stabilized since 2004). Wells OW-3R, OW-5R, PZ-11B, PZ-12B, and OW-14 show decreasing trends for the same time period (Table 11). There is no correlation between groundwater concentrations, elevations, and time at wells OW-5R, OW-6, and OW-7A, which are central to the former MGP facility. Possible explanations for the observed concentration trends at OW-5R, OW-9, and OW-10 may be related to MGP residuals detected along the base of the slough under the City parking lot, fluctuating groundwater levels, and/or convergence of regional and local flow systems on the eastern end of the Site.

Mann-Kendall statistical tests were completed using the January 2008 through March 2011 (the last 10 events) benzene and naphthalene results (Appendix N). Wells evaluated were within or on the leading edge of the plume and include OW-5R, OW-6, OW-7A, OW-9, OW-10, OW-14, P-5B, PZ-7B, and PZ-12B. According to the Mann-Kendall tests, benzene concentrations were stable or declining in all nine wells. Naphthalene concentrations in wells OW-10 and P-5B exhibited non-stable trend, which means the parameter concentrations fluctuate too much to determine if there is a definitive declining correlation for the data (although it should be noted that there is **not** an increasing trend). Regardless of the non-stable trends at these locations, wells located downgradient of OW-10 and P-5B exhibited stable or declining trends, and along with the regression analyses, and associated confidence limits, the results indicate the plume is stable and not expanding.

Contaminant transport velocity was estimated for benzene and naphthalene based on the groundwater flow velocity values of 40 to 140 feet/year (Table N-1, Appendix N). Contaminant transport estimates for benzene and naphthalene range from 40 to 130 feet and 10 to 30 feet per year, respectively. These transport results have been used to estimate the distance the contaminants could be expected to travel over period of 60 years, which coincides with approximate closure of the MGP facility in the early 1950s. OW-9 was selected as the point of origin based on its historical impacts since this well was installed

(Figure 28). Using a groundwater flow velocity of 40 feet per year and the associated contaminant flow velocities, benzene and naphthalene were estimated to travel 2,200 and 550 feet respectively. These calculated distances indicate benzene and naphthalene should have traveled well beyond wells OW-18 through OW-21, TW-2, and OW-15 during this time period. This evaluation of contaminant flow velocity suggests natural attenuation mechanisms (such as biodegradation, dispersion, and dilution) are present and have restricted plume expansion over time

Many of the MNA field and analytical parameters yield confounding results for site wells, which reflects convergence of the two groundwater flow systems near the site. Iron, nitrate, sulfate, and DO results are plotted with benzene and naphthalene concentrations for wells near or within the plume, and the graphs indicate many of the MNA parameters fluctuate with the benzene and/or naphthalene concentrations (Appendix N). The MNA averages have been determined for benzene and naphthalene concentrations that are near the MDL, below the MCL/ES (5 µg/L and 100 µg/L), and above the MCL/ES (Table 12).

The MNA results for the shallow and deep groundwater from March 2011 are plotted on Figures 32 through 35, and they show the variability present at the site. The March 2011 benzene and naphthalene plumes are shown on Figures 32 and 34 for the water table monitoring wells, and there appears to be little correlation. Based on site characteristics, the variability of the MNA parameters may be related to either the mixing of surface and groundwater in the vicinity of the site or degradation of organics in the subsurface. It is likely a combination of both these factors along with the regional flow system that is responsible for overall plume stability.

A summary of groundwater quality and trends indicate the following:

- The groundwater plume is well defined by the well network;
- The regression plots and Mann-Kendall tests indicate generally stable or decreasing trends, especially for wells outside of the plume in both the shallow and deep flow systems;
- The contaminant transport assessment indicates natural attenuation mechanisms (such as biodegradation, dispersion, and dilution) have restricted plume expansion over time; and
- The MNA geochemical indicator parameters are confounding, likely due to the presence of two groundwater flow systems that converge in the vicinity of the site.

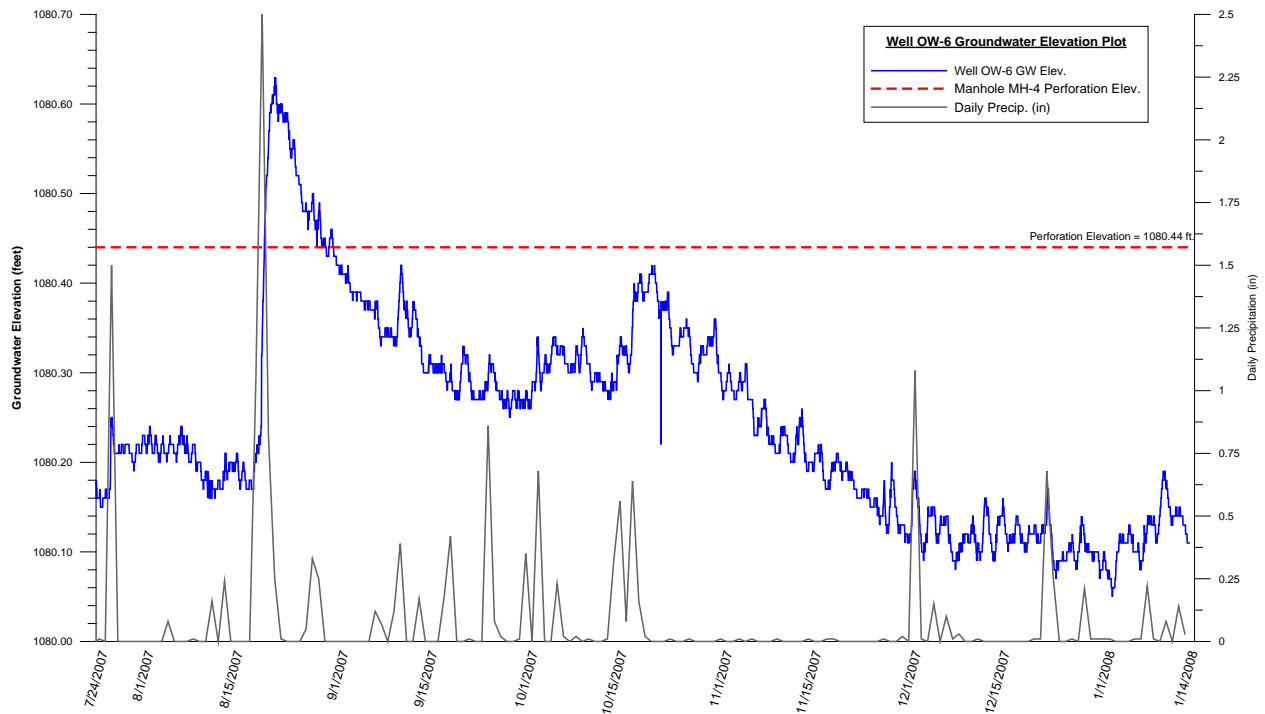
Thus, groundwater sampling results indicate natural attenuation mechanisms are present and the plume appears to be stable rather than expanding at the site regardless of contaminant concentration variability at individual wells. This conclusion is based on analytical results from downgradient and side gradient

wells including the January and March 2011 rounds of analytical results from OW-18 through OW-21 (the leading edge).

### 4.2.3 Storm Sewer Monitoring

Between July 2007 and January 2008, the water levels in monitoring well OW-06 (adjacent to manhole MH-4) were continuously recorded using a pressure transducer. Well OW-6 groundwater elevations, plotted below, exceeded the elevation of the storm sewer perforations near manhole MH-4 for a period of approximately 11 days (August 20 through August 31, 2007) confirming groundwater may enter the storm sewer. The groundwater elevation at OW-6 apparently increased in response to a storm event.

PAH and PVOC concentrations (Tables 13 and 14, respectively) in storm sewer water samples from July and October 2007 and January 2008 were relatively low, compared to concentrations within the plume. Concentrations were highest at manholes MH-3 and MH-4 (Figure 4). No PAH MCLs/ESs were exceeded and the benzene MCL/ES was only slightly exceeded. These storm sewer water samples were collected when the groundwater elevation was lower than the sewer perforations.



The OW-6 elevations since 2000 indicate groundwater exceeded the storm sewer perforations elevation on five of the 33 sampling occasions. Overall, these findings suggest groundwater may seep into the storm sewer sporadically for relatively brief periods. However, the sewer is not a preferential pathway based on the alluvial sands present at the site. Benzene and naphthalene concentrations in the storm sewer are low and do not account for the higher concentrations observed at wells OW-9 and OW-10.

Date	OW-6 Elevation (ft)	Preceding Precipitation (in)	Date	OW-6 Elevation (ft)	Preceding Precipitation (in)
10/28/02	1080.46	4.8 (Oct)	04/28/08	1080.49	5.8 (Apr)
06/16/03	1080.59	7.9 (May/Jun)	10/20/10	1080.54	10.2 (Sep/Oct)
07/20/04	1080.66	8.6 (Jun/Jul)			

Precipitation for the month or two prior to sampling appears to have influenced groundwater elevations at OW-6. In well OW-6, naphthalene exceeded the ES during four of the five sampling events (June 2003 was the exception); benzene exceeded the MCL only during the June 2003 event.

### 4.3 River Investigation Results

The nature and extent of MGP residuals in sediment and substrate materials in the Wisconsin River and park pond were previously identified. This effort focused on collecting samples to compare current site conditions with previous results. Little soft sediment occurs on the river bottom in the area of investigation. Where possible, substrate samples, including native soils were collected from as deep as 10 feet below the river bottom, and sampling extended to 2.5 feet below the base of the pond.

Analytical results are compared to sediment screening benchmarks (SSBs) for the purpose of identifying concentrations that may be of concern with respect to risks for specific receptors or pathways. The SSBs were derived from more than one authoritative study typically cited by federal and/or state regulators, and are listed on Table 15. Surface water analytical results for the river and pond are also discussed herein.

#### 4.3.1 Wisconsin River Investigation

##### 4.3.1.1 River Morphology and Flow

The multi-beam bathymetry and side scan sonar surveys, along with maps and aerial photos, facilitated evaluation of the river morphology and flow regime. The bathymetry survey results in the immediate vicinity of the site are shown on the map in Appendix K. Observations from bathymetric survey regarding the east bank of the river, using the pond as the reference point, indicate the following:

- The river is approximately 1,100 feet wide at the upstream end of the survey, and less than 600 feet wide downstream at the Hwy 10 bridge.
- Upstream of the pond, shallow water depths (less than 4 feet or elevation 1083) extend approximately 200 feet from shore (Appendix K). A point bar has developed near the island between the boat launch and pond due to the river geometry, which results in lower stream flow velocities, quiescent waters, and overall deposition along the upstream, east river bank.
- The former slough channel is evident in the bathymetry contours immediately west of the pond. The location of the former channel is identifiable through the “indented” contour lines where flow from the slough eroded bank material in this area.
- The river is at its narrowest point at the Hwy 10 Bridge and this geometry affects flow. Water depths exceed 4 feet (elevation 1083) approximately 20 feet from the shore in the vicinity of the pond and downstream to the bridge.
- Downstream of the pond, the east bank of the river is a cut bank, where river velocities are likely higher and deposition is minimal. This is evidenced by the step channel bank, compared with upstream areas or the west river bank, as well as the presence of the greatest water depths (elevation 1065 or less) near the east bank close to the bridge.

Results for the side scan sonar survey are shown on the map in Appendix K and indicate the following:

- The location of the fiber optics line that crosses the river just upstream of the Hwy 10 bridge is not identifiable. Additionally, the survey did not identify any underwater obstacles in the immediate vicinity of former slough outlet (Appendix K).
- Two areas of “clutter” were identified in the central part of the channel. The “clutter” piles are located at least 250 feet from the slough outlet in areas where the bottom elevation is less than 1070. No other debris was identified.
- Five “post like” structures are located downstream of the pond; four of these are grouped together while the other is closer to the Hwy 10 bridge. These are also located in the central portion of the channel where water depths are greatest (Appendix K).
- The overall resolution of the survey does not provide enough clarification for identifying large, contiguous areas where soft sediment is present on the river bottom.

The bathymetric survey data were used to determine the cross sectional area of the river, and estimating flow velocities in the area just off shore from the pond. The cross sectional area was determined for a point extending from the pond outlet to the far shore, a distance of about 800 feet. The river was divided into segments using the bathymetry contours and an assumed water elevation of 1,087 feet, and the cross-sectional area was calculated to be approximately 11,000 square feet for this segment.



The CWPC discharge data for the period of January 2006 through April 2008 was used to calculate the following stream flow velocities:

	Discharge Values		Stream Flow Velocities	
	(cfs)	(feet/sec.)	(cm/sec)	
Daily Average	3,476	0.32	9.8	
Monthly Average	3,220	0.29	8.9	
Maximum, Apr. 20, 2008 (Apr. 2008 Average)	39,250 (17,235)	3.57 (1.57)	108.8 (47.9)	
Minimum, Sept. 4, 2007 (Sept. 2007 Average)	897 (1,316)	0.08 (0.12)	2.4 (3.7)	

The monthly averages for maximum and minimum discharge values indicate the variability in river discharge and stream velocities near at the site. The cross sectional area and flow calculations, along with the discharge data, are included in Appendix F.

#### 4.3.1.2 Sediment Distribution

Little fine grained sediment was observed at the Site, with only thin layers of silt/clay material over the sand/gravel substrate identified in a few areas through poling and sampling efforts (Figure 8 and Table 2). This distribution is expected, based on the estimated flow velocities and river morphology.

The plot at right shows the erosion, transport, and deposition velocities for various sized particles in the stream environment<sup>4</sup>. The range of estimated velocities are approximated on the plot and indicate they are great enough to inhibit the deposition of silt, clay, and fine sand particles in the vicinity of the site, as well as downstream past the Hwy 10 bridge, based on the site geometry.

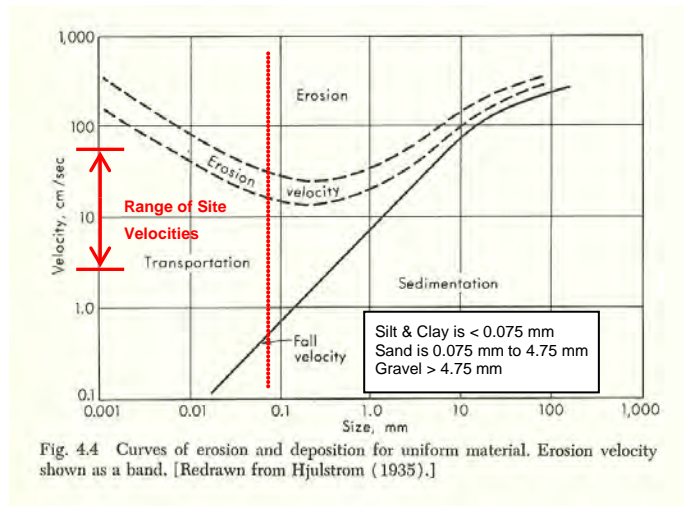


Fig. 4.4 Curves of erosion and deposition for uniform material. Erosion velocity shown as a band. [Redrawn from Hjulfstrom (1935).]

When present, the soft sediment distribution was greatest in the area near and just downstream of the island, decreasing downstream (Figure 8). As the plot above indicates, flow velocities in the vicinity of the slough outlet (between 2.5 and 54 cm/sec) are generally high enough to inhibit deposition of silt/clay particles, limiting the overall presence and thickness of sediment on the substrate.

<sup>4</sup> Morisawa, M. 1968. Streams: Their Dynamics and Morphology. McGraw-Hill Book Company. 175 pp.

Once silt/clay particles are deposited in an area, it takes much larger velocities to suspend these compared with fine sands. This is due to the fact that: 1) silt/clay particles adhere to each other more than sand, and 2) the overall particle shape and smoothness (compared with sand) does not provide a surface that allows them to be re-suspended as easily. Thus, the presence of some silt/clay in the vicinity of the outlet is expected. The accumulation of sediment in the area may also be facilitated by the former slough channel observed on the bathymetry map (Appendix K). This former channel appears to be slightly depressed, and may act as a sediment trap.

#### **4.3.1.3 Substrate Observations and Sampling Results**

MGP residuals were observed in the area immediately downstream of the former slough outlet. At sampling location T3-A1, viscous/sticky tar was observed intermixed with the sand and gravel at a depth of approximately 1.5 to 4.5 feet below the river bottom (not at the surface), and had a strong odor of MGP residuals (naphtha odor). This is the only location where tar was observed in any of the substrate sampling locations, and was confirmed by the analytical results discussed below.

MGP odors similar to those noted T3-A1 were noted in adjacent borings T7-A1 and T7-B1. These results, along with the analytical data, suggest MGP related impacts in the river are confined to the near shore areas immediately downstream of the former slough outlet. Wood chips were noted in borings T3-A3, T4-A1, T5-A1, T6-A1, and T6-B1, but are not attributed to MGP residuals based on the corresponding observations and analytical data.

Bedrock was encountered in many of the borings completed in the river, especially those located furthest from shore. The only locations where bedrock was not encountered were in near shore borings that extended 10 feet or less into the river bottom. The predominantly sandy substrate encountered in these borings was similar to the native sands observed in the upland borings.

#### **4.3.1.4 PAH Results**

This discussion of PAHs focuses on total PAH results rather than on individual compounds due to the additive affects of PAH mixtures for the benthic community in sediments. Samples where total PAHs exceeded the SSB are summarized below and shown on Sheet 2. Refer to Table 16 for individual compounds by sample location and depth. These are listed from upstream to downstream locations.

**Total PAHs (mg/kg)**

Sample	Results	Sample	Results	Sample	Results
T6-A1 (0"-6")	11	T3-A3 (0"-6")	1,476	T7-B1 (0"-6")	666
T3-A1 (0"-6")	17,990	T3-A3 (6"-18")	7.0	T7-B1 (6"-18")	6.0
T3-A1 (6"-18")	19,623	T3-A3 (18"-30")	3.1	T4-A1 (18"-30")	26
T3-A1 (18"-30")	21,154	T3-A3 (30"-42")	2.9	T4-A1 (30"-42")	15
T3-A1 (30"-42")	466	T3-A3 (42"-54")	4.8	T4-A1 (42"-54")	2.1
T3-A1 (42"-54")	24	T7-A1 (0"-6")	162	T5-A1 (0"-6")	9.3
T3-A1 (54"-66")	6.8	T7-A1 (6"-18")	127		
T3-A2 (18"-30")	1.8	T7-A1 (18"-30")	20		
		T7-A1 (30"-42")	3.4		

Notes: 1) Only locations where PAHs were detected are included herein.  
2) Results have been rounded

The total PAH SSBs used for general screening purposes are 1.61 mg/kg, which is the TEC; and 22.8 mg/kg, which is the Probable Effect Concentration (PEC) (MacDonald et. al., 2000). TEC and PEC values represent the concentrations at which toxicity to benthic dwelling organisms are predicted to be unlikely and probable, respectively. All sample locations listed above exceed the TEC, but are below the PEC except the near shore locations on transects T3, T7, and T4.

Over 20 Background samples were collected from various depths from the four sampling locations along background transect T1 (Sheet 2, Table 16) with the following results:

- PAHs were below the MDL in all but one of the background samples, and total PAHs in sample T1-A (30-42) were below the TEC.
- Background conditions in the river, along the point bank deposit located just upstream of the former slough outlet, are very low. PAHs were not detected in sample T2-A1, but low concentrations were present in the surface sample at T6-A1 (Table 16). The presence of the PAHs at this location, but not at T6T3-A1, suggests impacts in this area are isolated and not contiguous with the PAHs observed at T3-A1 and T3-A3.

Samples collected offshore of the former slough/pond outlet had the following results:

- Highest PAH concentrations are present at T3-A1, consistent with prior investigations, and occur where residual tar was observed at depth. Total PAH concentrations ranged between 18,000 and 21,000 mg/kg in the upper 30 inches (2.5 feet), and the highest concentrations are present between 18 and 30 inches (1.5 to 2.5 feet) below the river bottom (Table 16). Individual PAHs exceed the SSBs down to 66 inches (5.5 feet) below the river bottom at this location, and no PAHs were detected below this depth.
- PAHs were detected in samples from T3-A2 (18-30") and T3-A3 (0-6"), but were below SSBs in all other samples and borings along this transect located further from shore (Table 16).

Samples collected downstream of the pond outlet had the following results:

- Surface samples along transect T7 exhibited elevated PAH concentrations in the near shore area, where the water depth exceeded six feet. Individual PAHs exceeded the SSBs to a depth of 42 inches (3.5 feet) at T7-A1, but were limited to the upper 18 inches at location T7-B1 (Table 16). Concentrations at both locations decline with depth, suggesting impacts are related to surface deposition.
- PAHs along transects T4 and T5 are distributed in differing layers depending on the location. Total PAH results are below 26 mg/kg, which are low compared with samples collected on transects adjacent to the pond outlet. Near shore at T4-A1, the surface sample PAHs were below the MDL. Concentrations increased with depth and individual PAHs exceeded the SSBs between 30 and 42 inches (2.5 and 3.5 feet) below the river bottom (Table 16). At all other locations where PAHs were detected on these two transects, the PAHs were either limited to or highest in the surface samples. The results suggest concentrations at T4-A1 were naturally covered since there does not appear to be a separate source of material for these concentrations.

#### **4.3.1.5 PVOC Results**

The distribution of PVOCs is similar to PAHs. However, concentrations are below the applicable SSBs everywhere but at location T3-A1. The highest PVOC concentrations are present at a depth of 18 to 30 inches (1.5 to 2.5 feet) in boring T3-A1, and concentrations below this depth decrease significantly, similar to the PAHs (Table 17). This is the only location where benzene exceeded the MDL in river samples. Benzene concentrations ranged from 2,900 µg/kg to 21,000 µg/kg from 6 to 42 inches (0.5 to 3.5 feet) at T3-A1, but was below the MDL in the surface sample at this location (Table 17). Xylene is the most prevalent PVOC detected in river sediments. It is present in a number of samples along transects T7, T4, and T5, and, again, the distribution is generally similar to the PAHs, although concentrations are generally below the PEC.

#### **4.3.1.6 Metals Results**

The range of metals concentrations detected in river substrate samples are summarized below and the results are listed on Figure 36 and Table 17.

Average concentrations of most metals are below the SSBs and there does not appear to be a strong correlation between occurrence of these metals and the MGP residuals at T3-A1. Lead exceeded the SSB in the upper sediment samples at T3-A1 and T7-A1, and cadmium and mercury exceeded the SSBs only at T3-A1. However, sample T1-A also exhibited elevated mercury, suggesting there may also be upstream sources, in addition to cadmium and lead.

Parameter	Concentration Values (mg/kg)			SSBs
	Maximum	Average	Minimum	
Aluminum	24,000	6,180	1,800	NS
Antimony	<MDL	<MDL	<MDL	2
Arsenic	7.3	1.3	<MDL	9.79
Barium	330	59	<MDL	NS
Cadmium	2.6	0.11	<MDL	0.99
Chromium	35	13	<MDL	43.4
Copper	400	28	<MDL	31.6
Iron	44,000	13,500	4,200	20,000
Lead	69	6.0	<MDL	35.8
Manganese	570	199	60	460
Mercury	1.6	0.06	<MDL	0.18
Nickel	29	11	2.4	22.7
Selenium	3.3	0.29	<MDL	NS
Silver	0.62	0.01	<MDL	1.6
Vanadium	110	31	5.7	NS
Zinc	83	25	5.5	121

Notes: "<MDL" indicates concentrations were below the method detection limit.  
 "ns" indicates there is no SSB for this parameter.

Copper, iron, manganese, and nickel exceeded the SSBs across the area, apparently unrelated to the MGP residuals found at T3-A1. The copper and a number of the iron samples could be related to the bedrock material encountered at T1-C1a.

#### 4.3.1.7 Cyanide Results

Cyanide was not detected in any of the river samples submitted for analysis (Table 17).

#### 4.3.1.8 TOC Results

The seven TOC samples collected along transects T1 and T3 indicated there is little organic carbon in the substrate materials. TOC ranged up to 1.1 percent in background location T1-A as indicated below.

Sample	TOC (mg/kg)	TOC (%)
T1-A (0-6")	11,000	1.1
T1-B1 (0-6")	430	0.043
T1-C1a (6-18")	4,700	0.47
T1-D1 (0-6")	3,300	0.33
T3-B1 (0-6")	1,600	0.16
T3-C1 (0-6")	490	0.049
T3-D1a (0-6")	520	0.052

TOC conversion is mg/kg / 10,000 = % TOC

The TOC results indicate the general lack of carbon, which can help bind organic compounds to reduce availability to benthic organisms and limit migration in the system. These results further attest to the lack of soft sediment in the system, since depositional river sediments usually contain a much higher percentage of TOC reflective of the organic matter that is typically present.

#### 4.3.1.9 Geotechnical Results

The geotechnical testing results for the five composite river samples are summarized below.

Sample	Material	Organic Content	Moisture Content	Specific Gravity
T1-B1 (0-90")	F-C sand, some gravel, little silt/clay (SM)	0.9 %	12.2 %	2.72
T3-A1 (0-66")	Organic F-C sand, some gravel, trace silt/clay (SP)	7.7 %	32.7 %	2.52
T3-A3 (0-66")	F-C sand, some gravel, trace silt/clay (SP)	2.3 %	16.2 %	2.64
T3-B1 (0-102")	F-C sand, some gravel, little silt/clay (SM)	1.2 %	8.6 %	2.73
T4-A1 (0-72")	F-C sand, some gravel, little silt/clay, trace organic material (SM)	4.0 %	20.5 %	2.57

Notes: "F-C" indicates fine to coarse sand

The organic content is higher in these sample compared to the TOC results discussed above; however, these are composite samples, and samples T3-A1 (0-66") and T4-A1 (0-72") were collected from locations where elevated PAHs, as well as other MGP residuals, were observed. The moisture contents are typical for sands rather than fine grained sediments.

#### 4.3.2 Pond Sampling Activities and Results

Sediment samples from pond locations Psed-201, Psed-202, and Psed-203 (Figure 8) are also summarized on Tables 16 and 17. Sediment in the pond consisted of organic silt and clay at Psed-202 and Psed-203 while sand was predominant at Psed-201. Cores Psed-202 and Psed-203 are located furthest from the outlet to the river, suggesting river flow and currents may influence the material that settles in various portions of the pond. The odor of decaying organic material was present in all three sediment cores, and a slight MGP odor was also noted in sediment from core Psed-203. This is similar to the historic results for location SD-201, collected in 2000.

Seven of the nine total PAH results exceed the PEC, as summarized below and shown on Sheet 2. It appears the highest concentrations are present in the layer from 0.5 to 1.5 feet below the pond base.

**Total PAHs (mg/kg)**

Sample	Results	Sample	Results	Sample	Results
Psed-201 (0"-6")	13	Psed-202 (0"-6")	45	Psed-203 (0"-6")	53
Psed-201 (6"-18")	43	Psed-202 (6"-18")	409	Psed-203 (6"-18")	815
Psed-201 (18"-30")	8.1	Psed-202 (18"-30")	386	Psed-203 (18"-25")	292

Notes: 1) Results have been rounded.

The PVOC MDLs were elevated in the pond samples but the reported MDLs were below the appropriate SSBs (Table 17). As discussed in Section 1.3.1, the pond was filled during its creation in the 1980s, and the pond sediments are not the source for the elevated PVOCs detected at 12 to 14 feet bgs in PZ-16B, (Tables 5 and 17), which is located within 50 feet of sample Psed-202.

The range of metals concentrations detected in pond samples are summarized below and the results are listed on Table 17.

Parameter	Concentration Values (mg/kg)			SSBs
	Maximum	Average	Minimum	
Arsenic	11	6.5	3.7	9.79
Cadmium	4.0	0.88	<MDL	0.99
Chromium	57	23	<MDL	43.4
Copper	61	29	1.7	31.6
Iron	39,000	17,756	4,400	20,000
Lead	350	175	32	3.58
Mercury	1.1	0.43	0.04	0.18
Nickel	24	10	1.7	22.7
Zinc	430	208	34	121

Notes: "<MDL" indicates concentrations were below the method detection limit.

All the metals listed above exceeded the SSB in Psed-203 (18-25); in fact, this is the only location where arsenic, chromium, manganese, and nickel exceeded the SSBs (Table 17).

The highest arsenic and lead concentrations observed in any Site sediment samples were detected in the pond (Table 17). Arsenic was 11 mg/kg at Psed-203 (18-25). Lead was detected up to 350 mg/kg and exceeded the SSB in seven of the nine samples (Table 17). Mercury and zinc exceeded the SSB in all six samples from Psed-202 and Psed-203 (Table 17), and cadmium, copper, and iron exceeded the SSB in three to four of the samples from Psed-202 and/or Psed-203. The general distribution of PAHs and metals in pond sediments indicates concentrations are highest in the areas with finer grained silt and clay sediments, to which organic compounds and metals are more likely to sorb.

The geotechnical testing results for the pond composite sample is summarized below.

<b>Pond Material Description</b>	<b>Organic Content</b>	<b>Moisture Content</b>	<b>Specific Gravity</b>
Black sandy sedimentary peat, some silt, little clay, trace gravel (PT)	13.4 %	78.9 %	2.46

The higher organic content in the pond compared to the river is consistent with the higher moisture content, reflecting the presence of the fine-grained materials that retain moisture compared with sands and gravels.

### 4.3.3 Surface Water Results

Four surface water composite samples were collected from the Site; three from the river transects and one from three locations within the pond. Results are summarized in Tables 18 and 19 and the following results are noted:

- PAHs, PVOCs, and cyanide were below the MDLs in river water.
- Analytical results for metals were slightly higher for a few compounds in sample SWT-2 (located in the immediate vicinity of the pond outlet), compared to the background sample SWT-1.
- Metals concentrations for SWT-3, located downstream of the Hwy 10 bridge, were similar to SWT-1 (Table 19).
- PAHs were present at low concentrations in the pond surface water and PVOCs were below the MDL.
- Metals concentrations in the pond surface water sample are similar to the upstream SWT-1 results, with exception of lead.

Slightly higher concentrations in pond water would be expected due to a more stagnant condition.

## 4.4 Vapor Intrusion (VI) Sampling Results

The January and March 2011 soil vapor analytical results (Appendix M) were compared to residential and industrial soil gas screening levels for benzene and naphthalene to evaluate the potential VI exposure risk (Appendix O). Samples were collected at locations in the vicinity of nearby buildings and areas where the highest benzene and naphthalene groundwater concentrations are present. Soil gas results are listed on Table 20 and locations where benzene exceeded the screening levels are summarized below.

Naphthalene was not detected in any of the samples (Table 20); however, based on the revised



screening level, the detection limit (which ranged from 1.9 to 2.4  $\mu\text{g}/\text{m}^3$ ) exceeded the residential screening value of 0.72  $\mu\text{g}/\text{m}^3$ .

Point	Sample Date	Benzene ( $\mu\text{g}/\text{m}^3$ )	Point	Sample Date	Benzene ( $\mu\text{g}/\text{m}^3$ )
SV1S	01/25/11	3.2	SV9S	01/18/11	<b>38</b>
SV5S	01/19/11	<b>33</b>		03/16/11	13
SV6S	03/15/11	3.3	SV10S	01/18/11	9.0
SV7S	01/20/11	9.3		03/16/11	3.4
SV8S	01/17/11	4.7	SV12S	01/25/11	6.8
				03/16/11	9.3

Benzene exceeded the screening levels at a few locations. The highest benzene concentrations were detected in shallow probes SV5S and SV9S in January 2011. Probes SV9S and SV5S are located on the north and south sides of the mall building, respectively, and on the margins of the groundwater plume attributable to the former MGP site (Figures 37 and 38). All probes with benzene concentrations exceeding the residential screening criteria (3.1  $\mu\text{g}/\text{m}^3$ ) are located in the immediate vicinity of the former mall building, with the exception of SV1, which is located in the asphalt along the edge of 1<sup>st</sup> Street in an area with fill near the surface. Thus, all the areas with elevated results compared to screening levels are parking areas or driveways used frequently for vehicular traffic.

For groundwater to be the source of benzene in the soil vapor, benzene levels should be higher at depth and attenuate with distance away from the water table. With the exception of SV12 in January 2011, soil vapor results for all locations indicate concentrations are similar or higher near the surface compared to the deeper results just above the water table (Table 20). These differences between the shallow and deep benzene concentrations were greatest in the immediate vicinity of the former mall building during January 2011.

In addition, at soil gas sample location SV13, near the highest concentrations of benzene and naphthalene detected in groundwater monitoring well OW-9, on-site near the former MGP operations, there was no detection of naphthalene in soil gas, and only a trace of benzene in the soil gas which was below the most conservative residential screening level.

Based on this spatial analysis, the elevated benzene concentrations detected in surface soil gas above vapor intrusion soil gas screening levels east of Water Street appear to be associated with a surficial source of benzene unrelated to the MGP site. Overall, the MGP residuals are not the source of benzene observed in the soil gas.

Lower oxygen (O<sub>2</sub>) and higher carbon dioxide (CO<sub>2</sub>) levels are present at sampling locations SV1 through SV4 compared with all other sampling locations (Table 20). These results suggests aerobic processes are occurring in the vicinity of the commercial building north of the site that reduce O<sub>2</sub> levels and increases CO<sub>2</sub> concentrations. The highest O<sub>2</sub> and lowest CO<sub>2</sub> levels were present on SV5 through SV7, located in the alley south of the former Center Point Mall, as well as in the January SV9 sample, which is located north of the mall building (Figures 37 and 38). Results for these sampling locations suggest there is less biological activity within the soils in the vicinity of the mall, potentially due to the asphalt parking surface, which may limit the flux of gases into and out of the soil column.

The grain size analysis, bulk density, specific gravity, and moisture content for samples collected from the soil vapor probes are summarized below. They indicate subsurface soils in the areas evaluated were dominated by sand.

Location (Depth-ft.)	Sample Description	Bulk Density (wet-pounds per cubic foot)	Moisture Content (%)	Specific Gravity
SV4 (3-3.5)	Fine to Coarse Sand	116.1	6.5	2.49
SV4 (6.5-8)	Fine to Coarse Sand FILL with peat	94.4	29.9	2.29
SV7 (11-12)	Fine to Coarse Sand	111.2	2.6	2.64
SV13 (10-12)	Fine to Coarse Sand with Gravel and organic Silt	Bag Sample	41.4	2.39

## 4.5 Sample Validation and QA/QC

Trip blanks, duplicate samples and MS/MSD samples were collected and analyzed to satisfy Quality Assurance/Quality Control (QA/QC) requirements in accordance with Section 2 of the Multi Site QAPP.

Shepherd Technical Services, in Austin, Texas validated laboratory procedures and sample results for New Age Landmark, Pace Analytical Services, and STAT as discussed in Section 4 of the Multi Site QAPP.

The validation summaries are included in Appendix P. The data was generally acceptable for use with the exception of select metals and PAH analysis in the sediment samples analyzed in the New Age Landmark, on-site mobile laboratory.

The data validation reports calculated the relative percent differences and percent recoveries to assess precision and accuracy of the data sets. RI activities were performed in accordance with the standard operating procedures included in the Multi-Site FSP and QAPP to minimize errors and ensure

representativeness. Data for soil, groundwater, surface water and storm water were 100% complete. Data for sediment were 95% complete. Data comparability is not required because each media and sample were analyzed by the same methods.

Previously collected soil data (collected since 1985) was assessed for use in the BLRA. Data used for the BLRA is presented as sample-by-sample locations in Appendix G Tables A-1 through A-8. In general, samples used in the BLRA are from the 1998 remedial action documentation samples. Samples were collected within the source area excavations and document remaining soil quality in areas which previous sampling indicated were well above standards or had visual evidence of MGP-contamination.

EnChem, Inc. (now known as Pace), a Wisconsin-certified laboratory in Green Bay, Wisconsin, analyzed the 1998 soil samples. USEPA SW-846 Methods were used that were consistent with the methods used in 2007 hence, the methods yield measurement errors and detection limits similar to data collected in 2007. All of the data previously collected has been submitted to WDNR for review. Review of the detection limits versus the corresponding risk-based concentration (RBC) used for screening the soil samples indicates reporting limits are well below the RBC.

The BLRA identified benzene, benzo(a)pyrene, arsenic, and lead as the primary constituents detected in soil at frequencies and/or concentrations which prompted assessment of potential risk. Benzene was primarily detected above the RBC in sub-surface soil (greater than 2 feet bgs) samples collected in 2007. It is likely that benzo(a)pyrene, arsenic, and lead detected in the pre-2007 soil sampling events remain in undisturbed soil at concentrations equal to or less than that previously reported because these constituents tend to sorb to soil particles and are relatively immobile in the natural environment.

Based on the methods, detection limits, and similar parameters detected, the previously collected data is representative and has been included in the database for assessing potential risk to human health and the environment.

## 5 FATE AND TRANSPORT

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This section discusses the potential routes of migration and a summary of the overall understanding of site media.

### 5.1 Baseline Risk Assessment

Exponent prepared a baseline risk assessment (BLRA) using the 2007 RI data and the previously collected soil data. The BLRA is included in Appendix H.

Potential risk from site media were evaluated using the following analytical data sets:

- Groundwater: Data collected between 2007 and 2011.
- Soil: Previously collected soil data, 1998 remedial action data, and the 2007 soil analytical results.
- Sediment: 2007 RI data for the Wisconsin River and Pfiffner Pioneer Park pond.
- Surface water: 2007 RI data for the Wisconsin River and Pfiffner Pioneer Park pond.
- Soil Vapor: Data collected in January and March 2011.

The BLRA was prepared in accordance with the Multi-Site Risk Assessment Framework (RAF) (Exponent, September 2007) and the USEPA-suggested revised sediment hierarchy (provided in USEPA's RAF comments dated December 20, 2007). The BLRA focused on the media and receptors of concern identified in the SSWP (NRT, April 2007) which are also discussed in Appendix H. Screening levels, based on USEPA guidance documents, were used to identify media that presented a potential unacceptable risk to human health and/or ecological receptors present, or reasonably anticipated in a future land use, at the site.

### 5.2 Refined CSM

The refined CSM was developed using the previously collected soil and groundwater data and the 2007 soil, groundwater, sediment and surface water data and observations. As described in the Multi-Site CSM (September 2007), the CSM is refined as data are generated. The post-RI or refined CSM is included in the baseline risk assessment, Appendix H.

As described in the baseline risk assessment, screening levels for construction workers and recreational use do not exist and were qualitatively based on an unrestricted use and unlimited access (residential land use) exposure scenario.

## 5.3 Media of Concern

This section incorporates the previously collected data and the 2007 RI data to assess the media that required further assessment and/or were not fully addressed by previous work with respect to public health, welfare or the environment (described in the SSWP (NRT, April 2007) and Completion Report (NRT, June 2006). Results of the BLRA results are highlighted within the discussion.

### 5.3.1 Soil

#### 5.3.1.1 *Surface Soil*

Clean surface soil was placed on the WPSC property, extending into Pfiffner Pioneer Park as part of the 1998 remedial action. Additional surface soil sampling was performed in 2007 in portions of Pfiffner Pioneer Park and the parking lot located over the former slough (Section 3.3 and 4.1) to assess the soil quality adjacent to these areas for use in the human health risk assessment.

Surface soil was evaluated using an unrestricted use and unlimited access (represented by the residential exposure) and industrial/commercial land use scenario because standards do not exist for the recreational (current land use) or potential outdoor worker scenarios. The BLRA indicates surface soil at the site is not expected to pose a human health concern under the current land use and is at the low end (i.e., less than  $1 \times 10^{-6}$ ) of USEPA's generally acceptable target risk range ( $1 \times 10^{-4}$  to  $1 \times 10^{-6}$ ) for unrestricted use and unlimited access.

#### 5.3.1.2 *Subsurface Soil*

Residual concentrations of MGP-residuals were known to be present within the WPSC property, as documented in the remedial action report (NRT, September 1998). Additional subsurface soil sampling was completed in the vicinity of Pfiffner Pioneer Park pond, near the outlet of the former slough and in the parking lot located over the former slough.

Consistent with the previously collected data, borings advanced in the former slough contain isolated and sporadic occurrences of trace tar within the silt layer of the former slough. The silt layer appears to be thicker near the sheet pile wall and slopes to the east, away from the river (Sheet 1). Non-flowable, trace MGP residual was observed in borings at approximately 10-15 feet bgs (Figure 11). Concentrations of

PAHs are elevated throughout the former slough (Figures 9 and 10). These observations, along with the existing physical barrier, suggest the former slough is unlikely a contributing source of contamination to the Wisconsin River sediment.

Soil samples collected at 18 to 20 feet, which is below the base of the former slough (approximately 10-15 feet) indicate the underlying soils sampled are not impacted. Also, dissolved phase MGP residuals would be expected to follow the groundwater gradient to the east, away from river. Monitoring wells immediately downgradient (east) of the sheet pile wall, where trace tar has been observed in the former slough borings, do not indicate the presence of dissolved phase constituents. The groundwater monitoring well network also provides data that indicates the subsoils within the former slough are not a significant source of contamination to the groundwater in the vicinity of the pond.

There are no current human health exposures to subsurface soils. However, depending on the future land use, human health risks may exist due to subsurface soil concentrations. The residential scenario was used to evaluate potential risks to recreational users and the outdoor worker scenario was used to evaluate the construction worker scenario. These are both conservative approaches. Figures 39 and 40 summarize the subsurface soil locations with soil samples reported above the residential and outdoor worker scenarios, respectively, generally related to PAH concentrations and lower end risks associated with benzene. These locations are generally in the vicinity of the former remedial action excavations (Appendix A) or the former slough alignment.

### **5.3.2 Groundwater**

A plume containing organic compounds, as indicated by benzene and naphthalene concentrations, has been delineated extending from the western edge of the former MGP site eastward toward the former Center Point Mall building, which is approximately 350 feet east of the former MGP property boundary (Figures 30 and 31). Both the groundwater flow interpretation and the estimated plume extent are similar to results of previous interpretations. As indicated, the benzene plume at depth in March 2011 is limited to the area around piezometer PZ-12B (Figure 29), and lower concentrations in the piezometers to the south and east indicate the plume extent is greatest near the water table than at depth.

Based on the screening level evaluation, performed in the BLRA, groundwater concentrations would pose a risk to human receptors, if the water were to be used for drinking water. There are no current human health risks because the nearest groundwater well is over 2.5 miles from the site. There are also no groundwater withdrawal points within the defined extent of the plume or in downgradient areas.

Groundwater data suggest the regional flow system dominates in the general vicinity of the former Center Point Mall and limits the overall extent of contaminated groundwater migrating from the former MGP site. Although MNA indicator parameters suggest only limited biodegradation may be occurring within the plume, the physical and chemical processes, as measured by groundwater concentrations, indicate the site plume is stable and meets the definition of MNA. Site data indicate MNA is occurring and the plume is stable based on the following:

- Concentrations are stable or declining for side and downgradient wells, some of which have been sampled consistently since 2000 or earlier;
- The January and March 2011 rounds of sampling at wells OW-18 through OW-21 (on the leading edge of the plume) qualified indicate concentrations are below screening levels; and
- The fact increasing trends observed at a limited number of wells central to the historic MGP site (OW-5R, OW-9, and OW-10) have not been observed at other down gradient locations over an extended time period.

The March 2011 benzene and naphthalene plumes area compared to the area where soils exceed the residential screening levels (Figure 41). Both plumes are located east/southeast (or downgradient) of the former MGP site and reflect the influence of groundwater flowing beneath the site due to the presence of the dam.

### **5.3.3 Sediment**

#### **5.3.3.1 *Wisconsin River Sediment***

Soft sediment deposits within the Wisconsin River consist of thin layers of silt/clay ranging from not present to five inches (near the mouth of the former slough). In general, the soft sediment thickness is sporadic, typically one to two inches. From velocity estimates discussed earlier, this section of the Wisconsin River is neither depositional nor erosional (Section 4.3.1.2). Underlying the soft sediment is sand/gravel river bottom material.

MGP-residuals (viscous/sticky tar) were visually observed at the mouth of the former slough in boring location T3-A1 at a depth of 1.5 to 4.5 feet, in the vicinity of previously observed elevated concentrations (T203A). MGP-residuals were not observed in adjacent boring locations.

Elevated concentrations of PAHs and PVOCs correspond with this interval and are generally co-located. Affected sediment is located near-shore, at the mouth of the former slough (Figure 4). The area of affected sediments is consistent with 2000 sediment investigation results (Appendix A).

The presence of PAHs and PVOCs in river bottom samples does not suggest continued source material, particularly from sporadic observations of MGP-residuals in the former slough, based on the following observations:

- The base of the former slough (Sheet 1), east of the sheet pile wall, is sloped to the east, with an undulating surface and discontinuous presence of MGP-residuals (i.e., non-flowable tar).
- Tar was not observed in borings advanced for PZ-16B and OW-16, immediately adjacent to the Pfiffner Pioneer Park pond and in the vicinity of the Wisconsin River boring (T3-A1) that contained viscous/sticky tar.
- The presence of MGP-residuals at T3-A1 can be attributed to historic inputs from the former slough.
- The occurrence of MGP residuals below the surficial layer in underlying sands and gravels (a more protected/unweathered environment) rather than soft sediments may also explain why the MGP residuals remain.

The BLRA evaluated Wisconsin River sediments for recreational human health users and benthic invertebrates. The risk to human health receptors is expected to be minimal, based on the limited spatial extent of locations with detected MGP-residuals, particularly in wadable areas. Figure 42 provides the zones of exposure based on benthic invertebrates exposed to PAH concentrations and other co-located analytes.

#### **5.3.3.2 Pfiffner Pioneer Park Pond Sediment**

Soft sediment deposits within the Pfiffner Pioneer Park pond consist of thicker layers, at least 30 inches, of black sandy sedimentary peat with some silt/clay. Unlike the river sediment, pond sediment contains significant percentages of total organic carbon that may sequester PAHs, making them less bioavailable to benthic organisms.

Visual evidence of MGP-residuals was not observed in the pond. Concentrations of PAHs and lead were generally elevated and to a lesser extent, xylenes. These analytes are consistent with the 2000 sediment investigation.

The BLRA evaluated pond sediments for recreational human health users and benthic invertebrates. The risk to human health receptors was evaluated in a semi-quantitative manner using the residential soil screening risk-based concentrations to evaluate occasional recreational use exposures. This assessment indicates the pond sediment would not pose an unacceptable risk to occasional recreational users.



The pond sediments are likely to cause toxicity to sensitive benthic invertebrates, primarily as a result of exposure to PAHs. Figure 42 provides the zones of exposure based on benthic invertebrates exposed to PAH concentrations and other co-located analytes.

### 5.3.4 Storm Water and Surface Water

The storm water quality data was similar to previous investigation data and the elevation monitoring confirmed the potential for occasional discharge of Site groundwater to the storm sewer system through known perforated sections. Based on data collected during this investigation, the storm sewer does not appear to present a significant pathway of preferential flow that would further influence groundwater quality at downstream locations.

Surface water adjacent to the former MGP within the Wisconsin River and the Pfiffner Pioneer Park had not been previously assessed. Analytical results in the river and the pond are generally low to non-detectable (Tables 18 and 19). Constituents detected in the pond surface water may be influenced from affected pond sediment. The influence is likely localized to the pond because concentrations of these constituents are an order of magnitude less in the river surface water. Related risk assessment results include:

- The baseline human health risk assessment indicates the concentrations from the surface water in the river and the pond are not expected to pose a health concern.
- The baseline ecological risk assessment indicates the concentrations from the surface water in the river are not expected to pose a risk. Surface water in the pond may potentially affect sensitive water column benthic invertebrates because of benzo(a)anthracene and benzo(a)pyrene concentrations.

Composite surface water samples provide an indication of potential risk to humans and ecological receptors that can move through the entire water column and do not spend the majority of their life cycle in the vicinity of the river sediments, whereas sediment concentrations are a better indicator of potential risk to the benthic community.

### 5.3.5 Vapor Intrusion

Soil vapor results indicate benzene exceeded the industrial/commercial screening criteria at two locations near a commercial building without a basement. Five sample points exceeded the residential screening criteria at locations in a commercially zoned area of the city. Based on this evaluation and the screening level risk assessment, MGP-related groundwater contamination is not the source of soil vapors above health-based VI screening values east the Site.

## 6 SUMMARY AND CONCLUSIONS

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### 6.1 Summary

The results of the RI met the objectives of the SSWP (NRT, April 2007) and provide adequate information to assess the nature and extent of affected media to support the BLRA and the FS. The baseline risk assessment, using the previously collected data and the RI data, has identified the following media of concern:

- Subsurface soils: On the WPSC property, in the vicinity of the former slough, and the eastern boundary of Pfiffner Pioneer Park (Figures 39 and 40) to be addressed for the protection of human health.
- Groundwater plume as shown on Figures 30 and 31 to be addressed for the protection of human health.
- Sediment: Near-shore sediment and underlying sand in the Wisconsin River and soft sediment in Pfiffner Pioneer Park Pond (Figure 42) to be evaluated for the protection of benthic communities.

Soil vapor and storm water results indicate the following:

- Soil Vapor: MGP-related groundwater contamination are not the source of vapors above the health-based screening levels in the mall property east of the site.
- Storm Sewer: Groundwater elevations have been documented to exceed the perforated storm sewer elevations on six occasions during this RI. However, based on the groundwater plume this is not a significant migration pathway.

### 6.2 Conclusions

The FS can proceed without additional assessment. Groundwater sampling will continue on a semi-annual basis (spring and fall of the year) until a Record of Decision (ROD) has been issued for the site.

### 6.3 Preliminary Remedial Action Objectives

The remedial action objectives (RAOs) have been developed for the media of concern (subsurface soil, groundwater, and sediments) and receptors identified in Section 2.1 of the FS. The FS RAOs were developed to protect public health, welfare and/or the environment from site contaminants that may pose an unacceptable risk and be protective of future uses, as appropriate.

## 7 REFERENCES

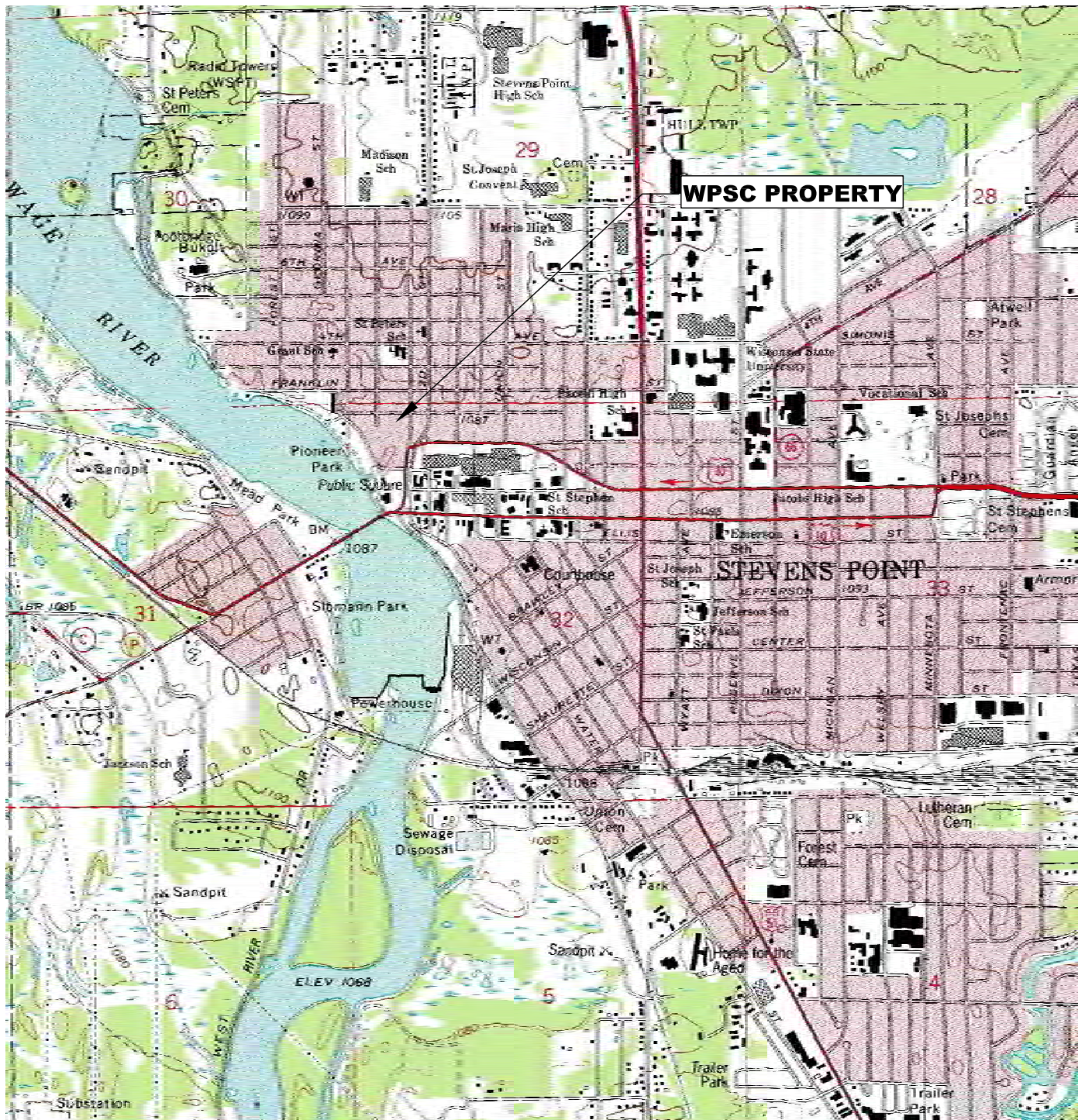
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- 2006 December 4. Revision 1, Natural Resource Technology, Inc. Multi-Site Quality Assurance Project Plan, , Remedial Investigation/Feasibility Study, Wisconsin Public Service Corporations' Former Manufactured Gas Plan Sites, CERCLA V-W-06-C-847.
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- 2007 August 5. Revision 0, Prepared for Integrys, Generalized Conceptual Site Model, Former Manufactured Gas Plant Sites.
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## FIGURES





SOURCE: DIGITAL DOWNLOAD FROM  
<http://STORE.USGS.GOV>.  
 USGS 7.5 MINUTE QUADRANGLE,  
 STEVENS POINT, WIS.  
 DATED 1970. REVISED 1991.



0 2000 4000



SCALE IN FEET

CONTOUR INTERVAL 10 FEET



LOCATION MAP  
 WSPC  
 FORMER STEVENS POINT MGP SITE  
 STEVENS POINT, WISCONSIN

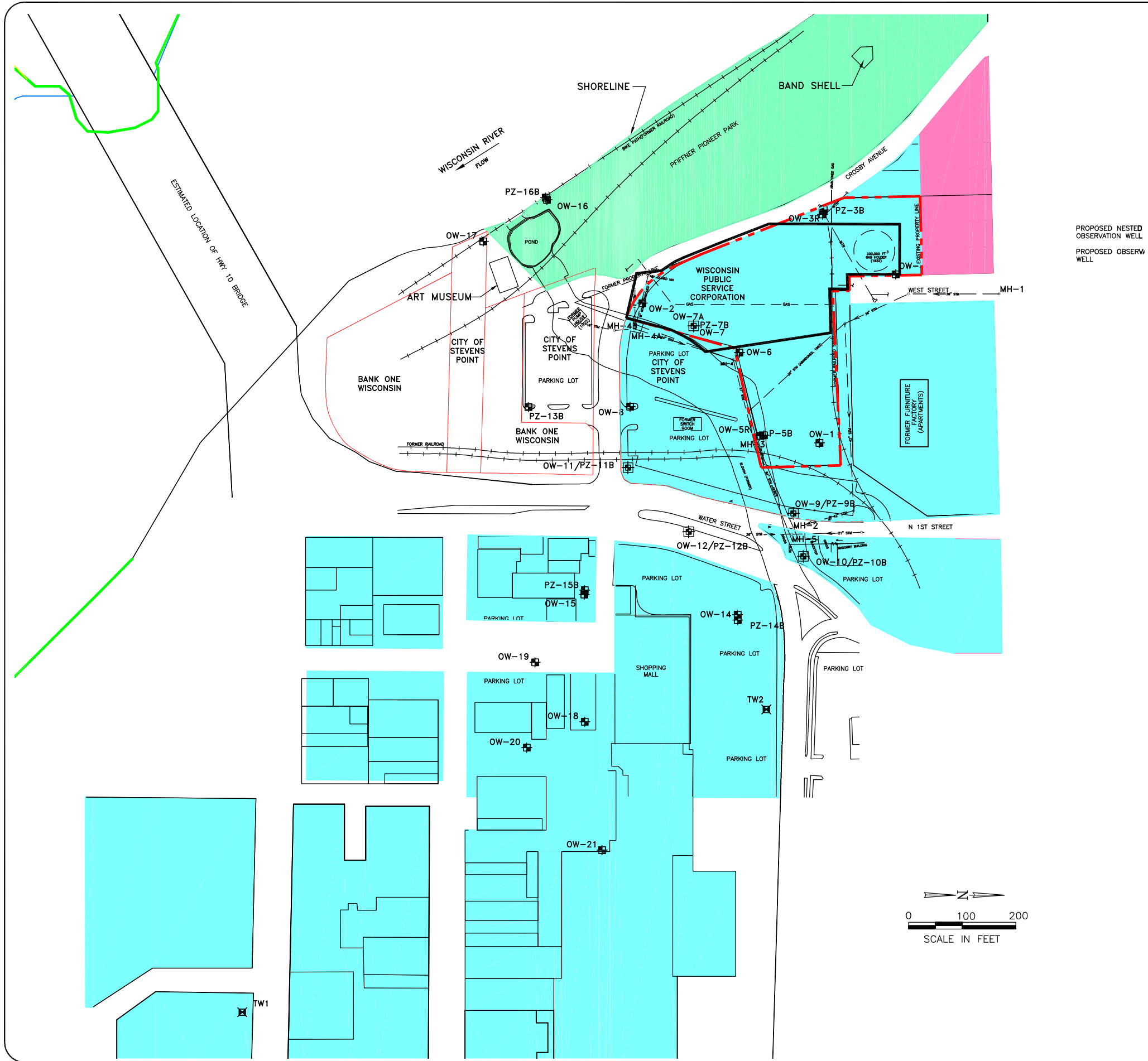
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FIGURE NO.  
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DRAWN BY: RLH 05/28/08 APP'D BY: JMK DATE: 05/28/08



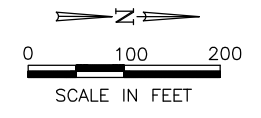


**LEGEND**

- OW-1 WATER TABLE OBSERVATION WELL
- P-5B PIEZOMETER
- TW1 TEMPORARY WELL
- OW-9 / PZ-9B WATER TABLE/PIEZOMETER WELL NEST
- COMMERCIAL/CENTRAL BUSINESS/LIGHT INDUSTRIAL
- CONSERVANCY
- RESIDENTIAL
- APPROXIMATE PARCEL BOUNDARIES AND PARCEL OWNER
- APPROXIMATE CURRENT Wpsc PROPERTY BOUNDARY
- APPROXIMATE FORMER FACILITY EXTENT
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR --- WATER LINE
- GAS --- GAS LINE
- STM --- STORM SEWER
- MGP MANUFACTURED GAS PLANT
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- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

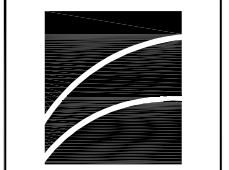
NOTES:  
 1) SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.  
 2) APPROXIMATE PARCEL BOUNDARIES WERE DEVELOPED FROM A MAP PROVIDED BY PORTAGE COUNTY PLANNING AND ZONING DEPARTMENT.

SOURCE NOTES:  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-d8 AND DRAWING NO. 3075-d2, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND STPTGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM Wpsc W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE.  
 A SURVEY FROM Wpsc DATED JANUARY 31, 2000 LOCATED WELLS AND BORINGS SB-207 THROUGH SB-216 INSTALLED JANUARY 2000.  
 A SURVEY FROM Wpsc DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE.  
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 A SURVEY BY Wpsc DATED AUGUST 15, 2007 LOCATED WELLS 01-14 THROUGH OW-17 AND BORINGS SB-309 THROUGH SB-321.  
 TW-1 AND TW-2 SURVEYED BY Wpsc ON DECEMBER 1, 2008.  
 OW-18 THROUGH OW-21 SURVEYED BY Wpsc ON MARCH 1, 2011.



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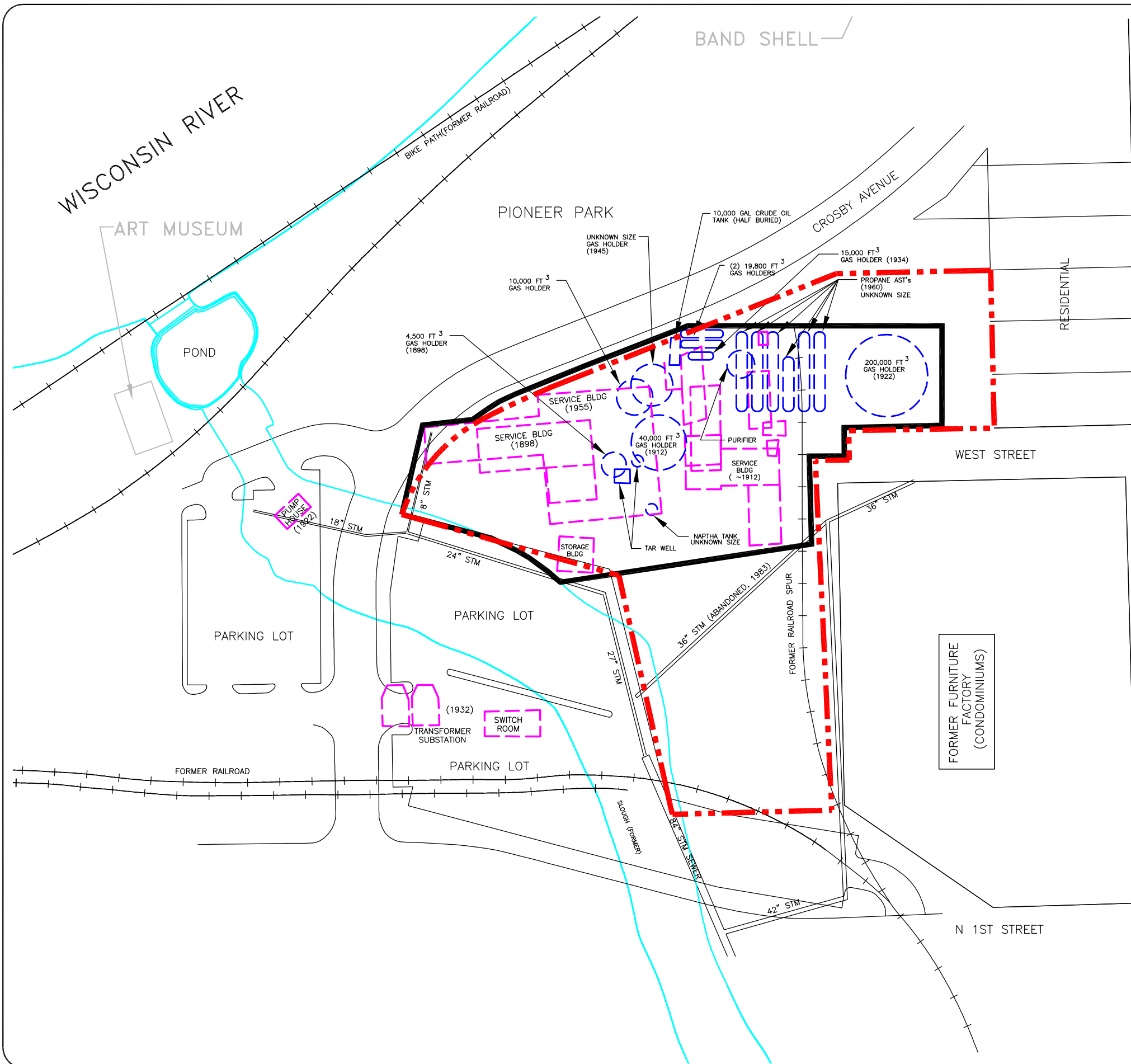
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 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN





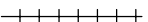


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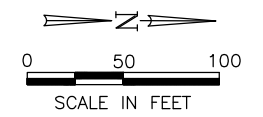
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FIGURE NO.  
 2



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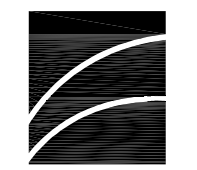
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-  FORMER BUILDINGS
-  RAILROAD
-  APPROXIMATE CURRENT WPC PROPERTY BOUNDARY
-  APPROXIMATE FORMER FACILITY EXTENT



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DRAWING NO:		1177-1412C-B03C	
REFERENCE:		NONE	

**FORMER MGP STRUCTURE LOCATIONS**  
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 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN

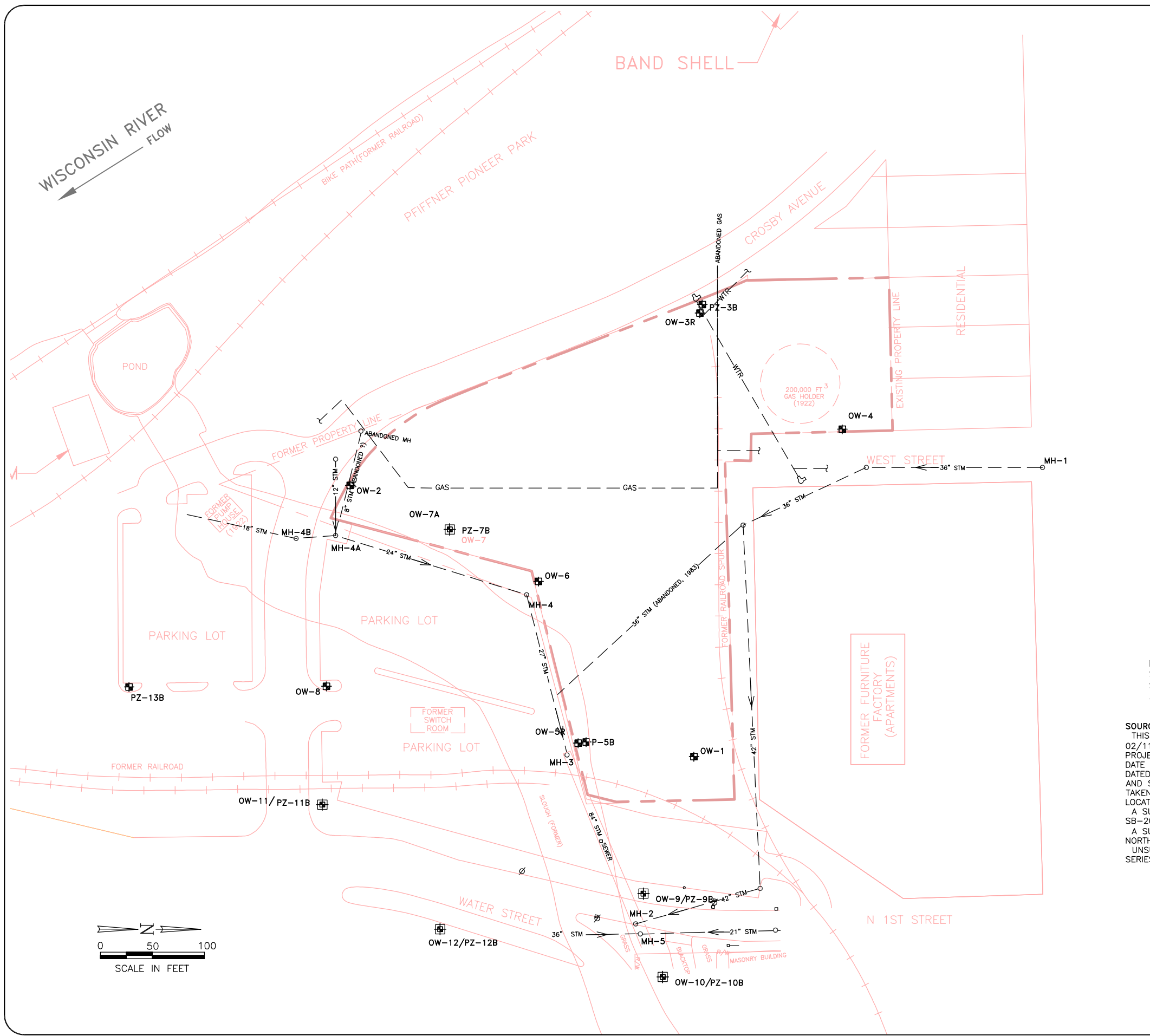


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FIGURE NO.  
 3



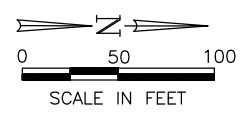


### LEGEND

- OW-1 WATER TABLE OBSERVATION
- OW-9 /PZ-9B WATER TABLE OBSERVATION/  
NESTED MONITORING WELL
- P-5B PIEZOMETER
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR --- WATER LINE
- GAS --- GAS LINE
- STM --- STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS  
STRUCTURES
- FORMER RAILROAD

NOTES:  
SUBSURFACE UTILITY LINE AND FORMER  
STRUCTURES/BUILDINGS LOCATIONS ARE  
APPROXIMATE.

SOURCE NOTES:  
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A SURVEY FROM WPSC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE.  
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## UNDERGROUND UTILITIES

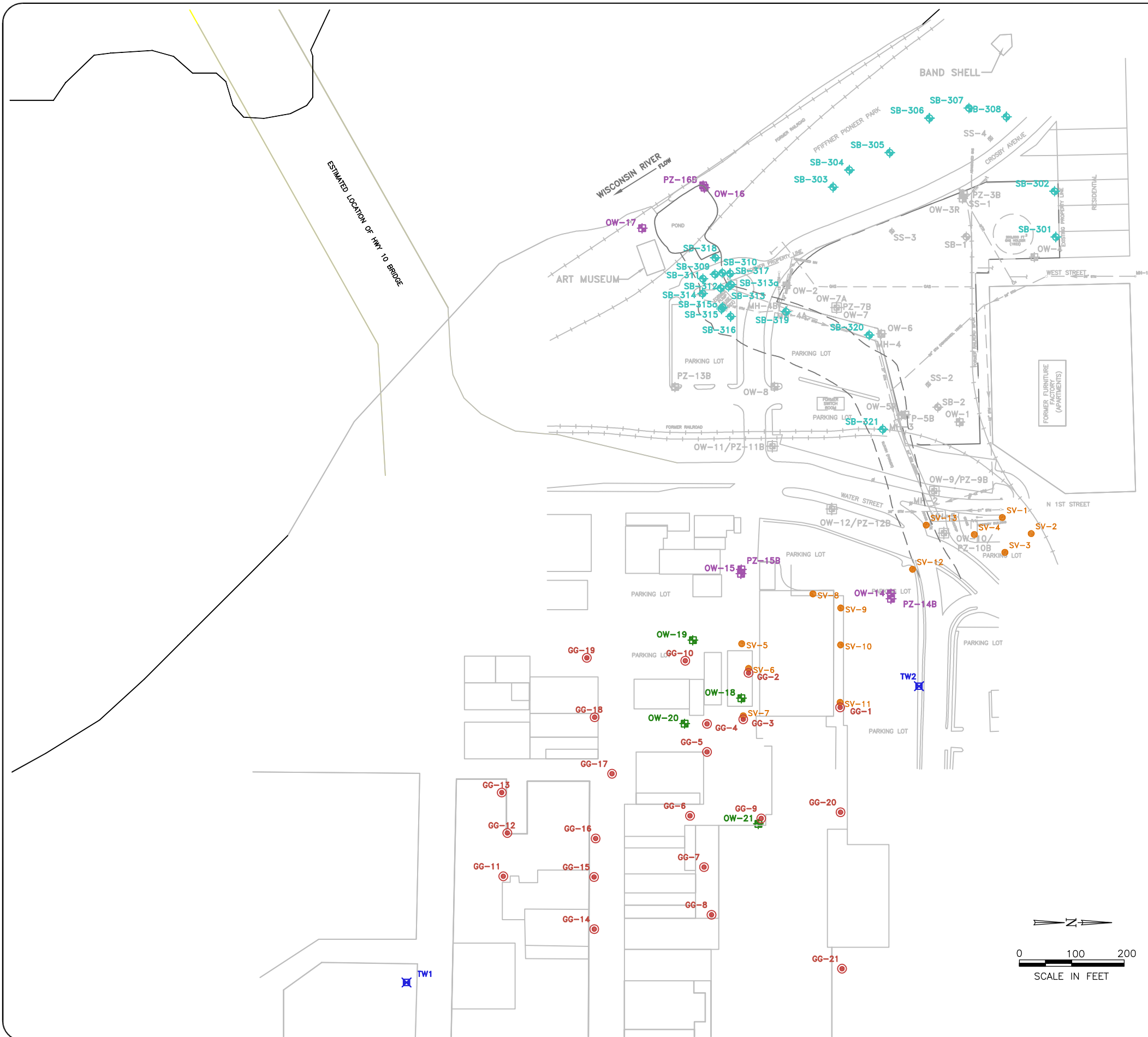
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STEVENS POINT MGP SITE  
WISCONSIN PUBLIC SERVICE CORPORATION  
STEVENS POINT, WISCONSIN



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FIGURE NO.  
4



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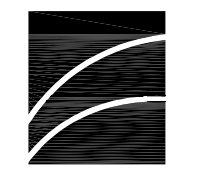
- PZ-14B WELL LOCATION (2007)
- OW-17 WELL LOCATION (2007)
- SB-308 SOIL BORING (2007)
- OW-19 WELL LOCATION (2011)
- TW1 TEMPORARY WELL (2008)
- SV-11 SOIL VAPOR PROBES (2011)
- GG-20 GROUNDWATER GRAB SAMPLES (2011)
- OW-1 WATER TABLE OBSERVATION WELL
- OW-9/PZ-9B WATER TABLE OBSERVATION WELL
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR --- WATER LINE
- GAS --- GAS LINE
- STM --- STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- +++++ FORMER RAILROAD

**SOURCE NOTES:**  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-d8 AND DRAWING NO. 3075-d2, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND STPTGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WPSC W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE.  
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 A SURVEY FROM WPSC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE.  
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 A SURVEY BY WPSC DATED AUGUST 15, 2007 LOCATED WELLS OW-14 THROUGH OW-17 AND BORINGS SB-309 THROUGH SB-321.  
 TW-1 AND TW-2 SURVEYED BY WPSC ON DECEMBER 1, 2008.  
 OW-18 THROUGH OW-21 SURVEYED BY WPSC ON MARCH 1, 2011.  
 SOIL VAPOR AND GROUNDWATER GRAB SAMPLE LOCATIONS, PORTAGE COUNTY COORDINATES, US SURVEY FEET.

**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

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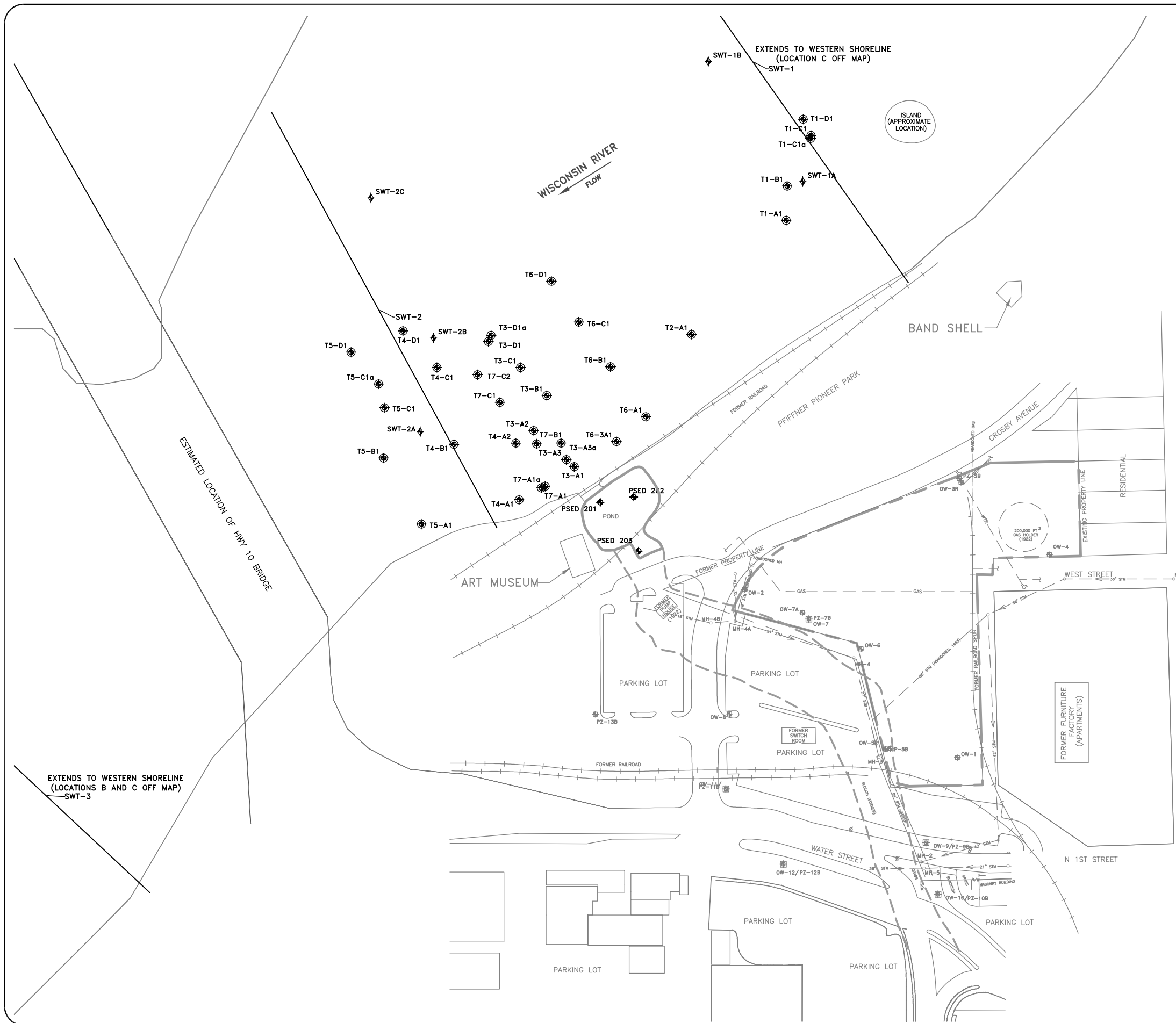
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 2007, 2008, AND 2011  
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 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN**



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FIGURE NO.  
 5

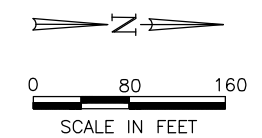


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- T1-A1 SEDIMENT SAMPLE LOCATION (2007)
- SWT-1B SURFACE WATER SAMPLE LOCATION (2007)
- PSED 201 SEDIMENT SAMPLE LOCATION (2007)
- OW-1 WATER TABLE OBSERVATION WELL
- OW-9 WATER TABLE OBSERVATION WELL
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

**SOURCE NOTES:**  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-08 AND DRAWING NO. 3075-02, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND STPTGAS.DWG, GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WPSC W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE.  
 A SURVEY FROM WPSC DATED JANUARY 31, 2000 LOCATED WELLS AND BORINGS SB-207 THROUGH SB-218 INSTALLED JANUARY 2000.  
 A SURVEY FROM WPSC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE.  
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**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.



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APPROVED BY:	EKP	DATE:	05/23/11
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**SEDIMENT SAMPLING AND SURFACE WATER SAMPLING LOCATIONS**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN

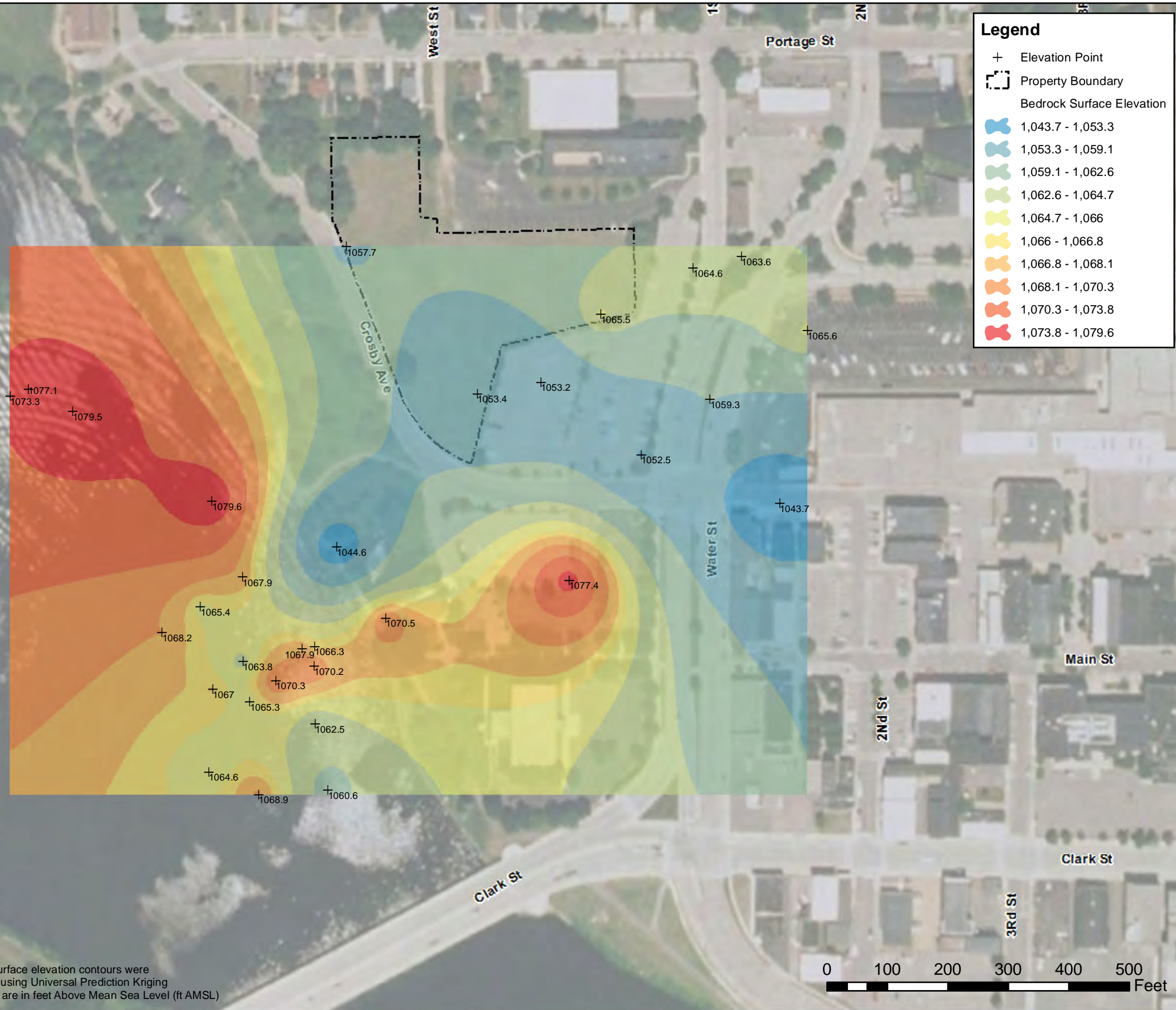


NATURAL RESOURCE TECHNOLOGY

PROJECT NO.  
1177/14.12C

FIGURE NO.  
6





**Legend**

- + Elevation Point
- Property Boundary
- Bedrock Surface Elevation

Light Blue	1,043.7 - 1,053.3
Medium Blue	1,053.3 - 1,059.1
Light Green	1,059.1 - 1,062.6
Yellow-Green	1,062.6 - 1,064.7
Yellow	1,064.7 - 1,066
Light Orange	1,066 - 1,066.8
Orange	1,066.8 - 1,068.1
Dark Orange	1,068.1 - 1,070.3
Red-Orange	1,070.3 - 1,073.8
Red	1,073.8 - 1,079.6

Top of Bedrock Surface Elevation Contours  
Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin



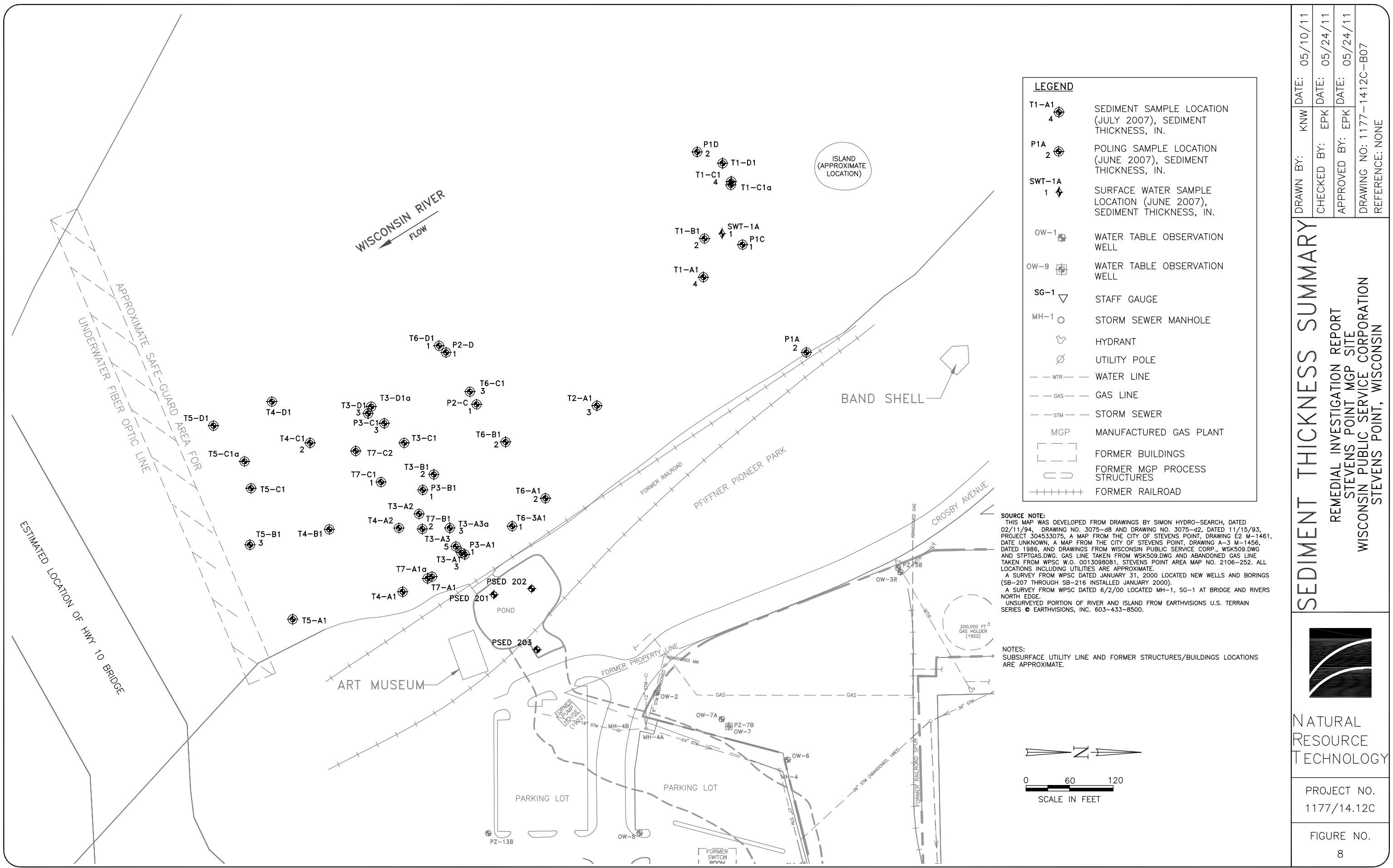
Note:  
Bedrock surface elevation contours were generated using Universal Prediction Kriging  
Elevations are in feet Above Mean Sea Level (ft AMSL)



Project No. 1177  
Figure No. 7

5/19/2011

Y:\GIS\Projects\1177\MXD\GWP\Bedrock Surface Contours.mxd

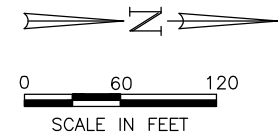


**LEGEND**

- T1-A1 4 SEDIMENT SAMPLE LOCATION (JULY 2007), SEDIMENT THICKNESS, IN.
- P1A 2 POLING SAMPLE LOCATION (JUNE 2007), SEDIMENT THICKNESS, IN.
- SWT-1A 1 SURFACE WATER SAMPLE LOCATION (JUNE 2007), SEDIMENT THICKNESS, IN.
- OW-1 WATER TABLE OBSERVATION WELL
- OW-9 WATER TABLE OBSERVATION WELL
- SG-1 STAFF GAUGE
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR --- WATER LINE
- GAS --- GAS LINE
- STM --- STORM SEWER
- MGP MANUFACTURED GAS PLANT
- [ ] FORMER BUILDINGS
- [ ] FORMER MGP PROCESS STRUCTURES
- +++++ FORMER RAILROAD

**SOURCE NOTE:**  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-dB AND DRAWING NO. 3075-d2, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND STPTGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WPSC W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE.  
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 A SURVEY FROM WPSC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE.  
 UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.

**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

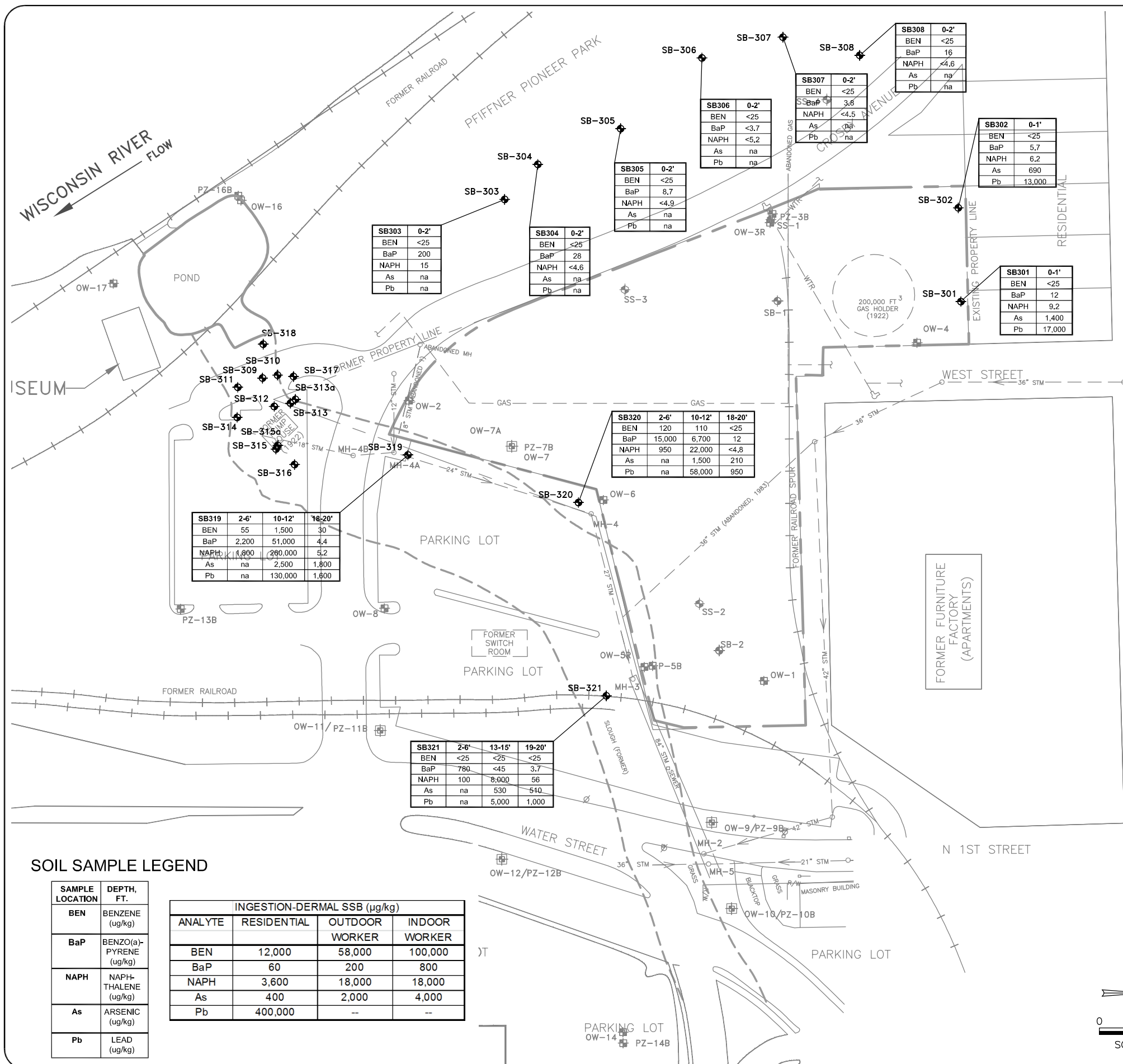


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DRAWING NO: 1177-1412C-B07		REFERENCE: NONE	

**SEDIMENT THICKNESS SUMMARY**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN







### LEGEND

- PZ-14B, OW-17: WELL LOCATION (2007)
- SB-308: SOIL BORING (2007)
- OW-1: WATER TABLE OBSERVATION WELL
- OW-9/PZ-9B: WATER TABLE OBSERVATION WELL
- P-5B: PIEZOMETER
- SS-4: EDI SURFACE SAMPLE (1986)
- MH-1: STORM SEWER MANHOLE
- HYDRANT: HYDRANT
- UTILITY POLE: UTILITY POLE
- WTR: WATER LINE
- GAS: GAS LINE
- STM: STORM SEWER
- MGP: MANUFACTURED GAS PLANT
- FORMER BUILDINGS: FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES: FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD: FORMER RAILROAD

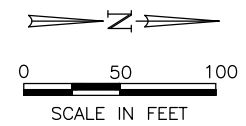
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 POND SEDIMENT SAMPLINGS FIELD MEASURED BY NRT.  
 UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.

**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

**SOIL SAMPLE LEGEND**

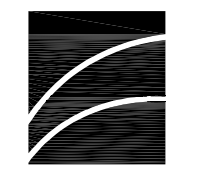
SAMPLE LOCATION	DEPTH, FT.
BEN	BENZENE (ug/kg)
BaP	BENZO(a)-PYRENE (ug/kg)
NAPH	NAPHTHALENE (ug/kg)
As	ARSENIC (ug/kg)
Pb	LEAD (ug/kg)

ANALYTE	INGESTION-DERMAL SSB (ug/kg)		
	RESIDENTIAL	OUTDOOR WORKER	INDOOR WORKER
BEN	12,000	58,000	100,000
BaP	60	200	800
NAPH	3,600	18,000	18,000
As	400	2,000	4,000
Pb	400,000	--	--



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 APPROVED BY: EPK DATE: 12/14/11  
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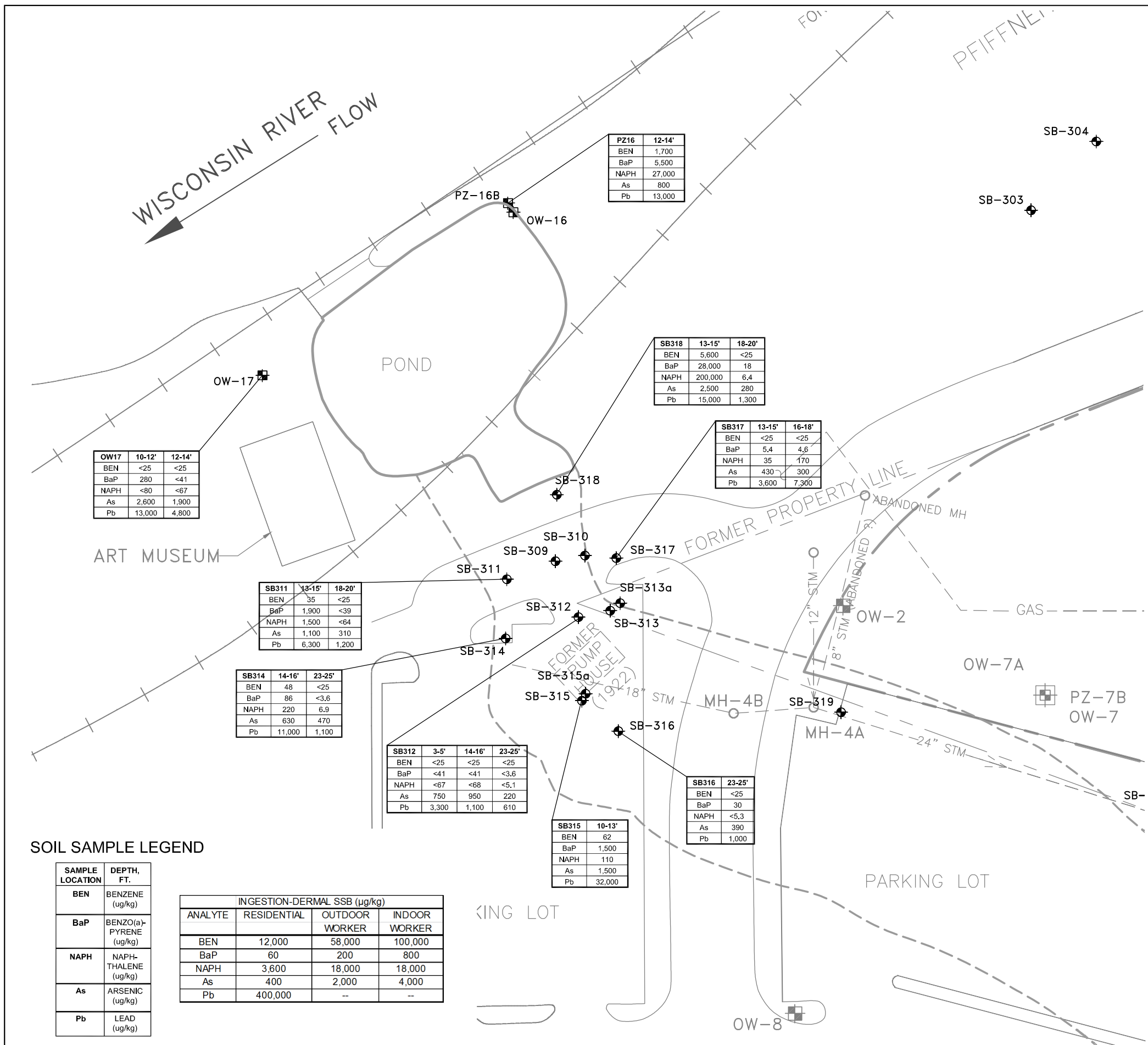
**SOIL ANALYTICAL RESULTS  
 PARK AND UPPER SLOUGH  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN**



NATURAL RESOURCE TECHNOLOGY

PROJECT NO.  
1177/14.12C

FIGURE NO.  
9

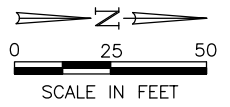


**LEGEND**

- PZ-14B [Symbol] WELL LOCATION (2007)
- OW-17 [Symbol] WELL LOCATION (2007)
- SB-308 [Symbol] SOIL BORING (2007)
- OW-1 [Symbol] WATER TABLE OBSERVATION WELL
- OW-9 / PZ-9B [Symbol] WATER TABLE OBSERVATION WELL
- P-5B [Symbol] PIEZOMETER
- SS-4 [Symbol] EDI SURFACE SAMPLE (1986)
- MH-1 [Symbol] STORM SEWER MANHOLE
- [Symbol] HYDRANT
- [Symbol] UTILITY POLE
- WTR --- WATER LINE
- GAS --- GAS LINE
- STM --- STORM SEWER
- MGP [Symbol] MANUFACTURED GAS PLANT
- [Symbol] FORMER BUILDINGS
- [Symbol] FORMER MGP PROCESS STRUCTURES
- +++++ FORMER RAILROAD

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**NOTES:**  
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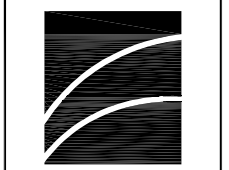
**SOIL SAMPLE LEGEND**

SAMPLE LOCATION	DEPTH, FT.
BEN	BENZENE (ug/kg)
BaP	BENZO(a)-PYRENE (ug/kg)
NAPH	NAPHTHALENE (ug/kg)
As	ARSENIC (ug/kg)
Pb	LEAD (ug/kg)

ANALYTE	INGESTION-DERMAL SSB (ug/kg)		
	RESIDENTIAL	OUTDOOR WORKER	INDOOR WORKER
BEN	12,000	58,000	100,000
BaP	60	200	800
NAPH	3,600	18,000	18,000
As	400	2,000	4,000
Pb	400,000	--	--

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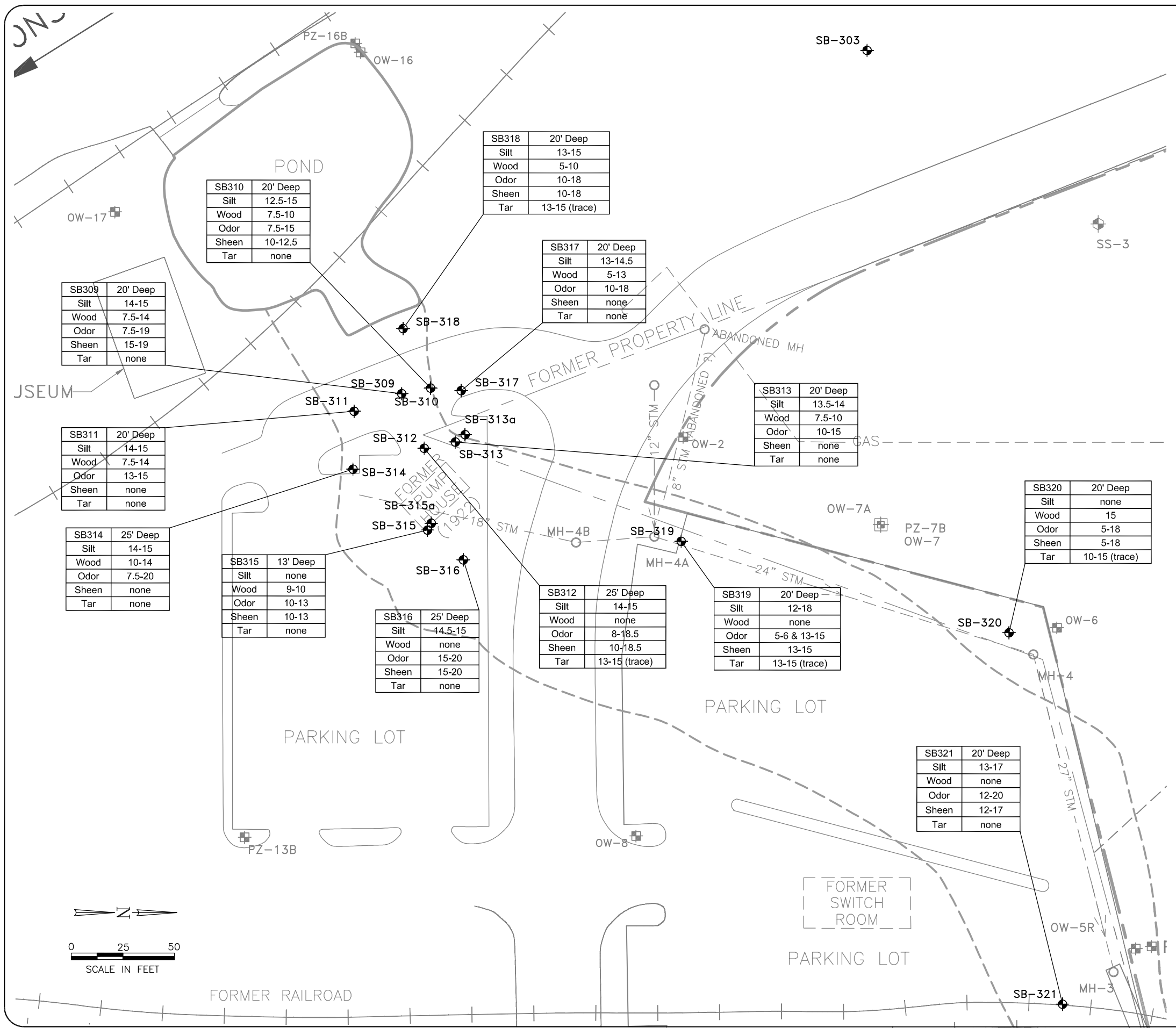
**SOIL ANALYTICAL RESULTS**  
**LOWER SLOUGH/POND AREA**  
**REMEDIAL INVESTIGATION REPORT**  
**STEVENS POINT MGP SITE**  
**WISCONSIN PUBLIC SERVICE CORPORATION**  
**STEVENS POINT, WISCONSIN**



NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 10



SB310	20' Deep
Silt	12.5-15
Wood	7.5-10
Odor	7.5-15
Sheen	10-12.5
Tar	none

SB318	20' Deep
Silt	13-15
Wood	5-10
Odor	10-18
Sheen	10-18
Tar	13-15 (trace)

SB317	20' Deep
Silt	13-14.5
Wood	5-13
Odor	10-18
Sheen	none
Tar	none

SB313	20' Deep
Silt	13.5-14
Wood	7.5-10
Odor	10-15
Sheen	none
Tar	none

SB320	20' Deep
Silt	none
Wood	15
Odor	5-18
Sheen	5-18
Tar	10-15 (trace)

SB312	25' Deep
Silt	14-15
Wood	none
Odor	8-18.5
Sheen	10-18.5
Tar	13-15 (trace)

SB319	20' Deep
Silt	12-18
Wood	none
Odor	5-6 & 13-15
Sheen	13-15
Tar	13-15 (trace)

SB316	25' Deep
Silt	14.5-15
Wood	none
Odor	15-20
Sheen	15-20
Tar	none

SB321	20' Deep
Silt	13-17
Wood	none
Odor	12-20
Sheen	12-17
Tar	none

SB309	20' Deep
Silt	14-15
Wood	7.5-14
Odor	7.5-19
Sheen	15-19
Tar	none

SB311	20' Deep
Silt	14-15
Wood	7.5-14
Odor	13-15
Sheen	none
Tar	none

SB314	25' Deep
Silt	14-15
Wood	10-14
Odor	7.5-20
Sheen	none
Tar	none

SB315	13' Deep
Silt	none
Wood	9-10
Odor	10-13
Sheen	10-13
Tar	none

### LEGEND

- PZ-14B  
OW-17 WELL LOCATION (2007)
- SB-308 SOIL BORING (2007)
- OW-1 WATER TABLE OBSERVATION WELL
- OW-9  
/PZ-9B WATER TABLE OBSERVATION WELL
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

Boring Location	Total Boring Depth (ft)
Observation	Observed Depth (ft)

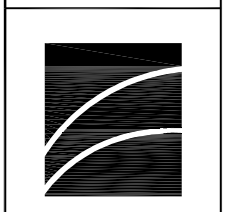
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**NOTES:**  
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 REFERENCE: NONE

# SLOUGH SOIL BORING OBSERVATIONS

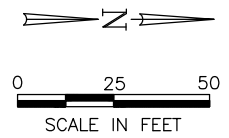
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 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



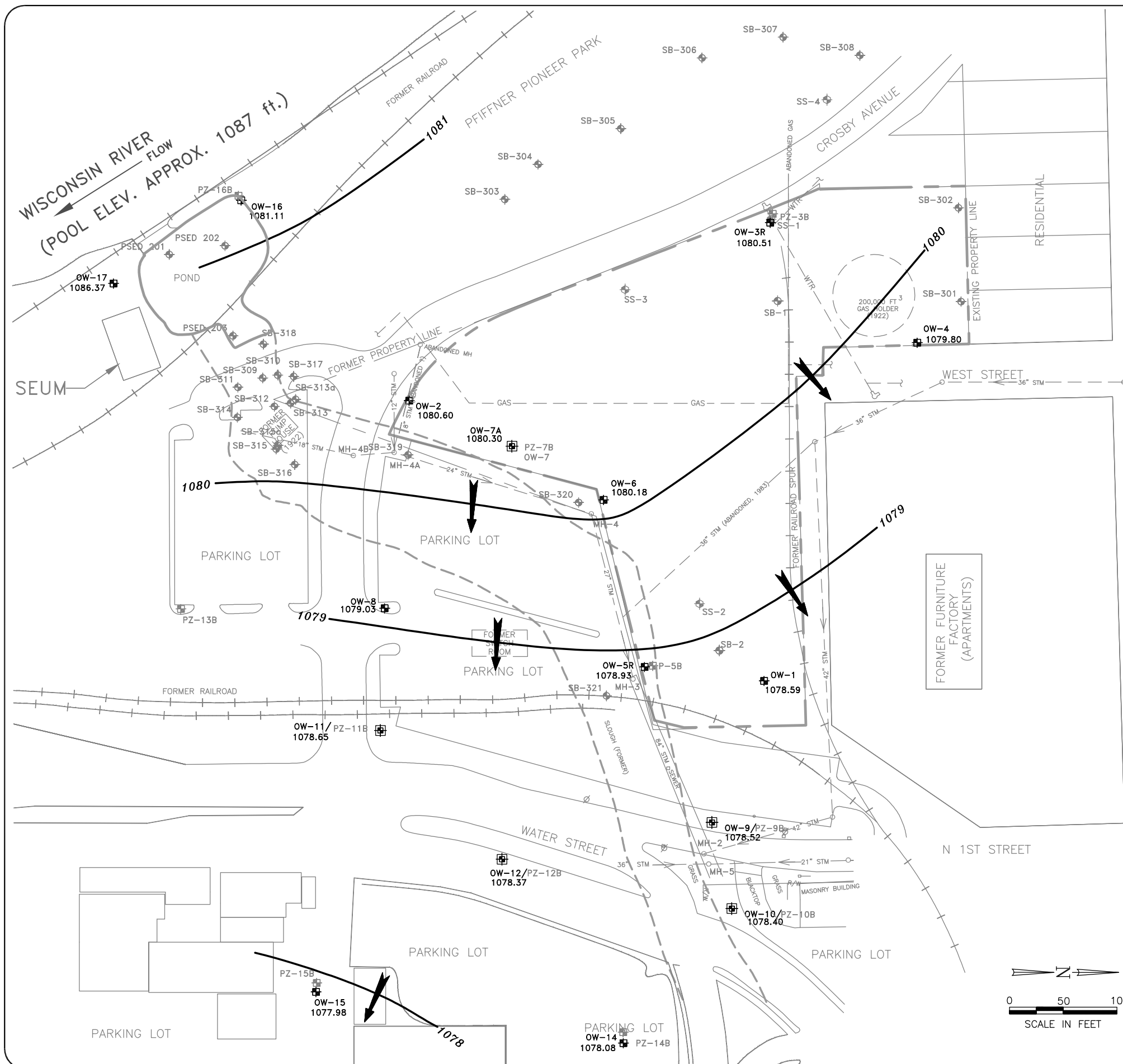
NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 11





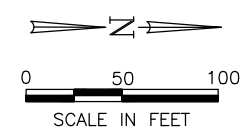


**LEGEND**

- WATER TABLE ELEVATION CONTOURS, FT.
- GROUNDWATER FLOW DIRECTION
- OW-1 1078.59 WATER TABLE OBSERVATION WELL AND GROUNDWATER ELEVATION, FT.
- OW-9 1078.52 /PZ-9B WATER TABLE OBSERVATION WELL AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- SB-308 SOIL BORING (2007)
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

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 A SURVEY BY WPSC DATED AUGUST 15, 2007 LOCATED WELLS OW-14 THROUGH OW-17 AND BORINGS SB-309 THROUGH SB-321.  
 BORINGS SB-301 THROUGH SB-308 WERE LOCATED IN THE FIELD BY NRT STAFF USING A HAND-HELD DGPS UNIT.

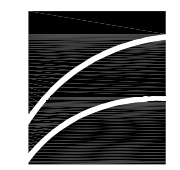
**NOTES:**  
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**WATER TABLE CONTOURS—JULY 2007**

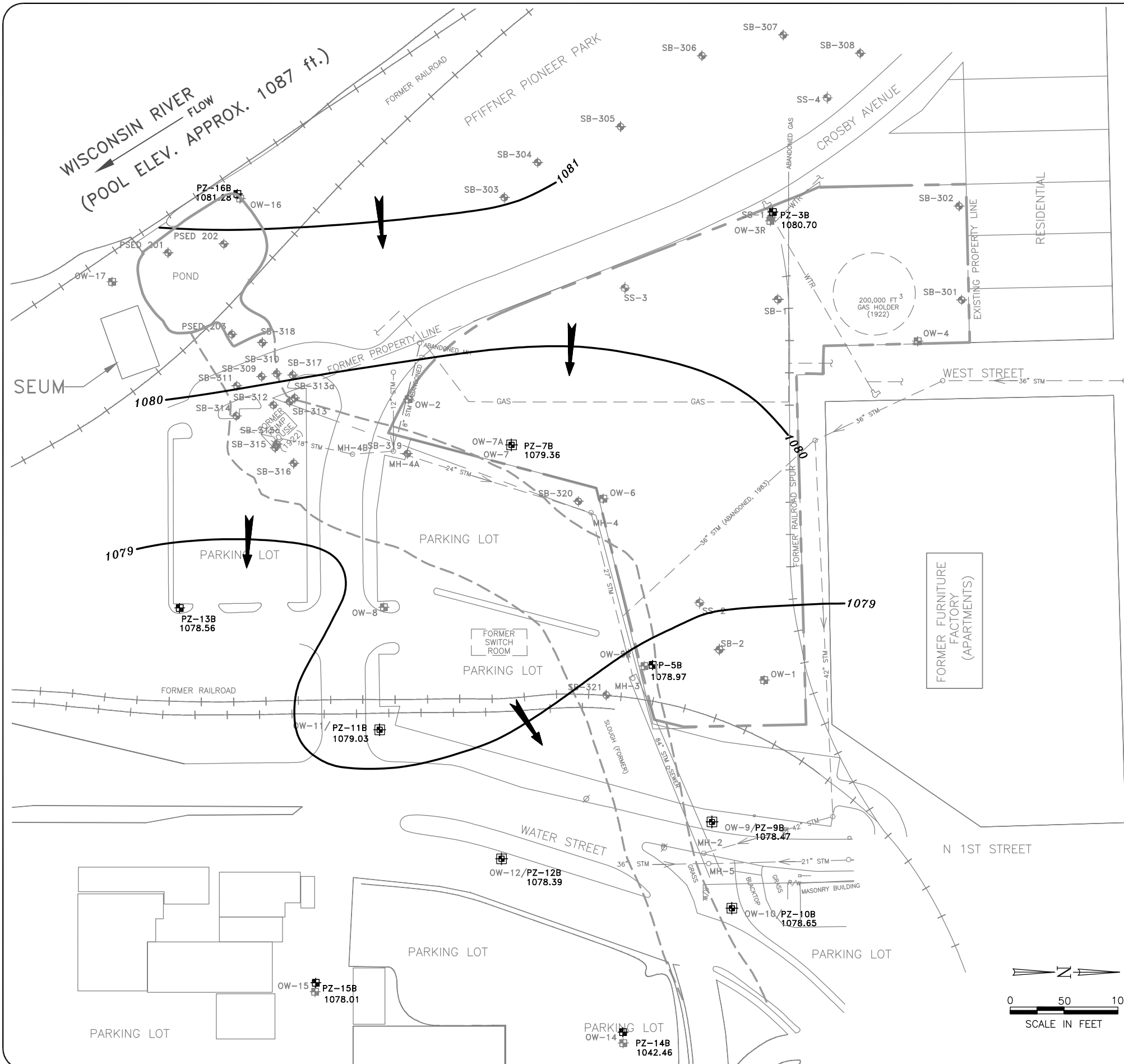
REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 12

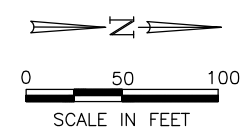


### LEGEND

- PIEZOMETER ELEVATION CONTOURS, FT.
- GROUNDWATER FLOW DIRECTION
- OW-1 WATER TABLE OBSERVATION WELL
- OW-9/PZ-9B 1078.47 PIEZOMETER AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- PZ-14B OW-17 WELL LOCATION (2007)
- SB-308 SOIL BORING (2007)
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

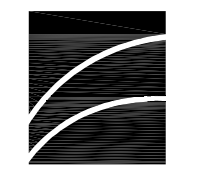
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**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.



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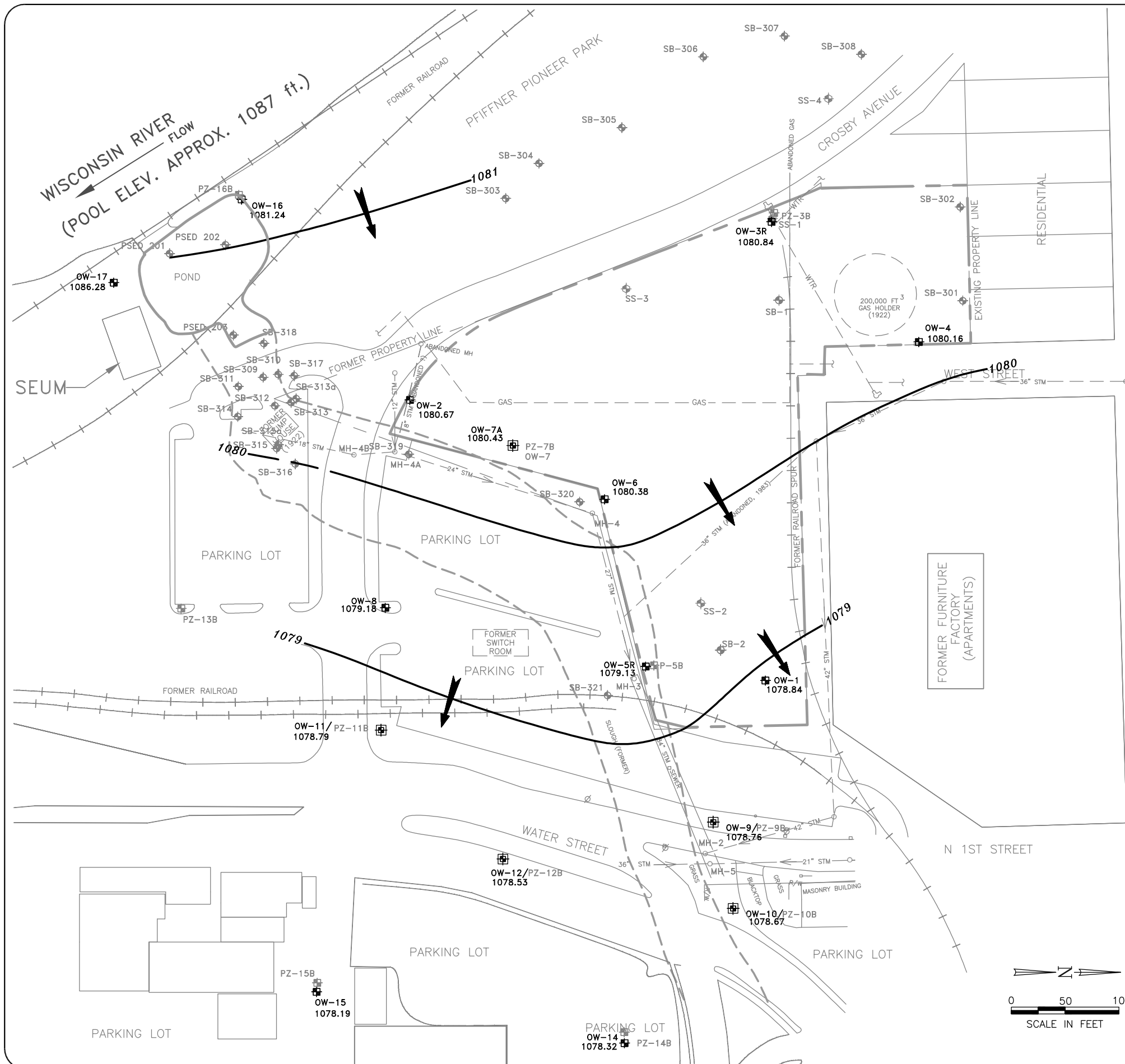
**PIEZOMETRIC SURFACE—JULY 2007**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 13



### LEGEND

- WATER TABLE ELEVATION CONTOURS, FT., DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- OW-1 1078.84
- OW-9 1078.76 /PZ-9B
- PZ-14B
- OW-17
- SB-308
- P-5B
- SS-4
- MH-1
- HYDRANT
- UTILITY POLE
- WTR — WATER LINE
- GAS — GAS LINE
- STM — STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

**SOURCE NOTE:**  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-d8 AND DRAWING NO. 3075-d2, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND STPTGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WPSC W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE.  
 A SURVEY FROM WPSC DATED JANUARY 31, 2000 LOCATED WELLS AND BORINGS SB-207 THROUGH SB-216 INSTALLED JANUARY 2000.  
 A SURVEY FROM WPSC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE.  
 POND SEDIMENT SAMPLINGS FIELD MEASURED BY NRT.  
 UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.  
 A SURVEY BY WPSC DATED AUGUST 15, 2007 LOCATED WELLS OW-14 THROUGH OW-17 AND BORINGS SB-309 THROUGH SB-321.  
 BORINGS SB-301 THROUGH SB-308 WERE LOCATED IN THE FIELD BY NRT STAFF USING A HAND-HELD DGPS UNIT.

**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

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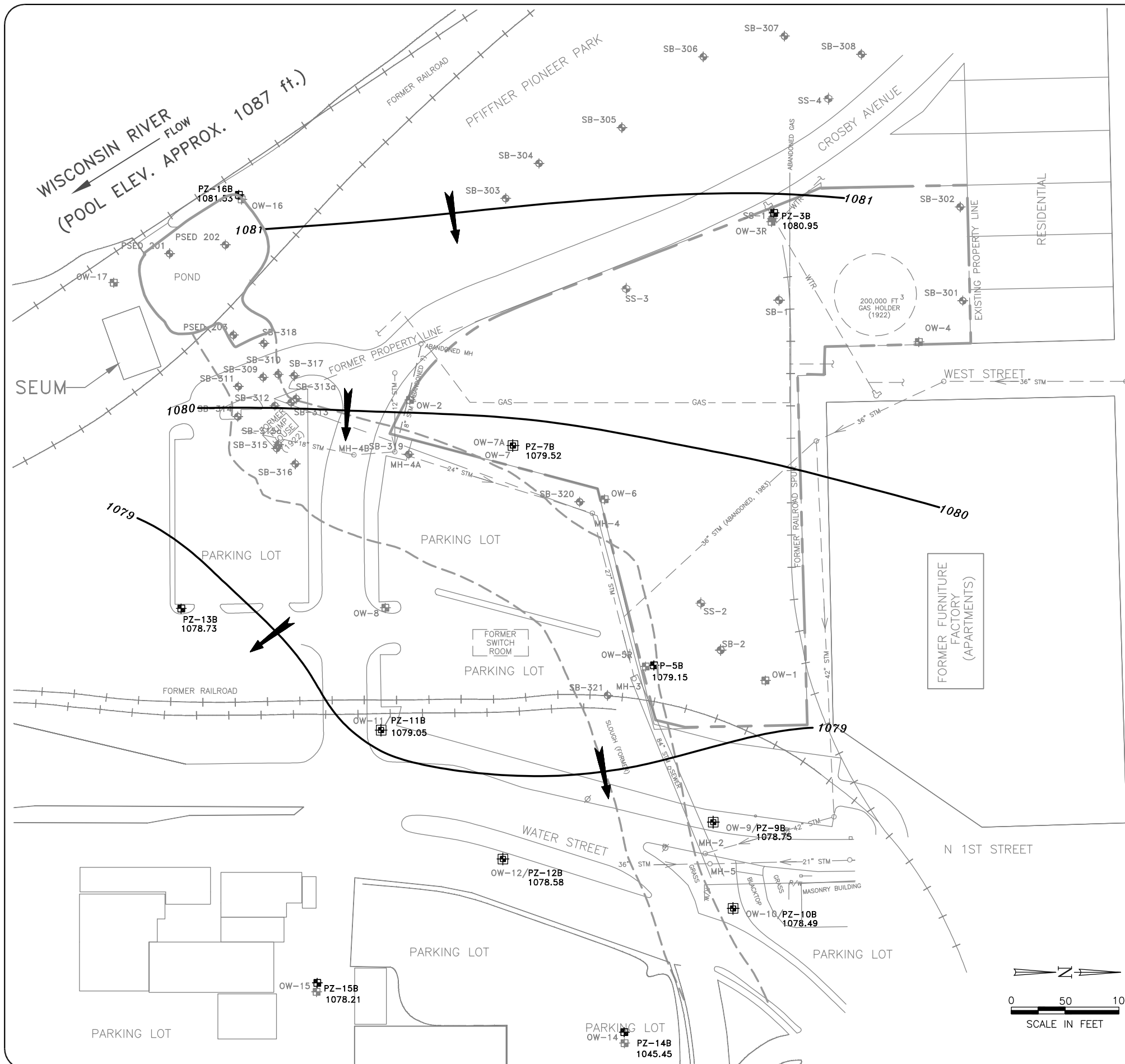
**WATER TABLE CONTOURS—OCTOBER 2007**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 14

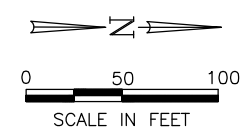


### LEGEND

- PIEZOMETER ELEVATION CONTOURS, FT.
- GROUNDWATER FLOW DIRECTION
- WATER TABLE OBSERVATION WELL
- PIEZOMETER AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- WELL LOCATION (2007)
- SOIL BORING (2007)
- PIEZOMETER
- EDI SURFACE SAMPLE (1986)
- STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WATER LINE
- GAS LINE
- STORM SEWER
- MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

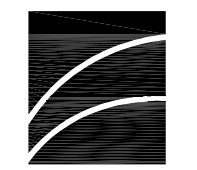
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**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.



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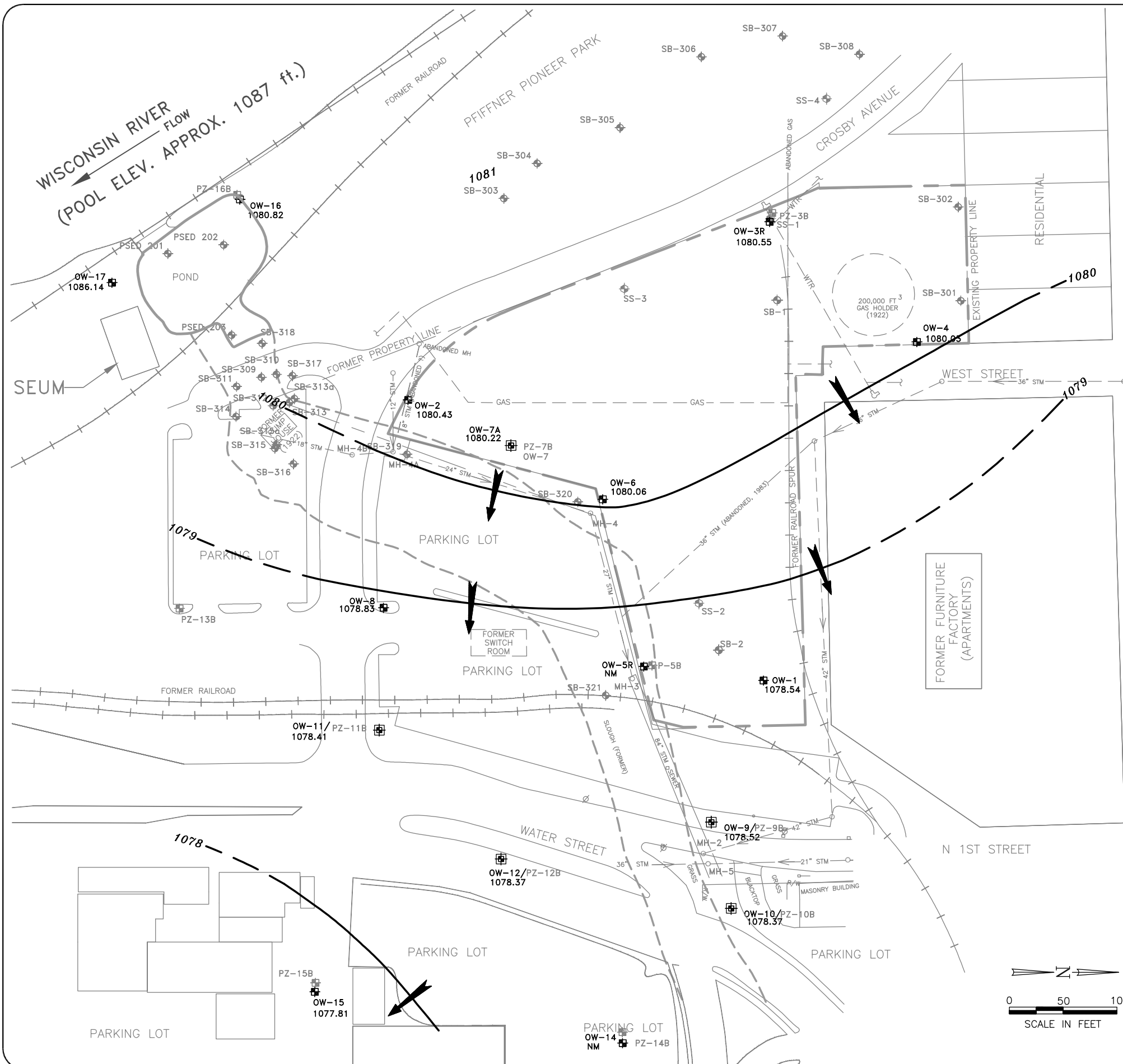
**PIEZOMETRIC SURFACE—OCTOBER 2007**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 15

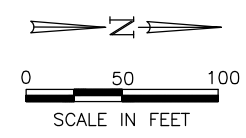


**LEGEND**

- WATER TABLE ELEVATION CONTOURS, FT., DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- OW-1 1078.54 WATER TABLE OBSERVATION WELL AND GROUNDWATER ELEVATION, FT.
- OW-9 1078.52 /PZ-9B WATER TABLE OBSERVATION WELL AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- PZ-14B OW-17 WELL LOCATION (2007)
- SB-308 SOIL BORING (2007)
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

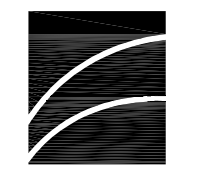
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**NOTES:**  
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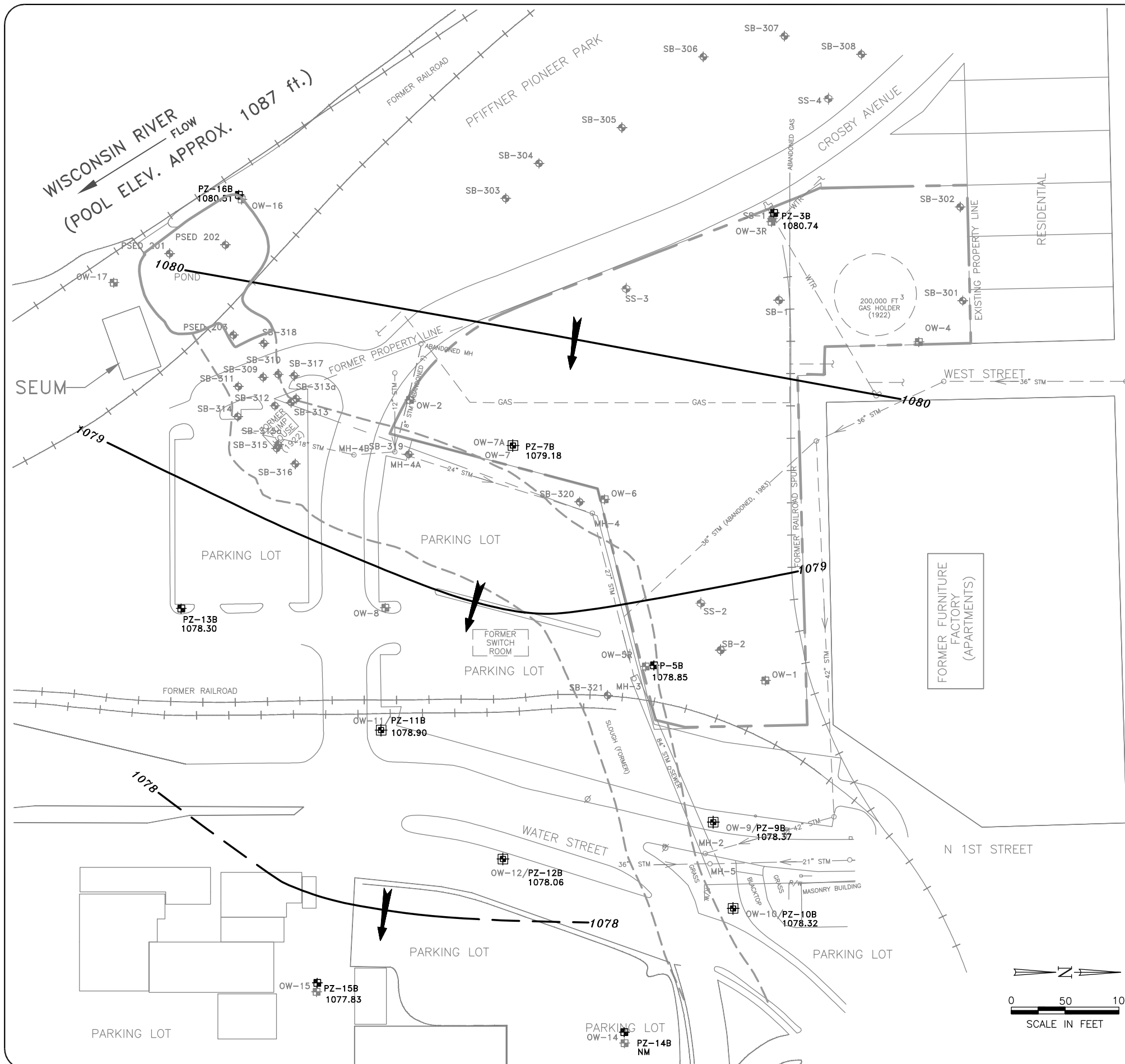
**WATER TABLE CONTOURS - JANUARY 2008**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 16

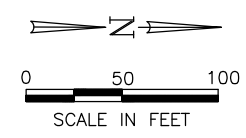


### LEGEND

- PIEZOMETRIC CONTOURS, FT., DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- OW-1 WATER TABLE OBSERVATION WELL
- OW-9/PZ-9B PIEZOMETER AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- PZ-14B WELL LOCATION (2007)
- OW-17 WELL LOCATION (2007)
- SB-308 SOIL BORING (2007)
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

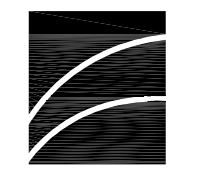
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**NOTES:**  
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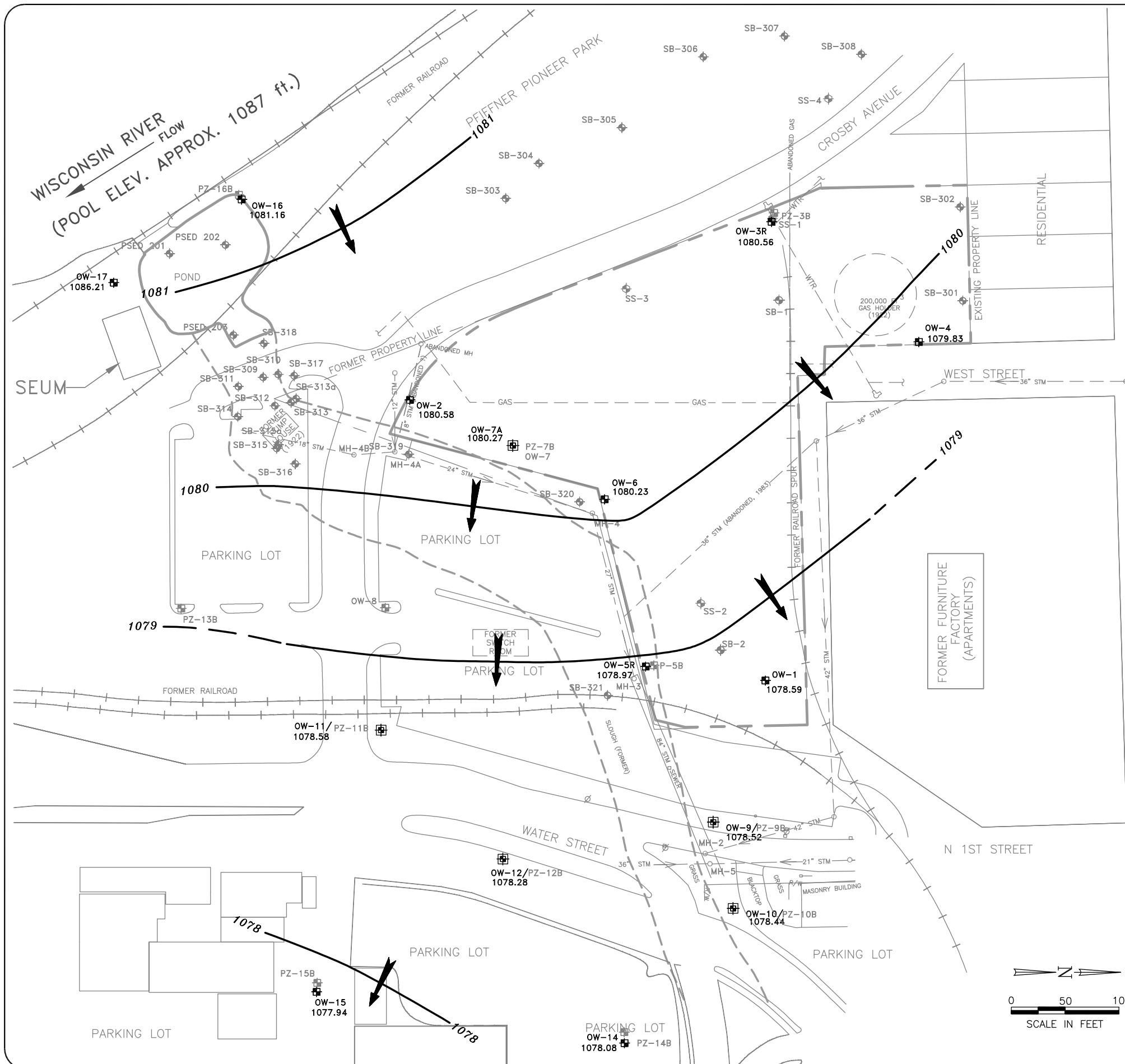
**PIEZOMETRIC SURFACE - JANUARY 2008**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
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PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 17



**LEGEND**

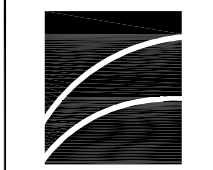
- WATER TABLE ELEVATION CONTOURS, FT.
- GROUNDWATER FLOW DIRECTION
- OW-1 1078.59  
OW-9 1078.52 /PZ-9B  
WATER TABLE OBSERVATION WELL AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- SB-308  
SOIL BORING (2007)
- P-5B  
PIEZOMETER
- SS-4  
EDI SURFACE SAMPLE (1986)
- MH-1  
STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR  
WATER LINE
- GAS  
GAS LINE
- STM  
STORM SEWER
- MGP  
MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

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**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

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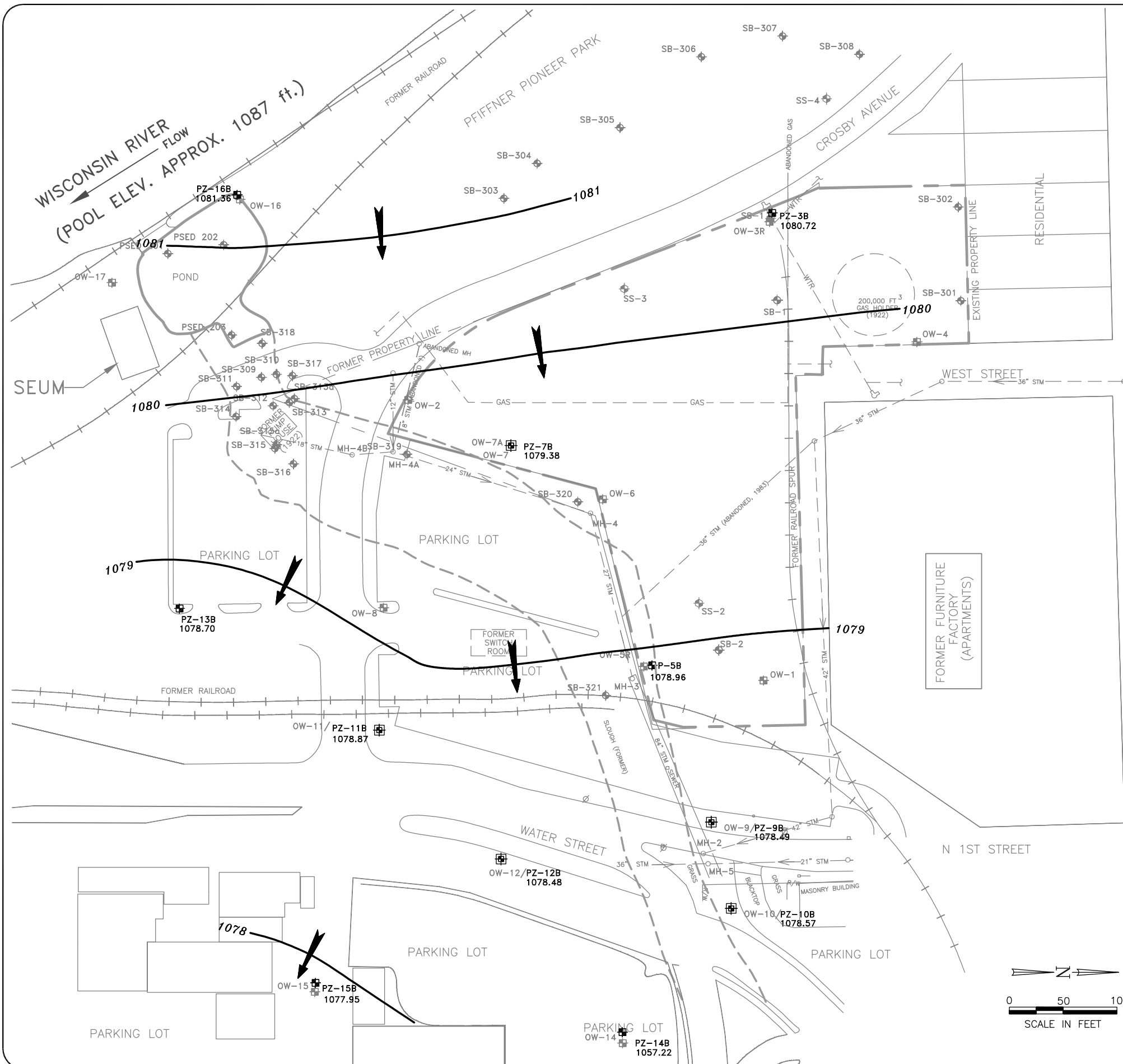
**WATER TABLE CONTOURS—OCTOBER 2009**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
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PROJECT NO.  
 1177/14.12C

FIGURE NO.  
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### LEGEND

- PIEZOMETER ELEVATION CONTOURS, FT.
- GROUNDWATER FLOW DIRECTION
- OW-1 WATER TABLE OBSERVATION WELL
- OW-9/PZ-9B 1078.49 PIEZOMETER AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- PZ-14B OW-17 WELL LOCATION (2007)
- SB-308 SOIL BORING (2007)
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
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**NOTES:**  
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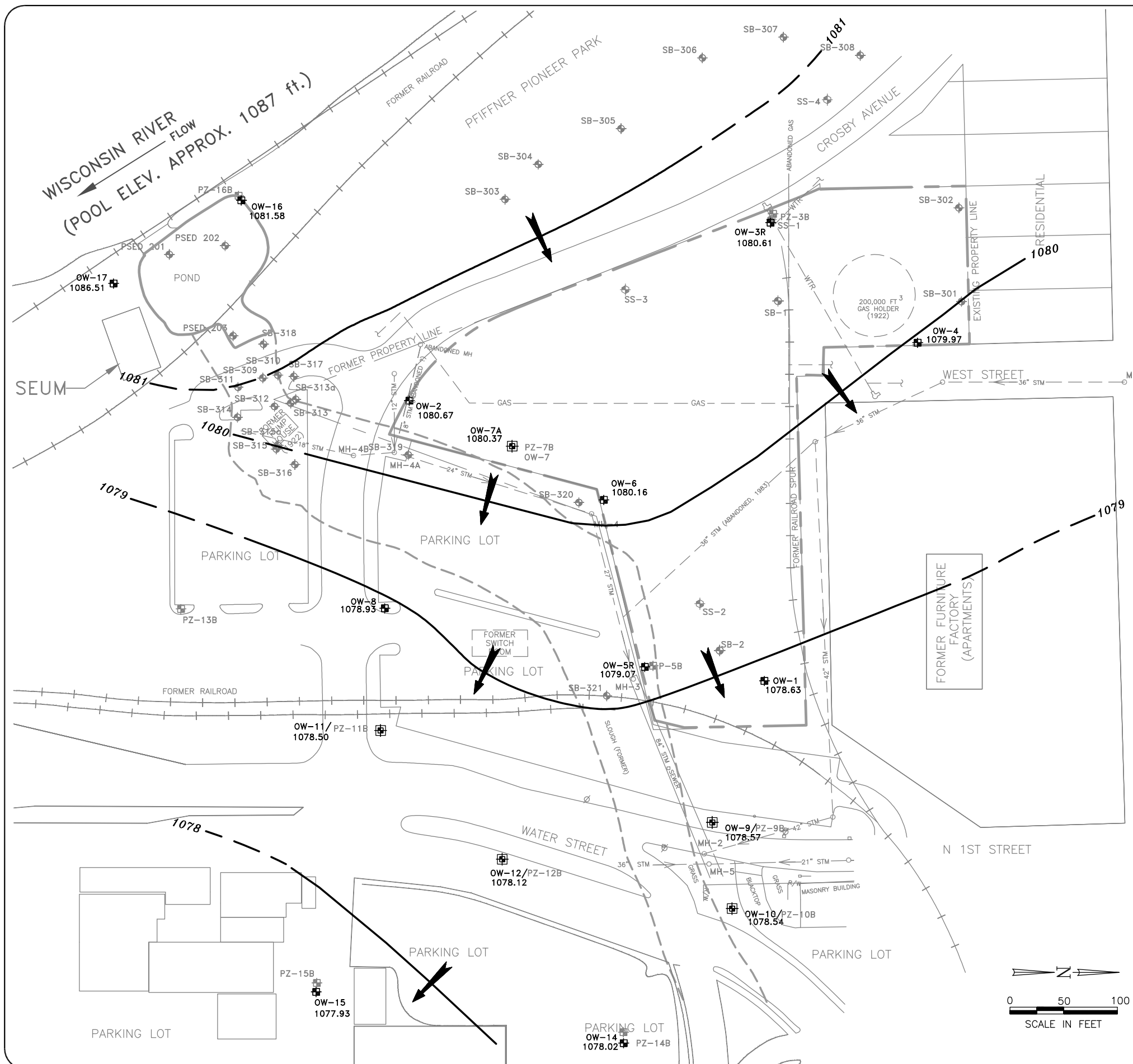
**PIEZOMETRIC SURFACE—OCTOBER 2009**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



PROJECT NO.  
1177/14.12C

FIGURE NO.  
19



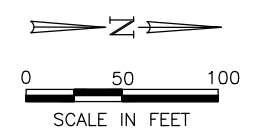


**LEGEND**

- WATER TABLE ELEVATION CONTOURS, FT., DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- OW-1 1078.63  
OW-9 1078.57 /PZ-9B  
WATER TABLE OBSERVATION WELL AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- PZ-14B  
OW-17  
WELL LOCATION (2007)
- SB-308  
SOIL BORING (2007)
- P-5B  
PIEZOMETER
- SS-4  
EDI SURFACE SAMPLE (1986)
- MH-1  
STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR  
WATER LINE
- GAS  
GAS LINE
- STM  
STORM SEWER
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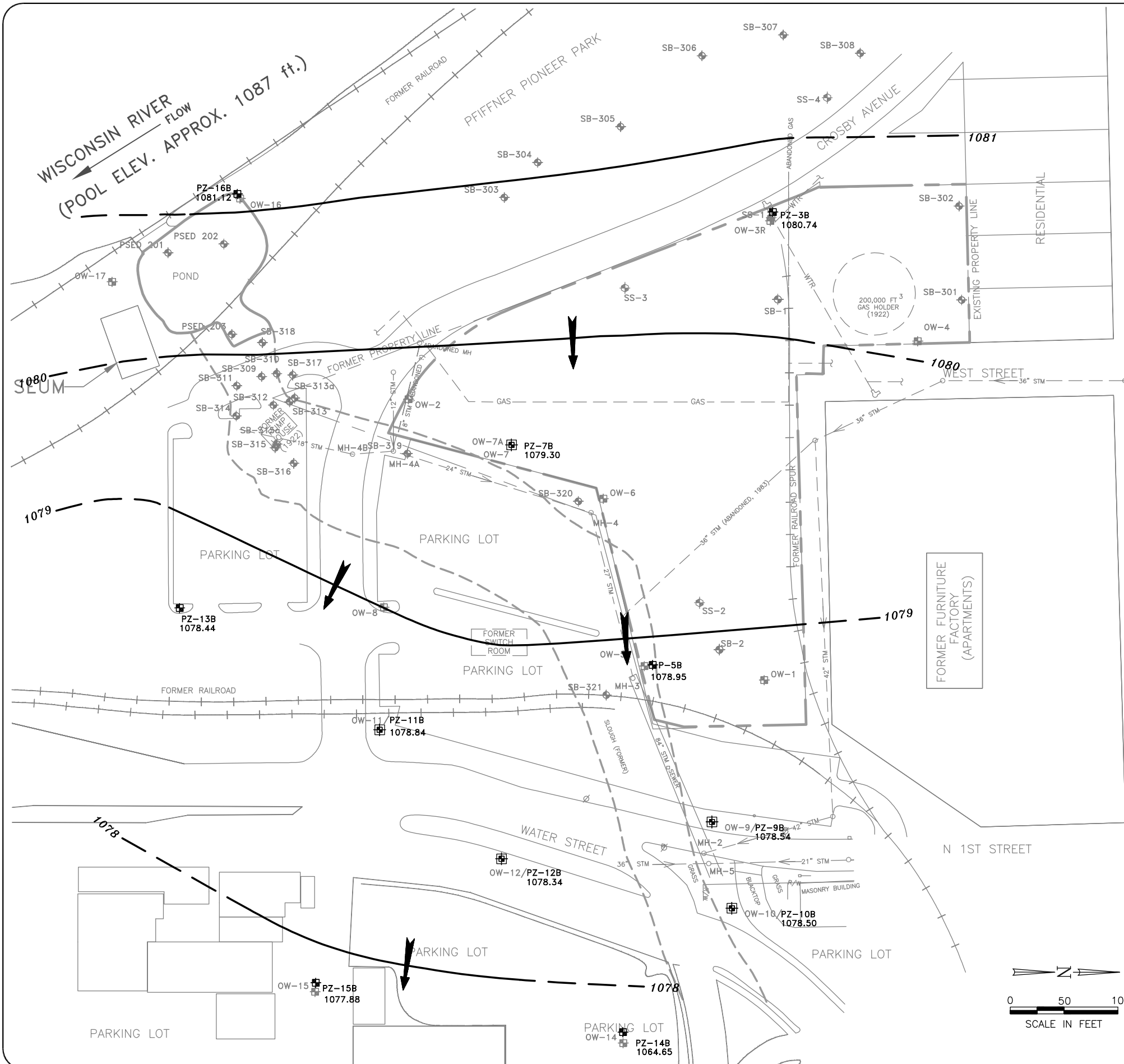
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REFERENCE:		NONE	

**WATER TABLE CONTOURS-APRIL 2010**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



PROJECT NO.  
1177/14.12C

FIGURE NO.  
20



### LEGEND

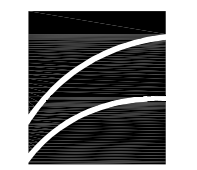
- PIEZOMETRIC CONTOURS, FT., DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- OW-1 WATER TABLE OBSERVATION WELL
- OW-9/PZ-9B PIEZOMETER AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- PZ-14B WELL LOCATION (2007)
- OW-17 WELL LOCATION (2007)
- SB-308 SOIL BORING (2007)
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

**SOURCE NOTES:**  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-d8 AND DRAWING NO. 3075-d2, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND STPTGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WPC W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE.  
 A SURVEY FROM WPC DATED JANUARY 31, 2000 LOCATED WELLS AND BORINGS SB-207 THROUGH SB-216 INSTALLED JANUARY 2000.  
 A SURVEY FROM WPC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE.  
 POND SEDIMENT SAMPLINGS FIELD MEASURED BY NRT.  
 UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.  
 A SURVEY BY WPC DATED AUGUST 15, 2007 LOCATED WELLS OW-14 THROUGH OW-17 AND BORINGS SB-309 THROUGH SB-321.  
 BORINGS SB-301 THROUGH SB-308 WERE LOCATED IN THE FIELD BY NRT STAFF USING A HAND-HELD DGPS UNIT.

**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

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DRAWING NO:		1177-1412C-B21	
REFERENCE:		NONE	

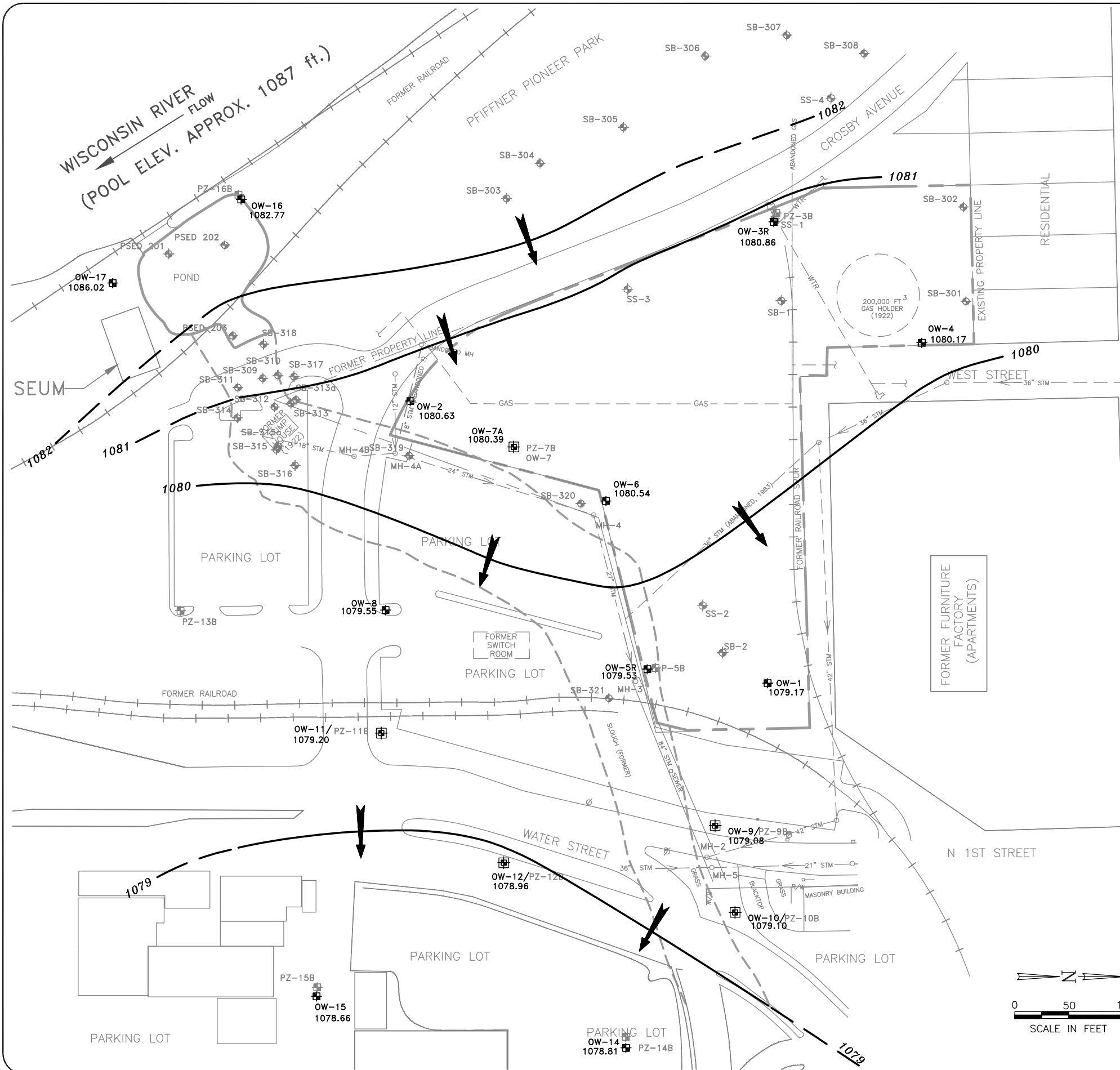
**PIEZOMETRIC SURFACE - APRIL 2010**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



**NATURAL RESOURCE TECHNOLOGY**

PROJECT NO.  
1177/14.12C

FIGURE NO.  
21

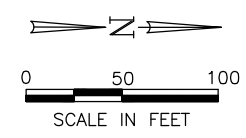


**LEGEND**

- WATER TABLE ELEVATION CONTOURS, FT., DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- OW-1 1079.17 WATER TABLE OBSERVATION WELL AND GROUNDWATER ELEVATION, FT.
- OW-9 1079.08 /PZ-9B WATER TABLE OBSERVATION WELL AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- PZ-14B OW-17 WELL LOCATION (2007)
- SB-308 SOIL BORING (2007)
- P-5B PIEZOMETER
- SS-4 EDI SURFACE SAMPLE (1986)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
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- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

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 UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.  
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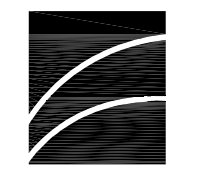
**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.



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APPROVED BY:	EPK	DATE:	05/24/11
DRAWING NO:		1177-1412C-B22	
REFERENCE:		NONE	

**WATER TABLE CONTOURS—OCTOBER 2010**

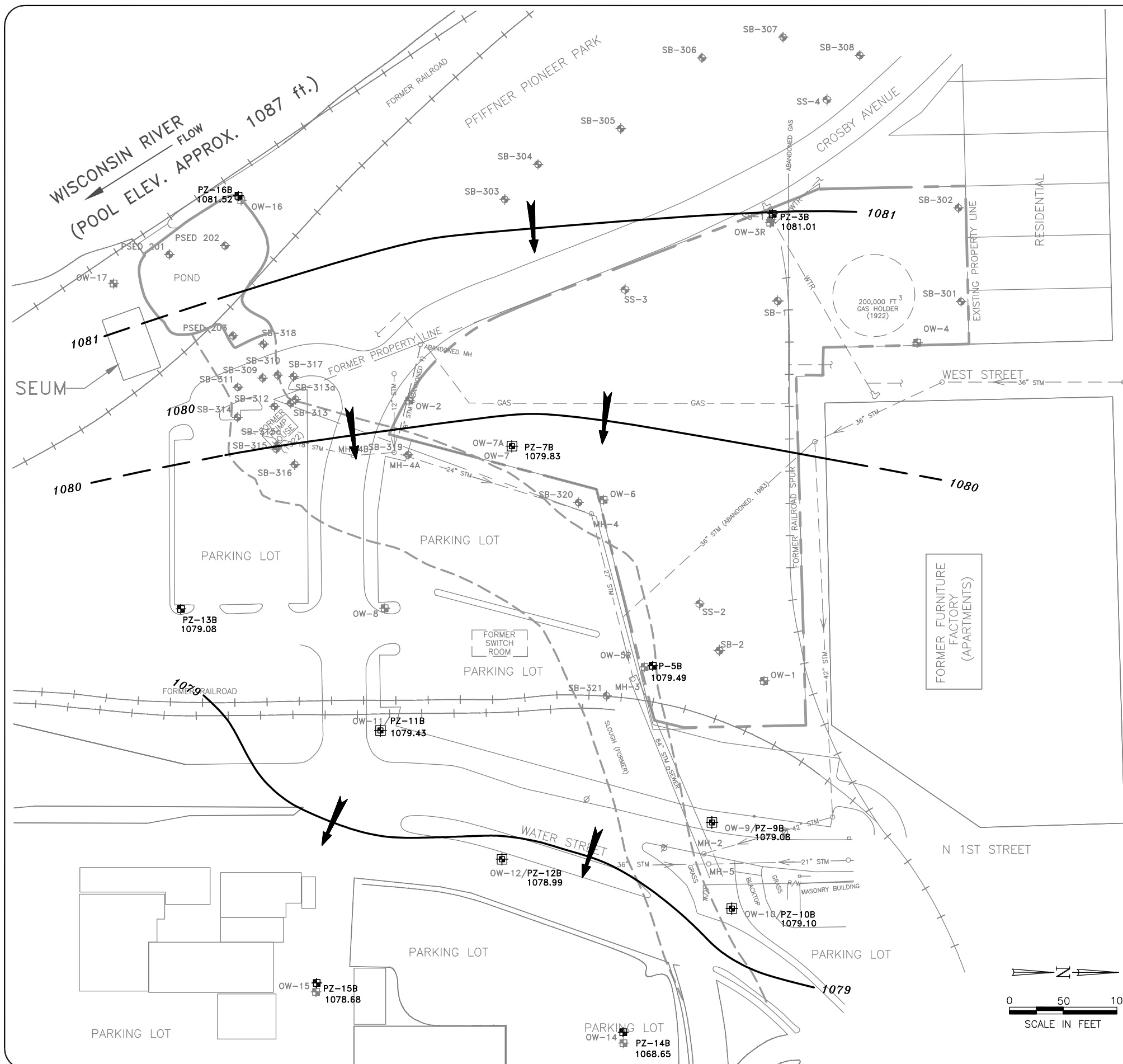
REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 22

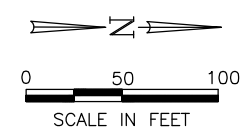


**LEGEND**

- PIEZOMETER ELEVATION CONTOURS, FT.
- GROUNDWATER FLOW DIRECTION
- WATER TABLE OBSERVATION WELL
- PIEZOMETER AND GROUNDWATER ELEVATION, FT./NESTED MONITORING WELL
- WELL LOCATION (2007)
- SOIL BORING (2007)
- PIEZOMETER
- EDI SURFACE SAMPLE (1986)
- STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WATER LINE
- GAS LINE
- STORM SEWER
- MANUFACTURED GAS PLANT
- FORMER BUILDINGS
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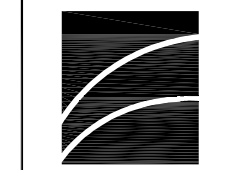
**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.



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APPROVED BY:	EPK	DATE:	05/24/11
DRAWING NO:		1177-1412C-B23	
REFERENCE:		NONE	

**PIEZOMETRIC SURFACE—OCTOBER 2010**

REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN







NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

FIGURE NO.  
 23



-  Monitoring Well Location
-  Groundwater Elevation Contours
-  Groundwater Flow Direction
-  Property Boundary



Pool Elevation ≈ 1087 ft

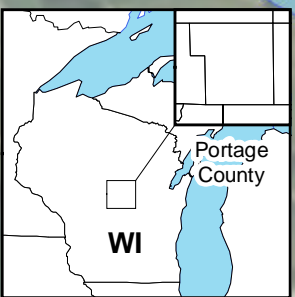
Water Table Contours  
March 2011

Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin







Project No. 1177  
Figure No. 24

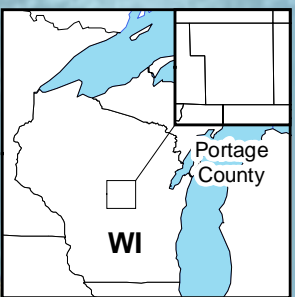
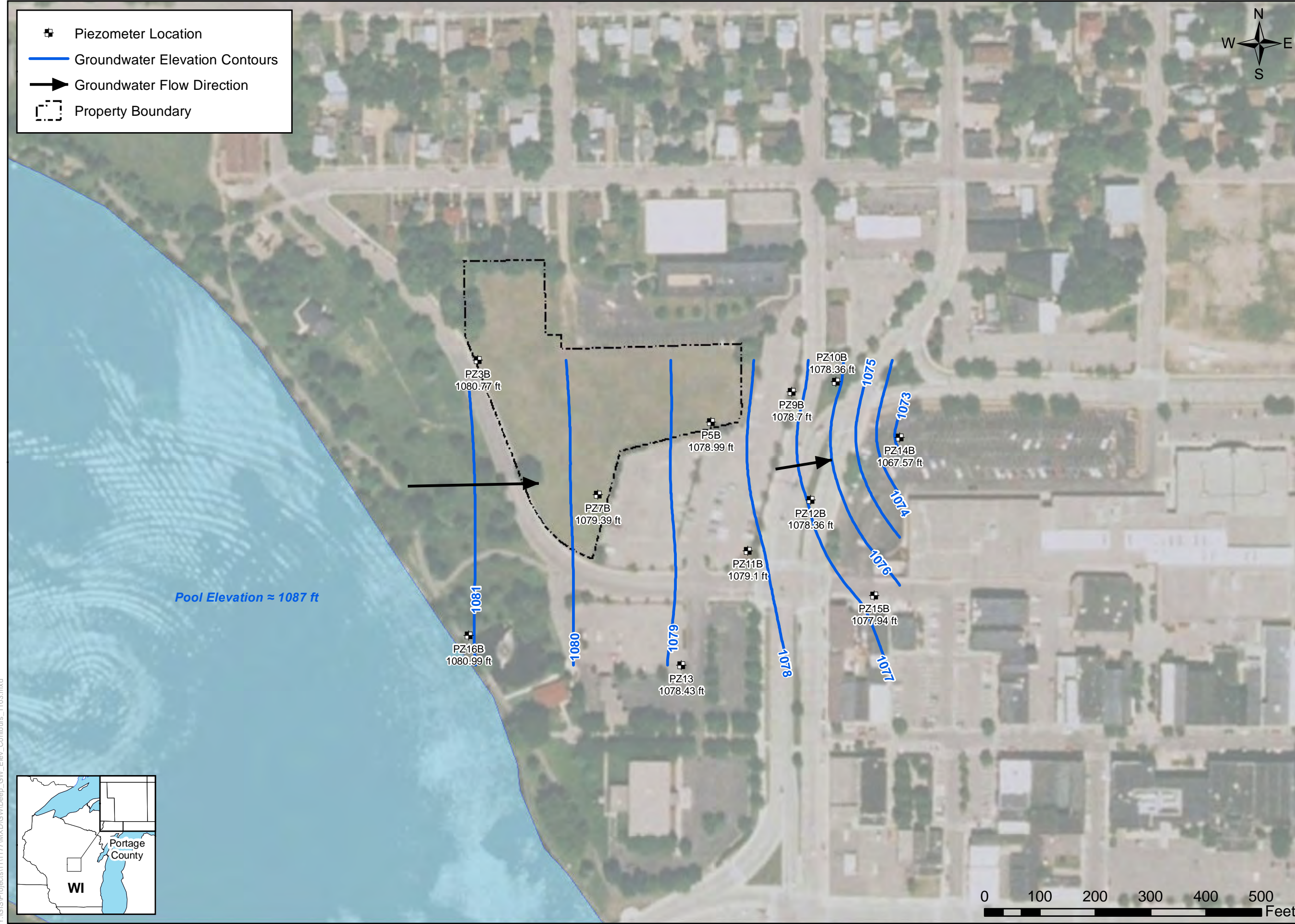
5/16/2011



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-  Piezometer Location
-  Groundwater Elevation Contours
-  Groundwater Flow Direction
-  Property Boundary



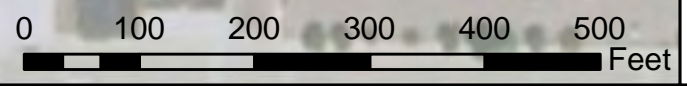
Piezometric Surface  
March 2011

Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin

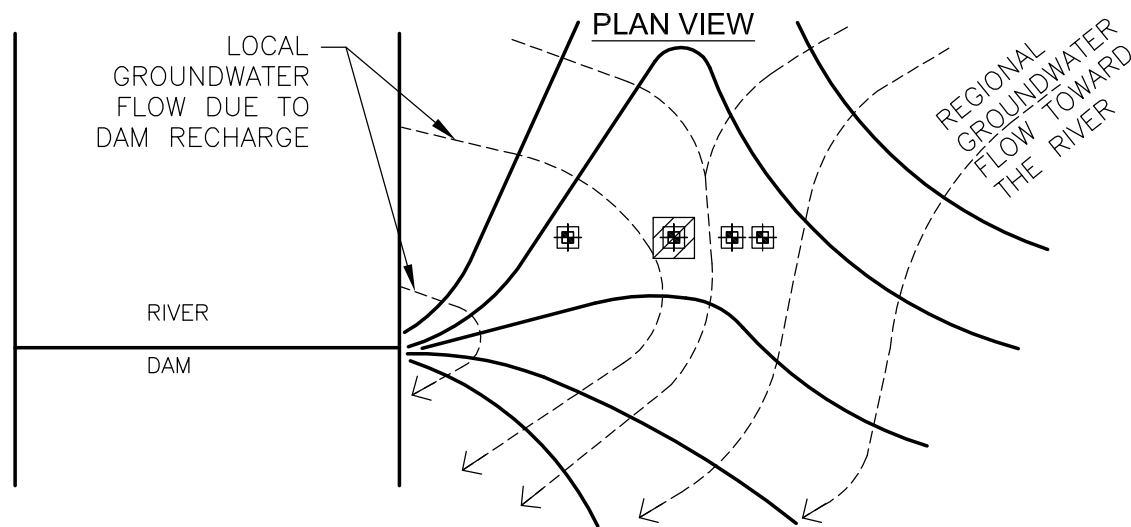
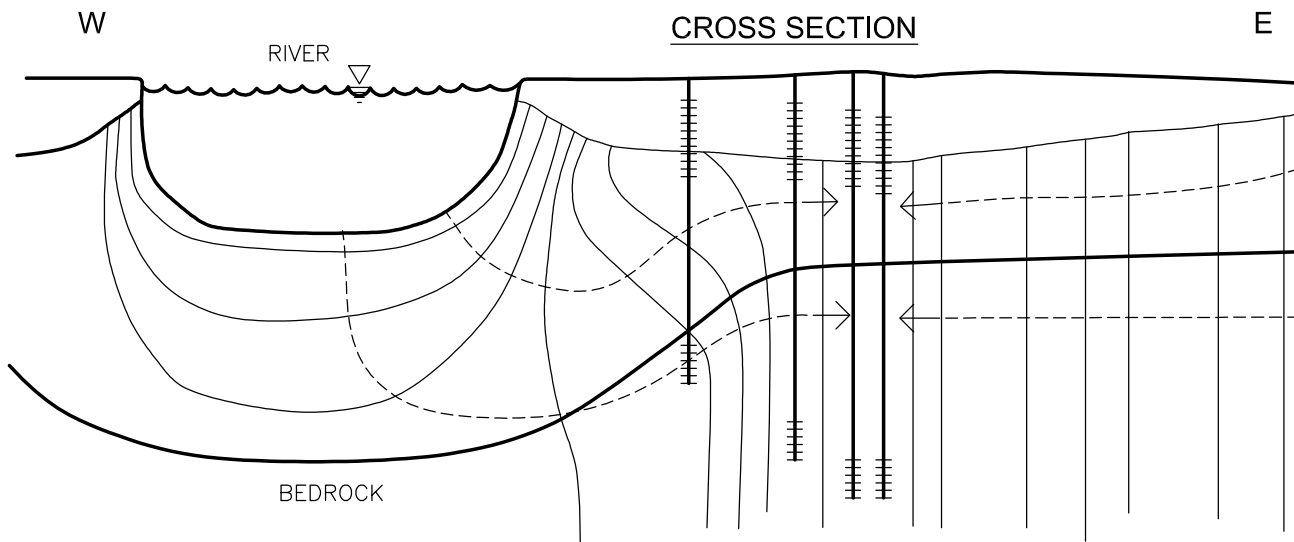


Project No. 1177  
Figure No. 25

5/16/2011



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LEGEND	
	MGP FACILITY
	NESTED WELL
	GW CONTOURS
	EQUIPOTENTIAL LINE
	FLOW DIRECTION
	WATER LEVEL
	WELL SCREEN

## CONCEPTUAL FLOW MODEL

REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN

DRAWN BY: KNW 05/10/11 APP'D BY: EPK DATE: 05/24/11

PROJECT NO.  
1177/14.12C

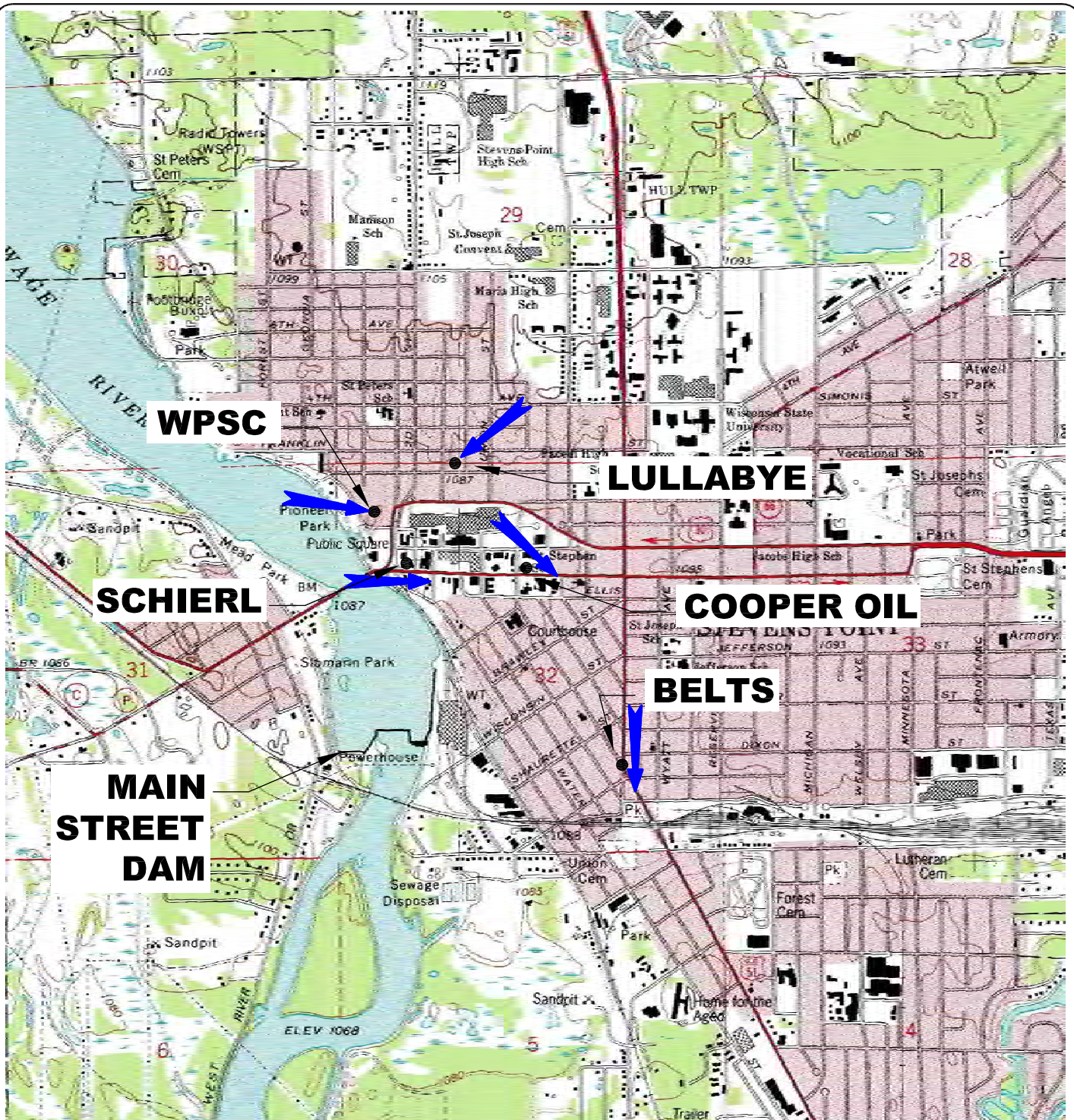
DRAWING NO.  
1177-1412C-A18

FIGURE NO.  
26



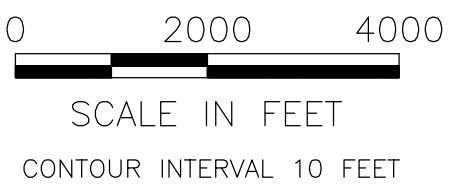
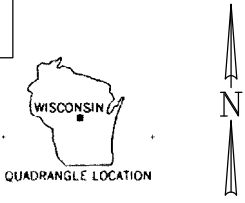
NATURAL  
RESOURCE  
TECHNOLOGY





**LEGEND**  
 GROUNDWATER FLOW DIRECTION AT NEARBY SITE

SOURCE: DIGITAL DOWNLOAD FROM <http://STORE.USGS.GOV>.  
 USGS 7.5 MINUTE QUADRANGLE, STEVENS POINT, WIS.  
 DATED 1970. REVISED 1991.



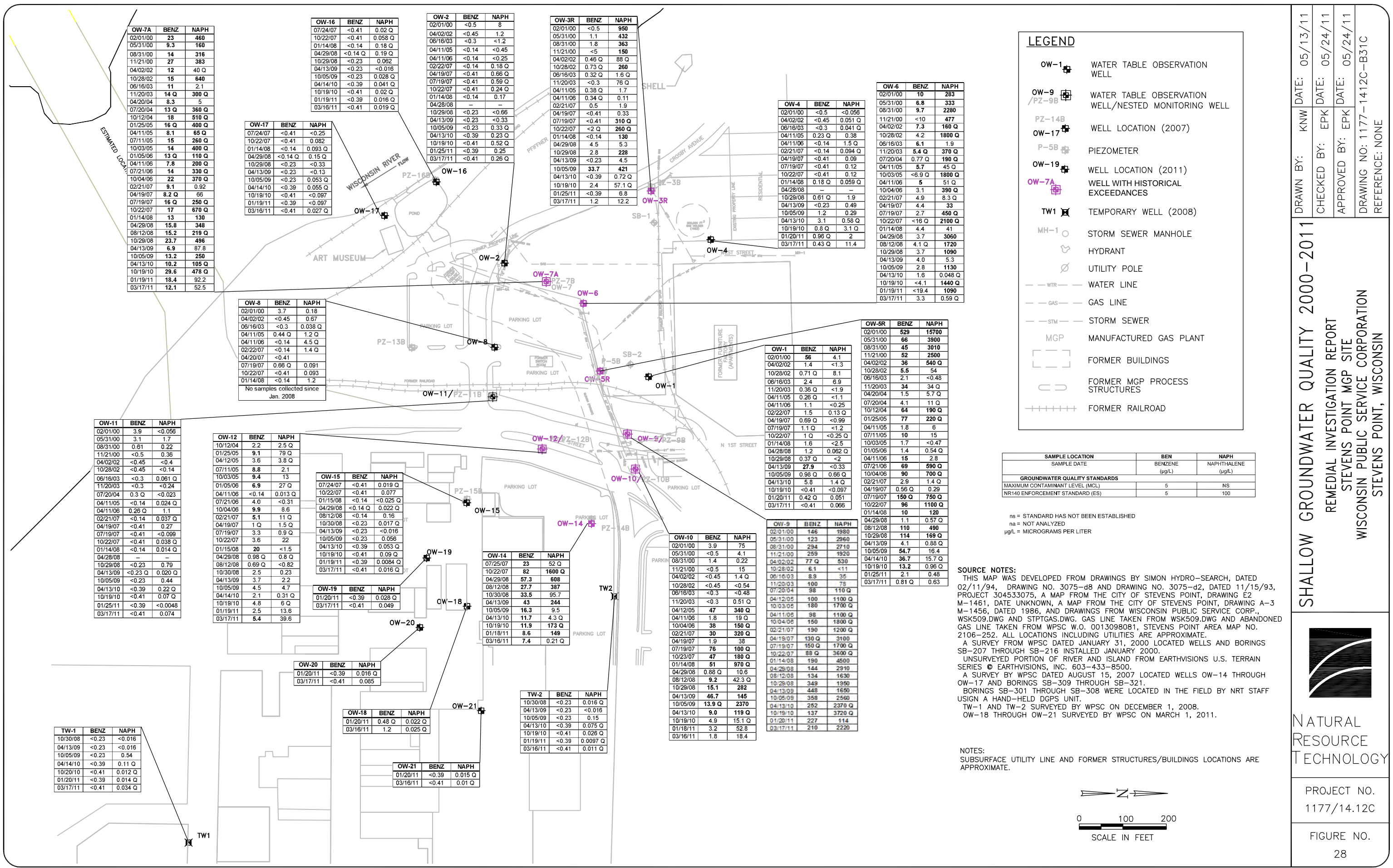
**GENERAL GROUNDWATER FLOW DIRECTION  
 – OTHER SITES  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN**



DRAWN BY:KNW 05/10/11 APP'D BY:EPK DATE:05/24/11

PROJECT NO.  
1177/14.12C  
 DRAWING NO.  
1177-1412C-A19  
 FIGURE NO.  
27





### LEGEND

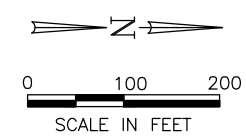
- OW-1, OW-9/PZ-9B, OW-17, OW-19, OW-7A, TW1, MH-1: WATER TABLE OBSERVATION WELL
- PZ-14B: WATER TABLE OBSERVATION WELL/NESTED MONITORING WELL
- OW-17: WELL LOCATION (2007)
- P-5B: PIEZOMETER
- OW-19: WELL LOCATION (2011)
- OW-7A: WELL WITH HISTORICAL EXCEEDANCES
- TW1: TEMPORARY WELL (2008)
- MH-1: STORM SEWER MANHOLE
- HYDRANT, UTILITY POLE: HYDRANT, UTILITY POLE
- WTR, GAS, STM: WATER LINE, GAS LINE, STORM SEWER
- MGP: MANUFACTURED GAS PLANT
- FORMER BUILDINGS, FORMER MGP PROCESS STRUCTURES, FORMER RAILROAD: FORMER BUILDINGS, FORMER MGP PROCESS STRUCTURES, FORMER RAILROAD

SAMPLE LOCATION	BEN	NAPH
SAMPLE DATE	BENZENE (µg/L)	NAPHTHALENE (µg/L)
GROUNDWATER QUALITY STANDARDS		
MAXIMUM CONTAMINANT LEVEL (MCL)	5	NS
NR140 ENFORCEMENT STANDARD (ES)	5	100

ns = STANDARD HAS NOT BEEN ESTABLISHED  
na = NOT ANALYZED  
µg/L = MICROGRAMS PER LITER

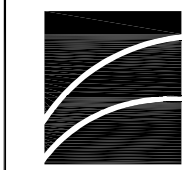
**SOURCE NOTES:**  
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BORINGS SB-301 THROUGH SB-308 WERE LOCATED IN THE FIELD BY NRT STAFF USING A HAND-HELD DGPS UNIT.  
TW-1 AND TW-2 SURVEYED BY WPSC ON DECEMBER 1, 2008.  
OW-18 THROUGH OW-21 SURVEYED BY WPSC ON MARCH 1, 2011.

**NOTES:**  
SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.



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CHECKED BY: EPK DATE: 05/24/11  
APPROVED BY: EPK DATE: 05/24/11  
DRAWING NO: 1177-1412C-B31C  
REFERENCE: NONE

**SHALLOW GROUNDWATER QUALITY 2000-2011**  
REMEDIAL INVESTIGATION REPORT  
STEVENS POINT MGP SITE  
WISCONSIN PUBLIC SERVICE CORPORATION  
STEVENS POINT, WISCONSIN



NATURAL  
RESOURCE  
TECHNOLOGY

PROJECT NO.  
1177/14.12C

FIGURE NO.  
28







**Benzene Concentration in Water Table Monitoring Wells**  
March 2011

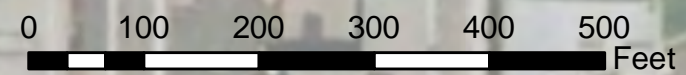
Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin



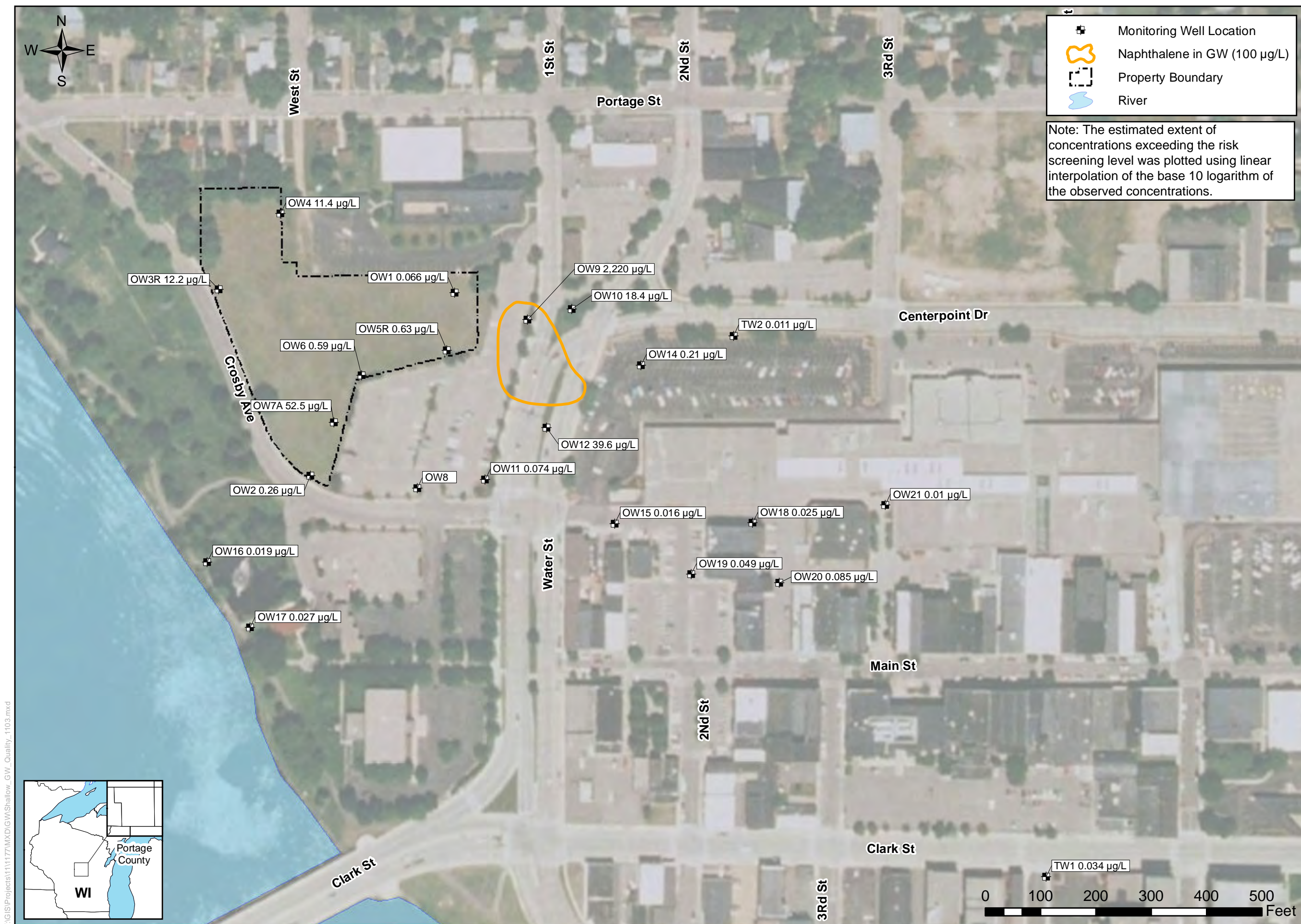
Project No. 1177  
Figure No. 30

5/25/2011

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Naphthalene Concentration in Water Table Monitoring Wells  
 March 2011  
 Wisconsin Public Service Corporation  
 Former Manufactured Gas Plant, Stevens Point, Wisconsin



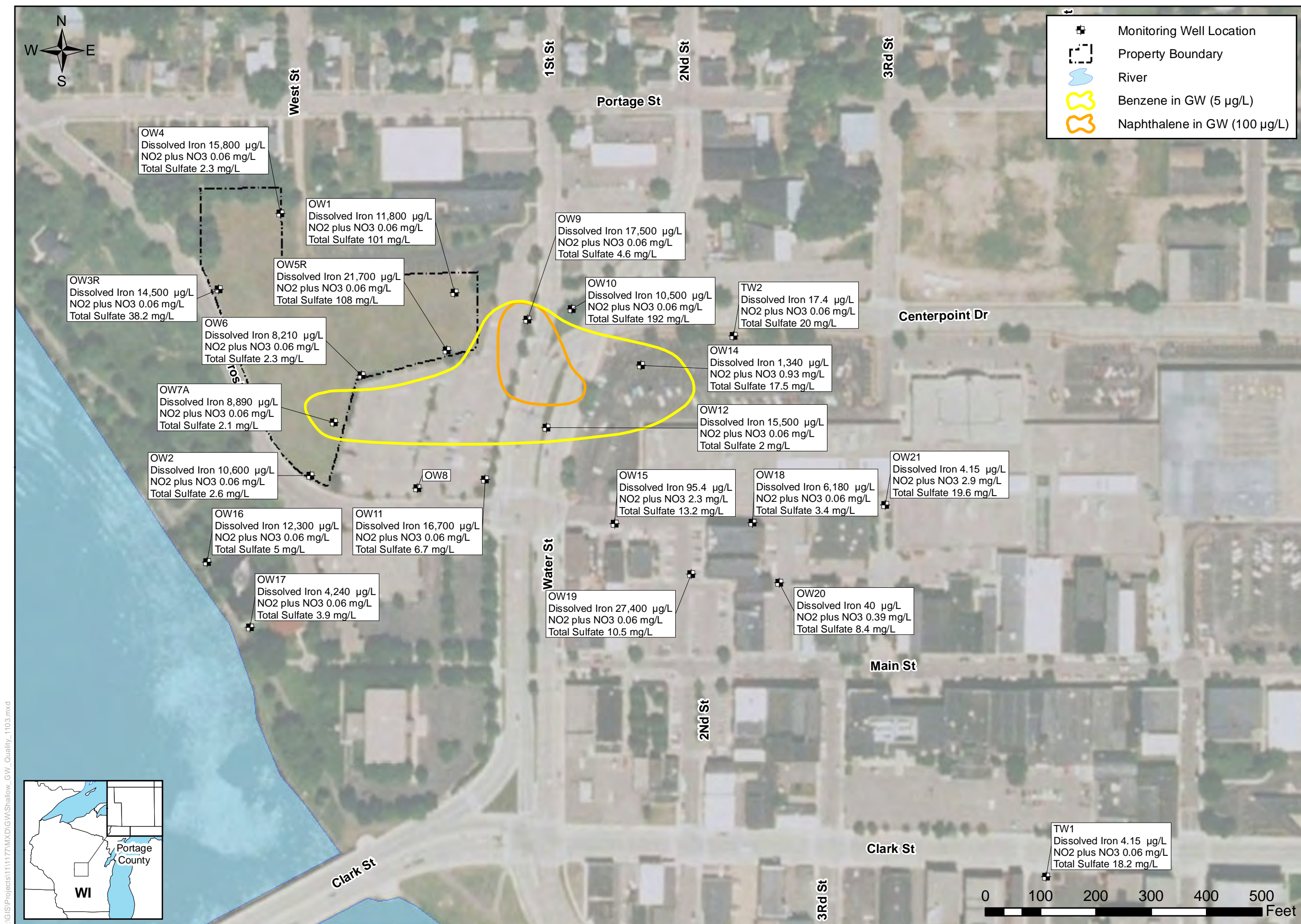
Project No. 1177  
 Figure No. 31

5/25/2011

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Iron, Nitrate, and Sulfate in Water Table Wells  
March 2011

Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin



Project No. 1177  
Figure No. 32




5/25/2011

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-  Piezometer Location
-  River
-  Property Boundary

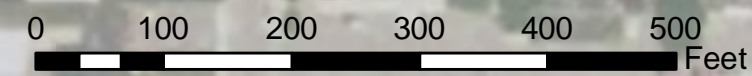


**Iron, Nitrate, and Sulfate in Piezometers**  
**March 2011**  
**Wisconsin Public Service Corporation**  
**Former Manufactured Gas Plant, Stevens Point, Wisconsin**



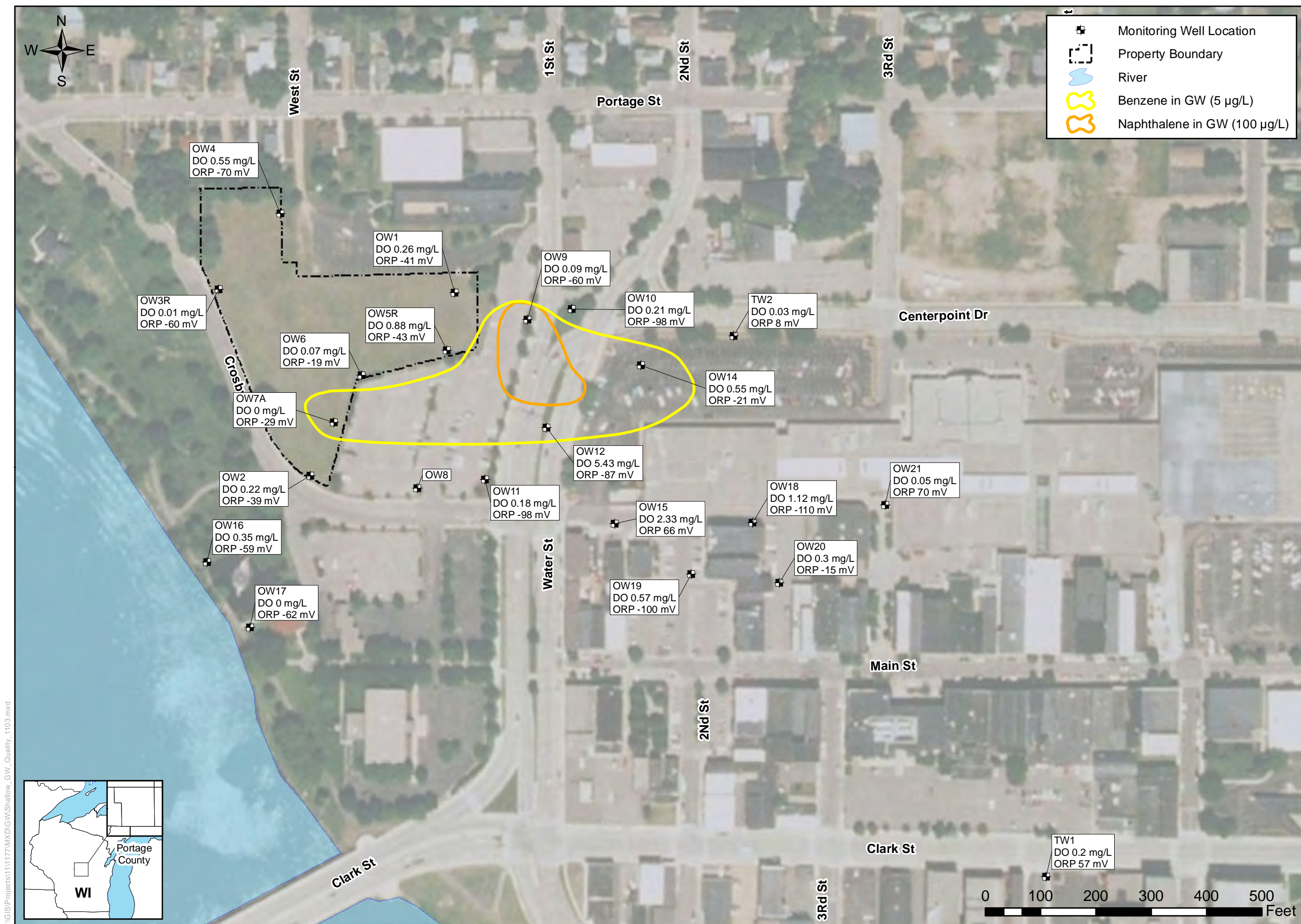
Project No. 1177  
Figure No. 33

5/25/2011



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- Monitoring Well Location
- Property Boundary
- River
- Benzene in GW (5 µg/L)
- Naphthalene in GW (100 µg/L)

**Dissolved Oxygen and Oxidation Reduction Potential  
in Water Table Wells - March 2011**

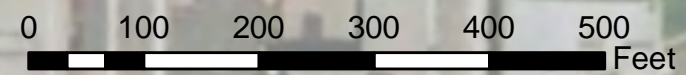
Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin



Project No. 1177  
Figure No. 34




5/25/2011

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-  Piezometer Location
-  River
-  Property Boundary



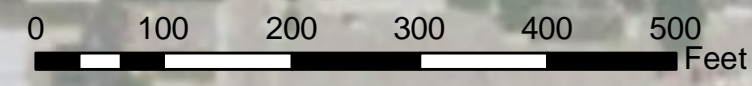
**Dissolved Oxygen and Oxidation Reduction Potential  
in Piezometers - March 2011**

Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin



Project No. 1177  
Figure No. 35

5/25/2011



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T3-D1a	Field Obs.	Material*	As	Cd	Cr	Pb	Hg	Se
0'-6"	N	C/S	na	na	na	na	na	0.017
6'-18"	N	S	na	na	na	na	na	0.017
18'-30"	N	WB	na	na	na	na	na	0.0089
30'-36"	N	WB	na	na	na	na	na	0.0069

T3-C1	Field Obs.	Material*	As	Cd	Cr	Pb	Hg	Se
0'-6"	N	S	<mdl	<mdl	9.9	1.9	0.016	<mdl
6'-18"	N	S	<mdl	<mdl	29	2.0	0.010	<mdl
18'-30"	N	S	<mdl	<mdl	9.0	1.2	0.0047	<mdl

T1-C1a	Field Obs.	Material*	As	Cd	Cr	Pb	Hg	Se
6'-18"	N	M	<mdl	<mdl	14	2.2	0.011	<mdl
90'-72"	N	WB	<mdl	<mdl	20	<mdl	0.011	<mdl
72'-64"	N	WB	<mdl	<mdl	16	<mdl	0.022	<mdl
64'-96"	N	WB	<mdl	<mdl	15	<mdl	0.024	<mdl
96'-108"	N	WB	<mdl	<mdl	20	1.2	0.010	<mdl
108'-120"	N	WB	<mdl	<mdl	24	1.8	0.0065	<mdl
120'-132"	N	WB	<mdl	<mdl	21	1.22	0.011	<mdl
132'-144"	N	WB	<mdl	<mdl	26	2.3	0.0051	<mdl

T1-D1	Field Obs.	Material*	As	Cd	Cr	Pb	Hg	Se
0'-6"	N	WB	<mdl	0.83	23	2.0	0.013	<mdl
6'-18"	N	WB	<mdl	<mdl	24	2.0	0.018	<mdl
18'-24"	N	WB	<mdl	<mdl	35	1.5	0.019	<mdl

**LEGEND**

- T5-D1 SEDIMENT SAMPLE
- PSED 203 SEDIMENT SAMPLE (POND)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- FORMER MGP PROCESS STRUCTURES
- FORMER RAILROAD

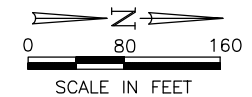
NOTES:  
SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

**SOURCE NOTES:**  
THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-d8 AND DRAWING NO. 3075-d2, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND STPTGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WPC W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE.  
A SURVEY FROM WPC DATED JANUARY 31, 2000 LOCATED WELLS AND BORINGS SB-207 THROUGH SB-216 INSTALLED JANUARY 2000.  
A SURVEY FROM WPC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE.  
POND SEDIMENT SAMPLINGS FIELD MEASURED BY NRT. UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.

Sample Location	Field Obs.	Material*	As	Cd	Cr	Pb	Hg	Se
SAMPLE DEPTH (INCHES BELOW TOP OF SEDIMENT)	FIELD OBSERVATIONS: TYPICAL: C=COAL FRAGMENTS S=SHALEN C=COCKOR N=NONE NOTED	RIVER BOTTOM MATERIAL: S=SAND M=M.S.T. GR=GRAVEL C=CLAY BDX=CONSOLIDATED BEDROCK AND/OR WB=WEATHERED BEDROCK	ARSENIC (mg/kg)	CADMIUM (mg/kg)	CHROMIUM (mg/kg)	LEAD (mg/kg)	MERCURY (mg/kg)	SELENIUM (mg/kg)

<mdl = RESULTS BELOW THE METHOD DETECTION LIMIT  
mg/kg = MILLIGRAMS PER KILOGRAM

	As	Cd	Cr	Pb	Hg	Se
Fresh Water Probable Effects Concentration (PEC)	33	4.98	111	128	1.06	ns
USEPA Ecotox Threshold Concentrations	8.2	1.2	81	47	0.15	ns



DRAWN BY: KNN DATE: 05/10/11  
CHECKED BY: EPK DATE: 05/24/11  
APPROVED BY: EPK DATE: 05/24/11  
DRAWING NO: 1177-1412C-B26  
REFERENCE: NONE

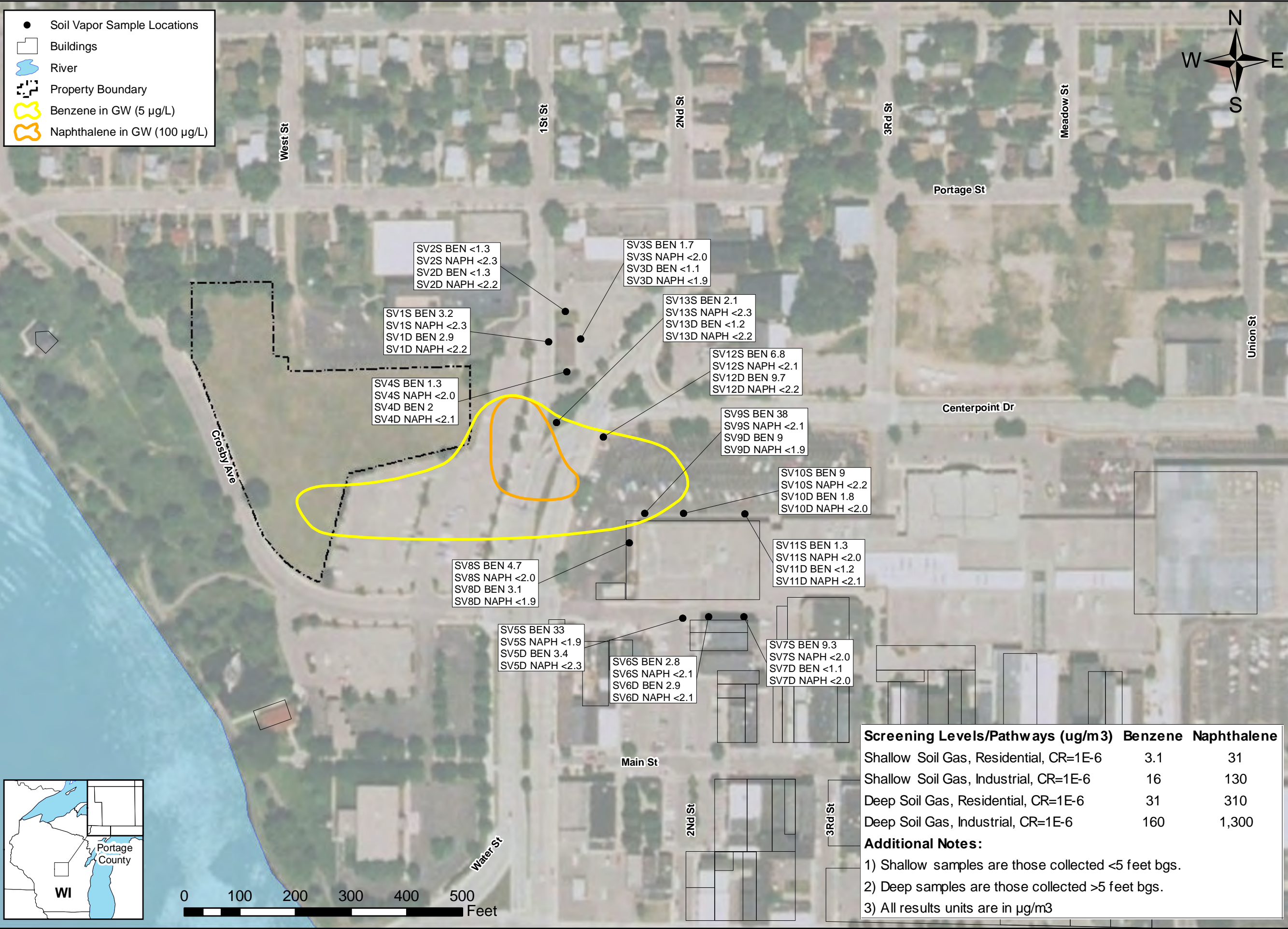
**SEDIMENT INORGANIC ANALYTICAL SUMMARY**  
REMEDIAL INVESTIGATION REPORT  
STEVENS POINT MGP SITE  
WISCONSIN PUBLIC SERVICE CORPORATION  
STEVENS POINT, WISCONSIN



NATURAL RESOURCE TECHNOLOGY

PROJECT NO. 1177/14.12C

FIGURE NO. 36



- Soil Vapor Sample Locations
- Buildings
- ▬ River
- ▬ Property Boundary
- ⊕ Benzene in GW (5 µg/L)
- ⊕ Naphthalene in GW (100 µg/L)



0 100 200 300 400 500 Feet

SV2S BEN <1.3  
SV2S NAPH <2.3  
SV2D BEN <1.3  
SV2D NAPH <2.2

SV3S BEN 1.7  
SV3S NAPH <2.0  
SV3D BEN <1.1  
SV3D NAPH <1.9

SV1S BEN 3.2  
SV1S NAPH <2.3  
SV1D BEN 2.9  
SV1D NAPH <2.2

SV13S BEN 2.1  
SV13S NAPH <2.3  
SV13D BEN <1.2  
SV13D NAPH <2.2

SV12S BEN 6.8  
SV12S NAPH <2.1  
SV12D BEN 9.7  
SV12D NAPH <2.2

SV4S BEN 1.3  
SV4S NAPH <2.0  
SV4D BEN 2  
SV4D NAPH <2.1

SV9S BEN 38  
SV9S NAPH <2.1  
SV9D BEN 9  
SV9D NAPH <1.9

SV10S BEN 9  
SV10S NAPH <2.2  
SV10D BEN 1.8  
SV10D NAPH <2.0

SV8S BEN 4.7  
SV8S NAPH <2.0  
SV8D BEN 3.1  
SV8D NAPH <1.9

SV11S BEN 1.3  
SV11S NAPH <2.0  
SV11D BEN <1.2  
SV11D NAPH <2.1

SV5S BEN 33  
SV5S NAPH <1.9  
SV5D BEN 3.4  
SV5D NAPH <2.3

SV6S BEN 2.8  
SV6S NAPH <2.1  
SV6D BEN 2.9  
SV6D NAPH <2.1

SV7S BEN 9.3  
SV7S NAPH <2.0  
SV7D BEN <1.1  
SV7D NAPH <2.0

Screening Levels/Pathways (ug/m <sup>3</sup> )	Benzene	Naphthalene
Shallow Soil Gas, Residential, CR=1E-6	3.1	31
Shallow Soil Gas, Industrial, CR=1E-6	16	130
Deep Soil Gas, Residential, CR=1E-6	31	310
Deep Soil Gas, Industrial, CR=1E-6	160	1,300

**Additional Notes:**

- 1) Shallow samples are those collected <5 feet bgs.
- 2) Deep samples are those collected >5 feet bgs.
- 3) All results units are in µg/m<sup>3</sup>

Benzene and Naphthalene Concentrations in Soil Vapor  
January 2011  
Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin

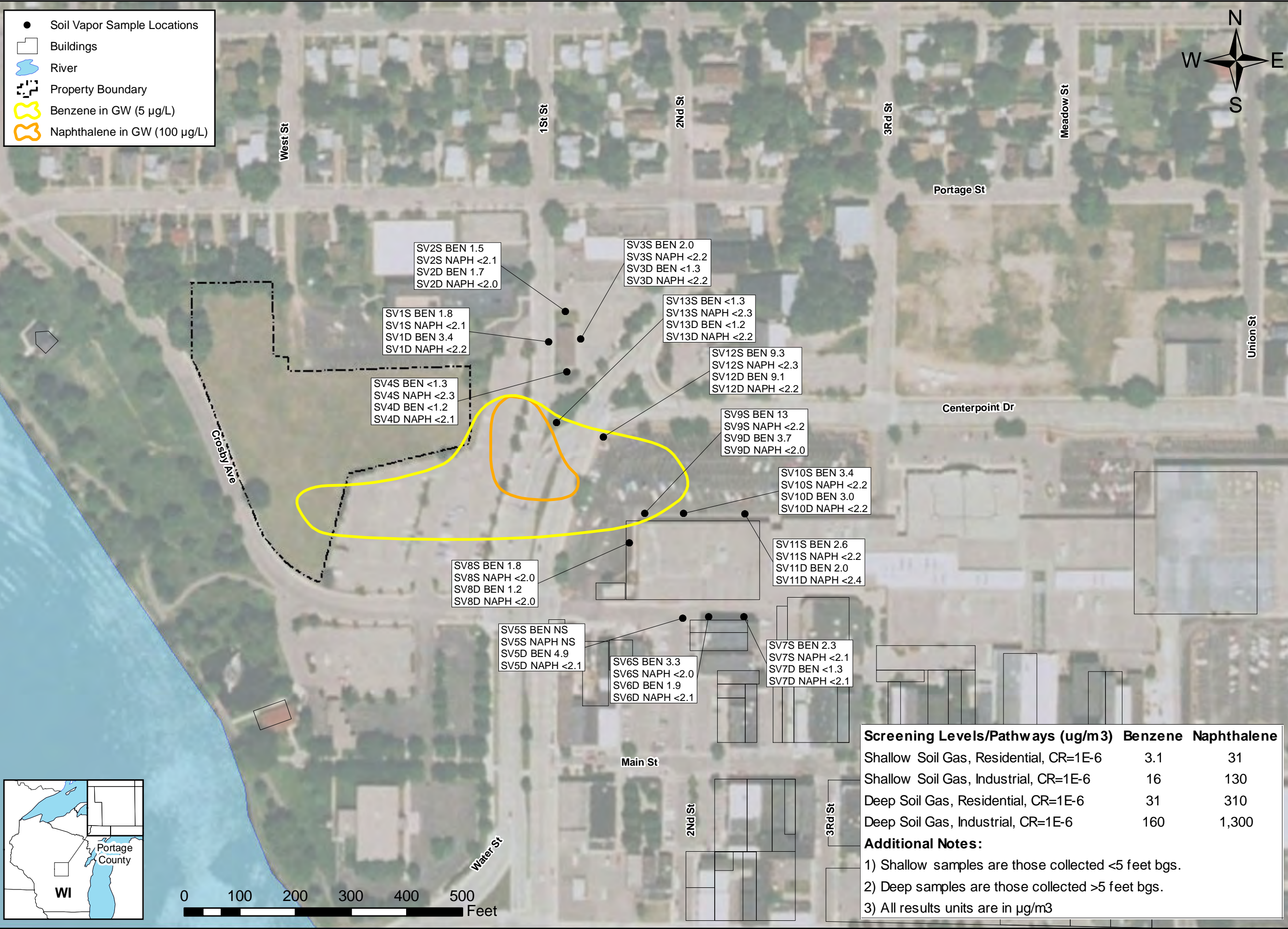


Project No. 1177  
Figure No. 37

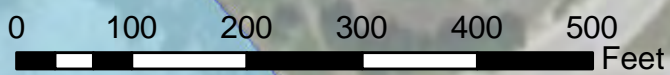
5/26/2011

Y:\GIS\Projects\1177\MXD\GW\Soil\_Vapor\_Sample\_Location\_Map.mxd





Y:\GIS\Projects\1177\MXD\GIS\Soil\_Vapor\_Sample\_Location\_Map.mxd



Screening Levels/Pathways (ug/m <sup>3</sup> )	Benzene	Naphthalene
Shallow Soil Gas, Residential, CR=1E-6	3.1	31
Shallow Soil Gas, Industrial, CR=1E-6	16	130
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Deep Soil Gas, Industrial, CR=1E-6	160	1,300

**Additional Notes:**

- 1) Shallow samples are those collected <5 feet bgs.
- 2) Deep samples are those collected >5 feet bgs.
- 3) All results units are in ug/m<sup>3</sup>

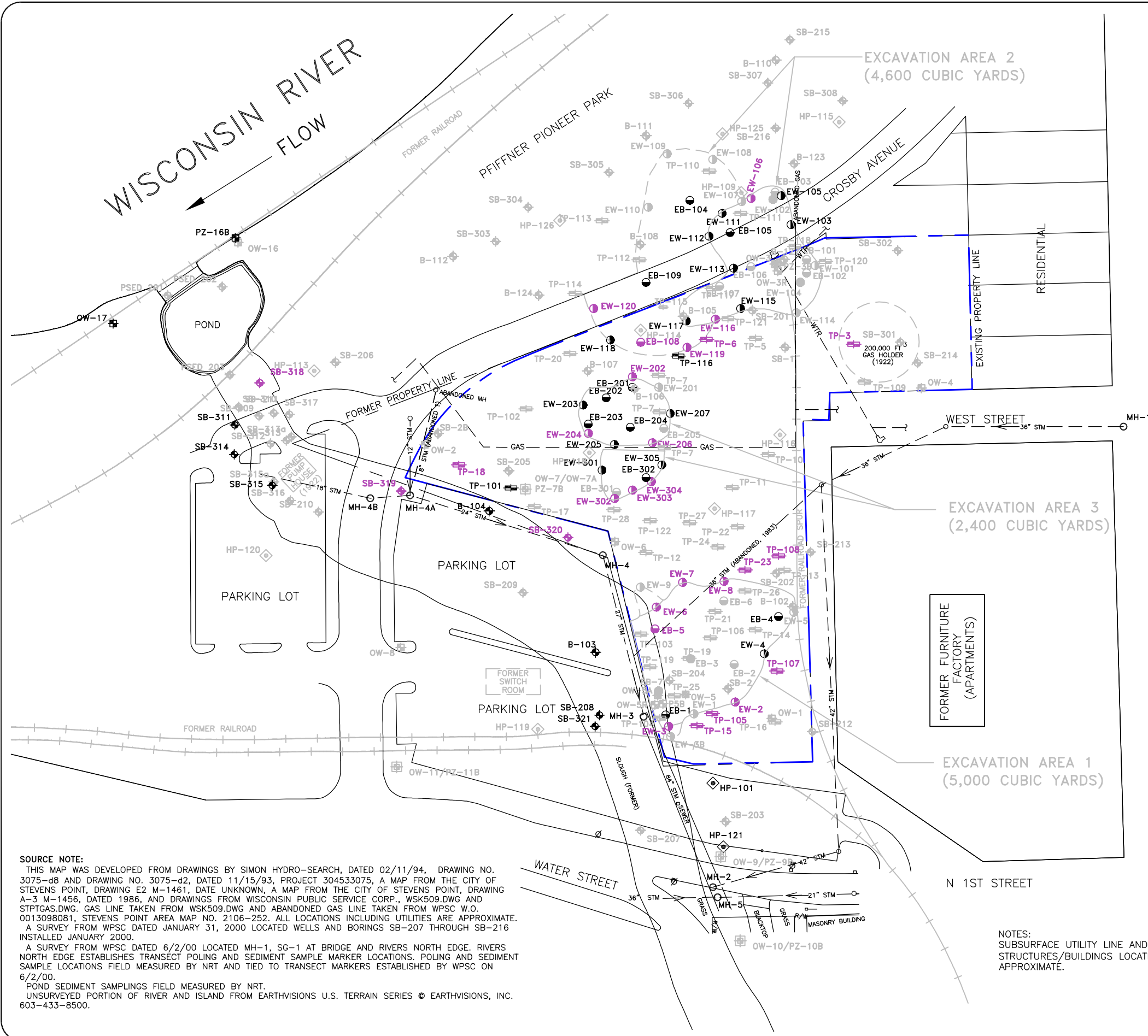
Benzene and Naphthalene Concentrations in Soil Vapor  
March 2011  
Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin



Project No. 1177  
Figure No. 38

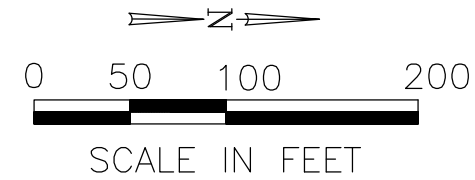
5/26/2011





**LEGEND**

EW-202	POINTS EXCEEDING 10 <sup>-4</sup> SCREENING CRITERIA ARE COLORED
SB-207	SOIL BORING (NRT)
OW-1	INVESTIGATION WELL
P5B	BEDROCK WELL
OW-9/ PZ-9B	NESTED MONITORING WELL/ BEDROCK WELL
(Solid line)	DEEP EXCAVATION (AVERAGE DEPTH IS 9-10 FEET)
(Dashed line)	SHALLOW EXCAVATION (AVERAGE DEPTH IS 2 FEET)
HP-120	HYDRO-PUNCH
EB-1	EXCAVATION BASE SAMPLE
EB-3	SOIL SAMPLE WHICH WAS EXCAVATED
EW-1	EXCAVATION WALL SAMPLE
OW-3	ABANDONED INVESTIGATION WELL
SB-206	SOIL BORING (HISTORICAL NRT)
B-124	BOREHOLE
SB-1	BOREHOLE
TP-3	TEST PIT
MH-1	STORM SEWER MANHOLE
(Circle with cross)	HYDRANT
(Circle with dot)	UTILITY POLE
--- WTR ---	WATER LINE
--- GAS ---	GAS LINE
--- STM ---	STORM SEWER
MGP	MANUFACTURED GAS PLANT
(Dashed box)	FORMER BUILDINGS
(Dashed line)	FORMER MGP PROCESS STRUCTURES
(Cross-hatched)	FORMER RAILROAD

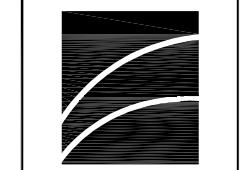


**SOURCE NOTE:**  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-d8 AND DRAWING NO. 3075-d2, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND SPTPGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WSPSC W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE. A SURVEY FROM WSPSC DATED JANUARY 31, 2000 LOCATED WELLS AND BORINGS SB-207 THROUGH SB-216 INSTALLED JANUARY 2000.  
 A SURVEY FROM WSPSC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE. RIVERS NORTH EDGE ESTABLISHES TRANSECT POLING AND SEDIMENT SAMPLE MARKER LOCATIONS. POLING AND SEDIMENT SAMPLE LOCATIONS FIELD MEASURED BY NRT AND TIED TO TRANSECT MARKERS ESTABLISHED BY WSPSC ON 6/2/00.  
 POND SEDIMENT SAMPLINGS FIELD MEASURED BY NRT.  
 UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.

NOTES:  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

DRAWN BY:	KNW	DATE:	05/10/11
CHECKED BY:	EPK	DATE:	05/24/11
APPROVED BY:	EPK	DATE:	05/24/11
DRAWING NO:		1177-1412C-B27C	
REFERENCE: .			

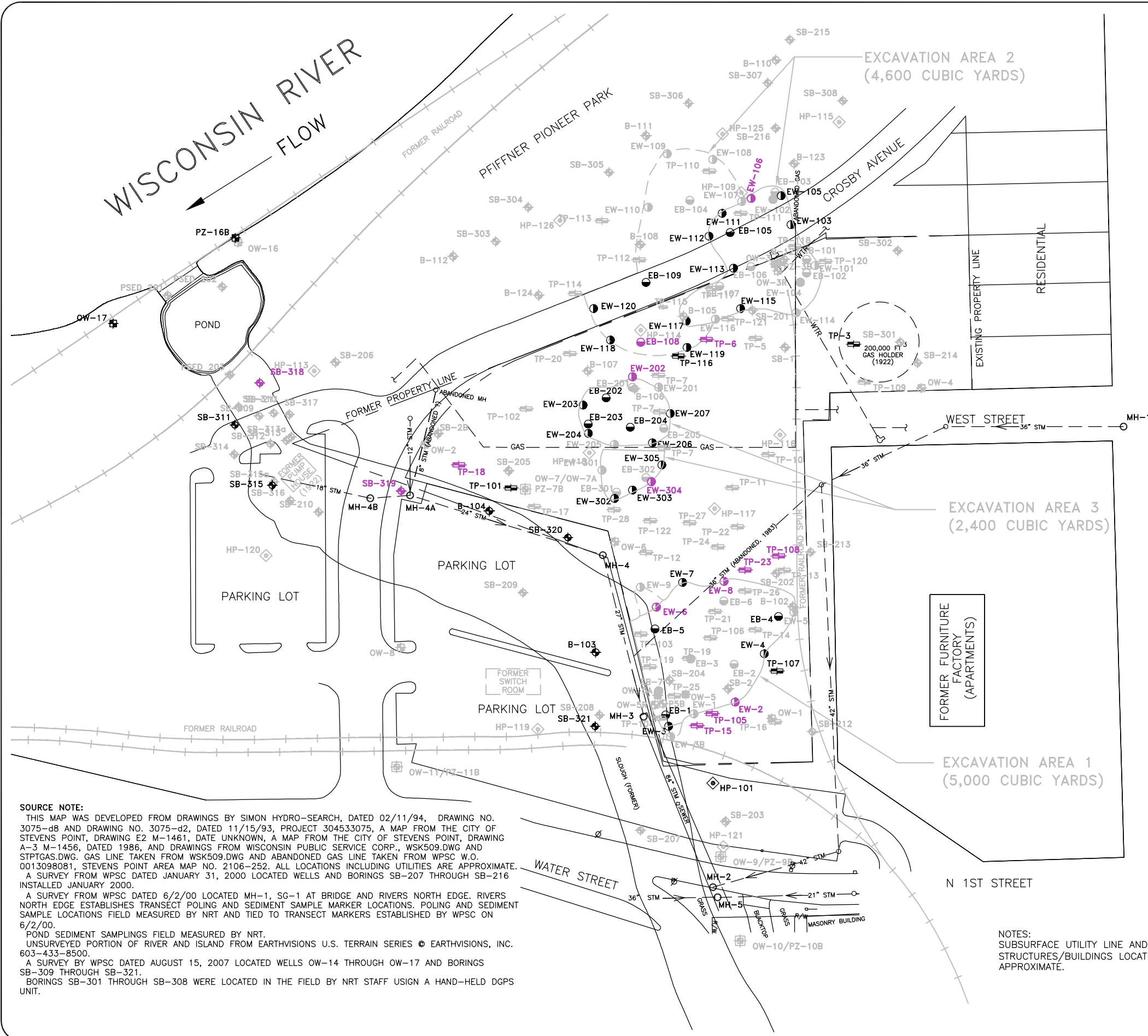
**SUBSURFACE SOIL ABOVE  
 RESIDENTIAL SOIL SCREENING LEVELS**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL  
 RESOURCE  
 TECHNOLOGY

PROJECT NO.  
 1177/14.12C

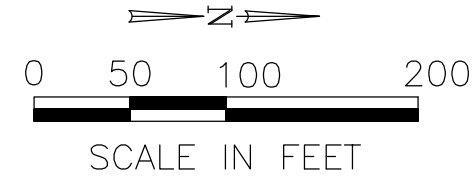
FIGURE NO.  
 39



LEGEND	
EW-202	POINTS EXCEEDING 10 <sup>-4</sup> SCREENING CRITERIA ARE COLORED
SB-207	SOIL BORING (NRT)
OW-1	INVESTIGATION WELL
P5B	BEDROCK WELL
OW-9/PZ-9B	NESTED MONITORING WELL/BEDROCK WELL
(Solid line)	DEEP EXCAVATION (AVERAGE DEPTH IS 9-10 FEET)
(Dashed line)	SHALLOW EXCAVATION (AVERAGE DEPTH IS 2 FEET)
HP-120	HYDRO-PUNCH
EB-1	EXCAVATION BASE SAMPLE
EB-3	SOIL SAMPLE WHICH WAS EXCAVATED
EW-1	EXCAVATION WALL SAMPLE
OW-3	ABANDONED INVESTIGATION WELL
SB-206	SOIL BORING (HISTORICAL NRT)
B-124	BOREHOLE
SB-1	BOREHOLE
TP-3	TEST PIT
MH-1	STORM SEWER MANHOLE
(Circle with cross)	HYDRANT
(Circle with dot)	UTILITY POLE
WTR	WATER LINE
GAS	GAS LINE
STM	STORM SEWER
MGP	MANUFACTURED GAS PLANT
(Dashed box)	FORMER BUILDINGS
(Double line)	FORMER MGP PROCESS STRUCTURES
(Dashed line with cross-ticks)	FORMER RAILROAD

**SOURCE NOTE:**  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-d8 AND DRAWING NO. 3075-d2, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND SPTGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WPSK W.O. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE. A SURVEY FROM WPSK DATED JANUARY 31, 2000 LOCATED WELLS AND BORINGS SB-207 THROUGH SB-216 INSTALLED JANUARY 2000.  
 A SURVEY FROM WPSK DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE. RIVERS NORTH EDGE ESTABLISHES TRANSECT POLING AND SEDIMENT SAMPLE MARKER LOCATIONS. POLING AND SEDIMENT SAMPLE LOCATIONS FIELD MEASURED BY NRT AND TIED TO TRANSECT MARKERS ESTABLISHED BY WPSK ON 6/2/00.  
 POND SEDIMENT SAMPLINGS FIELD MEASURED BY NRT.  
 UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.  
 A SURVEY BY WPSK DATED AUGUST 15, 2007 LOCATED WELLS OW-14 THROUGH OW-17 AND BORINGS SB-309 THROUGH SB-321.  
 BORINGS SB-301 THROUGH SB-308 WERE LOCATED IN THE FIELD BY NRT STAFF USING A HAND-HELD DGPS UNIT.

NOTES:  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.



DRAWN BY:	KNW	DATE:	05/10/11
CHECKED BY:	EPK	DATE:	05/24/11
APPROVED BY:	EPK	DATE:	05/24/11
DRAWING NO: 1177-1412C-B28C REFERENCE: .			

**SUBSURFACE SOIL ABOVE OUTDOOR WORKER SOIL SCREENING LEVELS**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN



NATURAL RESOURCE TECHNOLOGY

PROJECT NO.  
1177/14.12C

FIGURE NO.  
40





- ✦ Monitoring Well Location
- ⬡ Property Boundary
- 🌊 River
- 🔵 Soils Exceeding  $10^{-4}$  Residential Screening Levels (Figure 39)
- 🟡 Benzene in Groundwater above 5 µg/L (Figure 30)
- 🟠 Naphthalene in Groundwater 100 µg/L (Figure 31)

Benzene and Naphthalene Groundwater Plumes and  
Soils Exceeding Residential Screening Levels  
March 2011

Wisconsin Public Service Corporation  
Former Manufactured Gas Plant, Stevens Point, Wisconsin



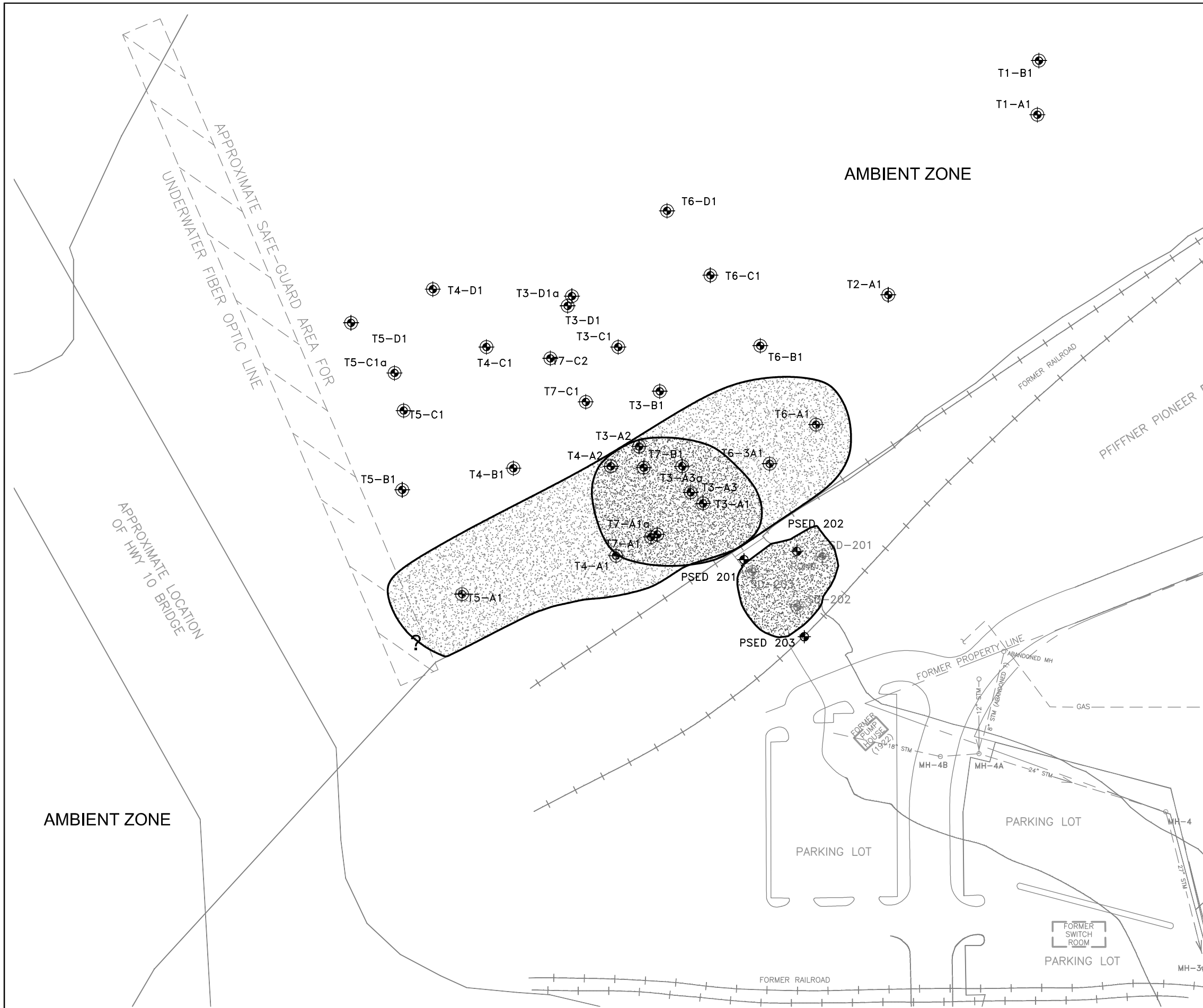
Project No. 1177  
Figure No. 41

12/12/2011

0 75 150  
SCALE IN FEET

Y:\GIS\Projects\1177\MXD\GW\Figure\_41\_Benz\_and\_Naph\_GW\_and\_Soils\_Exceeding\_Res\_SLS.mxd





**LEGEND**

- T4-B1 SEDIMENT SAMPLE
- SD-201 SEDIMENT SAMPLE (POND)
- MH-1 STORM SEWER MANHOLE
- HYDRANT
- UTILITY POLE
- WTR WATER LINE
- GAS GAS LINE
- STM STORM SEWER
- MGP MANUFACTURED GAS PLANT
- FORMER BUILDINGS
- STRUCTURES FORMER MGP PROCESS
- FORMER RAILROAD
- SEDIMENT CONCENTRATIONS ABOVE THE PROBABLE EFFECTS CONCENTRATION (PEC)
- SEDIMENT CONCENTRATION BELOW THE PEC AND ABOVE THE THRESHOLD EFFECTS CONCENTRATION

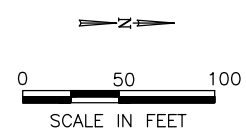
**NOTES:**  
 SUBSURFACE UTILITY LINE AND FORMER STRUCTURES/BUILDINGS LOCATIONS ARE APPROXIMATE.

**SOURCE NOTE:**  
 THIS MAP WAS DEVELOPED FROM DRAWINGS BY SIMON HYDRO-SEARCH, DATED 02/11/94, DRAWING NO. 3075-08 AND DRAWING NO. 3075-02, DATED 11/15/93, PROJECT 304533075, A MAP FROM THE CITY OF STEVENS POINT, DRAWING E2 M-1461, DATE UNKNOWN, A MAP FROM THE CITY OF STEVENS POINT, DRAWING A-3 M-1456, DATED 1986, AND DRAWINGS FROM WISCONSIN PUBLIC SERVICE CORP., WSK509.DWG AND SPTGAS.DWG. GAS LINE TAKEN FROM WSK509.DWG AND ABANDONED GAS LINE TAKEN FROM WSPC W.D. 0013098081, STEVENS POINT AREA MAP NO. 2106-252. ALL LOCATIONS INCLUDING UTILITIES ARE APPROXIMATE.

A SURVEY FROM WSPC DATED 6/2/00 LOCATED MH-1, SG-1 AT BRIDGE AND RIVERS NORTH EDGE. RIVERS NORTH EDGE ESTABLISHES TRANSECT POLING AND SEDIMENT SAMPLE MARKER LOCATIONS. POLING AND SEDIMENT SAMPLE LOCATIONS FIELD MEASURED BY NRT AND TIED TO TRANSECT MARKERS ESTABLISHED BY WSPC ON 6/2/00.

POND SEDIMENT SAMPLINGS FIELD MEASURED BY NRT.

UNSURVEYED PORTION OF RIVER AND ISLAND FROM EARTHVISIONS U.S. TERRAIN SERIES © EARTHVISIONS, INC. 603-433-8500.



DRAWN BY:	RLH	DATE:	12/14/11
CHECKED BY:	EPK	DATE:	12/14/11
APPROVED BY:	EPK	DATE:	12/14/11
DRAWING NO: 1177-1412C-B43		REFERENCE: .	

**ZONES OF SEDIMENT EXPOSURES FOR THE BENTHIC COMMUNITY**  
 REMEDIAL INVESTIGATION REPORT  
 STEVENS POINT MGP SITE  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 STEVENS POINT, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.  
1177/14.12C

FIGURE NO.  
42

## **TABLES**



**Table 1. Groundwater Elevation Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-1		OW-2		OW-3			
Well Depth from TOC (feet)	12.51	15.62	15.6	13.98				
Screen Length (feet)	5	5	5	5				
Surface Elevation (MSL) <sup>A</sup>	1085.80	1089.75	1086.65	1088.60				
Top of Casing Elevation (MSL) <sup>A</sup>	1088.21	1091.02	1089.55	1091.58				
Top of Screen Elevation (MSL)	1080.7	1080.4	1078.95	1082.6				
Bottom of Screen Elevation (MSL)	1075.7	1075.4	1073.95	1077.6				
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
09/16/93	8.88	1079.33			9.42	1080.13 *	8.85	1082.73 *
08/15/96	8.94	1079.27			9.21	1080.34 *	9.49	1082.09
08/16/97	9.08	1079.13			9.35	1080.20 *	10.44	1081.14
09/03 & 04/97	9.20	1079.01			9.46	1080.09 *	10.67	1080.91
02/26/98	9.29	1078.92			9.26	1080.29 *	10.57	1081.01
06/22/99	Casing added to the top of the well		not measured		9.00	1080.55 *	Abandoned April 1998	
01/31/00	Casing added to the top of the well		12.87	1078.15	9.45	1080.10 *	Replaced with OW-3R	
05/31/00			13.00	1078.02	9.08	1080.47 *		
08/31/00			12.15	1078.87	9.10	1080.45 *		
11/21/00			12.82	1078.20	9.38	1080.17 *		
04/01/02			12.33	1078.69	9.06	1080.49 *		
07/22/02			12.05	1078.97	9.05	1080.50 *		
10/28/02			11.95	1079.07	9.00	1080.55 *		
06/16/03			11.76	1079.26	8.68	1080.87 *		
11/20/03			12.33	1078.69	9.06	1080.49 *		
04/20/04			12.18	1078.84	8.90	1080.65 *		
07/20/04			11.68	1079.34	8.78	1080.77 *		
10/12/04			12.31	1078.71	9.09	1080.46 *		
01/25/05			12.43	1078.59	9.10	1080.45 *		
04/11/05			12.31	1078.71	8.90	1080.65 *		
07/11/05			12.33	1078.69	8.91	1080.64 *		
10/03/05			12.15	1078.87	8.92	1080.63 *		
01/05/06			12.51	1078.51	9.11	1080.44 *		
04/11/06			12.42	1078.60	8.91	1080.64 *		
07/21/06			13.10	1077.92	9.06	1080.49 *		
10/04/06			12.38	1078.64	9.08	1080.47 *		
2/22/2007			12.62	1078.40	9.2	1080.35 *		
4/19/2007			12.27	1078.75	8.88	1080.67 *		
7/19/2007			12.43	1078.59	8.95	1080.60 *		
10/22/2007			12.18	1078.84	8.88	1080.67 *		
1/14/2008			12.48	1078.54	9.12	1080.43 *		
4/28/2008			11.69	1079.33	8.56	1080.99 *		
8/12/2008			12.10	1078.92	9.00	1080.55 *		
10/29/2008			12.44	1078.58	9.05	1080.50 *		
04/13/09			12.60	1078.42	8.94	1080.61 *		
10/5/2009			12.43	1078.59	8.97	1080.58 *		
4/13/2010			12.39	1078.63	8.88	1080.67 *		
10/20/2010			11.85	1079.17	8.92	1080.63 *		
1/18/2011			12.41	1078.61	9.10	1080.45 *		
3/16/2011			12.13	1078.89	8.9	1080.65 *		

**Table 1. Groundwater Elevation Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-3R		PZ-3B		OW-4		OW-5	
Well Depth from TOC (feet)	17.21		41.76		16.98		22.51	
Screen Length (feet)	10		5		10		10	
Surface Elevation (MSL) <sup>A</sup>	1088.20		1088.20		1086.65		1085.50	
Top of Casing Elevation (MSL) <sup>A</sup>	1090.54		1090.85		1090.05		1088.39	
Top of Screen Elevation (MSL)	1083.3		1054.1		1083.1		1075.9	
Bottom of Screen Elevation (MSL)	1073.3		1049.1		1073.1		1065.9	
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
09/16/93	Constructed January 2000		Constructed in 1996		9.56	1080.49	8.88	1079.51 *
08/15/96			9.74	1081.11 *	9.89	1080.16	8.93	1079.46 *
08/16/97			9.76	1081.09 *	9.86	1080.19	9.03	1079.36 *
09/03 & 04/97			9.87	1080.98 *	9.96	1080.09	9.14	1079.25 *
02/26/98			10.79	1080.06 *	9.66	1080.39	9.31	1079.08 *
06/22/99	Constructed January 2000		9.74	1081.11 *	9.88	1080.17	Abandoned April 1998 Well Was Not Replaced	
01/31/00	9.97	1080.57	10.18	1080.67 *	10.04	1080.01		
05/31/00	9.75	1080.79	9.91	1080.94 *	9.95	1080.10		
08/31/00	9.68	1080.86	9.78	1081.07 *	9.92	1080.13		
11/21/00	9.32	1081.22	10.71	1080.14 *	10.04	1080.01		
04/01/02	9.69	1080.85	9.92	1080.93 *	9.81	1080.24		
07/22/02	9.72	1080.82	9.90	1080.95 *	9.90	1080.15		
10/28/02	9.65	1080.89	9.90	1080.95 *	9.85	1080.20		
06/16/03	9.48	1081.06	9.76	1081.09 *	9.66	1080.39		
11/20/03	9.76	1080.78	10.08	1080.77 *	10.83	1079.22		
04/20/04	9.71	1080.83	9.92	1080.93 *	9.80	1080.25		
07/20/04	9.54	1081.00	9.71	1081.14 *	9.78	1080.27		
10/12/04	9.89	1080.65	10.01	1080.84 *	10.10	1079.95		
01/25/05	9.91	1080.63	10.11	1080.74 *	10.02	1080.03		
04/11/05	9.71	1080.83	9.70	1081.15 *	9.84	1080.21		
07/11/05	9.89	1080.65	10.09	1080.76 *	10.19	1079.86		
10/03/05	9.67	1080.87	9.87	1080.98 *	9.89	1080.16		
01/05/06	9.86	1080.68	10.04	1080.81 *	9.88	1080.17		
04/11/06	9.75	1080.79	9.99	1080.86 *	9.82	1080.23		
07/21/06	10.00	1080.54	10.13	1080.72 *	10.17	1079.88		
10/04/06	10.10	1080.44	9.94	1080.91 *	10.00	1080.05		
2/22/2007	10.02	1080.52	10.17	1080.68 *	10.03	1080.02		
4/19/2007	9.83	1080.71	10.03	1080.82 *	9.88	1080.17		
7/19/2007	10.03	1080.51	10.15	1080.70 *	10.25	1079.80		
10/22/2007	9.70	1080.84	9.90	1080.95 *	9.89	1080.16		
1/14/2008	9.99	1080.55	10.11	1080.74 *	10.02	1080.03		
4/28/2008	9.45	1081.09	9.72	1081.13 *	9.52	1080.53		
8/12/2008	9.85	1080.69	9.95	1080.90 *	10.05	1080.00		
10/29/2008	9.90	1080.64	10.01	1080.84 *	10.09	1079.96		
04/13/09	9.80	1080.74	10.05	1080.80 *	9.88	1080.17		
10/05/09	9.98	1080.56	10.13	1080.72 *	10.22	1079.83		
04/13/10	9.93	1080.61	10.11	1080.74 *	10.08	1079.97		
10/19/2010	9.68	1080.86	9.84	1081.01 *	9.88	1080.17		
01/18/11	9.86	1080.68	10.12	1080.73 *	10.01	1080.04		
03/16/11	9.75	1080.79	10.08	1080.77 *	9.86	1080.19		

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**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-5A		OW-5R		P-5B		OW-6			
Well Depth from TOC (feet)	18.14		16.35		48.78		18.04			
Screen Length (feet)	10		10		5		10			
Surface Elevation (MSL) <sup>A</sup>	1085.50		1086.54		1086.54		1084.48			
Top of Casing Elevation (MSL) <sup>A</sup>	1088.39		1089.15		1088.20		1087.56			
Top of Screen Elevation (MSL)	1080.3		1082.8		1044.4		1079.5			
Bottom of Screen Elevation (MSL)	1070.3		1072.8		1039.4		1069.5			
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)		
09/16/93	8.88	1079.51	Constructed January 2000		8.73	1079.47 *	6.99	1080.57 *		
08/15/96	8.93	1079.46			8.76	1079.44 *	7.10	1080.46 *		
08/16/97	9.03	1079.36			8.88	1079.32 *	7.16	1080.40 *		
09/03 & 04/97	9.14	1079.25			8.99	1079.21 *	7.19	1080.37 *		
02/26/98	9.31	1079.08			9.22	1078.98 *	7.36	1080.20 *		
06/22/99	Abandoned April 1998				9.00	1079.20 *	7.10	1080.46 *		
01/31/00	Replaced with OW-5R				10.60	1078.55	9.70	1078.50 *	7.71	1079.85 *
05/31/00					9.92	1079.23	9.32	1078.88 *	7.41	1080.15 *
08/31/00					9.73	1079.42	8.97	1079.23 *	7.15	1080.41 *
11/21/00					10.19	1078.96	9.30	1078.90 *	7.44	1080.12 *
04/01/02					10.16	1078.99	9.33	1078.87 *	7.47	1080.09 *
07/22/02					9.75	1079.40	9.00	1079.20 *	7.18	1080.38 *
10/28/02					9.62	1079.53	8.85	1079.35 *	7.10	1080.46 *
06/16/03					9.28	1079.87	9.85	1078.35 *	6.97	1080.59 *
11/20/03					10.04	1079.11	9.26	1078.94 *	7.39	1080.17 *
04/20/04					--	-- *	--	--	--	-- *
07/20/04					9.48	1079.67	8.62	1079.58 *	6.90	1080.66 *
10/12/04					10.02	1079.13	9.06	1079.14 *	7.25	1080.31 *
01/25/05					10.15	1079.00	9.33	1078.87 *	7.44	1080.12 *
04/11/05					9.95	1079.20	9.24	1078.96 *	7.37	1080.19 *
07/11/05			10.01	1079.14	9.16	1079.04 *	7.30	1080.26 *		
10/03/05			9.67	1079.48	8.97	1079.23 *	7.13	1080.43 *		
01/05/06			10.18	1078.97	9.38	1078.82 *	7.49	1080.07 *		
04/11/06			10.11	1079.04	9.36	1078.84 *	7.47	1080.09 *		
07/21/06			10.23	1078.92	9.28	1078.92 *	7.38	1080.18 *		
10/04/06			10.19	1078.96	9.27	1078.93 *	7.41	1080.15 *		
2/22/2007			10.33	1078.82	9.28	1078.92 *	7.58	1079.98 *		
4/19/2007			9.9	1079.25	9.27	1078.93 *	7.36	1080.20 *		
7/19/2007			10.22	1078.93	9.23	1078.97 *	7.38	1080.18 *		
10/22/2007			10.02	1079.13	9.05	1079.15 *	7.18	1080.38 *		
1/14/2008			--	---	9.35	1078.85 *	7.50	1080.06 *		
4/28/2008			9.29	1079.86	8.62	1079.58 *	7.07	1080.49 *		
8/12/2008			9.97	1079.18	9.00	1079.20 *	7.20	1080.36 *		
10/29/2008			10.18	1078.97	9.23	1078.97 *	7.33	1080.23 *		
04/13/09			9.96	1079.19	9.25	1078.95 *	7.37	1080.19		
10/05/09			10.18	1078.97	9.24	1078.96 *	7.33	1080.23		
04/13/10			10.08	1079.07	9.25	1078.95 *	7.40	1080.16		
10/20/2010			9.62	1079.53	8.71	1079.49 *	7.02	1080.54		
1/18/2011			9.88	1079.27	9.1	1079.10 *	7.29	1080.27		
03/16/11			9.6	1079.55	9.21	1078.99 *	7.34	1080.22		

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Well Data	OW-7A		OW-7		PZ-7B		OW-8	
Well Depth from TOC (feet)	18.15		27.1		43.17		17.62	
Screen Length (feet)	10		10		5		10	
Surface Elevation (MSL) <sup>A</sup>	1085.39		1085.60		1085.39		1089.70	
Top of Casing Elevation (MSL) <sup>A</sup>	1088.65		1088.46		1086.51		1092.13	
Top of Screen Elevation (MSL)	1080.5		1071.4		1048.3		1084.5	
Bottom of Screen Elevation (MSL)	1070.5		1061.4		1043.3		1074.5	
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
09/16/93	8.94	1079.71	7.84	1080.62 *	Constructed in 1996		12.54	1079.59
08/15/96	8.73	1079.92	7.93	1080.53 *	8.12	1078.39 *	12.60	1079.53
08/16/97	8.80	1079.85	8.04	1080.42 *	8.35	1078.16 *	12.68	1079.45
09/03 & 04/97	8.90	1079.75	8.11	1080.35 *	8.47	1078.04 *	12.81	1079.32
02/26/98	8.75	1079.90	8.36	1080.10 *	8.71	1077.80 *	13.17	1078.96
06/22/99	8.25	1080.40	Abandoned April 1998 Well Was Not Replaced		6.88	1079.63 *	12.87	1079.26
01/31/00	8.63	1080.02			7.56	1078.95 *	13.72	1078.41
05/31/00	8.35	1080.30			7.22	1079.29 *	13.34	1078.79
08/31/00	8.35	1080.30			6.89	1079.62 *	12.90	1079.23
11/21/00	8.50	1080.15			7.22	1079.29 *	13.30	1078.83
04/01/02	8.35	1080.30			7.29	1079.22 *	13.42	1078.71
07/22/02	8.33	1080.32			6.88	1079.63 *	12.90	1079.23
10/28/02	8.30	1080.35			6.80	1079.71 *	12.80	1079.33
06/16/03	8.31	1080.34			6.79	1079.72 *	12.82	1079.31
11/20/03	8.28	1080.37			7.20	1079.31 *	13.31	1078.82
04/20/04	8.24	1080.41			7.15	1079.36 *	13.19	1078.94
07/20/04	8.21	1080.44			6.50	1080.01 *	12.37	1079.76
10/12/04	8.30	1080.35			7.02	1079.49 *	12.96	1079.17
01/25/05	8.40	1080.25			7.28	1079.23 *	13.29	1078.84
04/11/05	8.24	1080.41			7.20	1079.31 *	13.27	1078.86
07/11/05	8.29	1080.36			7.10	1079.41 *	13.06	1079.07
10/03/05	8.23	1080.42			6.92	1079.59 *	12.91	1079.22
01/05/06	8.41	1080.24			7.31	1079.20 *	13.26	1078.87
04/11/06	8.31	1080.34			7.30	1079.21 *	13.38	1078.75
07/21/06	8.35	1080.30			7.22	1079.29 *	13.30	1078.83
10/04/06	8.40	1080.25			7.21	1079.30 *	13.19	1078.94
2/22/2007	8.4	1080.25			7.42	1079.09 *	13.49	1078.64
4/19/2007	8.48	1080.17			7.18	1079.33 *	13.19	1078.94
7/19/2007	8.35	1080.30			7.15	1079.36 *	13.10	1079.03
10/22/2007	8.22	1080.43			6.99	1079.52 *	12.95	1079.18
1/14/2008	8.43	1080.22			7.33	1079.18 *	13.30	1078.83
4/28/2008	8.13	1080.52 *			6.62	1079.89 *	12.54	1079.59
8/12/2008	8.33	1080.32			6.96	1079.55 *	12.88	1079.25
10/29/2008	8.36	1080.29			7.11	1079.40 *	13.12	1079.01
04/13/09	8.26	1080.39			7.21	1079.30 *	nm	---
10/05/09	8.38	1080.27			7.13	1079.38 *	nm	---
04/13/10	8.28	1080.37			7.21	1079.30 *	13.20	1078.93
10/19/2010	8.26	1080.39			6.68	1079.83 *	12.58	1079.55
1/18/2011	8.4	1080.25			6.95	1079.56 *	12.85	1079.28
03/16/11	8.23	1080.42			7.12	1079.39 *	13.2	1078.93

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Well Data	OW-9		PZ-9B		OW-10		PZ-10B	
Well Depth from TOC (feet)	21.18		53.65		21.3		53.3	
Screen Length (feet)	10		5		10		5	
Surface Elevation (MSL) <sup>A</sup>	1088.33		1088.33		1088.41		1088.41	
Top of Casing Elevation (MSL) <sup>A</sup>	1090.92		1090.85		1090.95		1090.99	
Top of Screen Elevation (MSL)	1079.7		1042.2		1079.7		1042.7	
Bottom of Screen Elevation (MSL)	1069.7		1037.2		1069.7		1037.7	
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
08/16/97	Constructed August 1997		Constructed August 1997		Constructed August 1997		Constructed August 1997	
09/03 & 04/97	12.25	1078.67	12.17	1078.68 *	12.30	1078.65	12.44	1078.55 *
02/26/98	12.37	1078.55	12.37	1078.48 *	12.55	1078.40	12.51	1078.48 *
06/22/99	12.24	1078.68	12.25	1078.60 *	12.38	1078.57	13.14	1077.85 *
01/31/00	12.85	1078.07	12.85	1078.00 *	13.05	1077.90	12.95	1078.04 *
05/31/00	12.55	1078.37	12.47	1078.38 *	12.63	1078.32	12.70	1078.29 *
08/31/00	12.98	1077.94	12.08	1078.77 *	11.26	1079.69 *	11.29	1079.70 *
11/21/00	12.51	1078.41	12.43	1078.42 *	12.60	1078.35	12.64	1078.35 *
04/01/02	12.42	1078.50	12.36	1078.49 *	12.44	1078.51	12.54	1078.45 *
07/22/02	12.20	1078.72	12.10	1078.75 *	12.28	1078.67	12.16	1078.83 *
10/28/02	12.00	1078.92	11.90	1078.95 *	12.10	1078.85	12.12	1078.87 *
06/16/03	11.92	1079.00	11.87	1078.98 *	11.97	1078.98	12.20	1078.79 *
11/20/03	12.28	1078.64	12.30	1078.55 *	12.40	1078.55	12.48	1078.51 *
04/20/04	12.17	1078.75	12.15	1078.70 *	12.21	1078.74	12.36	1078.63 *
07/20/04	12.79	1078.13	12.70	1078.15 *	11.94	1079.01	11.77	1079.22 *
10/12/04	12.28	1078.64	12.23	1078.62 *	12.43	1078.52	12.23	1078.76 *
01/25/05	12.44	1078.48	12.41	1078.44 *	12.72	1078.23	12.43	1078.56 *
04/12/05	12.33	1078.59	12.32	1078.53 *	12.34	1078.61	12.55	1078.44 *
07/11/05	12.32	1078.60	12.27	1078.58 *	12.38	1078.57	12.64	1078.35 *
10/03/05	12.16	1078.76	12.05	1078.80 *	12.30	1078.65	12.39	1078.60 *
01/05/06	12.49	1078.43	12.38	1078.47 *	12.49	1078.46	12.80	1078.19 *
04/11/06	12.41	1078.51	12.39	1078.46 *	12.55	1078.40	12.59	1078.40 *
07/21/06	12.41	1078.51	12.38	1078.47 *	12.61	1078.34	12.68	1078.31 *
10/04/06	12.37	1078.55	12.35	1078.50 *	12.52	1078.43	12.51	1078.48 *
2/22/2007	12.54	1078.38	12.56	1078.29 *	12.71	1078.24	12.27	1078.72 *
4/19/2007	12.30	1078.62	12.30	1078.55 *	12.33	1078.62	12.97	1078.02 *
7/19/2007	12.40	1078.52	12.38	1078.47 *	12.55	1078.40	12.34	1078.65
10/22/2007	12.16	1078.76	12.10	1078.75 *	12.28	1078.67	12.50	1078.49
1/14/2008	12.40	1078.52	12.48	1078.37 *	12.58	1078.37	12.67	1078.32
4/28/2008	11.80	1079.12	11.68	1079.17 *	11.70	1079.25	12.30	1078.69
8/12/2008	12.18	1078.74	12.15	1078.70 *	12.54	1078.41	12.25	1078.74
10/29/2008	12.38	1078.54	12.36	1078.49 *	12.57	1078.38	12.41	1078.58
04/13/09	12.35	1078.57	12.29	1078.56 *	12.47	1078.48	12.30	1078.69
10/05/09	12.40	1078.52	12.36	1078.49 *	12.51	1078.44	12.42	1078.57
04/13/10	12.35	1078.57	12.31	1078.54 *	12.41	1078.54	12.49	1078.50
10/19/10	11.84	1079.08	11.77	1079.08 *	11.85	1079.10	11.89	1079.1
01/18/11	12.13	1078.79	12.05	1078.80 *	12.22	1078.73	12.22	1078.77
03/16/11	12.14	1078.78	12.15	1078.70 *	12.25	1078.70	12.63	1078.36

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Well Data	OW-11		PZ-11B		OW-12 <sup>A</sup>		PZ-12B <sup>A</sup>	
Well Depth from TOC (feet)	16.07		51.42		18.35		43.8	
Screen Length (feet)	10		5		10		5	
Surface Elevation (MSL) <sup>A</sup>	1091.51		1091.51		1090.23		1090.23	
Top of Casing Elevation (MSL) <sup>A</sup>	1094.09		1093.73		1089.98		1089.93	
Top of Screen Elevation (MSL)	1088.0		1047.3		1081.6		1051.1	
Bottom of Screen Elevation (MSL)	1078.0		1042.3		1071.6		1046.1	
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
06/22/99	Constructed January 2000		Constructed January 2000		Constructed September 2004		Constructed September 2004	
01/31/00	16.07	1078.02	15.43	1078.30	*			
05/31/00	15.76	1078.33	14.95	1078.78	*			
08/31/00	14.25	1079.84	14.60	1079.13	*			
11/21/00	15.71	1078.38	14.91	1078.82	*			
04/01/02	15.82	1078.27	14.94	1078.79	*			
07/22/02	15.23	1078.86	14.53	1079.20	*			
10/28/02	15.05	1079.04	14.40	1079.33	*			
06/16/03	15.20	1078.89	14.39	1079.34	*			
11/20/03	15.70	1078.39	14.88	1078.85	*			
04/20/04	15.54	1078.55	14.75	1078.98	*			
07/20/04	14.65	1079.44	14.13	1079.60	*			
10/12/04	15.30	1078.79	14.71	1079.02	*	11.42	1078.56	11.36
01/25/05	15.70	1078.39	14.95	1078.78	*	11.56	1078.42	11.69
4/11 & 12/05	15.61	1078.48	14.88	1078.85	*	11.87	1078.11	11.79
07/11/05	15.41	1078.68	14.77	1078.96	*	11.60	1078.38	11.51
10/03/05	15.26	1078.83	14.59	1079.14	*	11.43	1078.55	11.40
01/05/06	15.56	1078.53	14.90	1078.83	*	11.68	1078.30	11.59
04/11/06	16.73	1077.36	14.98	1078.75	*	11.88	1078.10	11.96
07/21/06	15.55	1078.54	15.01	1078.72	*	11.74	1078.24	11.62
10/04/06	15.54	1078.55	14.90	1078.83	*	11.75	1078.23	11.65
2/22/2007	15.86	1078.23	15.02	1078.71	*	12.04	1077.94	11.68
4/19/2007	15.56	1078.53	14.83	1078.90	*	11.73	1078.25	11.66
7/19/2007	15.44	1078.65	14.70	1079.03	*	11.61	1078.37	11.54
10/22/2007	15.30	1078.79	14.68	1079.05	*	11.45	1078.53	11.35
1/14/2008	15.68	1078.41	14.83	1078.90	*	11.61	1078.37	11.87
4/28/2008	14.87	1079.22	14.20	1079.53	*	11.00	1078.98	10.88
8/12/2008	15.20	1078.89	14.60	1079.13	*	11.35	1078.63	11.25
10/29/2008	15.49	1078.60	14.86	1078.87	*	11.66	1078.32	11.55
04/13/09	15.67	1078.42	14.90	1078.83	*	11.88	1078.10	11.69
10/05/09	15.51	1078.58	14.86	1078.87	*	11.70	1078.28	11.45
04/13/10	15.59	1078.50	14.89	1078.84	*	11.86	1078.12	11.59
10/19/10	14.89	1079.20	14.30	1079.43	*	11.02	1078.96	10.94
01/18/11	15.26	1078.83	14.67	1079.06	*	11.30	1078.68	11.18
03/16/11	15.59	1078.50	14.63	1079.10	*	11.71	1078.27	11.57

**Table 1. Groundwater Elevation Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	PZ-13 <sup>A</sup>		OW-14		PZ-14B		OW-15	
Well Depth from TOC (feet)	45.55		17.76		47.94		17.2	
Screen Length (feet)	5		10		5		10	
Surface Elevation (MSL) <sup>A</sup>	1090.75		1089.64		1089.64		1091.15	
Top of Casing Elevation (MSL) <sup>A</sup>	1090.40		1089.04		1089.35		1090.94	
Top of Screen Elevation (MSL)	1049.9		1081.3		1046.4		1083.7	
Bottom of Screen Elevation (MSL)	1044.9		1071.3		1041.4		1073.7	
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
10/12/04	11.63	1078.77 *	Constructed July 2007		Constructed July 2007		Constructed July 2007	
01/25/05	12.11	1078.29 *						
04/11/05	12.05	1078.35 *						
07/11/05	11.78	1078.62 *						
10/03/05	11.55	1078.85 *						
01/05/06	11.95	1078.45 *						
04/11/06	12.19	1078.21 *						
07/21/06	12.04	1078.36 *						
10/04/06	11.89	1078.51 *						
2/22/2007	12.31	1078.09 *						
4/19/2007	11.96	1078.44 *						
7/19/2007	11.84	1078.56 *	10.96	1078.08	46.89	1042.46	12.96	1077.98
10/22/2007	11.67	1078.73 *	10.72	1078.32	43.9	1045.45	12.75	1078.19
1/14/2008	12.10	1078.3 *	nm	---	nm	---	13.13	1077.81
4/28/2008	11.20	1079.20 *	10.22	1078.82	31.79	1057.56	12.25	1078.69
8/12/2008	11.68	1078.72 *	10.63	1078.41	30.97	1058.38	12.6	1078.34
10/29/2008	11.95	1078.45 *	10.97	1078.07	31.55	1057.80	12.98	1077.96
04/13/09	11.94	1078.46 *	11.08	1077.96	20.45	1068.90	13.18	1077.76
10/05/09	11.7	1078.70 *	10.96	1078.08	32.13	1057.22	13.00	1077.94
04/14/10	11.96	1078.44 *	11.02	1078.02	24.70	1064.65	13.01	1077.93
10/20/10	11.32	1079.08 *	10.23	1078.81	20.7	1068.65	12.28	1078.66
01/18/11	11.59	1078.81 *	10.56	1078.48	18.65	1070.70	12.50	1078.44
03/16/11	11.97	1078.43 *	10.91	1078.13	21.78	1067.57	13.02	1077.92

**Table 1. Groundwater Elevation Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	PZ-15B		OW-16		PZ-16B		OW-17	
Well Depth from TOC (feet)	47.4		13.4		45.5		13.25	
Screen Length (feet)	5		10		5		10	
Surface Elevation (MSL) <sup>A</sup>	1091.15		1088.61		1088.61		1089.47	
Top of Casing Elevation (MSL) <sup>A</sup>	1090.89		1088.44		1088.11		1089.40	
Top of Screen Elevation (MSL)	1048.5		1085.0		1047.6		1086.2	
Bottom of Screen Elevation (MSL)	1043.5		1075.0		1042.6		1076.2	
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
	Constructed July 2007		Constructed July 2007		Constructed July 2007		Constructed July 2007	
07/19/07	12.88	1078.01 *	7.33	1081.11	6.83	1081.28 *	3.03	1086.37 *
10/22/2007	12.68	1078.21 *	7.20	1081.24	6.58	1081.53 *	3.12	1086.28 *
1/14/2008	13.06	1077.83 *	7.62	1080.82	7.60	1080.51 *	3.26	1086.14
4/28/2008	12.21	1078.68	7.14	1081.30	6.67	1081.44 *	3.00	1086.40 *
8/12/2008	12.52	1078.37	7.21	1081.23	6.71	1081.40 *	3.13	1086.27 *
10/29/2008	12.90	1077.99	7.28	1081.16	6.72	1081.39 *	3.25	1086.15
04/13/09	13.12	1077.77	7.52	1080.92	7.05	1081.06 *	2.98	1086.42 *
10/05/09	12.94	1077.95	7.28	1081.16	6.75	1081.36 *	3.19	1086.21 *
04/14/10	13.01	1077.88	6.86	1081.58	6.99	1081.12 *	2.89	1086.51 *
10/20/10	12.21	1078.68	5.67	1082.77	6.59	1081.52 *	3.38	1086.02
01/18/11	12.41	1078.48	7.3	1081.14	6.91	1081.20 *	3.23	1086.17 *
03/16/11	12.95	1077.94	7.52	1080.92	7.12	1080.99 *	3.13	1086.27 *

Well Data	OW-18		OW-19		OW-20		OW-21	
Well Depth from TOC (feet)	19.5		19.5		19.5		19.5	
Screen Length (feet)	10		10		10		10	
Surface Elevation (MSL) <sup>A</sup>	1091.889		1091.163		1091.809		1091.282	
Top of Casing Elevation (MSL) <sup>A</sup>	1091.357		1090.817		1091.282		1091.03	
Top of Screen Elevation (MSL)	1081.9		1081.3		1081.8		1081.5	
Bottom of Screen Elevation (MSL)	1071.9		1071.3		1071.8		1071.5	
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
	Constructed January 2011		Constructed January 2011		Constructed January 2011		Constructed January 2011 #	
01/18/11	13.31	1078.05 *	12.71	1078.11	13.35	1077.93 *	13.11	1077.92
3/16/2011	14.85	1076.51	13.19	1077.63	13.93	1077.35	13.74	1077.29



**Table 1. Groundwater Elevation Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	TW-1		TW-2	
Well Depth from TOC (feet)	20		15	
Screen Length (feet)	10		10	
Surface Elevation (MSL) <sup>A</sup>	1091.95		1087.79	
Top of Casing Elevation (MSL) <sup>A</sup>	1091.52		1087.18	
Top of Screen Elevation (MSL)	1081.5		1082.2	
Bottom of Screen Elevation (MSL)	1071.5		1072.2	
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)
	Constructed October 2008		Constructed October 2008	
10/29/08	14.91	1076.61 *	9.20	1077.98
04/13/09	15.34	1076.18 *	9.30	1077.88
10/05/09	15.01	1076.51 *	9.20	1077.98
04/14/10	15.05	1076.47 *	9.18	1078.00
10/20/10	13.99	1077.53 *	8.43	1078.75
01/18/11	14.46	1077.06 *	8.74	1078.44
03/16/11	14.99	1076.53 *	9.10	1078.08

[U-EPK/JTB 1/05][U-EPK/PAR 5/05][U-PAR/RLH 8/05][U-EPK/PAR 6/06][U-RFS/KJB 11/10]

TOC : Top of PVC well casing

OW : Water table monitoring well

--: Not measured

Water level stopped functioning during field activities on 4/20/04.

\* : Water level elevation above top of screen elevation

P/PZ : Piezometer

MSL: Elevations are referenced to feet above Mean Sea Level

A: Elevations for all the site wells were re-surveyed on June 6 and 7, 2007 for previously existing wells and on August 15, 2007 for new wells by WPSC personnel.

**Table 2. Sediment Observations & Thickness****1177 Former Stevens Point MGP Site, WPSC**

Wisconsin River Sediment Poling June 13 and the week of July 9-13, 2007

Poling Point <sup>1</sup>	Depth to Bottom	Depth to Refusal	Sed. Thick (inch)	Notes
P-1A		6"		Rocky
P-1A1	2' 7"	2' 9"	2	Sandy
P-1B		3' 3"		Hard Bottom
P-1B1		2" 3"		Sandy
P-1C	2' 3"	2' 4"	1	Sandy
P-1C1		6' 2"		Hard
P-1D	14' 5"	14' 7"	2	Sandy
P-2A		1' 8"		Rocky, 2' deep between rocks
P-2A1		3' 3"		Sandy
P-2B		13' 7"		Sandy/Gravel
P-2B1		16' 3"		Sand
P-2C	16' 4"	16' 5"	1	Sand
P-2C1		15' 9"		Sand/Gravel
P-2D	16' 4	16' 5"	1	Sand/Gravel
P-3A		4' 6"		Rocky
P-3A1	7' 1"	7' 2"	1	Sandy/Rocky
P-3B		13' 7"		Sandy/Gravel
P-3B1	14' 3"	14' 4"	1	Sandy
P-3C		15' 2"		Hard
P-3C1	17' 0"	17' 3"	3	Sandy
P-3D		18' 0"		Sandy/Gravel
P-4A		1' 6"		Sandy/Gravel
P-4A1		10' 7"		Sandy/Gravel
P-4B		16' 2"		Rocky
P-4B1		17' 7"		Sandy/Gravel
P-4C		16' 8"		Sandy/Rocky
P-4C1		17' 6"		Rocky
P-4D		18' 6"		Rocky
P-5A		1' 6"		Rocks
P-5A1		13' 6"		Rock
P-5B		15' 10"		Sandy/Rocky
P-5B1		16' 11"		Sandy/Rocky
P-5C		21' 0"		Gravel/Rocky
P-5C1		19' 2"		Gravel/Rocky
P-5D		18' 8"		Rocky
P-7A		13' 8"		Rocky
P-7B		23' 6"		Sandy
P-7C		20' 2"		Rocky
P-7D		19' 1"		Rocky
P-7E		16' 8"		Rocky
P-7F		16' 11"		Sandy
P-7G		10' 3"		Sand/Gravel
P-6A		2' 0"		Sandy
P-6B		4' 9"		Sandy
P-6C		15' 11"		Sandy
P-6D		18' 11"		Sandy
SWT-1A	4' 0"	4' 1"	1	Sandy
SWT-1B		13' 3"		Sandy
SWT-1C		15' 8"		Sand/Gravel
SWT-2A		16' 5"		Gravel/Rocky
SWT-2B		20' 4"		Gravel/Sandy
SWT-2C		15' 8"		Hard Sand

**Table 2. Sediment Observations & Thickness****1177 Former Stevens Point MGP Site, WPSC**

Wisconsin River Sediment Poling June 13 and the week of July 9-13, 2007

Poling Point <sup>1</sup>	Depth to Bottom	Depth to Refusal	Sed. Thick (inch)	Notes
<b>Sediment Sampling Points<sup>2</sup></b>				
T1A1	2' 11"	3' 3"	4	Sand w/Soft Sediment
T1B1	4' 9"	4' 11"	2	Sandy/Soft Sediment
T1C1/T1C1a	5' 7"	5' 11"	4	Sandy
T1D1		13' 6"		Rocks
T2A1	3' 1"	3' 4"	3	Soft Sediment w/Sand, Rock next to pole
T3A1	7' 8"	7' 11"	3	Soft Sediment
T3A2		14' 5"		Thin layer of soft Sediment, mostly stiff Sand
T3A3	10' 2"	10' 7"	5	Soft Sediment (Muck)
T3A3a	12' 10"	13' 1"	3	Soft Sediment
T3B1	14' 8"	14' 10"	2	Rocks/little Soft Sediment and Sand
T3C1		15' 10"		Rocks/Sand around Rocks
T3D1/T3D1a	17' 5"	17' 8"	3	Soft Sediment/Sandy
T4A1		4' 4"		Sandy/Gravel
T4A2		15' 2"		Sandy
T4B1		17' 2"		Sandy, stiff Sand
T4C1	18' 7"	18' 9"	2	Soft Sediment to Sandy/some Gravel
T4D1		22' 4"		Sandy
T5A1		6' 6"		Hard Bottom-Rocks
T5B1	20' 6"	20' 9"	3	Soft Sandy Bottom
T5C1/T5C1a		18' 0"		Sandy/Gravel
T5D1		19' 1"		Gravel/Sandy
T6A1	2' 7"	2' 9"	2	Soft Sediment/some Sand
T6B1	15' 3"	15' 5"	2	Soft Sediment on Sand
T6C1	15' 8"	15' 11"	3	Soft Sediment with Sand
T6D1	17' 0"	17' 1"	1	Sandy
T6T3A1	3' 1"	3' 2"	1	Soft Sediment (Muck) w/Sand
T7A1/T7A1a		6' 8"		Gravel/Sand
T7B1	14' 11"	15' 1"	2	Sand/Rocks
T7C1	15' 0"	15' 1"	1	Soft Sediment/Sand
T7C2		17' 1"		Rock-soft sediment south of Rock

Notes:

- 1) Poling point data collected on June 13, 200.
- 2) Sediment sampling locations were completed the week of July 9, 2007.

**Table 3. Soil Screening Benchmark Values**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Analyte (mg/kg)	Residential soil criteria				Outdoor Worker Screening Criteria							
	Screening Criteria		U.S. EPA 2002		WIDNR 2007	Screening Criteria		U.S. EPA 2002		WIDNR 2007		
	Source	Value	Residential SSLs Ingestion- Dermal	Residential SSLs Inhalation of Volatiles	Residential SSLs Inhalation of Fugitive Particles	NR 720 Soil Cleanup Standards, non-industrial	Source	Value	Outdoor Worker SSLs Ingestion- Dermal	Outdoor Worker SSLs Inhalation of Volatiles	Outdoor Worker SSLs Inhalation of Fugitive Particles	NR 720 Soil Cleanup Standards, industrial
<b>PVOCs</b>												
Benzene	SSL-InhVol	0.8	12	0.8		SSL-InhVol	1	58	1			
Ethylbenzene	SSL-InhVol	5.4 *	5.4 *	5.4 *		SSL-InhVol	27 *	27 *	27 *			
Toluene	SSL-InhVol	650	16000	650		SSL-InhVol	650	230000	650			
meta-Xylene	SSL-Ing/Der	160,000	160000			SSL-Ing/Der	1000000	1000000				
meta+para-Xylene	SSL-Ing/Der	160,000	160000			SSL-Ing/Der	1000000	1000000				
ortho-Xylene	SSL-Ing/Der	160,000	160000			SSL-Ing/Der	1000000	1000000				
para-Xylene	SSL-Ing/Der	160,000	160000			SSL-Ing/Der	1000000	1000000				
Xylene isomers (total)	SSL-Ing/Der	160,000	160000			SSL-Ing/Der	1000000	1000000				
1,3,5-Trimethylbenzene												
1,2,4-Trimethylbenzene												
<b>Semivolatile Organic Comp.</b>												
<b>PAHs</b>												
Acenaphthene	SSL-Ing/Der	3,400	3400			SSL-Ing/Der	37000	37000				
Acenaphthylene												
Anthracene	SSL-Ing/Der	17,000	17000			SSL-Ing/Der	180000	180000				
Benz[a]anthracene	SSL-Ing/Der	0.6	0.6			SSL-Ing/Der	2	2				
Benzo[b]fluoranthene	SSL-Ing/Der	0.6	0.6			SSL-Ing/Der	2	2				
Benzo[k]fluoranthene	SSL-Ing/Der	6	6			SSL-Ing/Der	23	23				
Benzo[a]pyrene	SSL-Ing/Der	0.06	0.06			SSL-Ing/Der	0.2	0.2				
Benzo[g,h,i]perylene												
Chrysene	SSL-Ing/Der	62	62			SSL-Ing/Der	230	230				
Dibenz[a,h]anthracene	SSL-Ing/Der	0.06	0.06			SSL-Ing/Der	0.2	0.2				
Fluoranthene	SSL-Ing/Der	2,300	2300			SSL-Ing/Der	24000	24000				
Fluorene	SSL-Ing/Der	2,300	2300			SSL-Ing/Der	24000	24000				
Indeno[1,2,3-cd]pyrene	SSL-Ing/Der	0.6	0.6			SSL-Ing/Der	2	2				
Naphthalene	SSL-InhVol	3.6 *	3.6 *	3.6 *		SSL-InhVol	18 *	18 *	18 *			
Phenanthrene												
Pyrene	SSL-Ing/Der	1,700	1700			SSL-Ing/Der	18000	18000				
2-Methylnaphthalene												
<b>Phenols</b>												
2,4-Dimethylphenol	SSL-Ing/Der	1,200	1200			SSL-Ing/Der	14000	14000				
2-Methylphenol	SSL-Ing/Der	3,100	3100			SSL-Ing/Der	34000	34000				
4-Methylphenol												
Phenol	SSL-Ing/Der	18,000	18000			SSL-Ing/Der	210000	210000				

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Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Analyte (mg/kg)	Residential soil criteria		U.S. EPA 2002				WIDNR 2007	Outdoor Worker Screening Criteria		U.S. EPA 2002			WIDNR 2007
	Source	Value	Residential SSLs Ingestion- Dermal	Residential SSLs Inhalation of Volatiles	Residential SSLs Inhalation of Fugitive Particles	NR 720 Soil Cleanup Standards, non-industrial	Source	Value	Outdoor Worker SSLs Ingestion- Dermal	Outdoor Worker SSLs Inhalation of Volatiles	Outdoor Worker SSLs Inhalation of Fugitive Particles	NR 720 Soil Cleanup Standards, industrial	
<b>Inorganics</b>													
Aluminum													
Antimony	SSL-Ing/Der	31	31				SSL-Ing/Der	450	450				
Arsenic	SSL-Ing/Der	0.4	0.4		770	0.039	SSL-Ing/Der	2	2	1400	1.6		
Barium	SSL-Ing/Der	5,500	5500		710000		SSL-Ing/Der	79000	79000	1000000			
Cadmium	SSL-Ing/Der	70	70		1800	8	SSL-Ing/Der	900	900	3400	510		
Chromium	SSL-Ing/Der	230	230		280		SSL=InhFP	510	3400	510			
Chromium, trivalent	SSL-Ing/Der	120,000	120000			16000	SSL-Ing/Der	1000000	1000000				
Copper													
Cyanide, Amenable	SSL-Ing/Der	1,600	1600				SSL-Ing/Der	23000	23000				
Cyanide, Total	(see note)	1,600					(see note)	23000					
Cyanide, WAD	(see note)	1,600					(see note)	23000					
Iron													
Lead	(see note)	400				50	(see note)	710				500	
Manganese													
Mercury	SSL-InhVol	10	23	10			SSL-InhVol	14	340	14			
Nickel	SSL-Ing/Der	1,600	1600		14000		SSL-Ing/Der	23000	23000		26000		
Selenium	SSL-Ing/Der	390	390				SSL-Ing/Der	5700	5700				
Silver	SSL-Ing/Der	390	390				SSL-Ing/Der	5700	5700				
Vanadium	SSL-Ing/Der	550	550				SSL-Ing/Der	7900	7900				
Zinc	SSL-Ing/Der	23,000	23000				SSL-Ing/Der	340000	340000				

**Notes:**

- NR720 - Wisconsin DNR Soil Cleanup Standard Standard - Non-Industrial (WIDNR 2007)
- SSL - soil screening level
- SSL-Ing/Der - Residential SSLs for ingestion and dermal exposure (U.S. EPA 2002)
- SSL-InhVol - Residential SSLs for inhalation of volatiles (U.S. EPA 2002)
- SSL-InhFP - Residential SSLs for inhalation of fugitive particles (U.S. EPA 2002)
- WAD - Weak acid dissociable

- <sup>a</sup> Screening values for these xylenes are based on the SSLs for meta-, ortho-, and para-Xylenes.
- <sup>b</sup> The screening value used for WAD cyanide is based on the SSL for amenable cyanide.
- <sup>c</sup> The screening value used for lead in soil is based on U.S. EPA (1994).
- \* Naphthalene and ethylbenzene screening levels modified in accordance with November 2011 USEPA/IBS discussions.

Table 4. Soil Analytical Results - Polynuclear Aromatic Hydrocarbon (PAH, µg/Kg)

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities  
 1111 Crosby Avenue, Steven's Point, Wisconsin  
 USEPA# : WIN000509983 BRRTS# : 0250000079

Sample ID	Sample Depth	Collection Date	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
<b>Soil Screening Benchmarks</b>																				
<b>Ingestion Pathway, Residential</b>			NS	NS	3400000	NS	17000000	600	60	600	NS	6000	62000	60	2300000	2300000	600	3600	NS	1700000
<b>Outdoor Worker Ingestion-Dermal</b>			NS	NS	37000000	NS	180000000	2000	200	2000	NS	23000	230000	200	24000000	24000000	2000	18000	NS	18000000
<b>Indoor Worker Ingestion-Dermal</b>			NS	NS	120000000	NS	610000000	8000	800	8000	NS	78000	780000	800	82000000	82000000	8000	18000	NS	61000000
OW17	10 - 12'	7/17/2007	< 48 Q UJ	< 54 Q UJ	< 52 Q UJ	< 44 Q UJ	< 46 Q UJ	260 Q J	<b>280 Q J</b>	240 Q J	130 Q	340 Q J	310 Q J	< 70 Q UJ	320 Q J	< 64 Q UJ	160 Q	< 80 Q UJ	83 Q	280 Q J
	12 - 14'	7/17/2007	< 40 Q UJ	< 45 Q UJ	< 43 Q UJ	< 36 Q UJ	< 39 Q UJ	< 34 Q UJ	< 41 Q UJ	< 43 Q UJ	< 52 Q UJ	< 39 Q UJ	< 53 Q UJ	< 58 Q UJ	< 58 Q UJ	< 53 Q UJ	< 65 Q UJ	< 67 Q UJ	< 34 Q UJ	< 30 Q UJ
PZ16	12 - 14'	7/18/2007	6000	12000	12000	1100	11000	<b>6600</b>	<b>5500</b>	<b>4000</b>	2500	4100	5500	<b>910</b>	18000	8600	<b>2300</b>	<b>27000</b>	29000	13000
SB301	0 - 1'	7/17/2007	< 4.3	< 4.5	< 4.2	< 4.1	< 5.1	10 Q	12 Q	13 Q	10 Q	11 Q	13 Q	< 3.9	25	< 4.9	8.4 Q	9.2 Q	15	20
SB302	0 - 1'	7/17/2007	< 3.6	< 3.7	< 3.5	< 3.4	< 4.2	< 6.2	5.7 Q	6.2 Q	6.1 Q	5.4 Q	6.5 Q	< 3.2	7.7 Q	< 4	4.4 Q	6.2 Q	< 3.5	6.2 Q
SB303	0 - 2'	7/17/2007	8 Q	12	6.7 Q	39	100	160	<b>200</b>	200	130	200	230	41	350	8.9 Q	110	15	120	280
SB304	0 - 2'	7/17/2007	< 3.5	< 3.6	3.5 Q	< 3.3	10 Q	26	28	28	21	23	32	6.3 Q	77	< 3.9	17	< 4.6	41	57
SB305	0 - 2'	7/17/2007	< 3.7	< 3.8	< 3.6	< 3.5	< 4.4	7.2 Q	8.7 Q	8.9 Q	6.4 Q	8.2 Q	9.4 Q	< 3.4	16	< 4.2	5.2 Q	< 4.9	6 Q	13
SB306	0 - 2'	7/17/2007	< 4	< 4.1	< 3.9	< 3.8	< 4.7	< 6.9	< 3.7	< 3.7	< 4.6	< 4	< 5.7	< 3.6	4.1 Q	< 4.5	< 3.3	< 5.2	< 3.8	3.4 Q
SB307	0 - 2'	7/17/2007	< 3.4	< 3.5	< 3.3	< 3.2	< 4	< 6	3.8 Q	4 Q	< 4	3.5 Q	5.6 Q	< 3.1	7.6 Q	< 3.8	< 2.8	< 4.5	3.8 Q	6.5 Q
SB308	0 - 2'	7/17/2007	< 3.5	< 3.6	< 3.4	< 3.3	< 4.1	14 Q	16	20	15	18	21	4.9 Q	35	< 3.9	12	< 4.6	13	28
SB311	13 - 15'	7/18/2007	820	1400	2500	240	3300	<b>1900</b>	<b>1900</b>	<b>1200</b>	840	1600	1600	<b>340</b>	5100	2200	<b>830</b>	1500	8000	3700
	18 - 20'	7/17/2007	< 38 Q UJ	< 43 Q UJ	< 41 Q UJ	< 35 Q UJ	< 37 Q UJ	< 33 Q UJ	< 39 Q UJ	< 41 Q UJ	< 50 Q UJ	< 37 Q UJ	< 51 Q UJ	< 56 Q UJ	< 56 Q UJ	< 51 Q UJ	< 63 Q UJ	< 64 Q UJ	< 32 Q UJ	< 29 Q UJ
SB312	3 - 5'	7/17/2007	< 40 Q UJ	< 45 Q UJ	< 43 Q UJ	< 36 Q UJ	< 39 Q UJ	< 34 Q UJ	< 41 Q UJ	< 43 Q UJ	< 52 Q UJ	< 39 Q UJ	< 53 Q UJ	< 58 Q UJ	< 58 Q UJ	< 53 Q UJ	< 65 Q UJ	< 67 Q UJ	< 34 Q UJ	39 Q
	14 - 16'	7/18/2007	< 40 Q UJ	< 45 Q UJ	< 44 Q UJ	< 37 Q UJ	< 39 Q UJ	< 35 Q UJ	< 41 Q UJ	< 43 Q UJ	< 53 Q UJ	< 39 Q UJ	< 54 Q UJ	< 59 Q UJ	< 59 Q UJ	< 54 Q UJ	< 66 Q UJ	< 68 Q UJ	< 34 Q UJ	< 30 Q UJ
	23 - 25'	7/18/2007	< 3.8	< 4	< 3.8	< 3.6	< 4.5	< 6.7	< 3.6	< 3.6	< 4.5	< 3.9	< 5.5	< 3.5	4.7 Q	< 4.3	< 3.2	< 5.1	4.7 Q	3.2 Q
SB314	14 - 16'	7/18/2007	42	66	110	11 Q	46	68	<b>86</b>	59	52	69	68	18	140	66	46	220	130	130
	23 - 25'	7/18/2007	< 3.8	< 3.9	< 3.7	< 3.6	8.9 Q	< 6.6	< 3.6	< 3.5	< 4.4	< 3.8	< 5.4	< 3.4	9.3 Q	4.5 Q	< 3.1	6.9 Q	13	6.6 Q
SB315	11 - 13'	7/18/2007	110 Q	55 Q	530	190	1200	<b>1700</b>	<b>1500</b>	<b>1100</b>	750	1200	1500	<b>260</b>	3900	510	<b>690</b>	110 Q	2600	2900
SB316	23 - 25'	7/18/2007	< 4	< 4.1	4.5 Q	< 3.8	15 Q	29	30	28	22	24	29	5.5 Q	78	4.7 Q	18	< 5.3	43	58
SB317	13 - 15'	7/18/2007	5 Q	8.4 Q	8.1 Q	< 4.3	17 Q	< 7.8	5.4 Q	< 4.1	< 5.3	4.6 Q	6.5 Q	< 4.1	14	5.9 Q	< 3.7	35	21	12 Q
	16 - 18'	7/18/2007	49	52	89	< 3.6	12 Q	< 6.6	4.6 Q	< 3.5	< 4.4	4.1 Q	5.6 Q	< 3.4	11 Q	61	< 3.1	170	69	11



1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample ID	Sample Depth	Collection Date	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
<b>Soil Screening Benchmarks</b>																				
<u>Ingestion Pathway, Residential</u>			NS	NS	3400000	NS	17000000	600	60	600	NS	6000	62000	60	2300000	2300000	600	3600	NS	1700000
<u>Outdoor Worker Ingestion-Dermal</u>			NS	NS	37000000	NS	180000000	2000	200	2000	NS	23000	230000	200	24000000	24000000	2000	18000	NS	18000000
<u>Indoor Worker Ingestion-Dermal</u>			NS	NS	120000000	NS	610000000	8000	800	8000	NS	78000	780000	800	82000000	82000000	8000	18000	NS	61000000
SB318	13 - 15'	7/18/2007	38000	72000	45000	23000	64000	<b><u>37000</u></b>	<b><u>28000</u></b>	<b><u>20000</u></b>	12000	<b><u>23000</u></b>	30000	<b><u>5000</u></b>	97000	53000	<b><u>12000</u></b>	<b><u>200000</u></b>	160000	69000
	18 - 20'	7/18/2007	< 4	< 4.1	4.8 Q	4.7 Q	28	22 Q	18	14	9 Q	15	19 Q	4.4 Q	50	8.4 Q	8.9 Q	6.4 Q	46	36
SB319	2 - 6'	7/18/2007	580 Q	1000 Q	1000 Q	320	1600 Q	<b><u>1700 Q</u></b>	<b><u>2200 Q</u></b>	<b><u>1500</u></b>	1200	1800 Q	1500 Q	<b><u>400 Q</u></b>	3900 Q	1000 Q	<b><u>1100</u></b>	1800 Q	3500 Q	2800 Q
	10 - 12'	7/18/2007	64000	120000	110000	13000	75000	<b><u>62000</u></b>	<b><u>51000</u></b>	<b><u>34000</u></b>	22000	<b><u>40000</u></b>	51000	<b><u>8400</u></b>	160000	78000	<b><u>21000</u></b>	<b><u>260000</u></b>	250000	120000
	18 - 20'	7/18/2007	< 3.4	< 3.5	8.2 Q	< 3.2	9.1 Q	< 5.9	4.4 Q	< 3.1	< 4	3.7 Q	5.3 Q	< 3.1	16	9.9 Q	< 2.8	5.2 Q	23	11
SB320	2 - 6'	7/18/2007	270	340	540	3100	5700	<b><u>13000</u></b>	<b><u>15000</u></b>	<b><u>12000</u></b>	9700	<b><u>12000</u></b>	13000	<b><u>3000</u></b>	27000	990	<b><u>8600</u></b>	950	11000	24000
	10 - 12'	7/18/2007	4900	8300	6900	2700	12000	<b><u>7000</u></b>	<b><u>6700</u></b>	<b><u>4500</u></b>	3700	5400	6400	<b><u>1100</u></b>	18000	6100	<b><u>3300</u></b>	<b><u>22000</u></b>	22000	14000
	18 - 20'	7/18/2007	< 3.6	< 3.7	< 3.5	< 3.4	16	14 Q	12	6.4 Q	6.3 Q	9.1 Q	12 Q	< 3.3	28	< 4.1	4.9 Q	< 4.8	8.5 Q	39
SB321	2 - 6'	7/18/2007	21	32	60	100	230	<b><u>740</u></b>	<b><u>780</u></b>	<b><u>630</u></b>	370	660	700	<b><u>130</u></b>	1400	51	340	100	420	1100
	13 - 15'	7/18/2007	1300	640	2100	< 45	< 56	< 83	< 45	< 44	< 56	< 48	< 68	< 43	< 45	280	< 39	<b><u>8000</u></b>	300	50 Q
	19 - 20'	7/18/2007	26	13	110	< 3.5	26	< 6.5	3.7 Q	< 3.5	< 4.4	< 3.8	< 5.4	< 3.4	39	78	< 3.1	56	94	23

Notes

1) Samples that attain or exceed a soil screening benchmark are identified in underlined and bold.

NS: EPA Generic SSL has not been established for this parameter.

<2.0 : Parameter not detected above the Limit of Detection indicated.

-- : Parameter not analyzed.

Q: Analyte result has been qualified, see laboratory analytical report for additional information.

Other Qualifiers (J, N, R, etc.): Analyte result has been qualified by data validator, see validation report for additional information.

Table 5. Soil Analytical Summary - Petroleum Volatile Organic Compounds (PVOCs, µg/Kg), Cyanide (µg/Kg), and Phenols (µg/Kg)

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample ID	Sample Depth	Collection Date	Benzene	Ethyl-benzene	Toluene	Xylenes, M + P	Xylene, O	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Methyl - Tert - Butyl - Ether	Cyanide, Total	2,4 -Dimethyl phenol	2-Methylphenol	3 and 4 Methylphenol
<b>Wisconsin Generic Soil Residual Contaminant Levels (RCLs) (NR 720, September 2007)</b>														
<u>Non-Industrial Direct Contact</u>			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<u>Industrial Direct Contact</u>			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<b>Soil Screening Benchmarks</b>														
<u>Ingestion Pathway, Residential</u>			12000	5400	16000000	160000000	160000000	NS	NS	NS	1600000	1200000	3100000	NS
<u>Outdoor Worker Ingestion-Dermal</u>			58000	27000	230000000	NS	NS	NS	NS	NS	23000000	14000000	34000000	NS
<u>Indoor Worker Ingestion-Dermal</u>			100000	27000	410000000	1000000000	1000000000	NS	NS	NS	41000000	41000000	100000000	NS
OW17	10 - 12'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	92 Q	< 120 Q UJ	< 180 Q	< 36 Q UJ
	12 - 14'	7/17/2007	< 25	< 25	< 25	< 51	< 25	< 25	< 25	< 25	63 Q	< 100 Q UJ	< 150 Q	< 30 Q UJ
PZ16	12 - 14'	7/18/2007	1700 Q	<b>11000 Q</b>	4500 Q	19000 Q	7200 Q	25000 Q	12000 Q	< 1000 Q	340	< 1200 Q	< 1800 Q	< 370 Q
SB301	0 - 1'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	260	< 120	< 180	< 36
SB302	0 - 1'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	320 Q	< 99	< 150	< 30
SB303	0 - 2'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	--	--	--	--
SB304	0 - 2'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	--	--	--	--
SB305	0 - 2'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	--	--	--	--
SB306	0 - 2'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	--	--	--	--
SB307	0 - 2'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	--	--	--	--
SB308	0 - 2'	7/17/2007	< 25	< 25	< 25	< 51	< 25	< 25	< 25	< 25	--	--	--	--
SB311	13 - 15'	7/18/2007	35 Q	< 25	< 25	< 50	< 25	< 25	< 25	< 25	260 Q	< 110	< 170	49 Q
	18 - 20'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	62 Q	< 96 Q UJ	< 140 Q	< 29 Q UJ
SB312	3 - 5'	7/17/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	66 Q	< 100 Q UJ	< 150 Q	< 30 Q UJ
	14 - 16'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 55	< 100 Q UJ	< 150 Q	< 31 Q UJ
	23 - 25'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 76	< 110	< 160	< 32



1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample ID	Sample Depth	Collection Date	Benzene	Ethyl-benzene	Toluene	Xylenes, M + P	Xylene, O	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Methyl - Tert - Butyl- Ether	Cyanide, Total	2,4 -Dimethyl phenol	2-Methylphenol	3 and 4 Methylphenol
<b>Wisconsin Generic Soil Residual Contaminant Levels (RCLs) (NR 720, September 2007)</b>														
<u>Non-Industrial Direct Contact</u>			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<u>Industrial Direct Contact</u>			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<b>Soil Screening Benchmarks</b>														
<u>Ingestion Pathway, Residential</u>			12000	5400	16000000	160000000	160000000	NS	NS	NS	1600000	1200000	3100000	NS
<u>Outdoor Worker Ingestion-Dermal</u>			58000	27000	230000000	NS	NS	NS	NS	NS	23000000	14000000	34000000	NS
<u>Indoor Worker Ingestion-Dermal</u>			100000	27000	410000000	1000000000	1000000000	NS	NS	NS	41000000	41000000	100000000	NS
SB314	14 - 16'	7/18/2007	48 Q	< 25	51 Q	< 50	< 25	63 Q	< 25	< 25	910	< 130	< 190	< 38
	23 - 25'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 97	< 100	< 160	< 32
SB315	11 - 13'	7/18/2007	62 Q	< 25	100	< 50	46 Q	< 25	< 25	< 25	490	< 210 Q	< 320 Q	< 64 Q
SB316	23 - 25'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 86	< 110	< 170	< 33
SB317	13 - 15'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	130 Q	< 120	< 190	< 37
	16 - 18'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 83	< 100	< 160	< 32
SB318	13 - 15'	7/18/2007	5600 Q	<b>16000 Q</b>	16000 Q	33000 Q	14000 Q	26000 Q	11000 Q	< 1200 Q	140 Q	< 4600 Q	< 6900 Q	< 1400 Q
	18 - 20'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 61	< 110	< 170	< 33
SB319	2 - 6'	7/18/2007	55 Q	56 Q	170	130 Q	68 Q	86	34 Q	< 25	--	--	--	--
	10 - 12'	7/18/2007	1500 Q	<b>7400 Q</b>	910 Q	11000 Q	4500 Q	25000 Q	11000 Q	< 620 Q	420	< 5700 Q	--	< 1700 Q
	18 - 20'	7/18/2007	30 Q	< 25	< 25	< 50	< 25	< 25	< 25	< 25	160 Q	< 94	< 140	< 28
SB320	2 - 6'	7/18/2007	120	46 Q	180	210	150	100	54 Q	< 25	--	--	--	--
	10 - 12'	7/18/2007	110 Q	1500 Q	260 Q	1400 Q	640 Q	1600 Q	790 Q	< 62 Q	3500	< 1100 Q	< 1700 Q	< 330 Q
	18 - 20'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	< 36	< 100	< 150	< 30
SB321	2 - 6'	7/18/2007	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 25	--	--	--	--
	13 - 15'	7/18/2007	< 25	360	< 25	320	220	1200	500	< 25	93 Q	< 130	< 200	< 40
	19 - 20'	7/18/2007	< 25	< 25	< 25	< 50	< 25	71 Q	< 25	< 25	64 Q	< 100	< 150	< 31

**1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities**

**1111 Crosby Avenue, Steven's Point, Wisconsin**

**USEPA# : WIN000509983**

**BRRTS# : 0250000079**

<i>Sample ID</i>	<i>Sample Depth</i>	<i>Collection Date</i>	<i>Benzene</i>	<i>Ethyl-benzene</i>	<i>Toluene</i>	<i>Xylenes, M + P</i>	<i>Xylene, O</i>	<i>1,2,4-Trimethylbenzene</i>	<i>1,3,5-Trimethylbenzene</i>	<i>Methyl - Tert - Butyl- Ether</i>	<i>Cyanide, Total</i>	<i>2,4 -Dimethyl phenol</i>	<i>2-Methylphenol</i>	<i>3 and 4 Methylphenol</i>
<b>Wisconsin Generic Soil Residual Contaminant Levels (RCLs) (NR 720, September 2007)</b>														
<u>Non-Industrial Direct Contact</u>			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<u>Industrial Direct Contact</u>			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<b>Soil Screening Benchmarks</b>														
<u>Ingestion Pathway, Residential</u>			12000	5400	16000000	160000000	160000000	NS	NS	NS	1600000	1200000	3100000	NS
<u>Outdoor Worker Ingestion-Dermal</u>			58000	27000	230000000	NS	NS	NS	NS	NS	23000000	14000000	34000000	NS
<u>Indoor Worker Ingestion-Dermal</u>			100000	27000	410000000	1000000000	1000000000	NS	NS	NS	41000000	41000000	100000000	NS

Notes

- 1) Samples that attain or exceed a soil screening benchmark are identified in underlined and bold.
  - 2) Only detected parameters are shown in report, reference the laboratory analytical report for full list of compounds analyzed.
  - 3) The soil screening benchmark for xylenes derived from the EPA Generic SSLs for m-xylene, o-xylene, and p-xylene.
  - 4) The soil screening benchmark for free cyanide is used for the total cyanides Soil Standard Level.
- NS: NR 720 Residual Contaminant Level, NR 746 Risk Screening Criteria standard or EPA Generic Soil Standard Level has not been established  
 <2.0 : Parameter not detected above the Limit of Detection indicated.  
 --: Analysis not performed.  
 Q: Analyte result has been qualified, see laboratory analytical report for additional information.  
 Other Qualifiers (J, N, R, etc.): Analyte result has been qualified by data validator, see validation report for additional information.



Table 6. Soil Analytical Results - Metals ( µg/Kg)

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities  
 1111 Crosby Avenue, Steven's Point, Wisconsin  
 USEPA# : WIN000509983 BRRTS# : 0250000079

Sample ID	Sample Depth	Collection Date	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Vanadium	Zinc
<b>Wisconsin Generic Soil Residual Contaminant Levels (RCLs) (NR 720, September 2007)</b>																		
<u>Groundwater Pathway</u>			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<u>Non-industrial Direct Contact Pathway</u>			NS	NS	39	NS	8000	14000	NS	NS	50000	NS	NS	NS	NS	NS	NS	NS
<u>Industrial Direct Contact Pathway</u>			NS	NS	1600	NS	510000	200000	NS	NS	500000	NS	NS	NS	NS	NS	NS	NS
<b>Soil Screening Benchmarks</b>																		
<u>Ingestion Pathway, Residential</u>			NS	31000	400	5500000	70000	230000	3100000	NS	400000	NS	23000	1600000	390000	390000	550000	23000000
<u>Outdoor Worker Ingestion-Dermal</u>			NS	450000	2000	79000000	900000	3400000	41000000	NS	NS	NS	340000	23000000	5700000	5700000	7900000	340000000
<u>Indoor Worker Ingestion-Dermal</u>			NS	820000	4000	140000000	2000000	6100000	NS	NS	NS	610000	41000000	10000000	10000000	14000000	610000000	
OW17	10 - 12'	7/17/2007	13000000	--	<u>2600</u>	86000 J	320	21000 J	15000	14000000	13000	260000 J	99	13000	420 Q	--	43000 J	70000
	12 - 14'	7/17/2007	10000000	--	<u>1900</u>	40000 J	180	24000 J	11000	15000000	4800	160000 J	20	9800	400 Q	--	43000 Q J	28000
PZ16	12 - 14'	7/18/2007	2800000	< 110 Q U	<u>800</u>	17000 J	140 Q	7800 J	11000	4800000	13000	64000 J	18	3900	< 77 Q U	< 23	12000 J	26000
SB301	0 - 1'	7/17/2007	5800000	130 Q J	<u>1400</u>	47000 J	270	4900 J	5600	11000000	17000	200000 J	13	3900	440 Q	< 22 U	9600 J	44000
SB302	0 - 1'	7/17/2007	7800000	360 Q	<u>690</u>	89000 J	850	2000 J	4500	26000000	13000	350000 J	3.7 Q	1800	1200	< 56 Q U	3800 J	85000
SB311	13 - 15'	7/18/2007	7800000	< 80 Q U	<u>1100</u>	26000 J	160	18000 J	5000	11000000	6300	64000 J	24	6700	250 Q J	< 21	34000 J	24000
	18 - 20'	7/17/2007	3200000	--	310	16000 J	92 Q	8100 J	9500	5400000	1200	55000 J	< 1.9	5900	120 Q J	--	15000 J	11000 Q
SB312	3 - 5'	7/17/2007	1900000	< 87 Q U	<u>750</u>	8900 J	66 Q	4000 J	4000	2300000	3300	22000 J	15	1800	< 100 Q U	< 18	5200 J	11000
	14 - 16'	7/18/2007	2900000 Q J	--	<u>950 Q</u>	9800 Q J	140 Q	5800 Q J	4400	3800000 Q J	1100 Q	48000 Q J	5.2 Q	5400	< 120 Q U	--	11000 Q J	9700 Q
	23 - 25'	7/18/2007	1200000	< 32 Q U	220	6100 J	49 Q	3200 J	3100	3000000	610	25000 J	< 2.1	2300	< 100 Q U	< 20	8900 J	5000
SB314	14 - 16'	7/18/2007	3800000	140 Q J	<u>630</u>	23000 J	150 Q	8700 J	7100	3900000	11000	74000 J	62	5300	520 Q	< 24	20000 J	36000
	23 - 25'	7/18/2007	3100000	< 31 Q U	<u>470</u>	11000 J	97 Q	5900 J	17000	8700000	1100	58000 J	< 2.1	6400	< 120 Q U	< 19	20000 J	12000
SB315	11 - 13'	7/18/2007	3400000	230 Q J	<u>1500 Q</u>	32000 Q J	300 Q	6700 Q J	9200 Q J	5500000	32000 Q J	120000 Q J	14	5200 Q J	210 Q J	< 20	11000 Q J	23000
SB316	23 - 25'	7/18/2007	2000000	< 33	390	11000 J	67 Q	5700 J	8100	5100000	1000	46000 J	< 2.2	3900	< 38 Q U	< 21	14000 J	7400
SB317	13 - 15'	7/18/2007	6500000	< 37	<u>430</u>	26000 J	120 Q	14000 J	6800	5200000	3600	61000 J	24	5600	510 Q	< 23	21000 J	19000
	16 - 18'	7/18/2007	2000000	< 75 Q U	300	12000 J	52 Q	4800 J	5300	2400000	7300	28000 J	30	2800	< 71 Q U	< 19	6400 J	12000
SB318	13 - 15'	7/18/2007	8300000	320 Q J	<u>2500</u>	49000 J	320	24000 J	23000	14000000	15000	120000 J	24	12000	410 Q	< 21	57000 J	18000
	18 - 20'	7/18/2007	3300000	< 33	280	14000 J	110 Q	9400 J	8600	5300000	1300	60000 J	< 2.2	6100	< 38	< 21	13000 J	12000

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample ID	Sample Depth	Collection Date	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Vanadium	Zinc
<b>Wisconsin Generic Soil Residual Contaminant Levels (RCLs) (NR 720, September 2007)</b>																		
<u>Groundwater Pathway</u>			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
<u>Non-industrial Direct Contact Pathway</u>			NS	NS	39	NS	8000	14000	NS	NS	50000	NS	NS	NS	NS	NS	NS	NS
<u>Industrial Direct Contact Pathway</u>			NS	NS	1600	NS	510000	200000	NS	NS	500000	NS	NS	NS	NS	NS	NS	NS
<b>Soil Screening Benchmarks</b>																		
<u>Ingestion Pathway, Residential</u>			NS	31000	400	5500000	70000	230000	3100000	NS	400000	NS	23000	1600000	390000	390000	550000	23000000
<u>Outdoor Worker Ingestion-Dermal</u>			NS	450000	2000	79000000	900000	3400000	41000000	NS	NS	NS	340000	23000000	5700000	5700000	7900000	340000000
<u>Indoor Worker Ingestion-Dermal</u>			NS	820000	4000	140000000	2000000	6100000	NS	NS	NS	610000	41000000	10000000	10000000	10000000	14000000	610000000
SB319	10 - 12'	7/18/2007	4500000	< 110 Q U	<b><u>2500</u></b>	46000 J	780	8900 J	16000	6700000	130000	84000 J	46	6400	390 Q	22 Q U	17000 J	190000
	18 - 20'	7/18/2007	4200000	< 74 Q U	<b><u>1800</u></b>	17000 J	130	14000 J	14000	13000000	1600	96000 J	< 1.9	7200	140 Q J	< 17	26000 J	13000
SB320	10 - 12'	7/18/2007	3000000	340 Q J	<b><u>1500</u></b>	24000 J	240	6500 J	17000	6800000	58000	63000 J	200	4800	170 Q J	< 20	11000 J	120000
	18 - 20'	7/18/2007	2700000	< 31 Q U	210	19000 J	61 Q	6100 J	6100	3400000	950	39000 J	< 2	4700	< 36 Q U	< 18	8700 J	8800
SB321	13 - 15'	7/18/2007	5600000	< 83 Q U	<b><u>530</u></b>	38000 J	130 Q	9500 J	5200	4900000	5000	61000 J	17	4700	400 Q	< 24	12000 J	20000
	19 - 20'	7/18/2007	2600000	< 34 Q U	<b><u>510</u></b>	15000 J	58 Q	5400 J	5000	4600000	1000	36000 J	2.2 Q	3900	< 96 Q U	< 19	9200 J	10000

Notes

1) Samples that attain or exceed a soil screening benchmark are identified in underlined and bold.

NS: Wisconsin Department of Natural Resources Generic Soil Residual Contaminant Level (RCL) or an EPA Generic SSL has not been established for this parameter.

<2.0 : Parameter not detected above the Limit of Detection indicated.

-- : Parameter not analyzed.

Q: Analyte result has been qualified, see laboratory analytical report for additional information.

Other Qualifiers (J, N, R, etc.): Analyte result has been qualified by data validator, see validation report for additional information.



**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-3R		PZ-3B					
Well Depth from TOC (feet)	17.21		41.76					
Screen Length (feet)	10		5					
Surface Elevation (MSL) <sup>A</sup>	1088.20		1088.20					
Top of Casing Elevation (MSL) <sup>A</sup>	1090.54		1090.85					
Top of Screen Elevation (MSL)	1083.3		1054.1					
Bottom of Screen Elevation (MSL)	1073.3		1049.1		Middle of screen elevation (piez.)			1051.6
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
04/20/04	9.71	1080.83	9.92	1080.93	-0.10	29.24	-3.4E-03	up
07/20/04	9.54	1081.00	9.71	1081.14	-0.14	29.41	-4.8E-03	up
10/12/04	9.89	1080.65	10.01	1080.84	-0.19	29.06	-6.5E-03	up
01/25/05	9.91	1080.63	10.11	1080.74	-0.11	29.04	-3.8E-03	up
04/11/05	9.71	1080.83	9.70	1081.15	-0.32	29.24	-1.1E-02	up
07/11/05	9.89	1080.65	10.09	1080.76	-0.11	29.06	-3.8E-03	up
10/03/05	9.67	1080.87	9.87	1080.98	-0.11	29.28	-3.8E-03	up
01/05/06	9.86	1080.68	10.04	1080.81	-0.13	29.09	-4.5E-03	up
04/11/06	9.75	1080.79	9.99	1080.86	-0.07	29.20	-2.4E-03	up
07/21/06	10.00	1080.54	10.13	1080.72	-0.18	28.95	-6.2E-03	up
10/04/06	10.10	1080.44	9.94	1080.91	-0.47	28.85	-1.6E-02	up
2/22/2007	10.02	1080.52	10.17	1080.68	-0.16	28.93	-5.5E-03	up
4/19/2007	9.83	1080.71	10.03	1080.82	-0.11	29.12	-3.8E-03	up
7/19/2007	10.03	1080.51	10.15	1080.70	-0.19	28.92	-6.6E-03	up
10/22/2007	9.70	1080.84	9.90	1080.95	-0.11	29.25	-3.8E-03	up
1/14/2008	9.99	1080.55	10.11	1080.74	-0.19	28.96	-6.6E-03	up
4/28/2008	9.45	1081.09	9.72	1081.13	-0.04	29.50	-1.4E-03	flat
8/12/2008	9.85	1080.69	9.95	1080.90	-0.21	29.10	-7.2E-03	up
10/29/2008	9.90	1080.64	10.01	1080.84	-0.20	29.05	-6.9E-03	up
04/13/09	9.80	1080.74	10.05	1080.80	-0.06	29.15	-2.1E-03	up
10/05/09	9.98	1080.56	10.13	1080.72	-0.16	28.97	-5.5E-03	up
04/13/10	9.93	1080.61	10.11	1080.74	-0.13	29.02	-4.5E-03	up
10/19/2010	9.68	1080.86	9.84	1081.01	-0.15	29.27	-5.1E-03	up
01/18/11	9.86	1080.68	10.12	1080.73	-0.05	29.09	-1.7E-03	up
03/16/11	9.75	1080.79	10.08	1080.77	0.02	29.20	6.8E-04	flat

**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-5R		P-5B					
Well Depth from TOC (feet)	16.35		48.78					
Screen Length (feet)	10		5					
Surface Elevation (MSL) <sup>A</sup>	1086.54		1086.54					
Top of Casing Elevation (MSL) <sup>A</sup>	1089.15		1088.20					
Top of Screen Elevation (MSL)	1082.8		1044.4					
Bottom of Screen Elevation (MSL)	1072.8		1039.4		Middle of screen elevation (piez.)			1041.9
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
04/20/04	--	--	--	--	---	---	---	
07/20/04	9.48	1079.67	8.62	1079.58	0.09	37.75	2.4E-03	down
10/12/04	10.02	1079.13	9.06	1079.14	-0.01	37.21	-2.7E-04	flat
01/25/05	10.15	1079.00	9.33	1078.87	0.13	37.08	3.5E-03	down
04/11/05	9.95	1079.20	9.24	1078.96	0.24	37.28	6.4E-03	down
07/11/05	10.01	1079.14	9.16	1079.04	0.10	37.22	2.7E-03	down
10/03/05	9.67	1079.48	8.97	1079.23	0.25	37.56	6.7E-03	down
01/05/06	10.18	1078.97	9.38	1078.82	0.15	37.05	4.0E-03	down
04/11/06	10.11	1079.04	9.36	1078.84	0.20	37.12	5.4E-03	down
07/21/06	10.23	1078.92	9.28	1078.92	0.00	37.00	0.0E+00	flat
10/04/06	10.19	1078.96	9.27	1078.93	0.03	37.04	8.1E-04	flat
2/22/2007	10.33	1078.82	9.28	1078.92	-0.10	36.90	-2.7E-03	up
4/19/2007	9.9	1079.25	9.27	1078.93	0.32	37.33	8.6E-03	down
7/19/2007	10.22	1078.93	9.23	1078.97	-0.04	37.01	-1.1E-03	flat
10/22/2007	10.02	1079.13	9.05	1079.15	-0.02	37.21	-5.4E-04	flat
1/14/2008	nm	---	9.35	1078.85	---	---	---	flat
4/28/2008	9.29	1079.86	8.62	1079.58	0.28	37.94	7.4E-03	down
8/12/2008	9.97	1079.18	9.00	1079.20	-0.02	37.26	-5.4E-04	flat
10/29/2008	10.18	1078.97	9.23	1078.97	0.00	37.05	0.0E+00	flat
04/13/09	9.96	1079.19	9.25	1078.95	0.24	37.27	6.4E-03	down
10/05/09	10.18	1078.97	9.24	1078.96	0.01	37.05	2.7E-04	flat
04/13/10	10.08	1079.07	9.25	1078.95	0.12	37.15	3.2E-03	down
10/20/2010	9.62	1079.53	8.71	1079.49	0.04	37.61	1.1E-03	flat
1/18/2011	9.88	1079.27	9.1	1079.10	0.17	37.35	4.6E-03	down
03/16/11	9.6	1079.55	9.21	1078.99	0.56	37.63	1.5E-02	down

**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data		OW-7A		PZ-7B <sup>A</sup>				
Well Depth from TOC (feet)		18.15		43.17				
Screen Length (feet)		10		5				
Surface Elevation (MSL) <sup>A</sup>		1085.39		1085.39				
Top of Casing Elevation (MSL) <sup>A</sup>		1088.65		1086.51				
Top of Screen Elevation (MSL)		1080.5		1048.3				
Bottom of Screen Elevation (MSL)		1070.5		1043.3		Middle of screen elevation (piez.)		1045.8
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
04/20/04	8.24	1080.41	7.15	1079.36	1.05	34.57	3.0E-02	down
07/20/04	8.21	1080.44	6.50	1080.01	0.43	34.60	1.2E-02	down
10/12/04	8.30	1080.35	7.02	1079.49	0.86	34.51	2.5E-02	down
01/25/05	8.40	1080.25	7.28	1079.23	1.02	34.41	3.0E-02	down
04/11/05	8.24	1080.41	7.20	1079.31	1.10	34.57	3.2E-02	down
07/11/05	8.29	1080.36	7.10	1079.41	0.95	34.52	2.8E-02	down
10/03/05	8.23	1080.42	6.92	1079.59	0.83	34.58	2.4E-02	down
01/05/06	8.41	1080.24	7.31	1079.20	1.04	34.40	3.0E-02	down
04/11/06	8.31	1080.34	7.30	1079.21	1.13	34.50	3.3E-02	down
07/21/06	8.35	1080.30	7.22	1079.29	1.01	34.46	2.9E-02	down
10/04/06	8.40	1080.25	7.21	1079.30	0.95	34.41	2.8E-02	down
2/22/2007	8.4	1080.25	7.42	1079.09	1.16	34.41	3.4E-02	down
4/19/2007	8.48	1080.17	7.18	1079.33	0.84	34.33	2.4E-02	down
7/19/2007	8.35	1080.30	7.15	1079.36	0.94	34.46	2.7E-02	down
10/22/2007	8.22	1080.43	6.99	1079.52	0.91	34.59	2.6E-02	down
1/14/2008	8.43	1080.22	7.33	1079.18	1.04	34.38	3.0E-02	down
4/28/2008	8.13	1080.52	6.62	1079.89	0.63	34.68	1.8E-02	down
8/12/2008	8.33	1080.32	6.96	1079.55	0.77	34.48	2.2E-02	down
10/29/2008	8.36	1080.29	7.11	1079.40	0.89	34.45	2.6E-02	down
04/13/09	8.26	1080.39	7.21	1079.30	1.09	34.55	3.2E-02	down
10/05/09	8.38	1080.27	7.13	1079.38	0.89	34.43	2.6E-02	down
04/13/10	8.28	1080.37	7.21	1079.30	1.07	34.53	3.1E-02	down
10/19/2010	8.26	1080.39	6.68	1079.83	0.56	34.55	1.6E-02	down
1/18/2011	8.4	1080.25	6.95	1079.56	0.69	34.41	2.0E-02	down
03/16/11	8.23	1080.42	7.12	1079.39	1.03	34.58	3.0E-02	down

**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-9		PZ-9B					
Well Depth from TOC (feet)	21.18		53.65					
Screen Length (feet)	10		5					
Surface Elevation (MSL) <sup>A</sup>	1088.33		1088.33					
Top of Casing Elevation (MSL) <sup>A</sup>	1090.92		1090.85					
Top of Screen Elevation (MSL)	1079.7		1042.2					
Bottom of Screen Elevation (MSL)	1069.7		1037.2		Middle of screen elevation (piez.)			1039.7
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
04/20/04	12.17	1078.75	12.15	1078.70	0.05	39.05	1.3E-03	flat
07/20/04	12.79	1078.13	12.70	1078.15	-0.02	38.43	-5.2E-04	flat
10/12/04	12.28	1078.64	12.23	1078.62	0.02	38.94	5.1E-04	flat
01/25/05	12.44	1078.48	12.41	1078.44	0.04	38.78	1.0E-03	flat
04/12/05	12.33	1078.59	12.32	1078.53	0.06	38.89	1.5E-03	down
07/11/05	12.32	1078.60	12.27	1078.58	0.02	38.90	5.1E-04	flat
10/03/05	12.16	1078.76	12.05	1078.80	-0.04	39.06	-1.0E-03	flat
01/05/06	12.49	1078.43	12.38	1078.47	-0.04	38.73	-1.0E-03	flat
04/11/06	12.41	1078.51	12.39	1078.46	0.05	38.81	1.3E-03	flat
07/21/06	12.41	1078.51	12.38	1078.47	0.04	38.81	1.0E-03	flat
10/04/06	12.37	1078.55	12.35	1078.50	0.05	38.85	1.3E-03	flat
2/22/2007	12.54	1078.38	12.56	1078.29	0.09	38.68	2.3E-03	down
4/19/2007	12.30	1078.62	12.30	1078.55	0.07	38.92	1.8E-03	down
7/19/2007	12.40	1078.52	12.38	1078.47	0.05	38.82	1.3E-03	flat
10/22/2007	12.16	1078.76	12.10	1078.75	0.01	39.06	2.6E-04	flat
1/14/2008	12.40	1078.52	12.48	1078.37	0.15	38.82	3.9E-03	down
4/28/2008	11.80	1079.12	11.68	1079.17	-0.05	39.42	-1.3E-03	flat
8/12/2008	12.18	1078.74	12.15	1078.70	0.04	39.04	1.0E-03	flat
10/29/2008	12.38	1078.54	12.36	1078.49	0.05	38.84	1.3E-03	flat
04/13/09	12.35	1078.57	12.29	1078.56	0.01	38.87	2.6E-04	flat
10/05/09	12.40	1078.52	12.36	1078.49	0.03	38.82	7.7E-04	flat
04/13/10	12.35	1078.57	12.31	1078.54	0.03	38.87	7.7E-04	flat
10/19/10	11.84	1079.08	11.77	1079.08	0.00	39.38	0.0E+00	flat
01/18/11	12.13	1078.79	12.05	1078.80	-0.01	39.09	-2.6E-04	flat
03/16/11	12.14	1078.78	12.15	1078.70	0.08	39.08	2.0E-03	down

**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-10		PZ-10B					
Well Depth from TOC (feet)	21.3		53.3					
Screen Length (feet)	10		5					
Surface Elevation (MSL) <sup>A</sup>	1088.41		1088.41					
Top of Casing Elevation (MSL) <sup>A</sup>	1090.95		1090.99					
Top of Screen Elevation (MSL)	1079.7		1042.7					
Bottom of Screen Elevation (MSL)	1069.7		1037.7		Middle of screen elevation (piez.)			1040.2
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
04/20/04	12.21	1078.74	12.36	1078.63	0.11	38.55	2.9E-03	down
07/20/04	11.94	1079.01	11.77	1079.22	-0.21	38.82	-5.4E-03	up
10/12/04	12.43	1078.52	12.23	1078.76	-0.24	38.33	-6.3E-03	up
01/25/05	12.72	1078.23	12.43	1078.56	-0.33	38.04	-8.7E-03	up
04/12/05	12.34	1078.61	12.55	1078.44	0.17	38.42	4.4E-03	down
07/11/05	12.38	1078.57	12.64	1078.35	0.22	38.38	5.7E-03	down
10/03/05	12.30	1078.65	12.39	1078.60	0.05	38.46	1.3E-03	flat
01/05/06	12.49	1078.46	12.80	1078.19	0.27	38.27	7.1E-03	down
04/11/06	12.55	1078.40	12.59	1078.40	0.00	38.21	0.0E+00	flat
07/21/06	12.61	1078.34	12.68	1078.31	0.03	38.15	7.9E-04	flat
10/04/06	12.52	1078.43	12.51	1078.48	-0.05	38.24	-1.3E-03	flat
2/22/2007	12.71	1078.24	12.27	1078.72	-0.48	38.05	-1.3E-02	up
4/19/2007	12.33	1078.62	12.97	1078.02	0.60	38.43	1.6E-02	down
7/19/2007	12.55	1078.40	12.34	1078.65	-0.25	38.21	-6.5E-03	up
10/22/2007	12.28	1078.67	12.50	1078.49	0.18	38.48	4.7E-03	down
1/14/2008	12.58	1078.37	12.67	1078.32	0.05	38.18	1.3E-03	flat
4/28/2008	11.70	1079.25	12.30	1078.69	0.56	39.06	1.4E-02	down
8/12/2008	12.54	1078.41	12.25	1078.74	-0.33	38.22	-8.6E-03	up
10/29/2008	12.57	1078.38	12.41	1078.58	-0.20	38.19	-5.2E-03	up
04/13/09	12.47	1078.48	12.30	1078.69	-0.21	38.29	-5.5E-03	up
10/05/09	12.51	1078.44	12.42	1078.57	-0.13	38.25	-3.4E-03	up
04/13/10	12.41	1078.54	12.49	1078.50	0.04	38.35	1.0E-03	flat
10/19/10	11.85	1079.10	11.89	1079.1	0.00	38.91	0.0E+00	flat
01/18/11	12.22	1078.73	12.22	1078.77	-0.04	38.54	-1.0E-03	flat
03/16/11	12.25	1078.70	12.63	1078.36	0.34	38.51	8.8E-03	down

**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-11		PZ-11B					
Well Depth from TOC (feet)	16.07		51.42					
Screen Length (feet)	10		5					
Surface Elevation (MSL) <sup>A</sup>	1091.51		1091.51					
Top of Casing Elevation (MSL) <sup>A</sup>	1094.09		1093.73					
Top of Screen Elevation (MSL)	1088.0		1047.3					
Bottom of Screen Elevation (MSL)	1078.0		1042.3		Middle of screen elevation (piez.)			1044.8
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
04/20/04	15.54	1078.55	14.75	1078.98	-0.43	33.74	-1.3E-02	up
07/20/04	14.65	1079.44	14.13	1079.60	-0.16	34.63	-4.6E-03	up
10/12/04	15.30	1078.79	14.71	1079.02	-0.23	33.98	-6.8E-03	up
01/25/05	15.70	1078.39	14.95	1078.78	-0.39	33.58	-1.2E-02	up
4/11 & 12/05	15.61	1078.48	14.88	1078.85	-0.37	33.67	-1.1E-02	up
07/11/05	15.41	1078.68	14.77	1078.96	-0.28	33.87	-8.3E-03	up
10/03/05	15.26	1078.83	14.59	1079.14	-0.31	34.02	-9.1E-03	up
01/05/06	15.56	1078.53	14.90	1078.83	-0.30	33.72	-8.9E-03	up
04/11/06	16.73	1077.36	14.98	1078.75	-1.39	32.55	-4.3E-02	up
07/21/06	15.55	1078.54	15.01	1078.72	-0.18	33.73	-5.3E-03	up
10/04/06	15.54	1078.55	14.90	1078.83	-0.28	33.74	-8.3E-03	up
2/22/2007	15.86	1078.23	15.02	1078.71	-0.48	33.42	-1.4E-02	up
4/19/2007	15.56	1078.53	14.83	1078.90	-0.37	33.72	-1.1E-02	up
7/19/2007	15.44	1078.65	14.70	1079.03	-0.38	33.84	-1.1E-02	up
10/22/2007	15.30	1078.79	14.68	1079.05	-0.26	33.98	-7.7E-03	up
1/14/2008	15.68	1078.41	14.83	1078.90	-0.49	33.60	-1.5E-02	up
4/28/2008	14.87	1079.22	14.20	1079.53	-0.31	34.41	-9.0E-03	up
8/12/2008	15.20	1078.89	14.60	1079.13	-0.24	34.08	-7.0E-03	up
10/29/2008	15.49	1078.60	14.86	1078.87	-0.27	33.79	-8.0E-03	up
04/13/09	15.67	1078.42	14.90	1078.83	-0.41	33.61	-1.2E-02	up
10/05/09	15.51	1078.58	14.86	1078.87	-0.29	33.77	-8.6E-03	up
04/13/10	15.59	1078.50	14.89	1078.84	-0.34	33.69	-1.0E-02	up
10/19/10	14.89	1079.20	14.30	1079.43	-0.23	34.39	-6.7E-03	up
01/18/11	15.26	1078.83	14.67	1079.06	-0.23	34.02	-6.8E-03	up
03/16/11	15.59	1078.50	14.63	1079.10	-0.60	33.69	-1.8E-02	up



**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-12 <sup>A</sup>		PZ-12B <sup>A</sup>					
Well Depth from TOC (feet)	18.35		43.8					
Screen Length (feet)	10		5					
Surface Elevation (MSL) <sup>A</sup>	1090.23		1090.23					
Top of Casing Elevation (MSL) <sup>A</sup>	1089.98		1089.93					
Top of Screen Elevation (MSL)	1081.6		1051.1					
Bottom of Screen Elevation (MSL)	1071.6		1046.1		Middle of screen elevation (piez.)			1048.6
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
10/12/04	11.42	1078.56	11.36	1078.57	-0.01	29.93	-3.3E-04	flat
01/25/05	11.56	1078.42	11.69	1078.24	0.18	29.79	6.0E-03	down
4/11 & 12/05	11.87	1078.11	11.79	1078.14	-0.03	29.48	-1.0E-03	flat
07/11/05	11.60	1078.38	11.51	1078.42	-0.04	29.75	-1.3E-03	flat
10/03/05	11.43	1078.55	11.40	1078.53	0.02	29.92	6.7E-04	flat
01/05/06	11.68	1078.30	11.59	1078.34	-0.04	29.67	-1.3E-03	flat
04/11/06	11.88	1078.10	11.96	1077.97	0.13	29.47	4.4E-03	down
07/21/06	11.74	1078.24	11.62	1078.31	-0.07	29.61	-2.4E-03	up
10/04/06	11.75	1078.23	11.65	1078.28	-0.05	29.60	-1.7E-03	up
2/22/2007	12.04	1077.94	11.68	1078.25	-0.31	29.31	-1.1E-02	up
4/19/2007	11.73	1078.25	11.66	1078.27	-0.02	29.62	-6.8E-04	flat
7/19/2007	11.61	1078.37	11.54	1078.39	-0.02	29.74	-6.7E-04	flat
10/22/2007	11.45	1078.53	11.35	1078.58	-0.05	29.90	-1.7E-03	up
1/14/2008	11.61	1078.37	11.87	1078.06	0.31	29.74	1.0E-02	down
4/28/2008	11.00	1078.98	10.88	1079.05	-0.07	30.35	-2.3E-03	up
8/12/2008	11.35	1078.63	11.25	1078.68	-0.05	30.00	-1.7E-03	up
10/29/2008	11.66	1078.32	11.55	1078.38	-0.06	29.69	-2.0E-03	up
04/13/09	11.88	1078.10	11.69	1078.24	-0.14	29.47	-4.8E-03	up
10/05/09	11.70	1078.28	11.45	1078.48	-0.20	29.65	-6.7E-03	up
04/13/10	11.86	1078.12	11.59	1078.34	-0.22	29.49	-7.5E-03	up
10/19/10	11.02	1078.96	10.94	1078.99	-0.03	30.33	-9.9E-04	flat
01/18/11	11.30	1078.68	11.18	1078.75	-0.07	30.05	-2.3E-03	up
03/16/11	11.71	1078.27	11.57	1078.36	-0.09	29.64	-3.0E-03	up

**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data	OW-14		PZ-14B					
Well Depth from TOC (feet)	17.76		47.94					
Screen Length (feet)	10		5					
Surface Elevation (MSL) <sup>A</sup>	1089.64		1089.64					
Top of Casing Elevation (MSL) <sup>A</sup>	1089.04		1089.35					
Top of Screen Elevation (MSL)	1081.3		1046.4					
Bottom of Screen Elevation (MSL)	1071.3		1041.4		Middle of screen elevation (piez.)			1043.9
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
7/19/2007	10.96	1078.08	46.89	1042.46	35.62	34.17	1.0E+00	down
10/22/2007	10.72	1078.32	43.90	1045.45	32.87	34.41	9.6E-01	down
1/14/2008	nm	---	nm	---	---	---	---	---
4/28/2008	10.22	1078.82	31.79	1057.56	21.26	34.91	6.1E-01	down
8/12/2008	10.63	1078.41	30.97	1058.38	20.03	34.50	5.8E-01	down
10/29/2008	10.97	1078.07	31.55	1057.80	20.27	34.16	5.9E-01	down
04/13/09	11.08	1077.96	20.45	1068.90	9.06	34.05	2.7E-01	down
10/05/09	10.96	1078.08	32.13	1057.22	20.86	34.17	6.1E-01	down
04/14/10	11.02	1078.02	24.70	1064.65	13.37	34.11	3.9E-01	down
10/20/10	10.23	1078.81	20.7	1068.65	10.16	34.90	2.9E-01	down
01/18/11	10.56	1078.48	18.65	1070.70	7.78	34.57	2.3E-01	down
03/16/11	10.91	1078.13	21.78	1067.57	10.56	34.22	3.1E-01	down

**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data		OW-15		PZ-15B				
Well Depth from TOC (feet)		17.2		47.4				
Screen Length (feet)		10		5				
Surface Elevation (MSL) <sup>A</sup>		1091.15		1091.15				
Top of Casing Elevation (MSL) <sup>A</sup>		1090.94		1090.89				
Top of Screen Elevation (MSL)		1083.7		1048.5				
Bottom of Screen Elevation (MSL)		1073.7		1043.5		Middle of screen elevation (piez.)		1046.0
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
07/19/07	12.96	1077.98	12.88	1078.01	-0.03	31.99	-9.4E-04	flat
10/22/2007	12.75	1078.19	12.68	1078.21	-0.02	32.20	-6.2E-04	flat
1/14/2008	13.13	1077.81	13.06	1077.83	-0.02	31.82	-6.3E-04	flat
4/28/2008	12.21	1078.68	12.25	1078.69	-0.01	32.69	-3.1E-04	flat
8/12/2008	12.52	1078.37	12.6	1078.34	0.03	32.38	9.3E-04	flat
10/29/2008	12.90	1077.99	12.98	1077.96	0.03	32.00	9.4E-04	flat
04/13/09	13.12	1077.77	13.18	1077.76	0.01	31.78	3.1E-04	flat
10/05/09	12.94	1077.95	13.00	1077.94	0.01	31.96	3.1E-04	flat
04/14/10	13.01	1077.88	13.01	1077.93	-0.05	31.89	-1.6E-03	up
10/20/10	12.21	1078.68	12.28	1078.66	0.02	32.69	6.1E-04	flat
01/18/11	12.41	1078.48	12.50	1078.44	0.04	32.49	1.2E-03	flat
03/16/11	12.95	1077.94	13.02	1077.92	0.02	31.95	6.3E-04	flat

**Table 7. Groundwater Vertical Gradient Summary**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Well Data		OW-16		PZ-16B				
Well Depth from TOC (feet)		13.4		45.5				
Screen Length (feet)		10		5				
Surface Elevation (MSL) <sup>A</sup>		1088.61		1088.61				
Top of Casing Elevation (MSL) <sup>A</sup>		1088.44		1088.11				
Top of Screen Elevation (MSL)		1085.0		1047.6				
Bottom of Screen Elevation (MSL)		1075.0		1042.6		Middle of screen elevation (piez.)		1045.1
Date	Depth to Water from TOC (feet)	Water Elevation (MSL)	Depth to Water from TOC (feet)	Water Elevation (MSL)	Head Change (dH)	Dist. Change (dL)	Vertical Hydraulic Gradient (dH/dL)*	
07/19/07	7.33	1081.11	6.83	1081.28	-0.17	36.00	-4.7E-03	up
10/22/2007	7.20	1081.24	6.58	1081.53	-0.29	36.13	-8.0E-03	up
1/14/2008	7.62	1080.82	7.60	1080.51	0.31	35.71	8.7E-03	down
4/28/2008	7.14	1081.30	6.67	1081.44	-0.14	36.19	-3.9E-03	up
8/12/2008	7.21	1081.23	6.71	1081.40	-0.17	36.12	-4.7E-03	up
10/29/2008	7.28	1081.16	6.72	1081.39	-0.23	36.05	-6.4E-03	up
04/13/09	7.52	1080.92	7.05	1081.06	-0.14	35.81	-3.9E-03	up
10/05/09	7.28	1081.16	6.75	1081.36	-0.20	36.05	-5.5E-03	up
04/14/10	6.86	1081.58	6.99	1081.12	0.46	36.47	1.3E-02	down
10/20/10	5.67	1082.77	6.59	1081.52	1.25	37.66	3.3E-02	down
01/18/11	7.3	1081.14	6.91	1081.20	-0.06	36.03	-1.7E-03	up
03/16/11	7.52	1080.92	7.12	1080.99	-0.07	35.81	-2.0E-03	up

TOC : Top of PVC well casing

MSL: Elevations are referenced to feet above Mean Sea Level

A: Elevations for all the site wells were re-surveyed on June 6 and 7, 2007 for previously existing wells and on August 15, 2007 for new wells by WPSC personnel.

\*: Vertical gradients less than ±0.0015 are considered flat, and they typically have less than 0.05 foot difference between wells.

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW01	06/02/93	ND	ND	ND	0.36	ND	0.12	ND	ND	<b>0.3</b>	ND	0.8	0.54	ND	--	--	ND	ND	0.56
	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	< 1	< 2	< 0.2	0.2	<b>0.32</b>	0.1	0.35	0.1	0.19	< 0.1	0.28	< 0.4	0.28	< 1	< 1	< 1	< 0.4	0.21
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	< 0.96	< 0.89	< 0.02	< 0.032	< 0.063	< 0.088	< 0.11	< 0.061	< 0.021	< 0.13	< 0.06	< 0.075	< 0.057	< 0.58	< 0.65	< 0.31	< 0.025	< 0.064
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	7.7	< 0.55	< 0.018	< 0.017	< 0.027	< 0.043	< 0.1	< 0.029	< 0.013	< 0.16	< 0.1	0.13	< 0.083	3.9	0.71	16	0.035	< 0.047
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	30	0.47	0.39	1.3	<b>3.2</b>	<b>2</b>	1.4	< 0.11	<b>1.1</b>	0.28	2.2	7.1	1.5	13	< 0.072	4.1	1.7	2.7
	05/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/21/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	13	0.34	0.079	0.37	<b>0.47</b>	<b>0.37</b>	0.32	0.32	<b>0.3</b>	0.099	0.49	< 1.1	0.28	3	< 0.028	< 1.3	0.29	0.44
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	59	< 1.8	< 1.6	< 1.5	< 0.96	< 1.1	< 1.2	< 1	< 1.4	< 1.4	< 2.2	11	< 1.1	37	< 2.2	8.1	8.9	< 1.6
	06/16/03	28	0.5	< 0.41	< 0.25	< 0.29	< 0.27	< 0.33	< 0.39	< 0.29	< 0.33	< 0.27	2.4	< 0.44	15	< 0.35	6.9	1.4	< 0.35
	11/20/03	27	< 1.5	< 1.6	< 0.96	< 1.1	< 1	< 1.3	< 1.5	< 1.1	< 1.3	< 1	1.6	< 1.7	5.9	< 1.4	< 1.9	1.5	< 1.4
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/05	14	< 0.97	< 0.88	< 0.98	< 0.91	< 0.89	< 1	< 0.97	< 0.82	< 1.1	< 0.82	< 1.1	< 0.85	< 1	< 1.1	< 1.1	< 1	< 0.81
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/03/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	25	0.58	< 0.23	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	4.1	< 0.38	3.4	< 0.22	< 0.25	2.2	< 0.29
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/22/07	26	0.71	0.093	< 0.016	< 0.019	< 0.016	< 0.02	< 0.02	< 0.019	< 0.019	0.044	5.5	< 0.019	2.5	0.02	0.13	3.2	0.025
	04/19/07	23	< 0.65	< 0.93	< 1.2	< 1.5	< 1.3	< 1.5	< 1.5	< 1.5	< 1.5	< 1.2	3.5	< 1.5	0.82	< 0.9	< 0.99	2.4	< 1.2
	07/19/07	26	< 0.81	< 1.2	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	3.2	< 1.9	< 1	< 1.1	< 1.2	1.9	< 1.5
	10/22/07	50	1.6	0.26	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	9.1	< 0.38	0.7	< 0.22	< 0.25	3.7	< 0.29
	01/14/08	68	2	< 2.3	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	13	< 3.8	14	< 2.2	< 2.5	6	< 2.9
	04/28/08	18.5	0.45	0.045	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.018	4.7	< 0.0036	1.2	0.023	0.062	3.6	0.0096
	10/29/08	31.5	1.1	< 0.81	< 0.43	< 0.67	< 0.64	< 0.78	< 0.97	< 0.87	< 0.54	< 0.67	4.2	< 0.45	< 1.2	< 1.3	< 2	3.8	< 0.85

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
	Quality Standard <sup>1</sup>	NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW1	04/13/09	37.2	1.1	< 0.13	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	0.14	11.5	< 0.072	2	< 0.21	< 0.33	9.6	< 0.14
	10/05/09	34.7	0.83	< 0.57	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	< 0.44	7.8	< 0.47	0.71	< 0.39	0.66	6.7	< 0.47
	04/13/10	35	1.1	0.84	< 0.072	< 0.057	< 0.068	< 0.096	< 0.087	< 0.07	< 0.064	< 0.088	8.7	< 0.094	2.2	0.13	1.4	7.3	< 0.095
	10/19/10	12	0.34	0.2	< 0.072	< 0.057	< 0.068	< 0.096	< 0.087	< 0.07	< 0.064	< 0.088	1.8	< 0.094	< 0.1	< 0.077	< 0.097	1.5	< 0.095
	01/20/11	22.3	0.6	< 0.047	0.0042	< 0.047	< 0.047	< 0.047	< 0.047	0.0049	< 0.047	0.04	1.7	< 0.047	0.088	0.015	0.051	2.3	0.015
	03/17/11	30.4	0.76	0.084	0.0055	0.0037	0.0049	< 0.047	< 0.047	0.0062	< 0.047	0.052	< 4.7	< 0.047	0.13	< 0.047	0.066	< 4.7	0.02
OW2	06/03/93	ND	ND	0.41	ND	ND	ND	ND	ND	<b>0.44</b>	ND	1.4	5	ND	--	--	11	2.8	0.38
	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	1.3	< 2	< 0.2	0.46	< 0.024	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	0.39	3.1	< 0.1	< 1	1.6	10	2.3	0.35
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	7.8	< 0.89	0.41	0.37	< 0.063	< 0.088	< 0.11	< 0.061	< 0.021	< 0.13	0.66	5.2	< 0.057	< 0.58	< 0.65	11	2.4	0.25
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	14	< 0.55	0.77	0.7	<b>0.34</b>	<b>0.22</b>	0.26	0.13	<b>0.23</b>	< 0.16	1.3	7	0.31	0.77	2.5	10	3.3	0.31
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	14	< 0.15	0.52	< 0.11	< 0.013	<b>0.24</b>	0.39	0.16	<b>0.57</b>	< 0.068	0.87	7.1	0.91	2.9	1	8	3.2	0.28
	05/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/21/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	7.8	2.7	< 0.4	< 0.38	<b>0.26</b>	< 0.28	< 0.3	0.3	< 0.36	< 0.34	< 0.56	3.3	< 0.28	0.71	0.68	1.2	1.8	0.41
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/16/03	12	0.1	< 1	0.18	0.15	0.17	0.12	0.14	0.15	0.036	0.5	4.6	0.11	0.32	0.031	< 1.2	3	0.45
	11/20/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/05	7.7	< 0.39	0.59	< 0.39	< 0.36	< 0.36	< 0.41	< 0.39	< 0.33	< 0.44	0.36	3	< 0.34	0.41	< 0.45	< 0.45	1.8	< 0.33
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/03/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/11/06	4.2	< 0.16	0.27	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	1.6	< 0.38	0.21	< 0.22	< 0.25	0.93	< 0.29	
07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/04/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/22/07	6.6	0.1	0.53	0.066	0.028	0.031	0.02	0.041	0.059	< 0.019	0.44	2.8	< 0.019	0.38	0.056	0.18	1.4	0.33	



**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																		
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>	
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250	
OW2	04/19/07	7.3	< 0.16	0.4	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	3	< 0.38	0.26	< 0.22	0.66	1.8	< 0.29	
	07/19/07	9.4	0.099	0.58	0.044	< 0.018	0.016	< 0.019	0.022	0.036	< 0.019	0.45	3.9	< 0.019	0.58	0.074	0.59	2	0.3	
	10/22/07	8.3	0.11	0.89	0.056	< 0.018	0.02	< 0.019	0.024	0.054	< 0.019	0.55	3.4	< 0.019	0.44	0.052	0.24	2.4	0.38	
	01/14/08	10	0.11	0.72	0.041	< 0.018	0.017	< 0.019	0.022	0.043	< 0.019	0.47	4.5	< 0.019	0.58	0.075	0.17	2.6	0.32	
	04/28/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/29/08	7.3	< 0.2	0.44	< 0.14	< 0.22	< 0.21	< 0.25	< 0.31	< 0.28	< 0.17	0.37	3	< 0.14	< 0.38	< 0.43	< 0.66	1.7	< 0.27	
	04/13/09	6.1	< 0.099	0.28	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	0.22	2.5	< 0.072	< 0.19	< 0.21	< 0.33	1.2	0.16	
	10/05/09	7.8	< 0.076	0.69	< 0.077	< 0.061	< 0.072	< 0.1	< 0.093	< 0.074	< 0.068	0.5	3.7	< 0.099	0.29	< 0.082	0.33	1.9	0.36	
	04/13/10	4.9	< 0.072	0.63	< 0.072	< 0.057	< 0.068	< 0.096	< 0.087	< 0.07	< 0.064	0.33	2.3	< 0.094	0.13	< 0.077	0.23	1	0.24	
	10/19/10	9.7	0.11	0.97	< 0.091	< 0.071	< 0.085	< 0.12	< 0.11	0.1	< 0.08	0.55	4.5	< 0.12	0.34	< 0.096	0.52	2	0.49	
	01/25/11	12	0.058	0.4	0.022	0.0047	< 0.047	< 0.047	0.0068	0.02	< 0.047	0.33	5.3	< 0.047	0.42	0.043	0.25	1.8	0.2	
03/17/11	5.8	< 0.94	0.31	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	0.29	2.2	< 0.94	0.28	< 0.94	0.26	0.21	0.2		
OW03	06/04/93	28	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.45	2	ND	--	--	<b>620</b>	3.4	ND	
	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	08/16/96	< 1	< 2	< 0.2	< 0.05	< 0.024	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.2	< 0.4	< 0.1	4.2	3.1	56	< 0.4	< 0.2	
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	09/03/97	94	580	< 0.1	< 0.16	< 0.32	< 0.44	< 0.55	< 0.3	< 0.1	< 0.65	< 0.44	4.4	< 0.28	130	119	<b>2500</b>	2.3	< 0.32	
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/01/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OW03R	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	02/01/00	203	119	124	126	<b>75</b>	<b>73</b>	27	17	<b>36</b>	5	202	244	24	158	428	<b>950</b>	390	146	
	05/31/00	115	70	145	64	<b>86</b>	<b>137</b>	27	71	<b>55</b>	6.9	254	208	25	82	235	<b>432</b>	424	219	
	08/31/00	43	21	77	163	<b>28</b>	<b>25</b>	17	12	<b>34</b>	5.7	190	87	17	32	68	<b>363</b>	240	98	
	11/21/00	5.5	31	27	44	<b>2.1</b>	<b>1.4</b>	0.36	0.81	<b>5.3</b>	< 0.068	29	32	0.32	19	34	<b>150</b>	70	24	
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/02/02	< 22	34	84	120	<b>110</b>	<b>63</b>	51	75	<b>98</b>	< 20	240	30	46	< 32	< 34	88	160	200	
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	< 14	< 18	< 16	< 15	< 9.6	< 11	< 12	< 10	< 14	< 14	< 22	< 17	< 11	< 22	< 22	<b>260</b>	21	< 16	
	06/16/03	1.2	1.1	3	3.4	<b>2.7</b>	<b>1.9</b>	1.4	2.1	<b>3</b>	< 0.41	7.7	2.1	1.2	0.6	< 0.44	1.6	3.6	6	
	11/20/03	9	2.1	4.6	1.3	<b>0.95</b>	<b>0.67</b>	0.5	0.92	<b>1.3</b>	< 0.4	5.5	7.7	< 0.52	8.4	9.4	76	12	3.9	
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/11/05	1.6	0.36	0.68	0.24	0.15	0.11	< 0.1	0.13	0.17	< 0.11	1.1	0.89	< 0.085	0.98	0.15	1.7	2	0.82		
07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW3R	10/03/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	0.47	0.12	0.35	0.04	< 0.037	< 0.031	< 0.039	< 0.039	< 0.038	< 0.038	0.54	0.36	< 0.038	0.27	< 0.022	0.11	0.42	0.33
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/21/07	1.4	0.16	1.1	0.23	< 0.23	< 0.2	< 0.24	< 0.24	< 0.24	< 0.24	1.6	1.1	< 0.24	0.81	0.58	1.9	3.6	1.1
	04/19/07	0.32	0.068	0.23	0.12	0.098	0.07	0.054	0.077	0.1	< 0.038	0.53	0.2	0.051	0.15	0.049	0.33	0.35	0.4
	07/19/07	12	4.8	1.9	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	3.7	< 1.9	17	19	<b>310</b>	5.5	< 1.5
	10/22/07	13	3.7	2.4	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	4.9	< 1.9	14	20	<b>260</b>	6.2	< 1.5
	01/14/08	10	< 4.1	< 5.8	< 7.8	< 9.2	< 7.8	< 9.6	< 9.7	< 9.5	< 9.4	< 7.7	< 4.5	< 9.4	8.5	15	<b>130</b>	7.5	< 7.3
	04/29/08	0.78	< 0.099	0.3	0.13	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	0.42	0.47	< 0.072	0.45	< 0.21	5.3	0.61	0.29
	10/29/08	12.6	< 2.5	< 3.3	< 1.7	< 2.7	< 2.6	< 3.1	< 3.9	< 3.5	< 2.2	< 2.7	< 3.1	< 1.8	14.6	22.3	<b>228</b>	4	< 3.4
	04/13/09	1.9	0.17	0.35	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	0.47	0.83	< 0.072	1.3	< 0.21	4.5	1.1	0.43
	10/05/09	15.8	3.3	< 3	0.24	0.042	0.031	0.0095	0.034	0.14	< 0.0034	< 2.3	5.8	0.0087	16.6	17.7	<b>421</b>	6.4	< 2.5
	04/13/10	0.83	0.12	0.32	0.057	0.026	0.04	0.029	0.04	0.05	0.02	0.41	0.46	0.026	0.45	0.23	0.72	0.7	0.27
	10/19/10	2.9	0.52	1	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	0.48	1.2	< 0.47	3	2	57.1	1.2	< 0.47
	01/25/11	0.36	0.033	0.091	0.026	0.021	< 0.047	0.0099	0.02	0.026	< 0.047	0.084	0.24	0.0075	0.48	0.28	6.8	0.15	0.057
03/17/11	0.49	0.075	0.5	0.035	0.012	0.012	0.0065	0.015	0.035	< 0.047	0.4	0.86	< 0.047	0.43	0.083	12.2	0.63	0.27	
OW04	06/10/93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	ND	ND
	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	< 1	< 2	< 0.2	< 0.05	< 0.024	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.2	< 0.4	< 0.1	< 1	< 1	< 1	< 0.4	< 0.2
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	< 1	< 0.92	< 0.021	< 0.033	< 0.066	< 0.092	< 0.11	< 0.063	< 0.022	< 0.14	< 0.062	< 0.078	< 0.059	< 0.6	< 0.68	< 0.32	< 0.026	< 0.066
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	< 0.23	< 0.57	< 0.019	< 0.018	< 0.028	< 0.045	< 0.1	< 0.03	< 0.014	< 0.17	< 0.1	< 0.03	< 0.086	< 0.42	< 0.62	< 0.23	< 0.015	< 0.049
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	< 0.13	< 0.15	< 0.02	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	< 0.11	< 0.08	< 0.082	< 0.072	< 0.056	< 0.045	< 0.032
	05/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/21/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	0.033	< 0.023	< 0.02	< 0.019	0.022	0.015	< 0.015	0.015	< 0.018	< 0.017	< 0.028	< 0.021	< 0.014	< 0.027	< 0.028	0.051	0.029	0.023
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/28/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/16/03	0.02	< 0.019	< 0.02	0.013	0.016	0.014	< 0.016	< 0.019	< 0.014	< 0.016	0.018	< 0.017	< 0.021	< 0.018	< 0.017	0.041	0.019	0.018	
11/20/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW4	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/05	0.03	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	0.02	< 0.023	0.38	< 0.02	< 0.016
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/03/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	0.059	0.0092	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.093	0.017	1.5	< 0.011	< 0.015
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/21/07	0.032	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.04	< 0.011	0.094	0.012	< 0.015
	04/19/07	0.029	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.03	< 0.011	0.09	< 0.011	< 0.015
	07/19/07	0.043	0.0087	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.011	< 0.019	0.026	0.015	0.12	0.017	< 0.015
	10/22/07	0.063	0.0097	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.053	< 0.011	0.12	< 0.011	< 0.015
	01/14/08	0.055	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.031	< 0.011	0.059	0.016	< 0.015
	04/28/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/29/08	0.08	0.014	0.0081	0.0038	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.0089	0.01	< 0.0036	0.11	0.021	1.9	0.022	0.007	
04/13/09	0.049	0.006	< 0.0065	0.019	0.023	0.032	0.022	0.03	0.032	0.0058	0.056	0.0074	0.019	0.055	< 0.011	0.49	0.025	0.047	
10/05/09	0.17	0.028	0.0068	0.0087	0.0068	0.0063	< 0.0051	0.0054	0.008	< 0.0034	0.0098	0.013	< 0.005	0.1	0.029	0.29	0.015	0.0098	
04/13/10	0.68	0.08	0.014	< 0.0073	< 0.0058	< 0.0069	< 0.0097	< 0.0088	< 0.007	< 0.0065	0.014	0.034	< 0.0094	0.25	0.045	0.58	0.043	0.013	
10/19/10	0.54	0.055	< 0.057	< 0.036	< 0.029	< 0.034	< 0.048	< 0.044	< 0.035	< 0.032	< 0.044	< 0.048	< 0.047	0.69	0.068	3.1	< 0.081	< 0.047	
01/20/11	0.28	0.044	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.0088	< 0.05	0.25	0.0086	2	0.0093	< 0.05	
03/17/11	0.72	0.085	0.007	0.0074	0.0073	0.0055	0.006	0.0091	0.0079	< 0.047	0.011	< 0.047	< 0.047	0.39	< 0.047	11.4	< 0.047	0.01	
OW05	06/03/93	450	810	56	44	<b>46</b>	<b>21</b>	18	15	<b>27</b>	0.97	210	260	25	--	--	<b>9000</b>	330	74
	08/16/96	710	1800	100	60	<b>47</b>	<b>22</b>	36	27	<b>28</b>	< 2	280	270	34	1300	1500	<b>6700</b>	350	69
	09/04/97	20	46	16	26	<b>1.2</b>	<b>8.3</b>	19	9.6	<b>12</b>	< 0.65	54	23	15	110	97	<b>120</b>	37	34
OW05A	06/03/93	350	240	45	78	<b>68</b>	<b>30</b>	26	20	<b>36</b>	ND	260	140	35	--	--	<b>2700</b>	220	96
	08/16/96	60	230	23	22	<b>18</b>	<b>8.1</b>	18	5.9	<b>9.1</b>	< 1	67	31	15	190	110	<b>440</b>	63	24
	09/04/97	240	< 22	40	20	<b>15</b>	<b>6.1</b>	13	7.1	<b>10</b>	< 3.2	87	170	9.8	900	880	<b>5300</b>	170	36
OW05R	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	1180	1020	882	37	<b>541</b>	<b>256</b>	181	126	<b>223</b>	< 0.34	<b>1610</b>	<b>1390</b>	192	34	17	<b>15700</b>	2360	<b>1190</b>
	05/31/00	305	341	194	74	<b>102</b>	<b>64</b>	87	64	<b>56</b>	9.1	304	317	48	303	580	<b>3900</b>	527	221
	08/31/00	373	222	513	419	<b>101</b>	<b>218</b>	138	104	<b>253</b>	< 3.4	<b>909</b>	<b>472</b>	127	294	566	<b>3010</b>	1110	<b>694</b>
	11/21/00	328	155	410	320	<b>244</b>	<b>142</b>	87	66	<b>252</b>	29	<b>683</b>	393	103	247	423	<b>2500</b>	1150	<b>461</b>
04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
	Quality Standard <sup>1</sup>	NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW5R	04/02/02	180	170	420	410	<b>370</b>	<b>250</b>	200	310	<b>370</b>	64	<b>990</b>	180	210	100	< 90	<b>540</b>	1000	<b>720</b>
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	24	23	57	57	<b>58</b>	<b>51</b>	36	49	<b>63</b>	10	140	19	32	16	< 14	54	140	100
	06/16/03	< 0.36	0.47	0.99	1.6	<b>1.6</b>	<b>1.1</b>	0.76	1.4	<b>1.5</b>	< 0.32	4.4	< 0.34	0.75	< 0.36	< 0.34	< 0.48	1.6	3.1
	11/20/03	31	11	9.2	6.9	<b>6.5</b>	<b>4.8</b>	2.9	4.9	<b>5.2</b>	1	18	13	3	32	0.7	34	30	13
	04/20/04	4.2	1.5	1.1	1	<b>1.1</b>	<b>0.63</b>	0.35	0.41	<b>0.88</b>	0.12	2.1	1.4	0.37	2.8	0.13	5.7	1.3	1.5
	07/20/04	8.6	5.5	1.2	0.13	0.05	0.034	0.02	0.04	0.079	< 0.015	1.9	4.4	< 0.02	9.5	0.082	11	5	1.2
	10/12/04	48	< 15	6.9	0.52	< 0.36	< 0.36	< 0.41	< 0.39	<b>0.43</b>	< 0.44	7.6	< 17	< 0.34	73	1.6	<b>190</b>	25	4.6
	01/25/05	68	21	22	18	<b>18</b>	<b>12</b>	7.6	13	<b>15</b>	2.3	46	22	7.6	77	2.6	<b>220</b>	48	29
	04/11/05	6.9	3.8	1.5	< 0.39	< 0.36	< 0.36	< 0.41	< 0.39	< 0.33	< 0.44	2.3	3.6	< 0.34	6.8	< 0.45	6	4.6	1.6
	07/11/05	10	4.9	1.7	< 0.78	< 0.92	< 0.78	< 0.96	< 0.97	< 0.95	< 0.94	1.9	5	< 0.94	11	< 0.56	15	3.8	1.3
	10/03/05	2.3	0.99	0.18	< 0.16	< 0.18	< 0.16	< 0.19	< 0.19	< 0.19	< 0.19	1.1	0.46	< 0.19	1.2	< 0.11	< 0.47	< 0.11	0.67
	01/05/06	5.3	2.7	1.3	0.11	0.033	0.019	< 0.019	< 0.39	0.059	< 0.019	1.4	2.9	< 0.019	4.2	0.026	0.54	3.3	1.1
	04/11/06	6.6	2.1	0.92	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	1.8	2.9	< 0.38	5.3	< 0.22	2.8	2.4	1.1
	07/21/06	100	8.7	9.2	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	10	21	< 3.8	130	6	<b>590</b>	39	6.7
	10/04/06	130	9.3	10	1.6	<b>1.1</b>	<b>0.86</b>	0.55	0.94	<b>1.2</b>	< 0.38	14	24	0.5	150	22	<b>700</b>	43	9.3
	02/21/07	4.8	1.1	0.46	0.1	0.04	0.034	< 0.019	0.035	0.065	< 0.019	1.3	1.3	< 0.019	3.1	0.2	1.4	0.12	0.87
	04/19/07	0.045	0.028	0.024	0.056	0.098	0.079	0.054	0.065	0.046	< 0.019	0.097	0.011	0.054	0.038	0.012	0.29	0.051	0.073
	07/19/07	110	7.2	12	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	11	30	< 1.9	130	23	<b>750</b>	49	7.3
	10/22/07	350	73	210	130	<b>130</b>	<b>67</b>	61	130	<b>100</b>	< 15	<b>440</b>	190	55	230	140	<b>1100</b>	700	<b>290</b>
	01/14/08	55	14	41	27	<b>22</b>	<b>14</b>	12	19	<b>20</b>	3.9	84	38	11	27	24	<b>120</b>	120	60
	04/29/08	3	0.8	0.81	0.59	<b>0.62</b>	<b>0.38</b>	0.36	0.58	<b>0.64</b>	0.1	2.1	0.94	0.33	2.4	0.11	0.57	1.8	1.6
	08/12/08	123	15	32.7	24.8	<b>20.7</b>	<b>15.2</b>	10	16.9	<b>17.3</b>	2.8	74.7	52.8	9.4	120	43	<b>490</b>	147	57
	10/29/08	98	5.7	13.9	< 0.87	0.18	0.15	0.054	0.13	<b>0.3</b>	0.016	10.5	25.4	0.052	103	15.8	<b>169</b>	44.1	6.3
	04/13/09	9.4	1.3	0.8	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	1.1	3.6	< 0.072	7.9	< 0.21	0.88	2.5	0.84
	10/05/09	25.8	3	4.8	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	5.1	8.9	< 0.47	16.3	< 0.39	16.4	19.7	3.6
	04/14/10	20.2	2.4	3.6	0.57	<b>0.34</b>	<b>0.3</b>	0.17	0.26	<b>0.32</b>	0.047	3.9	8.5	0.17	14.1	0.26	15.7	8.5	2.6
	10/19/10	4.9	1.1	0.85	0.12	0.058	0.055	0.027	0.045	0.093	0.0062	1.2	2	0.023	2.5	0.077	0.96	2.2	0.92
	01/25/11	8.5	2.2	0.71	0.066	0.025	< 0.047	0.01	0.025	0.044	< 0.047	1.5	4.2	0.0086	5	0.03	0.48	5.2	0.64
	03/17/11	4.4	1.1	0.57	0.088	0.043	0.043	0.021	0.038	0.064	0.0043	0.97	2	0.019	2.3	0.05	0.63	2.1	0.72
OW06	06/03/93	63	47	13	ND	<b>1.1</b>	<b>0.68</b>	ND	0.46	<b>0.93</b>	ND	35	38	ND	--	--	<b>230</b>	100	18
	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	8.6	44	4.3	1.4	<b>0.35</b>	0.06	< 0.2	< 0.05	<b>0.39</b>	< 0.1	14	8.2	< 0.1	4.6	2.8	50	32	11
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	5.2	110	12	1.6	< 0.32	< 0.44	< 0.55	< 0.3	<b>0.41</b>	< 0.65	22	42	< 0.28	340	35	<b>330</b>	99	19
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
	Quality Standard <sup>1</sup>	NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW6	06/23/99	78	450	12	< 0.34	< 0.54	< 0.86	< 2	< 0.58	< 0.26	< 3.2	23	79	< 1.7	250	270	<b>2600</b>	98	16
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	40	21	9.7	1.6	<b>3.8</b>	<b>1.4</b>	6.2	< 0.11	< 0.059	< 0.068	9.7	19	6.5	38	28	<b>283</b>	31	8.8
	05/31/00	25	34	5.1	3.5	<b>0.68</b>	<b>1.6</b>	2.1	0.68	<b>3.3</b>	0.4	9.1	14	2.5	36	28	<b>333</b>	20	9
	08/31/00	87	275	20	< 0.11	<b>4.5</b>	<b>2.8</b>	2.8	< 0.11	<b>4.5</b>	< 0.068	33	84	3.1	238	218	<b>2280</b>	140	30
	11/21/00	50	42	9.1	2.6	<b>2.3</b>	<b>1.5</b>	1.7	1.2	<b>1.7</b>	0.38	11	25	1.7	53	39	<b>477</b>	50	13
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	31	4.2	4.4	2.6	<b>2.1</b>	<b>1.4</b>	0.91	1.5	<b>1.9</b>	0.39	7.3	14	0.94	22	15	<b>160</b>	27	8.6
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	88	150	9	< 1.9	< 1.2	< 1.4	< 1.5	< 1.3	< 1.8	< 1.7	8	41	< 1.4	170	< 110	<b>1800</b>	100	10
	06/16/03	29	4.9	2.4	0.64	<b>0.44</b>	<b>0.33</b>	< 0.32	0.39	<b>0.56</b>	< 0.32	2.9	10	< 0.42	10	0.39	1.9	2.3	4.4
	11/20/03	31	20	3.8	< 1.2	< 1.4	< 1.3	< 1.6	< 1.9	< 1.4	< 1.6	3.5	14	< 2.1	33	25	<b>370</b>	21	3.9
	07/20/04	46	26	13	< 1.1	< 1.3	< 1.2	< 1.5	< 1.8	< 1.3	< 1.5	8.4	28	< 2	59	18	<b>190</b>	88	10
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/05	9.6	0.49	1.3	< 0.39	< 0.36	< 0.36	< 0.41	< 0.39	< 0.33	< 0.44	1.2	4.5	< 0.34	7.2	5.1	45	4	1.1
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/03/05	79	120	5.1	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	21	< 3.8	130	100	<b>1800</b>	40	< 2.9
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	11	0.31	1.6	< 0.31	< 0.37	< 0.32	< 0.39	< 0.39	< 0.38	< 0.38	1.1	5.2	< 0.38	7.3	6.3	51	6.2	0.84
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	16	29	2.9	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	2	7.2	< 1.9	27	19	<b>390</b>	17	2.4
	02/21/07	12	0.31	1.8	0.13	0.084	0.062	0.041	0.069	0.087	< 0.019	1.4	4.9	0.039	8.5	5.4	8.3	4	1.3
	04/19/07	7.3	< 1	< 1.4	< 1.9	< 2.3	< 2	< 2.4	< 2.4	< 2.4	< 2.4	< 1.9	2.7	< 2.4	5.2	3.7	33	3	< 1.8
	07/19/07	17	29	2.4	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	7.5	< 1.9	28	27	<b>450</b>	8.1	< 1.5
	10/22/07	55	120	10	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	2.1	21	< 1.9	110	110	<b>2100</b>	32	1.9
	01/14/08	14	< 0.81	3.9	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	6.7	< 1.9	10	7.6	41	7.2	< 1.5
	04/29/08	43.9	72.2	< 16.3	0.19	0.02	0.016	< 0.0062	0.016	0.095	< 0.0043	< 13.4	< 15.7	< 0.0036	72.4	58	<b>3060</b>	< 18.7	< 16.9
	08/12/08	55.7	101	7	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	2.9	17.4	< 0.36	94.3	95.8	<b>1720</b>	39.9	3.5
	10/29/08	44.9	62.9	< 6.5	< 3.5	< 5.4	< 5.1	< 6.2	< 7.8	< 7	< 4.3	< 5.3	10.2	< 3.6	71.7	63.2	<b>1090</b>	17.7	< 6.8
	04/13/09	12.2	0.3	0.82	0.072	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	0.97	4.4	< 0.072	6.8	1.2	5.3	< 0.15	1.1
	10/05/09	75.7	36.8	3.7	0.089	< 0.057	< 0.068	< 0.096	< 0.087	0.072	< 0.064	1.6	14.9	< 0.094	47.4	31.1	<b>1130</b>	16.5	1.5
	04/13/10	4.2	0.21	0.5	0.094	0.051	0.052	0.054	0.064	0.07	0.013	0.81	1.2	0.043	0.05	0.008	0.048	0.059	0.71
	10/19/10	230	< 18	< 28.7	< 18.1	< 14.3	< 17	< 24.1	< 21.8	< 17.4	< 16	< 22	< 23.9	< 23.4	154	117	<b>1440</b>	< 40.5	< 23.7
	01/19/11	219	< 236	< 236	< 236	< 236	< 236	< 236	< 236	< 236	< 236	< 236	< 236	< 236	117	97.2	<b>1090</b>	< 236	< 236
	03/17/11	20.8	0.48	2.4	0.074	< 0.94	< 0.94	< 0.94	< 0.94	0.07	< 0.94	1.5	7.9	< 0.94	4.5	< 0.94	0.59	10.7	1.7

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW07	06/04/93	40	70	9	2.5	1.8	0.85	ND	0.97	1.6	ND	23	33	1.2	--	--	460	64	9.7
	08/16/96	< 1	22	3.1	0.4	< 0.024	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	2.3	14	< 0.1	26	46	70	18	1
	09/03/97	2	< 0.89	1.8	0.3	0.18	< 0.088	< 0.11	< 0.061	0.12	< 0.13	2.6	7.5	< 0.057	18	19	48	10	1.3
OW07A	06/02/93	26	ND	24	ND	12	3.9	5.1	2	7.4	ND	82	25	5.4	--	--	88	170	65
	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	< 1	< 2	25	33	9.9	1.8	6.9	3.1	7.1	< 0.1	72	24	4.4	87	100	76	130	66
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	14	< 4.4	14	9.2	5.9	1.2	5.2	1.6	4.2	< 0.65	43	15	3.1	110	5.9	56	78	51
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	40	3.3	15	13	13	4.3	11	4.8	6.2	1.1	67	27	5.3	28	56	270	60	63
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	49	7.5	23	3	18	6.4	6.7	2.7	6.1	5.9	57	27	5.2	31	28	460	80	74
	05/31/00	38	< 0.15	17	13	5.6	6.8	5.7	3.2	26	1.6	50	40	6.9	21	20	160	62	69
	08/31/00	56	< 0.15	29	21	11	11	14	11	24	2.1	61	39	12	35	26	316	93	102
	11/21/00	49	3.8	14	13	4.7	2.8	3.2	1.2	15	< 0.068	23	32	1.8	32	29	383	51	32
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	35	5.2	16	15	11	5.6	6.6	5.4	13	1.6	34	21	4.7	18	12	40	55	60
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	48	< 2.3	5.1	< 1.9	< 1.2	< 1.4	< 1.5	< 1.3	< 1.8	< 1.7	5.1	23	< 1.4	49	48	640	34	6
	06/16/03	29	1.7	3.7	1.8	1.6	0.85	0.96	0.84	1.7	< 0.32	4.7	13	0.63	11	4.7	2.1	5.6	9
	11/20/03	46	3.2	10	5.1	5.1	3	3.2	3	5.6	< 1.6	16	25	< 2.1	33	32	300	45	23
	04/20/04	15	0.68	2	0.7	0.61	0.26	0.33	< 0.37	0.51	< 0.31	2.1	7	< 0.4	7.8	3.8	5	2.4	2.7
	07/20/04	38	< 1.8	4	< 1.1	< 1.3	< 1.2	< 1.5	< 1.8	< 1.3	< 1.5	2.7	16	< 2	34	16	360	22	2.5
	10/12/04	42	< 1.9	4	< 2	< 1.8	< 1.8	< 2.1	< 1.9	< 1.6	< 2.2	3	18	< 1.7	43	42	510	25	2.7
	01/25/05	45	6.7	18	9.9	9.8	5	5.9	5.4	10	< 4.4	28	24	3.5	33	31	400	56	38
	04/11/05	20	< 1.9	4	< 2	< 1.8	< 1.8	< 2.1	< 1.9	< 1.6	< 2.2	2.7	8.9	< 1.7	13	11	65	9.2	3.8
	07/11/05	31	< 1.6	4.9	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	11	< 3.8	30	27	260	16	2.9
	10/03/05	40	< 1.6	3.8	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	17	< 3.8	34	36	400	21	< 2.9
	01/05/06	24	0.57	2.5	0.2	0.059	0.033	0.023	< 2.4	0.11	< 0.019	1.7	11	< 0.019	18	20	110	9.6	1.8
	04/11/06	26	0.69	2.9	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	1.7	11	< 0.38	17	15	200	12	1.4
	07/21/06	33	< 1.6	4	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	13	< 3.8	28	30	330	20	3.8
	10/04/06	38	1.3	5.8	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	4.3	17	< 1.9	36	42	370	24	4.5
	02/21/07	9.7	0.56	1.2	< 0.31	< 0.37	< 0.32	< 0.39	< 0.39	< 0.38	< 0.38	1.9	3	< 0.38	1.6	< 0.23	0.92	< 0.23	1.8
	04/19/07	16	< 1.6	< 2.3	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	5.6	< 3.8	11	12	66	5.4	< 2.9
	07/19/07	23	0.52	3.8	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	2.4	< 9.1	< 0.38	15	15	250	13	2
	10/22/07	53	1.3	7.8	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	4	21	< 1.9	49	59	670	33	3.3



**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW7A	01/14/08	38	< 4.1	6.5	< 7.8	< 9.2	< 7.8	< 9.6	< 9.7	< 9.5	< 9.4	< 7.7	15	< 9.4	27	28	<b>130</b>	18	< 7.3
	04/29/08	29.7	< 8	< 10.4	< 5.6	< 8.6	< 8.2	< 10	< 12.4	< 11.2	< 6.9	< 8.5	< 10	< 5.8	23.7	25.2	<b>348</b>	< 12	< 10.8
	08/12/08	23.7	< 5.0	< 6.5	< 3.5	< 5.4	< 5.1	< 6.2	< 7.8	< 7.0	< 4.3	< 5.3	12.3	< 3.6	19.6	23.2	<b>219</b>	21.7	< 6.8
	10/29/08	42	< 5	< 6.5	< 3.5	< 5.4	< 5.1	< 6.2	< 7.8	< 7	< 4.3	< 5.3	13.2	< 3.6	44.6	47.5	<b>496</b>	20.8	< 6.8
	04/13/09	19.5	0.55	2.3	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	1.6	9.3	< 0.36	14.3	7.5	87.8	8.4	1.8
	10/05/09	25	0.52	4.1	0.15	< 0.057	< 0.068	< 0.096	< 0.087	0.12	< 0.064	2.6	13.1	< 0.094	16.9	10.2	<b>250</b>	18.1	2.3
	04/13/10	22.4	0.34	< 2.3	0.16	0.033	0.02	0.0065	0.023	0.097	< 0.0032	< 1.8	7.2	0.0057	15.4	15.9	<b>105</b>	13.4	< 1.9
	10/19/10	49.3	0.98	10.8	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	3.5	21.6	< 0.47	45.5	41.5	<b>478</b>	28.5	3.3
	01/19/11	31.3	1	5.4	< 9.4	< 9.4	< 9.4	< 9.4	< 9.4	< 9.4	< 9.4	3.1	12.5	< 9.4	28.8	25.1	92.2	16	3.3
	03/17/11	18.7	0.29	2.7	0.17	< 0.94	< 0.94	< 0.94	< 0.94	0.16	< 0.94	2.4	9.4	< 0.94	16.6	16.6	52.5	12.7	2.3
OW08	06/02/93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	ND	5.4
	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	< 1	< 2	< 0.2	< 0.05	< 0.024	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.2	< 0.4	< 0.1	< 1	< 1	1.9	< 0.4	< 0.2
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	< 1	< 0.96	< 0.022	< 0.034	< 0.068	< 0.095	< 0.12	< 0.066	< 0.023	< 0.14	< 0.065	< 0.081	< 0.062	< 0.63	< 0.7	< 0.33	< 0.027	5.4
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	0.66	< 0.56	0.089	< 0.017	< 0.027	< 0.043	< 0.1	< 0.029	< 0.013	< 0.16	0.11	0.032	< 0.084	< 0.4	< 0.6	0.62	0.62	< 0.11
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	< 0.13	< 0.15	< 0.02	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	< 0.11	< 0.08	< 0.082	< 0.072	0.18	< 0.045	5.4
	05/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/21/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/16/03	0.5	< 0.019	0.071	0.021	0.02	0.017	< 0.016	< 0.019	0.019	< 0.016	0.14	0.059	< 0.021	< 0.018	< 0.017	0.038	0.63	0.14
	11/20/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/11/05	1	0.029	0.046	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	0.047	0.33	< 0.017	0.61	0.09	1.2	0.52	0.053	
07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/03/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
	Quality Standard <sup>1</sup>	NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW8	04/11/06	2.1	0.08	0.13	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.063	0.76	< 0.019	1.6	0.21	4.5	0.95	0.055
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/22/07	2.3	0.063	0.05	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	0.03	0.5	< 0.019	0.88	0.032	1.4	0.73	0.046
	04/20/07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/19/07	0.7	0.022	0.11	< 0.031	< 0.037	< 0.031	< 0.039	< 0.039	< 0.038	< 0.038	0.056	0.095	< 0.038	0.18	< 0.022	0.091	0.66	0.054
	10/22/07	0.86	0.021	0.043	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.024	0.11	< 0.019	0.067	0.019	0.093	0.39	0.042
	01/14/08	2.1	0.054	0.06	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.05	0.38	< 0.019	0.62	0.045	1.2	0.46	0.055
	04/28/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/13/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/19/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
OW09	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/04/97	61	200	1.7	< 0.32	< 0.63	< 0.88	< 1.1	< 0.63	< 0.21	< 1.3	< 0.6	23	< 0.57	140	75	<b>1000</b>	17	< 0.64
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	260	210	15	< 0.34	< 0.54	< 0.86	< 2	< 0.58	< 0.26	< 3.2	22	160	< 1.7	340	680	<b>4800</b>	110	7.2
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	203	163	28	< 0.11	<b>4.3</b>	<b>1.9</b>	9.3	< 0.11	< 0.059	< 0.068	48	49	13	291	42	<b>1980</b>	153	25
	05/31/00	200	190	11	< 0.11	<b>0.33</b>	<b>0.6</b>	0.13	0.71	< 0.059	< 0.068	19	101	0.27	277	63	<b>2960</b>	84	8.7
	08/31/00	269	85	10	< 0.11	<b>2</b>	< 0.055	1.3	< 0.11	< 0.059	< 0.068	17	111	3.8	268	42	<b>2710</b>	91	8.5
	11/21/00	215	77	11	< 0.11	<b>1.7</b>	0.19	< 0.074	< 0.11	< 0.059	< 0.068	7.7	89	3.8	223	< 0.072	<b>1920</b>	87	5.8
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	160	35	4.5	0.32	<b>0.32</b>	< 0.28	< 0.3	< 0.26	< 0.36	< 0.34	< 34	48	< 0.28	150	1.8	<b>530</b>	70	6.8
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	110	< 9.2	< 8	< 7.6	< 4.8	< 5.6	< 6	< 5.2	< 7.2	< 6.8	< 11	25	< 5.6	63	< 11	< 11	52	< 8
	06/16/03	85	6.7	< 2.1	< 1.3	< 1.5	< 1.4	< 1.7	< 2	< 1.5	< 1.7	3.4	7.2	< 2.2	38	< 1.8	35	21	2.4
	11/20/03	110	7.7	< 5	< 3	< 3.5	< 3.2	< 4	< 4.8	< 3.5	< 4	5.4	9.8	< 5.2	62	< 4.2	78	28	< 4.2
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	92	8.7	2.4	< 1.1	< 1.3	< 1.2	< 1.5	< 1.8	< 1.3	< 1.5	4.1	14	< 2	63	< 1.6	<b>110</b>	27	2.5
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/12/05	100	31	5.2	< 2	< 1.8	< 1.8	< 2.1	< 1.9	< 1.6	< 2.2	4.9	42	< 1.7	130	20	<b>1100</b>	56	2.7	
07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/03/05	120	50	6.3	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	5.8	59	< 3.8	160	49	<b>1700</b>	72	3.7	
01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/11/06	76	39	3.8	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	5.3	37	< 1.9	92	15	<b>1100</b>	48	2.6	
07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW9	10/04/06	190	44	8.6	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	7	58	< 1.9	220	64	<b>1800</b>	80	4.1
	02/21/07	130	23	8.2	< 1.6	< 1.9	< 1.6	< 1.9	< 2	< 1.9	< 1.9	7.9	50	< 1.9	140	47	<b>1200</b>	76	4.6
	04/19/07	190	< 81	< 120	< 160	< 180	< 160	< 190	< 190	< 190	< 190	< 150	< 91	< 190	190	< 110	<b>3100</b>	< 110	< 150
	07/19/07	210	43	12	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	6.8	80	< 1.9	230	62	<b>1700</b>	78	3.6
	10/22/07	270	71	19	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	10	110	< 1.9	320	96	<b>3600</b>	120	5.2
	01/14/08	220	< 160	< 230	< 310	< 370	< 310	< 390	< 390	< 380	< 380	< 310	< 180	< 380	310	< 220	<b>4500</b>	< 230	< 290
	04/29/08	198	< 49.7	< 65	< 34.7	< 54	< 51.5	< 62.4	< 77.8	< 69.9	< 43.1	< 53.4	< 62.7	< 36.1	224	< 107	<b>2910</b>	< 74.8	< 67.6
	08/12/08	206	35.8	18.4	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	< 13.4	89.6	< 0.072	229	79.7	<b>1630</b>	105	5.9
	10/29/08	178	44.2	18	< 3.5	< 5.4	< 5.1	< 6.2	< 7.8	< 7	< 4.3	6.9	74.7	< 3.6	248	66.9	<b>1950</b>	71.8	< 6.8
	04/13/09	183	21.4	8.7	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	5.7	71	< 0.36	155	63.6	<b>1650</b>	72.6	3.5
	10/05/09	213	48.2	16.9	< 3.8	< 3	< 3.6	< 5.1	< 4.6	< 3.7	< 3.4	7.1	93.9	< 5	212	76.8	<b>2560</b>	87.1	< 5
	04/13/10	175	33.3	22.9	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	9.8	91.3	< 0.47	157	90.7	<b>2370</b>	< 80.9	5.5
	10/19/10	210	< 45	< 71.7	< 45.3	< 35.7	< 42.5	< 60.1	< 54.6	< 43.5	< 40	< 55.1	77.8	< 58.5	213	99.1	<b>3720</b>	103	< 59.3
	01/20/11	8	< 16.8	12.9	< 1	< 1	< 1	< 1	< 1	< 1	< 1	9.4	3.1	< 1	8.1	2.5	<b>114</b>	3.9	4.9
	03/17/11	152	18.7	12.4	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	9.1	53.6	< 0.94	157	39.6	<b>2220</b>	82.3	4.9
OW10	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/04/97	< 0.96	< 0.89	0.84	1	<b>0.62</b>	<b>0.24</b>	0.46	0.24	<b>0.51</b>	< 0.13	2.8	1.2	0.4	< 0.58	< 0.65	0.89	3.7	1.6
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	6.6	6.1	0.28	0.51	<b>0.5</b>	<b>0.24</b>	0.51	0.27	<b>0.37</b>	< 0.16	1.8	0.45	0.31	11	5.2	<b>130</b>	0.71	1.6
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	10	4	1	< 0.11	<b>3.9</b>	<b>2.9</b>	1	0.69	<b>2</b>	< 0.068	5.9	2.8	1.1	9.2	< 0.072	75	2.7	4.6
	05/31/00	1.2	0.37	0.17	0.28	<b>0.28</b>	0.11	0.21	0.18	<b>0.35</b>	< 0.068	0.79	0.27	0.24	0.78	< 0.072	4.1	0.44	0.65
	08/31/00	32	6.9	1.2	3.3	<b>1.7</b>	<b>5.9</b>	1.1	1.9	<b>1.9</b>	< 0.068	4.4	4.6	1.2	26	< 0.072	0.22	3.1	4.1
	11/21/00	14	2	0.64	1.6	<b>0.83</b>	<b>0.46</b>	0.3	0.18	<b>0.59</b>	< 0.068	1.7	4.7	0.39	7.2	< 0.072	15	1.7	1.5
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	3.5	0.73	0.94	3	<b>2.9</b>	<b>1.8</b>	1.5	2.3	<b>2.7</b>	0.49	5.5	0.61	1.3	0.8	< 0.56	1.4	3	4.7
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	4.7	< 0.46	< 0.4	< 0.38	< 0.24	< 0.28	< 0.3	< 0.26	< 0.36	< 0.34	< 0.56	< 0.42	< 0.28	< 0.54	< 0.56	< 0.54	< 0.38	< 0.4
	06/16/03	0.43	0.59	0.56	2.7	<b>2.4</b>	<b>2.1</b>	1.4	2	<b>2.5</b>	0.48	3.9	< 0.34	1.3	< 0.36	< 0.34	< 0.48	1.4	4.3
	11/20/03	2.1	< 0.38	< 0.4	1.3	<b>1.2</b>	<b>1</b>	0.68	1.1	<b>1.3</b>	< 0.32	2.7	< 0.34	0.59	0.47	< 0.34	0.51	1.2	2
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/12/05	20	7.1	< 0.35	< 0.39	< 0.36	< 0.36	< 0.41	< 0.39	< 0.33	< 0.44	< 0.33	4	< 0.34	30	3.3	<b>340</b>	< 0.41	< 0.33	
07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW10	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	2.4	0.37	< 0.23	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	0.5	< 0.38	2.8	0.35	19	< 0.23	< 0.29
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	160	23	0.62	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	0.31	37	< 0.38	160	0.65	<b>150</b>	31	< 0.29
	02/21/07	45	5.6	< 1.2	< 1.6	< 1.9	< 1.6	< 1.9	< 2	< 1.9	< 1.9	< 1.6	10	< 1.9	54	3.2	<b>320</b>	6.7	< 1.5
	04/19/07	9.8	< 1.6	< 2.3	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	< 1.8	< 3.8	10	< 2.2	38	< 2.3	< 2.9
	07/19/07	120	17	< 1.2	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	39	< 1.9	97	< 1.1	<b>100</b>	40	< 1.5
	10/23/07	85	9.9	2.6	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	23	< 1.9	73	< 1.1	<b>180</b>	16	< 1.5
	01/14/08	160	4.1	3.1	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	45	< 1.9	150	24	<b>970</b>	40	< 1.5
	04/29/08	1.1	< 0.2	< 0.26	< 0.14	< 0.22	< 0.21	< 0.25	< 0.31	< 0.28	< 0.17	< 0.21	0.33	< 0.14	1.2	< 0.43	10.6	0.3	< 0.27
	08/12/08	114	10.2	< 2.6 0	< 1.4 0	< 2.2 0	< 2.1 0	< 2.5 0	< 3.1 0	< 2.8 0	< 1.7 0	< 2.1 0	44.3	< 1.4 0	82.1	< 4.3 0	42.3	40.5	< 2.7 0
	10/29/08	80.6	< 5	< 6.5	< 3.5	< 5.4	< 5.1	< 6.2	< 7.8	< 7	< 4.3	< 5.3	18.7	< 3.6	76	< 10.7	<b>282</b>	18	< 6.8
	04/13/09	50.2	2	< 0.65	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	< 0.53	14.7	< 0.36	53.4	1.8	<b>145</b>	11.2	< 0.68
	10/05/09	281	17.6	< 12.2	< 7.7	< 6.1	< 7.2	< 10.2	< 9.3	< 7.4	< 6.8	< 9.3	83.8	< 9.9	181	27.8	<b>2370</b>	59.4	< 10.1
	04/13/10	26.1	0.63	1.5	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	< 0.44	6.2	< 0.47	22.4	3.5	<b>119</b>	2.9	< 0.47
	10/19/10	42.5	1.8	2.1	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	< 0.44	12.1	< 0.47	32	< 0.39	15.1	7.2	< 0.47
	01/18/11	78.8	1.2	1.5	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	27.3	< 4.7	56.8	1	52.8	21.7	< 4.7
	03/16/11	20.5	0.3	0.42	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	0.14	7.9	< 0.94	16	0.21	18.4	6.6	0.096
OW11	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	< 0.13	< 0.15	< 0.02	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	< 0.11	< 0.08	< 0.082	< 0.072	< 0.056	< 0.045	< 0.032
	05/31/00	6.3	< 0.15	0.4	0.29	0.013	< 0.055	< 0.074	< 0.11	<b>0.2</b>	< 0.068	0.95	1.7	< 0.08	0.6	0.22	1.7	0.45	0.95
	08/31/00	3.4	< 0.16	0.25	0.7	<b>0.21</b>	<b>0.48</b>	0.33	< 0.12	<b>0.43</b>	< 0.07	1	< 0.12	0.55	< 0.084	< 0.074	0.22	0.33	0.96
	11/21/00	3.3	< 0.15	0.13	< 0.11	< 0.013	<b>0.29</b>	0.17	< 0.11	0.16	< 0.068	0.42	0.48	0.27	0.32	< 0.072	0.36	0.13	0.41
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	4.2	< 0.34	< 0.3	< 0.28	< 0.18	< 0.21	< 0.23	< 0.2	< 0.27	< 0.26	< 0.42	0.9	< 0.21	< 0.4	< 0.42	< 0.4	< 0.28	< 0.3
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	1.9	< 0.11	< 0.1	0.096	0.093	0.095	< 0.075	0.077	0.092	< 0.085	0.21	0.52	< 0.07	< 0.14	< 0.14	< 0.14	< 0.095	0.24
	06/16/03	4.3	0.14	0.059	0.075	0.071	0.058	0.045	0.06	0.06	< 0.016	0.17	1.2	0.041	0.06	0.024	0.061	0.053	0.22
	11/20/03	2.6	< 0.19	< 0.2	< 0.12	< 0.14	< 0.13	< 0.16	< 0.19	< 0.14	< 0.16	< 0.13	0.63	< 0.21	0.36	< 0.17	< 0.24	< 0.16	< 0.17
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	2.5	0.072	0.027	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	< 0.013	< 0.015	0.054	0.85	< 0.02	0.022	< 0.016	< 0.023	< 0.015	0.068
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/05	1.3	0.043	0.025	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	0.044	0.19	< 0.017	0.023	< 0.023	0.024	< 0.02	0.068
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/03/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
	Quality Standard <sup>1</sup>	NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW11	04/11/06	2	0.078	< 0.058	< 0.079	< 0.093	< 0.079	< 0.097	< 0.098	< 0.096	< 0.095	< 0.078	0.47	< 0.095	0.14	< 0.057	1.1	< 0.057	< 0.073
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/21/07	2.8	0.086	0.028	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	0.053	0.16	< 0.019	0.016	< 0.011	0.037	0.013	0.061
	04/19/07	1.9	0.058	0.019	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.041	0.47	< 0.019	0.044	< 0.011	0.27	< 0.011	0.043
	07/19/07	1.6	< 0.065	< 0.093	< 0.12	< 0.15	< 0.13	< 0.15	< 0.15	< 0.15	< 0.15	< 0.12	1.1	< 0.15	< 0.081	< 0.09	< 0.099	< 0.091	< 0.12
	10/22/07	3.5	0.082	0.043	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.087	0.48	< 0.019	0.11	< 0.011	0.038	0.016	0.081
	01/14/08	2	0.043	0.03	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.074	0.17	< 0.019	< 0.01	< 0.011	0.014	0.012	0.073
	04/28/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/29/08	0.83	0.031	< 0.026	< 0.014	< 0.022	< 0.021	< 0.025	< 0.031	< 0.028	< 0.017	0.069	0.051	< 0.014	0.14	0.17	0.79	0.034	0.055
	04/13/09	1.9	0.038	0.014	0.0044	0.0058	0.0075	< 0.0062	< 0.0078	0.007	< 0.0043	0.053	0.38	0.0042	0.022	< 0.011	0.02	0.011	0.057
	10/05/09	1.4	0.054	0.054	0.012	0.0098	0.0092	0.0057	0.0062	0.0097	< 0.0034	0.1	0.45	< 0.005	0.15	0.2	0.44	0.07	0.094
	04/13/10	2.7	0.086	0.03	0.0039	0.0037	0.0046	< 0.0048	0.0057	0.0052	< 0.0032	0.081	0.25	< 0.0047	0.075	0.026	0.22	0.067	0.07
	10/19/10	1.3	0.032	0.031	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.11	0.11	< 0.0047	0.0074	0.0077	0.07	0.015	0.11
	01/25/11	0.5	0.011	0.0083	< 0.047	0.0047	< 0.047	< 0.047	0.0089	0.0085	< 0.047	0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047
03/17/11	0.48	0.011	0.016	0.0084	0.0068	0.011	0.015	0.013	0.012	0.012	0.07	0.012	0.012	0.016	0.01	0.074	0.009	0.064	
OW12	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/04	23	0.36	< 1.8	0.046	0.03	0.025	< 0.021	0.022	0.039	< 0.022	2.3	13	< 0.017	4.1	0.094	2.5	19	< 1.6
	01/25/05	24	< 2	2.7	< 2	< 1.8	< 1.8	< 2.1	< 2	< 1.7	< 2.2	2.1	8.5	< 1.7	19	7.7	79	15	< 1.7
	04/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/12/05	20	< 1.9	5	< 2	< 1.8	< 1.8	< 2.1	< 1.9	< 1.6	< 2.2	2	7.2	< 1.7	6.6	< 2.3	3.8	12	< 1.6
	07/11/05	16	< 0.41	1.6	< 0.78	< 0.92	< 0.78	< 0.96	< 0.97	< 0.95	< 0.94	1.3	4.7	< 0.94	7.5	< 0.56	2.1	6.2	0.82
	10/03/05	14	< 0.41	1.7	< 0.78	< 0.92	< 0.78	< 0.96	< 0.97	< 0.95	< 0.94	2.3	6.6	< 0.94	4.5	< 0.56	13	13	1.5
	01/05/06	21	0.46	4.1	0.18	0.16	0.15	0.1	< 1.9	0.14	0.02	2.7	8.8	0.084	9.3	1.5	27	17	2
	04/11/06	< 0.0082	0.022	< 0.012	0.026	0.023	0.017	< 0.019	0.02	0.023	< 0.019	0.042	< 0.0091	< 0.019	< 0.01	< 0.011	0.013	0.012	0.037
	07/21/06	5.5	< 0.2	1	< 0.39	< 0.46	< 0.39	< 0.48	< 0.48	< 0.47	< 0.47	2.2	3.6	< 0.47	0.35	< 0.28	< 0.31	6.2	1.4
	10/04/06	19	0.53	2.3	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	3.6	7.6	< 0.38	2.7	< 0.22	8.6	17	2.5
	02/21/07	23	0.45	3.4	< 0.31	< 0.37	< 0.32	< 0.39	< 0.39	< 0.38	< 0.38	3.7	9.6	< 0.38	6	1.1	11	17	2.7
	04/19/07	5.5	0.11	0.39	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	1.4	2	< 0.019	1.8	< 0.011	1.5	1.6	1
	07/19/07	12	0.18	0.71	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	2.2	2.5	< 0.019	0.96	0.068	0.9	1.5	1.4
	10/22/07	11	< 0.81	1.8	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	3.9	3.7	< 1.9	2.4	< 1.1	22	4.9	1.7
01/15/08	53	2.5	< 1.4	< 1.9	< 2.3	< 2	< 2.4	< 2.4	< 2.4	< 2.4	< 1.9	7.5	< 2.4	12	< 1.4	< 1.5	< 1.4	< 1.8	
04/29/08	9.3	0.2	< 0.27	0.027	0.026	0.028	0.019	0.023	0.022	< 0.0044	1.7	3.8	0.014	3.1	0.02	0.8	7	1.1	
08/12/08	10	< 0.25	0.38	< 0.17	< 0.27	< 0.26	< 0.31	< 0.39	< 0.35	< 0.22	1.4	4.2	< 0.18	< 0.48	< 0.53	< 0.82	1.3	1.1	
10/30/08	6.3	0.12	0.28	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	1.1	1.3	< 0.0036	0.45	0.014	0.23	1.4	0.84	
04/13/09	13.7	0.17	1.9	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	2.6	8.5	< 0.072	4.2	1.2	2.2	11.2	2.4	
10/05/09	22.3	< 0.31	3.5	< 0.31	< 0.24	< 0.29	< 0.41	< 0.37	< 0.3	< 0.27	4.2	11.6	< 0.4	1.6	< 0.33	4.7	16.5	3.5	
04/14/10	11.4	0.14	1.6	< 0.0036	0.0045	0.0053	< 0.0048	< 0.0044	0.0039	< 0.0032	2.6	5.4	< 0.0047	0.69	0.11	0.31	6.7	1.9	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW12	10/19/10	25.3	0.31	3.8	0.006	0.0058	0.0058	< 0.0048	0.0053	0.0053	< 0.0032	3.3	9.7	< 0.0047	5.3	0.11	6	15.2	3
	01/19/11	18.1	0.22	2.1	0.0058	0.0056	0.0069	0.0057	0.0071	0.0075	< 0.047	2.9	8.1	0.0048	3.2	2	13.6	11.5	2.6
	03/17/11	27.1	0.32	2.9	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	3.5	9.7	< 0.94	17.2	4.6	39.6	15.5	2.9
OW14	07/25/07	9.5	1.1	< 0.23	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	0.77	< 0.38	8.8	< 0.22	52	1.3	< 0.29
	10/22/07	190	14	1.5	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	19	< 1.9	170	29	<b>1600</b>	14	< 1.5
	04/29/08	181	< 9.9	< 13	< 6.9	< 10.8	< 10.3	< 12.5	< 15.6	< 14	< 8.6	< 10.7	< 12.5	< 7.2	108	< 21.4	<b>608</b>	26.4	< 13.5
	08/12/08	132	< 0.5	0.86	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	< 0.53	11.3	< 0.36	54	4.8	<b>387</b>	21.3	< 0.68
	10/30/08	101	2.2	< 2.6	< 1.4	< 2.2	< 2.1	< 2.5	< 3.1	< 2.8	< 1.7	< 2.1	16.2	< 1.4	58.8	5.1	95.7	31.3	< 2.7
	04/13/09	123	1.6	< 0.65	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	< 0.53	27	< 0.36	65.3	8.3	<b>244</b>	31.3	< 0.68
	10/05/09	17.8	< 0.31	< 0.49	< 0.31	< 0.24	< 0.29	< 0.41	< 0.37	< 0.3	< 0.27	< 0.37	< 0.4	< 0.4	2.9	< 0.33	9.5	22.7	< 0.4
	04/13/10	35.1	0.52	1.7	< 0.072	< 0.057	< 0.068	< 0.096	< 0.087	< 0.07	< 0.064	< 0.088	0.48	< 0.094	2.1	< 0.077	4.3	6.1	< 0.095
	10/19/10	56	1.4	0.85	< 0.072	< 0.057	< 0.068	< 0.096	< 0.087	< 0.07	< 0.064	< 0.088	4.2	< 0.094	27.8	4.3	<b>173</b>	7.4	< 0.095
	01/18/11	42.9	< 11.8	< 11.8	< 11.8	< 11.8	< 11.8	< 11.8	< 11.8	< 11.8	< 11.8	< 11.8	10.4	< 11.8	28.3	6.3	<b>149</b>	9	< 11.8
	03/16/11	26.4	< 0.94	< 0.94	0.079	0.15	<b>0.43</b>	0.3	0.4	<b>0.41</b>	< 0.94	< 0.94	10	0.21	19.1	1.6	< 0.94	7	< 0.94
OW15	07/24/07	0.61	0.013	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.013	< 0.019	< 0.01	< 0.011	0.019	0.017	< 0.015
	10/22/07	0.14	0.0097	0.022	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.077	0.02	< 0.015
	01/15/08	0.032	< 0.016	0.029	0.067	0.089	0.11	0.1	0.13	0.17	< 0.038	0.36	< 0.018	0.077	< 0.02	< 0.022	< 0.025	0.16	0.25
	04/29/08	0.18	0.0076	0.01	0.0099	0.012	0.015	0.011	0.015	0.016	< 0.0043	0.033	< 0.0063	0.0081	< 0.0096	< 0.011	0.022	0.018	0.035
	08/12/08	0.14	0.011	0.016	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	0.025	0.029	0.16	0.013	0.0096
	10/30/08	0.2	0.0075	0.0092	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	< 0.0095	< 0.011	0.017	0.009	0.0084
	04/13/09	< 0.0078	< 0.005	< 0.0065	0.0039	< 0.0054	0.0081	< 0.0062	< 0.0078	0.0072	< 0.0043	0.012	< 0.0063	0.004	< 0.0095	< 0.011	< 0.016	< 0.0075	0.017
	10/05/09	0.22	0.0094	0.018	0.0044	0.0051	0.0058	< 0.0051	0.0065	0.0067	< 0.0034	0.012	< 0.0051	< 0.005	0.011	0.005	0.056	0.035	0.021
	04/13/10	0.16	0.0055	0.0082	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.0098	0.025	< 0.0047	0.0099	0.0084	0.053	0.025	0.0089
	10/19/10	0.011	< 0.0036	0.0076	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	0.01	0.0047	0.09	< 0.0081	< 0.0047
	01/19/11	< 0.047	0.0036	0.017	0.0058	0.0043	0.0045	0.0063	0.0071	0.006	0.0032	0.014	0.0048	0.0055	< 0.047	0.0047	< 0.047	0.019	0.012
03/17/11	0.011	0.0044	0.012	0.008	0.0067	0.0072	0.007	0.0072	0.01	< 0.048	0.022	< 0.048	< 0.048	< 0.048	0.0075	0.016	0.02	0.023	
OW16	07/24/07	0.039	0.011	0.025	0.02	0.02	0.021	< 0.019	< 0.019	0.021	< 0.019	0.11	0.024	< 0.019	< 0.01	< 0.011	0.02	0.014	0.077
	10/22/07	0.057	0.16	0.11	0.46	<b>0.61</b>	<b>0.43</b>	0.36	0.48	<b>0.48</b>	0.097	0.76	0.033	0.33	< 0.025	< 0.028	0.058	0.033	0.6
	01/14/08	0.085	0.57	0.2	2	<b>2.4</b>	<b>1.7</b>	1.3	1.9	<b>2.1</b>	0.36	2.9	< 0.091	1.3	< 0.1	< 0.11	0.18	< 0.11	2.4
	04/29/08	0.075	0.011	0.0092	0.016	0.015	0.016	0.013	0.017	0.018	< 0.0043	0.045	0.017	0.0092	0.059	< 0.011	0.19	0.0096	0.046
	10/29/08	0.072	0.013	0.017	0.023	0.024	0.021	0.015	0.022	0.021	< 0.0043	0.1	0.043	0.014	0.032	0.03	0.062	0.0099	0.076
	04/13/09	0.039	< 0.005	< 0.0065	0.01	0.011	0.0096	0.0079	0.011	0.011	< 0.0043	0.03	0.018	0.0069	< 0.0095	< 0.011	< 0.016	< 0.0075	0.027
	10/05/09	0.028	0.042	0.035	0.13	0.15	0.11	0.072	0.089	0.1	0.025	0.2	0.018	0.066	< 0.0053	0.0057	0.028	0.01	0.17
	04/14/10	0.079	0.018	0.017	0.057	0.055	0.045	0.04	0.055	0.047	0.01	0.094	0.035	0.035	0.017	0.0089	0.041	0.039	0.076
	10/19/10	0.019	0.0092	0.042	0.012	0.012	0.0089	0.011	0.014	0.014	< 0.0032	0.04	0.013	0.0075	0.0055	< 0.0039	0.02	< 0.0081	0.039
	01/19/11	< 0.047	0.011	0.021	0.025	0.033	0.023	0.024	0.031	0.028	0.0059	0.047	0.0077	0.021	< 0.047	< 0.047	< 0.047	< 0.047	0.042
	03/16/11	< 0.047	< 0.047	< 0.047	0.018	0.02	0.018	0.014	0.02	0.021	< 0.047	0.042	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047



**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
OW17	07/24/07	5.4	< 0.16	0.24	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	1.7	< 0.38	1.2	< 0.22	< 0.25	0.65	< 0.29
	10/22/07	10	0.08	0.26	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.068	3.7	< 0.019	1.9	0.18	0.082	2.3	0.037
	01/14/08	8.7	0.069	0.25	0.023	0.026	0.018	< 0.019	0.025	0.025	< 0.019	0.081	3.1	< 0.019	1.6	0.1	0.093	1.9	0.051
	04/29/08	5.2	< 0.005	0.15	0.014	0.013	0.011	0.0068	0.012	0.012	< 0.0043	0.051	1.5	0.0055	0.9	0.037	0.15	0.87	0.037
	10/29/08	5.2	< 0.099	0.19	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	< 0.11	1.9	< 0.072	< 0.19	< 0.21	< 0.33	0.69	< 0.14
	04/13/09	2.8	< 0.04	< 0.052	< 0.028	< 0.043	< 0.041	< 0.05	< 0.062	< 0.056	< 0.034	< 0.043	1.1	< 0.029	< 0.076	< 0.086	< 0.13	< 0.06	< 0.054
	10/05/09	5.2	< 0.038	0.092	< 0.038	< 0.03	< 0.036	< 0.051	< 0.046	< 0.037	< 0.034	0.059	2.1	< 0.05	0.16	< 0.041	0.053	0.55	< 0.05
	04/14/10	1.9	0.009	0.039	0.013	0.01	0.01	0.0068	0.01	0.0097	< 0.0032	0.049	0.7	0.0063	0.012	0.0092	0.055	0.019	0.029
	10/19/10	4.2	< 0.072	0.15	< 0.072	0.077	< 0.068	< 0.096	< 0.087	0.072	< 0.064	0.13	1.6	< 0.094	< 0.1	< 0.077	< 0.097	0.31	0.1
	01/19/11	3.3	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	1.1	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94
03/16/11	3	< 0.047	< 0.047	0.015	0.015	0.016	0.013	0.018	0.016	0.0041	< 0.047	0.96	0.011	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	
OW18	01/20/11	2.5	0.053	0.062	0.013	0.0056	0.0061	< 0.047	0.0064	0.014	< 0.047	0.14	0.62	< 0.047	0.0078	0.0058	< 0.047	0.11	0.083
	03/16/11	4.2	0.048	0.036	0.011	0.011	0.021	0.013	0.014	0.017	< 0.047	0.071	0.65	0.0098	0.018	0.005	0.025	0.036	0.021
OW19	01/20/11	0.25	0.068	0.013	0.012	0.011	0.012	0.011	0.013	0.015	< 0.049	0.028	< 0.049	0.0062	0.0096	0.016	< 0.049	0.026	0.029
	03/17/11	0.084	0.0064	0.014	0.015	0.015	0.016	0.018	0.022	0.019	0.0048	0.034	0.006	0.013	0.016	0.015	0.049	0.027	0.042
OW20	01/20/11	0.0093	0.022	0.034	0.071	0.082	0.071	0.066	0.079	0.092	0.013	0.19	< 0.048	0.049	0.0054	0.0074	< 0.048	0.063	0.17
	03/17/11	0.0083	0.0084	0.014	0.0086	0.0087	0.0091	0.01	0.01	0.013	< 0.047	0.028	0.0091	0.0069	0.018	0.024	0.085	0.03	0.024
OW21	01/20/11	< 0.048	0.013	0.081	0.051	0.053	0.045	0.045	0.055	0.065	0.01	0.24	0.018	0.035	< 0.048	0.0071	< 0.048	0.19	0.18
	03/16/11	< 0.047	0.079	0.065	0.26	<b>0.33</b>	<b>0.36</b>	0.27	0.27	<b>0.28</b>	0.068	0.42	< 0.047	0.21	< 0.047	< 0.047	0.047	0.066	0.4
P05B	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/17/93	ND	ND	20	0.71	ND	ND	ND	ND	<b>0.23</b>	ND	17	130	ND	--	--	ND	110	5.7
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	< 5	< 10	12	0.25	< 0.12	< 0.25	< 1	< 0.25	< 0.5	< 0.5	11	97	< 0.5	660	390	<b>3500</b>	76	3.2
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/04/97	110	770	110	< 0.16	< 0.32	< 0.44	< 0.55	< 0.3	< 0.1	< 0.65	11	110	< 0.28	630	300	<b>2600</b>	67	3.5
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	190	180	13	< 0.17	< 0.27	< 0.43	< 1	< 0.29	< 0.13	< 1.6	17	130	< 0.83	250	530	<b>2800</b>	84	5.3
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	4.3	< 0.15	< 0.02	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	1.3	< 0.08	< 0.082	< 0.072	< 0.056	< 0.045	< 0.032
	05/31/00	29	< 0.15	< 0.02	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	0.06	< 0.069	0.72	13	< 0.081	< 0.072	29	0.51	2.6	0.42
08/31/00	262	< 0.15	18	2.4	<b>0.85</b>	<b>0.5</b>	< 0.074	< 0.11	<b>0.74</b>	< 0.068	14	159	< 0.08	340	134	<b>3030</b>	93	10	
11/21/00	266	141	15	1.3	< 0.013	<b>0.26</b>	0.18	0.14	<b>0.65</b>	< 0.068	7.4	156	< 0.08	326	94	<b>3420</b>	103	7.8	
04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/02/02	< 220	< 280	< 240	0.55	<b>0.34</b>	< 0.28	< 0.3	< 0.26	< 0.36	< 0.34	5.7	< 250	< 0.28	< 320	< 340	<b>2900</b>	< 230	3.6	
07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/28/02	230	< 120	< 100	< 95	< 60	< 70	< 75	< 65	< 90	< 85	< 140	< 110	< 70	320	< 140	<b>3800</b>	110	< 100	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
	Quality Standard <sup>1</sup>	NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
P05B	06/16/03	260	< 95	< 100	0.29	< 0.28	< 0.26	< 0.32	< 0.38	< 0.28	< 0.32	8.1	110	< 0.42	360	130	<b>3900</b>	100	6.5
	11/20/03	260	82	17	< 6	< 7	< 6.5	< 8	< 9.5	< 7	< 8	8	120	< 10	370	170	<b>4800</b>	110	< 8.5
	04/20/04	79	< 65	4.2	< 0.48	< 0.56	< 0.52	< 0.64	< 0.76	< 0.56	< 0.64	2	< 58	< 0.84	91	18	<b>1000</b>	< 54	1.2
	07/20/04	62	6	2	< 1.1	< 1.3	< 1.2	< 1.5	< 1.8	< 1.3	< 1.5	2.5	20	< 2	24	< 1.6	< 2.3	5.8	1.7
	10/12/04	< 160	32	8.2	< 2	< 1.8	< 1.8	< 2.1	< 1.9	< 1.6	< 2.2	6.7	< 170	< 1.7	< 160	42	<b>1500</b>	< 160	4.4
	01/25/05	210	66	18	< 3.9	< 3.6	< 3.6	< 4.1	< 3.9	< 3.3	< 4.4	10	100	< 3.4	270	140	<b>3300</b>	95	5.6
	04/11/05	94	12	< 3.5	< 3.9	< 3.6	< 3.6	< 4.1	< 3.9	< 3.3	< 4.4	< 3.3	21	< 3.4	38	< 4.5	< 4.5	< 4.1	< 3.3
	07/11/05	100	21	5.8	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	35	< 3.8	92	18	<b>430</b>	22	< 2.9
	10/03/05	130	21	5.2	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	44	< 3.8	130	31	<b>440</b>	30	< 2.9
	01/05/06	80	4.4	1	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	0.93	12	< 0.38	8.8	< 0.22	< 0.25	< 0.23	0.59
	04/11/06	90	7.8	3.2	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	29	< 3.8	57	5.3	34	11	< 2.9
	07/21/06	150	19	9.2	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	3.9	49	< 3.8	130	21	<b>240</b>	41	< 2.9
	10/04/06	140	20	8.6	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	4.2	41	< 0.38	130	38	<b>1200</b>	48	2.7
	02/21/07	110	11	10	< 1.6	< 1.9	< 1.6	< 1.9	< 2	< 1.9	< 1.9	5	50	< 1.9	110	46	<b>1300</b>	64	3
	04/19/07	0.019	0.031	0.12	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.019	0.0094	< 0.019	< 0.01	< 0.011	0.022	0.025	0.037
	07/19/07	85	17	2.4	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	3	25	< 1.9	36	1.6	<b>480</b>	3.9	1.8
	10/22/07	170	15	11	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	5.1	43	< 0.38	130	10	<b>1300</b>	39	3.1
	01/14/08	0.022	0.047	0.11	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.2	0.021	< 0.019	0.013	< 0.011	0.029	0.043	0.055
	04/28/08	140	< 24.8	< 32.5	< 17.3	< 27	< 25.7	< 31.2	< 38.9	< 34.9	< 21.5	< 26.7	< 31.3	< 18	109	< 53.5	<b>947</b>	38.2	< 33.8
	08/12/08	118	12.9	11	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	6.9	45.8	< 0.36	98.1	20.1	<b>485</b>	50	4.4
	10/29/08	152	7.9	14.2	< 3.5	< 5.4	< 5.1	< 6.2	< 7.8	< 7	< 4.3	< 5.3	51	< 3.6	131	29.9	<b>1030</b>	42.5	< 6.8
	04/13/09	12.1	0.56	0.24	< 0.069	< 0.11	< 0.1	< 0.12	< 0.16	< 0.14	< 0.086	0.96	1.3	< 0.072	< 0.19	< 0.21	< 0.33	< 0.15	0.85
	10/05/09	132	9.5	10.1	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	4.9	47.8	< 0.47	67.7	8.5	<b>555</b>	37.6	3.4
	04/14/10	< 0.0045	0.047	0.024	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	0.0048	< 0.0032	0.0091	< 0.0048	< 0.0047	< 0.005	0.0047	0.016	< 0.0081	0.011
	10/20/10	146	20.5	15.6	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	7.6	73.3	< 0.47	119	24.9	<b>1600</b>	67.4	5.2
	01/25/11	19.5	0.73	1.6	0.017	0.0038	< 0.047	< 0.047	< 0.047	0.018	< 0.047	1.2	12.3	< 0.047	19.2	1.4	14.8	5.1	0.71
	03/17/11	< 0.047	0.06	0.036	0.0075	0.0056	0.0075	0.005	0.0053	0.008	< 0.047	0.022	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.017
PZ03B	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/09/96	< 1	< 2	< 0.2	< 0.05	< 0.024	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.2	< 0.4	< 0.1	< 1	< 1	< 1	< 0.4	< 0.2
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	< 1	< 2	< 0.2	< 0.05	< 0.024	< 0.05	< 0.2	< 0.05	< 0.1	< 0.1	< 0.2	< 0.4	< 0.1	< 1	< 1	< 1	< 0.4	< 0.2
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	< 1	< 0.94	< 0.021	< 0.034	< 0.067	< 0.093	< 0.12	< 0.065	< 0.022	< 0.14	< 0.064	< 0.08	< 0.06	< 0.61	< 0.69	< 0.33	< 0.026	< 0.068
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	< 0.23	< 0.57	< 0.019	0.06	0.12	0.049	< 0.1	< 0.03	0.047	< 0.17	< 0.1	< 0.03	< 0.086	< 0.42	< 0.62	< 0.23	0.055	< 0.049
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	< 0.13	< 0.15	< 0.02	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	< 0.11	< 0.08	< 0.082	< 0.072	0.12	< 0.045	< 0.032

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
PZ03B	05/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/21/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	< 0.018	< 0.023	< 0.02	0.049	0.062	0.05	0.046	0.047	0.049	< 0.017	0.055	< 0.021	0.038	< 0.027	< 0.028	0.029	0.021	0.052
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/16/03	< 0.018	< 0.019	< 0.02	0.016	0.016	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	0.026	< 0.017	< 0.021	< 0.018	< 0.017	0.033	< 0.016	0.025
	11/20/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/05	< 0.019	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	< 0.02	< 0.023	< 0.022	< 0.02	< 0.016
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/03/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	0.078	< 0.0082	0.014	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	< 0.016	0.045	< 0.019	0.054	0.056	0.23	0.062	< 0.015
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/21/07	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.014	< 0.011	< 0.015
	04/19/07	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.024	< 0.011	< 0.015
	07/19/07	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	0.013	0.043	< 0.011	< 0.015
	10/22/07	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.034	< 0.011	< 0.015
	01/14/08	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.018	< 0.011	< 0.015
	04/28/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/29/08	0.011	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	< 0.0095	< 0.011	0.039	< 0.0075	< 0.0068
	04/13/09	0.021	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	0.02	< 0.011	0.066	< 0.0075	< 0.0068
	10/05/09	0.0072	0.0053	< 0.0061	0.0095	0.0084	0.0056	< 0.0051	0.0056	0.007	< 0.0034	0.017	0.0059	< 0.005	0.0074	0.0093	0.031	0.018	0.014
	04/13/10	0.13	0.01	0.026	0.013	0.013	0.011	0.0095	0.017	0.018	0.0038	0.036	0.055	0.0081	0.074	0.06	0.51	0.056	0.029
	10/19/10	0.0087	< 0.0036	0.013	0.027	0.015	0.029	0.022	0.039	0.036	0.016	0.051	< 0.0048	0.018	0.011	0.011	0.11	0.023	0.03
	01/25/11	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.007	< 0.047	< 0.047
	03/17/11	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.0071	< 0.047	< 0.047

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
PZ07B	09/16/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/09/96	440	< 40	10	< 1	< 0.48	< 1	< 4	< 1	< 2	< 2	5.6	130	< 2	1700	350	<b>2600</b>	87	< 4
	08/15/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/16/96	390	450	1.4	< 0.25	< 0.12	< 0.25	< 1	< 0.25	< 0.5	< 0.5	1.5	36	< 0.5	620	180	<b>870</b>	15	0.76
	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	290	350	2.4	< 0.16	< 0.32	< 0.44	< 0.55	< 0.3	< 0.1	< 0.65	< 0.3	32	< 0.28	110	53	< 1.6	15	< 0.32
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	190	100	2.7	< 0.017	< 0.027	< 0.043	< 0.1	< 0.029	< 0.013	< 0.16	2.2	52	< 0.083	170	170	<b>970</b>	23	1
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	223	< 0.15	3.1	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	0.13	< 0.068	3.4	54	< 0.08	219	224	<b>1000</b>	20	1.8
	05/31/00	154	207	11	0.23	< 0.013	< 0.055	< 0.074	< 0.11	0.09	< 0.068	6.2	164	< 0.08	289	348	<b>1700</b>	101	6.2
	08/31/00	173	195	17	0.36	< 0.013	< 0.055	< 0.074	< 0.11	0.15	< 0.068	7.3	181	< 0.08	300	324	<b>358</b>	93	7.8
	11/21/00	174	176	15	0.25	< 0.013	< 0.055	< 0.074	< 0.11	0.11	< 0.068	8.3	111	< 0.08	305	374	<b>966</b>	98	7.3
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	160	< 170	8.3	< 0.38	< 0.24	< 0.28	< 0.3	< 0.26	< 0.36	< 0.34	2.9	< 150	< 0.28	270	350	<b>2300</b>	< 140	4.5
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	160	130	7.4	< 1.9	< 1.2	< 1.4	< 1.5	< 1.3	< 1.8	< 1.7	3.3	< 84	< 1.4	300	380	<b>1700</b>	98	5.4
	06/16/03	150	25	11	< 1.2	< 1.4	< 1.3	< 1.6	< 1.9	< 1.4	< 1.6	2.9	50	< 2.1	190	5.5	< 2.4	87	6
	11/20/03	< 180	< 190	15	< 3	< 3.5	< 3.2	< 4	< 4.8	< 3.5	< 4	< 3.2	56	< 5.2	310	400	<b>2700</b>	95	5.2
	04/20/04	140	32	1.3	< 0.46	< 0.53	< 0.5	< 0.61	< 0.72	< 0.53	< 0.61	< 0.5	30	< 0.8	160	140	48	18	< 0.65
	07/20/04	50	8.5	< 1.9	< 1.1	< 1.3	< 1.2	< 1.5	< 1.8	< 1.3	< 1.5	< 1.2	8.6	< 2	52	46	62	11	< 1.6
	10/12/04	< 78	9.8	< 1.8	< 2	< 1.8	< 1.8	< 2.1	< 1.9	< 1.6	< 2.2	< 1.6	7.9	< 1.7	< 80	< 91	<b>980</b>	5.9	< 1.6
	01/25/05	140	170	15	< 3.9	< 3.6	< 3.6	< 4.1	< 3.9	< 3.3	< 4.4	4.4	55	< 3.4	290	390	<b>2800</b>	88	6.3
	04/11/05	84	41	16	< 3.9	< 3.6	< 3.6	< 4.1	< 3.9	< 3.3	< 4.4	< 3.3	19	< 3.4	120	130	<b>700</b>	39	< 3.3
	07/11/05	77	26	4.2	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	10	< 3.8	95	98	<b>810</b>	8.6	< 2.9
	10/03/05	72	20	< 2.3	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	9.5	< 3.8	97	85	<b>890</b>	7.9	< 2.9
	01/05/06	94	26	< 4.6	< 6.2	< 7.3	< 6.3	< 7.7	< 7.7	< 7.6	< 7.5	< 6.2	12	< 7.5	120	160	<b>1600</b>	9.6	< 5.8
	04/11/06	78	30	1.4	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	13	< 1.9	110	100	<b>590</b>	9.1	< 1.5
	07/21/06	110	42	7.4	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	24	< 3.8	150	170	<b>1000</b>	50	4.7
	10/04/06	180	110	11	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	4.8	41	< 0.38	300	380	<b>2000</b>	97	7.9
	02/21/07	81	28	4.9	< 0.31	< 0.37	< 0.32	< 0.39	< 0.39	< 0.38	< 0.38	1.9	20	< 0.38	120	140	<b>730</b>	43	3.1
	04/19/07	130	43	< 46	< 62	< 73	< 63	< 77	< 77	< 76	< 75	< 62	< 36	< 75	150	180	<b>1200</b>	48	< 58
	07/19/07	100	12	3.1	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	18	< 1.9	87	1.6	< 1.2	14	< 1.5
	10/22/07	170	70	26	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	3.5	44	< 1.9	270	310	<b>1600</b>	69	6.2
	01/14/08	140	< 20	< 29	< 39	< 46	< 39	< 48	< 48	< 47	< 47	< 39	< 23	< 47	160	170	<b>940</b>	< 28	< 36
	04/28/08	25.5	6	< 1	< 0.56	< 0.86	< 0.82	< 1	< 1.2	< 1.1	< 0.69	< 0.85	3	< 0.58	34.9	26.4	24.7	4.4	< 1.1
	08/12/08	99.5	45	8.1	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	3.8	27	< 0.36	154	192	<b>794</b>	63	6.4

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
PZ07B	10/29/08	240	< 24.8	< 32.5	< 17.3	< 27	< 25.7	< 31.2	< 38.9	< 34.9	< 21.5	< 26.7	< 31.3	< 18	287	327	<b>1680</b>	< 37.4	< 33.8
	04/13/09	180	25.3	4	< 0.35	< 0.54	< 0.51	< 0.62	< 0.78	< 0.7	< 0.43	0.66	35.8	< 0.36	176	101	65.7	25.3	1.4
	10/05/09	124	50.1	11.6	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	2.7	37.6	< 0.47	138	136	<b>701</b>	60.6	5.1
	04/13/10	117	23.8	5.1	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	0.48	22.2	< 0.47	103	50.5	14.1	15	0.79
	10/19/10	87.4	26.6	16.4	< 0.36	< 0.29	< 0.34	< 0.48	< 0.44	< 0.35	< 0.32	2.1	21.7	< 0.47	107	117	<b>587</b>	35.3	4.4
	01/19/11	152	46.8	< 189	< 189	< 189	< 189	< 189	< 189	< 189	< 189	< 189	< 189	< 189	190	203	<b>945</b>	61.1	< 189
	03/17/11	81.8	24.1	3.5	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	< 4.7	0.59	19.3	< 4.7	79.1	37.7	5.8	15.9	0.95
PZ09B	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/04/97	< 0.96	< 0.89	0.08	< 0.032	< 0.063	< 0.088	< 0.11	< 0.061	< 0.021	< 0.13	< 0.06	2	< 0.057	14	6.6	81	0.95	< 0.064
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	32	< 0.55	0.58	< 0.017	< 0.027	< 0.043	< 0.1	< 0.029	< 0.013	< 0.16	0.89	3.9	< 0.083	12	29	8.4	0.85	0.33
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	2.1	< 0.51	< 0.067	< 0.38	< 0.045	< 0.18	< 0.25	< 0.38	< 0.2	< 0.23	< 0.22	< 0.38	< 0.27	< 0.28	< 0.24	< 0.19	< 0.15	< 0.11
	05/31/00	17	< 0.15	0.39	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	0.56	< 0.11	< 0.08	5.7	< 0.072	0.78	0.23	0.35
	08/31/00	2.1	< 0.15	< 0.02	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	< 0.11	< 0.08	0.78	0.12	0.52	0.12	< 0.032
	11/21/00	40	< 0.15	0.95	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	2.2	< 0.08	11	< 0.072	1.2	< 0.045	< 0.032
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	1.1	0.12	0.07	< 0.019	< 0.012	< 0.014	< 0.015	< 0.013	< 0.018	< 0.017	0.15	0.12	< 0.014	0.49	< 0.028	0.95	0.17	0.15
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	0.059	< 0.023	< 0.02	< 0.019	< 0.012	< 0.014	< 0.015	< 0.013	< 0.018	< 0.017	0.052	< 0.021	< 0.014	< 0.027	< 0.028	0.032	< 0.019	0.11
	06/16/03	0.036	< 0.019	0.063	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	0.15	< 0.017	< 0.021	< 0.018	< 0.017	0.035	< 0.016	0.27
	11/20/03	34	0.25	0.46	< 0.013	< 0.015	< 0.014	< 0.017	< 0.02	< 0.015	< 0.017	0.43	0.056	< 0.022	14	0.13	5	0.069	0.39
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	0.15	< 0.018	< 0.019	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	< 0.013	< 0.015	< 0.012	< 0.016	< 0.02	0.032	< 0.016	0.037	< 0.015	< 0.016
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/12/05	0.4	0.021	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	0.18	< 0.023	0.58	< 0.02	< 0.016
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/03/05	1.6	0.044	0.014	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.023	< 0.019	0.72	0.034	1.2	0.019	< 0.015
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	1.4	0.048	0.013	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.024	< 0.019	0.86	0.029	0.75	0.02	< 0.015
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	1.4	< 0.041	< 0.058	< 0.078	< 0.092	< 0.078	< 0.096	< 0.097	< 0.095	< 0.094	< 0.077	< 0.045	< 0.094	0.63	< 0.056	< 0.062	< 0.057	< 0.073
	02/21/07	4.8	0.094	0.031	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.02	< 0.019	2.6	0.022	0.92	0.029	< 0.015
	04/19/07	6.9	< 0.16	< 0.23	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	< 0.18	< 0.38	3.3	< 0.22	1.9	< 0.23	< 0.29
	07/19/07	0.67	0.032	< 0.029	< 0.039	< 0.046	< 0.039	< 0.048	< 0.048	< 0.047	< 0.047	< 0.039	< 0.023	< 0.047	0.089	< 0.028	< 0.031	< 0.028	< 0.036

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Polynuclear Aromatic Hydrocarbons (µg/l)																	
Sample ID	Sample Date	Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
PZ09B	10/22/07	0.019	0.017	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.0096	< 0.019	0.065	0.045	0.46	< 0.011	< 0.015
	01/14/08	2.6	0.063	0.02	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.99	< 0.011	0.29	0.012	< 0.015
	04/28/08	2.3	< 0.05	< 0.065	< 0.035	< 0.054	< 0.051	< 0.062	< 0.078	< 0.07	< 0.043	< 0.053	< 0.063	< 0.036	0.51	< 0.11	< 0.16	< 0.075	< 0.068
	10/29/08	3.3	0.067	0.019	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.0087	0.01	< 0.0036	0.044	< 0.011	0.1	0.0092	< 0.0068
	04/13/09	1.9	0.03	0.016	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.011	0.0078	< 0.0036	0.043	< 0.011	0.29	0.01	0.0097
	10/05/09	8.3	0.083	0.063	< 0.0038	< 0.003	< 0.0036	< 0.0051	< 0.0046	< 0.0037	< 0.0034	0.016	0.039	< 0.005	0.1	0.0077	0.079	0.015	0.012
	04/13/10	0.44	0.024	0.0095	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.0058	0.012	< 0.0047	0.02	0.012	0.24	< 0.0081	< 0.0047
	10/19/10	8	0.096	0.057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.019	0.043	< 0.0047	0.11	0.016	0.15	0.017	0.014
	01/20/11	11.3	0.12	0.24	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.18	0.2	< 0.047	2.9	0.04	4.2	0.42	0.13
	03/17/11	0.46	0.027	0.013	< 0.047	< 0.047	< 0.047	0.0048	< 0.047	< 0.047	< 0.047	0.0049	0.029	< 0.047	0.11	0.046	0.66	0.014	< 0.047
PZ10B	08/16/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/03/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/04/97	< 1	< 0.97	< 0.022	< 0.035	< 0.069	< 0.096	< 0.12	< 0.066	< 0.023	< 0.14	< 0.065	< 0.082	< 0.062	< 0.63	< 0.71	< 0.34	< 0.027	< 0.07
	02/26/98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/23/99	< 0.22	< 0.55	< 0.018	< 0.017	< 0.027	< 0.043	< 0.1	< 0.029	< 0.013	< 0.16	< 0.1	< 0.029	< 0.083	< 0.4	< 0.6	< 0.22	< 0.014	< 0.047
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	< 0.12	< 0.14	< 0.019	< 0.11	< 0.012	< 0.052	< 0.069	< 0.11	< 0.056	< 0.064	< 0.062	< 0.11	< 0.076	< 0.077	< 0.068	0.16	< 0.043	< 0.03
	05/31/00	< 0.13	< 0.15	< 0.02	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	< 0.11	< 0.08	< 0.082	< 0.072	0.13	< 0.045	< 0.032
	08/31/00	< 0.14	< 0.16	< 0.021	0.23	< 0.014	< 0.057	< 0.077	< 0.12	<b>0.21</b>	< 0.071	< 0.069	< 0.12	< 0.086	< 0.084	< 0.075	< 0.058	< 0.048	< 0.034
	11/21/00	< 0.19	< 0.21	< 0.028	< 0.16	< 0.019	< 0.077	< 0.1	< 0.16	< 0.084	< 0.096	< 0.093	< 0.16	< 0.11	< 0.12	< 0.1	0.21	< 0.064	< 0.045
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	0.26	< 0.023	< 0.02	0.034	0.033	0.037	0.029	0.031	0.04	< 0.017	0.087	< 0.021	0.024	0.039	< 0.028	0.24	0.048	0.07
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	0.021	< 0.023	< 0.02	< 0.019	0.017	0.02	0.018	0.013	< 0.018	< 0.017	0.032	< 0.021	< 0.014	< 0.027	< 0.028	0.08	0.027	0.027
	06/16/03	0.046	< 0.019	< 0.02	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	0.019	< 0.017	< 0.021	0.034	0.022	0.072	0.038	0.019
	11/20/03	< 0.018	< 0.019	< 0.02	0.015	0.019	0.021	0.016	< 0.019	<b>0.22</b>	< 0.016	0.037	< 0.017	< 0.021	< 0.018	< 0.017	0.042	0.024	0.028
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/12/05	0.033	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	0.018	< 0.022	< 0.017	< 0.02	< 0.023	0.04	< 0.02	< 0.016
07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/03/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/11/06	< 0.0083	< 0.0083	< 0.012	< 0.016	< 0.019	< 0.016	< 0.02	< 0.02	< 0.019	< 0.019	0.02	< 0.0092	< 0.019	< 0.01	0.013	0.045	< 0.012	0.016	
07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/04/06	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.015	< 0.011	< 0.015	



**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
PZ10B	02/21/07	< 0.0082	< 0.0082	< 0.012	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	< 0.016	< 0.0091	< 0.019	< 0.01	< 0.011	0.045	< 0.011	< 0.015
	04/19/07	0.22	< 0.16	< 0.23	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	< 0.18	< 0.38	0.25	< 0.22	3.7	< 0.23	< 0.29
	07/19/07	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	< 0.012	< 0.011	< 0.015
	10/23/07	0.011	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.014	< 0.011	0.058	< 0.011	< 0.015
	01/14/08	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	0.013	0.035	0.014	< 0.015
	04/28/08	< 0.0088	< 0.0056	< 0.0073	< 0.0039	< 0.0061	< 0.0058	< 0.007	< 0.0088	< 0.0079	< 0.0049	< 0.006	< 0.0071	< 0.0041	< 0.011	< 0.012	0.021	0.0098	< 0.0076
	10/29/08	0.017	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	0.014	< 0.011	0.03	< 0.0075	< 0.0068
	04/13/09	0.094	0.0055	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.011	0.021	< 0.0036	0.1	< 0.011	0.32	0.012	0.0079
	10/05/09	0.22	0.014	0.019	< 0.0042	< 0.0033	< 0.0039	< 0.0055	< 0.005	< 0.004	< 0.0037	0.0075	0.044	< 0.0054	0.14	0.037	0.15	0.088	0.0057
	04/13/10	0.16	0.014	0.027	< 0.0037	< 0.0029	< 0.0034	< 0.0049	< 0.0044	< 0.0035	< 0.0032	0.013	0.074	< 0.0047	0.056	0.042	0.3	0.1	0.0086
	10/19/10	0.0086	< 0.0036	< 0.0057	< 0.0036	< 0.0029	0.0036	< 0.0048	< 0.0044	0.005	< 0.0032	0.0046	< 0.0048	< 0.0047	0.007	0.0072	0.038	0.0084	< 0.0047
	01/18/11	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047
	03/16/11	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.0051	0.018	< 0.047
PZ11B	06/22/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/31/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/01/00	6.6	< 0.14	0.4	< 0.11	< 0.012	< 0.052	< 0.069	< 0.11	< 0.056	< 0.064	0.17	< 0.11	< 0.076	< 0.077	< 0.068	< 0.053	0.16	0.29
	05/31/00	30	6.2	0.12	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	4.7	< 0.08	30	11	<b>174</b>	0.5	0.12
	08/31/00	54	< 0.15	0.44	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	11	< 0.08	52	25	<b>344</b>	4	< 0.032
	11/21/00	17	< 0.15	0.11	< 0.11	< 0.013	< 0.055	< 0.074	< 0.11	< 0.059	< 0.068	< 0.066	3.3	< 0.08	14	6.4	38	1.5	< 0.032
	04/01/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/02/02	46	3.7	0.69	< 0.38	< 0.24	< 0.28	< 0.3	< 0.26	< 0.36	< 0.34	< 0.56	7.3	< 0.28	44	< 28	<b>290</b>	7.3	< 0.4
	07/22/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/28/02	68	2	< 1.6	< 1.5	< 0.96	< 1.1	< 1.2	< 1	< 1.4	< 1.4	< 2.2	8.5	< 1.1	55	5.2	34	7.9	< 1.6
	06/16/03	20	< 1.9	0.16	< 0.012	< 0.014	< 0.013	< 0.016	< 0.019	< 0.014	< 0.016	0.032	< 1.7	< 0.021	0.23	0.058	0.31	0.19	0.061
	11/20/03	23	< 0.95	< 1	< 0.6	< 0.7	< 0.65	< 0.8	< 0.95	< 0.7	< 0.8	< 0.65	2.1	< 1	16	< 0.85	20	< 0.8	< 0.85
	04/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/04	0.018	< 0.018	< 0.019	< 0.011	< 0.013	< 0.012	< 0.015	< 0.018	< 0.013	< 0.015	< 0.012	< 0.016	< 0.02	< 0.017	< 0.016	< 0.023	< 0.015	< 0.016
	10/12/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/25/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/05	0.034	< 0.019	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	< 0.016	< 0.022	< 0.017	< 0.02	< 0.023	< 0.022	< 0.02	< 0.016
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/03/05	0.023	0.0096	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.0091	< 0.019	0.019	< 0.011	0.14	0.015	< 0.015
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	< 0.0082	< 0.0082	< 0.012	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	< 0.016	< 0.0091	< 0.019	< 0.01	< 0.011	0.026	0.013	< 0.015
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/04/06	0.018	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.017	< 0.011	< 0.015	
02/21/07	< 0.0082	< 0.0082	< 0.012	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	< 0.016	< 0.0091	< 0.019	< 0.01	< 0.011	0.013	< 0.011	< 0.015	
04/19/07	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	< 0.012	< 0.011	< 0.015	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Polynuclear Aromatic Hydrocarbons (µg/l)																	
		Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
PZ11B	07/19/07	0.085	< 0.041	< 0.058	< 0.078	< 0.092	< 0.078	< 0.096	< 0.097	< 0.095	< 0.094	< 0.077	< 0.045	< 0.094	0.12	< 0.056	1.1	< 0.057	< 0.073
	10/22/07	< 0.0082	0.009	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	< 0.012	< 0.011	< 0.015
	01/14/08	0.56	0.031	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.017	< 0.011	< 0.015
	04/28/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/29/08	< 0.0078	0.0091	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	< 0.0095	0.016	0.025	< 0.0075	< 0.0068
	04/13/09	0.0089	0.013	< 0.0065	0.0089	0.01	0.013	0.01	0.013	0.012	0.0063	0.014	0.0097	0.0088	0.03	0.032	0.041	0.02	< 0.0068
	10/05/09	< 0.0049	0.009	< 0.0062	0.0042	0.0055	0.0059	< 0.0052	0.0055	0.0053	< 0.0035	0.01	< 0.0052	< 0.0051	< 0.0054	0.0051	0.017	< 0.0088	0.0078
	04/13/10	0.032	0.012	< 0.0057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	0.01	< 0.0047	0.02	0.0089	0.25	0.0091	< 0.0047
	10/19/10	0.018	0.013	0.0064	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	0.0081	< 0.0047	0.014	0.0097	0.13	0.017	< 0.0047
	01/25/11	1.6	0.079	0.016	< 0.047	0.0029	< 0.047	< 0.047	0.0044	0.0055	< 0.047	0.0088	0.044	< 0.047	0.37	< 0.047	0.075	0.027	0.0097
	03/17/11	0.022	0.0081	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.0058	< 0.047	0.013	0.0091	0.035	< 0.047	< 0.047
PZ12B	07/20/04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/04	26	6.7	0.21	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	< 0.016	< 0.022	0.047	< 5.4	< 0.017	36	< 5.7	<b>160</b>	< 5.1	0.041
	01/25/05	160	42	7.6	< 2	< 1.8	< 1.8	< 2.1	< 1.9	< 1.6	< 2.2	< 1.6	35	< 1.7	160	14	<b>830</b>	47	< 1.6
	04/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/12/05	39	5.3	1.9	< 2	< 1.8	< 1.8	< 2.1	< 1.9	< 1.6	< 2.2	< 1.6	5.5	< 1.7	24	< 2.3	8.3	7	< 1.6
	07/11/05	91	14	7.2	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	15	< 1.9	88	14	21	28	< 1.5
	10/03/05	0.016	0.038	0.024	0.066	0.064	0.057	0.051	0.044	0.065	< 0.019	0.13	< 0.0091	0.039	0.016	< 0.011	0.12	0.069	0.18
	01/05/06	0.28	0.033	0.012	< 0.016	0.019	0.024	0.021	< 0.02	< 0.019	< 0.019	0.045	0.055	< 0.019	0.098	0.03	0.58	0.041	0.046
	04/11/06	9.9	0.22	1.2	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	1.3	6	< 0.019	1.8	0.29	0.74	5.1	0.94
	07/21/06	7.7	2.8	< 0.46	< 0.62	< 0.73	< 0.63	< 0.77	< 0.77	< 0.76	< 0.75	< 0.62	< 0.36	< 0.75	< 0.41	< 0.45	1.6	< 0.45	0.76
	10/04/06	83	2.4	3.2	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	1.2	11	< 0.38	53	18	72	22	1.2
	02/21/07	7	0.76	< 0.29	< 0.39	< 0.46	< 0.39	< 0.49	< 0.49	< 0.48	< 0.48	< 0.39	0.25	< 0.47	< 0.26	< 0.28	< 0.31	< 0.29	< 0.37
	04/19/07	92	8.2	< 5.8	< 7.8	< 9.2	< 7.8	< 9.6	< 9.7	< 9.5	< 9.4	< 7.7	12	< 9.4	70	18	<b>260</b>	18	< 7.3
	07/19/07	85	3.5	3.8	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	< 1.5	17	< 1.9	36	< 1.1	< 1.2	13	< 1.5
	10/22/07	98	2.9	11	< 3.1	< 3.7	< 3.1	< 3.9	< 3.9	< 3.8	< 3.8	< 3.1	16	< 3.8	87	25	<b>160</b>	33	< 2.9
	01/15/08	24	< 0.81	3.9	< 1.6	< 1.8	< 1.6	< 1.9	< 1.9	< 1.9	< 1.9	4.7	9.4	< 1.9	11	4.2	33	21	3.2
	04/28/08	61.9	< 2.5	< 3.3	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 2.7	< 3.1	< 0.0036	29.1	< 5.3	<b>140</b>	< 3.7	< 3.4
	08/12/08	86.5	7.7	4.1	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	1.6	17.4	< 0.0036	65.6	3.3	0.21	22.1	1.7
	10/30/08	74.7	3.8	4.2	< 0.69	< 1.1	< 1	< 1.2	< 1.6	< 1.4	< 0.86	< 1.1	10.9	< 0.72	61.5	15.1	21.7	17	< 1.4
04/13/09	1.4	0.39	0.027	0.0043	< 0.0054	0.0069	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.21	0.051	< 0.0036	0.024	0.012	0.044	0.018	0.77	
10/05/09	84.2	3.2	4.8	< 0.48	< 0.38	< 0.45	< 0.64	< 0.58	< 0.46	< 0.42	1.4	11.9	< 0.62	49.4	8.1	14.3	22.2	1.6	
04/14/10	25.7	0.67	0.76	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.67	3.8	< 0.0047	8	0.32	0.039	1.1	0.72	
10/20/10	63.5	2.3	6.1	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	1.2	13.4	< 0.0047	29.4	0.24	0.074	27.4	1.7	
01/19/11	< 0.19	1.9	0.03	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	< 0.19	0.57	0.025	< 0.19	< 0.19	0.022	< 0.19	0.04	1.4	
03/17/11	39.5	1.9	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	< 0.94	1	1.5	< 0.94	0.17	< 0.94	0.23	< 0.94	1.2	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRS # 02-50-000079 / FID # 750081200

		Polynuclear Aromatic Hydrocarbons (µg/l)																		
Sample ID	Sample Date	Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>	
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250	
PZ13B	10/12/04	< 0.019	< 0.019	< 0.018	0.032	0.026	0.021	< 0.021	0.02	0.026	< 0.022	0.045	< 0.022	< 0.017	0.033	< 0.023	0.099	0.022	0.046	
	01/25/05	0.028	< 0.02	< 0.018	< 0.02	< 0.018	< 0.018	< 0.021	< 0.019	0.018	< 0.022	0.031	< 0.022	< 0.017	0.059	0.045	0.44	0.029	0.027	
	04/11/05	0.055	< 0.019	< 0.018	0.025	0.029	0.039	0.026	0.029	0.035	< 0.022	0.058	< 0.022	0.021	< 0.02	< 0.023	< 0.022	0.046	0.055	
	07/11/05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/03/05	0.04	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.01	< 0.019	0.015	0.022	0.067	0.012	< 0.015	
	01/05/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/06	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	0.029	< 0.0091	< 0.019	< 0.01	< 0.011	< 0.012	0.014	0.023	
	07/21/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/04/06	< 0.0082	0.013	0.012	0.05	0.082	0.073	0.057	0.066	0.05	< 0.019	0.089	< 0.0091	0.051	< 0.01	< 0.011	0.019	0.03	0.071	
	02/22/07	< 0.0083	< 0.0083	< 0.012	< 0.016	< 0.019	< 0.016	< 0.02	< 0.02	< 0.019	< 0.019	0.03	< 0.0092	< 0.019	< 0.01	0.011	0.03	0.021	0.024	
	04/20/07	0.022	< 0.0081	0.076	0.4	<b>0.59</b>	<b>0.65</b>	0.45	0.46	<b>0.53</b>	0.14	1.3	0.033	0.46	< 0.01	< 0.011	< 0.012	0.55	0.89	
	07/19/07	< 0.041	< 0.041	0.12	0.43	<b>0.75</b>	<b>0.7</b>	0.58	0.069	<b>0.72</b>	0.11	1.6	< 0.045	0.46	< 0.051	< 0.056	< 0.062	0.59	1.3	
	10/22/07	0.0094	< 0.0081	< 0.012	0.028	0.044	0.041	0.038	0.052	0.054	< 0.019	0.1	< 0.0091	0.03	< 0.01	< 0.011	0.037	0.047	0.075	
	01/14/08	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.013	< 0.011	< 0.015	
	04/28/08	0.011	< 0.0051	0.026	0.21	<b>0.25</b>	<b>0.3</b>	0.19	0.23	<b>0.27</b>	0.038	0.66	0.01	0.16	< 0.0097	< 0.011	0.035	0.24	0.55	
	10/29/08	< 0.0078	< 0.005	< 0.0065	0.015	0.029	0.034	0.027	0.036	0.033	0.0052	0.062	< 0.0063	0.022	< 0.035	0.072	0.11	0.022	0.042	
	04/13/09	< 0.0079	< 0.005	0.008	0.06	0.1	0.13	0.089	0.12	0.12	0.02	0.22	< 0.0063	0.076	< 0.0096	< 0.011	< 0.017	0.071	0.18	
10/05/09	0.15	< 0.018	< 0.029	0.29	<b>0.49</b>	<b>0.63</b>	0.38	0.46	<b>0.54</b>	0.075	0.91	0.043	0.32	0.11	0.023	1.9	0.23	0.66		
04/14/10	0.094	0.0041	0.014	0.0087	0.012	0.017	0.013	0.014	0.014	< 0.0032	0.026	0.022	0.0094	0.038	0.022	0.11	0.057	0.022		
10/19/10	0.0053	< 0.0036	0.0094	0.032	0.045	0.062	0.044	0.052	0.058	0.01	0.087	< 0.0048	0.031	< 0.005	0.0056	0.018	0.03	0.077		
01/19/11	< 0.047	0.0046	< 0.047	0.0096	0.017	0.02	0.016	0.017	0.019	0.0036	0.026	< 0.047	0.013	< 0.047	0.016	0.077	0.011	0.024		
03/16/11	< 0.047	< 0.047	< 0.047	0.02	0.029	0.035	0.024	0.032	0.038	0.0082	0.084	< 0.047	0.02	< 0.047	< 0.047	< 0.047	0.05	0.062		
PZ14B	07/25/07	41	2.4	< 2.6	< 3.5	< 4.1	< 3.5	< 4.3	< 4.4	< 4.3	< 4.3	< 3.5	13	< 4.2	37	3.6	<b>200</b>	7.3	< 3.3	
	10/22/07	5.3	0.22	< 0.23	< 0.31	< 0.37	< 0.31	< 0.39	< 0.39	< 0.38	< 0.38	< 0.31	0.91	< 0.38	1.6	< 0.22	< 0.25	< 0.23	< 0.29	
	04/28/08	0.2	0.015	0.011	0.048	0.066	0.16	0.094	0.09	0.12	0.023	0.17	0.023	0.074	0.015	< 0.011	0.018	0.052	0.14	
	08/12/08	0.067	0.017	0.012	0.024	0.035	0.071	0.045	0.046	0.06	0.011	0.074	0.013	0.039	0.021	< 0.011	0.12	0.036	0.055	
	10/30/08	0.019	0.0052	< 0.0065	0.0096	0.025	0.043	0.037	0.035	0.028	0.0067	0.032	< 0.0063	0.027	0.011	< 0.011	0.022	0.014	0.025	
	04/13/09	0.28	0.014	0.0074	0.016	0.034	0.07	0.055	0.044	0.046	0.011	0.049	0.043	0.042	0.15	0.024	0.61	0.036	0.044	
	10/05/09	0.12	0.014	0.016	0.043	0.095	0.14	0.12	0.12	0.096	0.023	0.11	0.011	0.096	0.013	< 0.0041	0.022	0.032	0.08	
	04/13/10	< 0.0045	0.0042	< 0.0057	0.014	0.033	0.078	0.059	0.048	0.049	0.01	0.044	< 0.0048	0.043	< 0.005	0.0083	0.021	0.012	0.031	
	10/19/10	0.0081	< 0.0036	< 0.0057	0.0076	0.028	0.045	0.049	0.044	0.037	0.008	0.026	< 0.0048	0.034	0.006	0.0047	0.038	0.0082	0.023	
	01/18/11	< 0.047	0.022	0.022	0.081	0.16	<b>0.47</b>	0.31	0.23	<b>0.35</b>	0.054	0.4	0.018	0.22	< 0.047	0.0053	< 0.047	0.077	0.32	
03/16/11	< 0.047	< 0.047	< 0.047	0.031	0.078	<b>0.21</b>	0.14	0.13	0.11	0.027	0.1	< 0.047	0.1	< 0.047	< 0.047	< 0.047	< 0.047	0.085		
PZ15B	07/24/07	1.6	0.047	0.31	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.61	< 0.019	1.4	0.31	0.52	1.4	0.36	
	10/22/07	2.3	0.061	0.051	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.08	< 0.019	1.5	0.079	0.28	0.024	0.42	
	01/15/08	2.4	0.058	0.43	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	0.92	< 0.019	1.7	0.041	0.2	3	0.74	
	04/29/08	0.73	0.025	< 0.016	< 0.0087	< 0.013	< 0.013	< 0.016	< 0.019	< 0.017	< 0.011	< 0.013	0.032	< 0.009	0.26	< 0.027	0.18	< 0.019	0.19	
	08/12/08	1.4	0.047	0.2	< 0.017	< 0.027	< 0.026	< 0.031	< 0.039	< 0.035	< 0.022	< 0.027	0.52	< 0.018	1	0.054	0.18	1.4	0.44	

**Table 8. Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons (PAHs)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Polynuclear Aromatic Hydrocarbons (µg/l)																	
Sample ID	Sample Date	Acenaphthene	Acenaphthylene	Anthracene <sup>2</sup>	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene <sup>2</sup>	Benzo(ghi)perylene	Benzo(k)fluoranthene	Chrysene <sup>2</sup>	Dibenz(a,h)anthracene	Fluoranthene <sup>2</sup>	Fluorene <sup>2</sup>	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene <sup>2</sup>	Phenanthrene	Pyrene <sup>2</sup>
Quality Standard <sup>1</sup>		NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	NS	NS	100	NS	250
PZ15B	10/30/08	1.4	0.039	0.24	0.0042	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.0077	0.53	< 0.0036	0.96	0.015	0.098	1.6	0.43
	04/13/09	< 0.0078	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	< 0.0095	< 0.011	< 0.016	< 0.0075	< 0.0068
	10/05/09	1.7	0.054	0.23	< 0.015	< 0.012	< 0.014	< 0.02	< 0.019	0.016	< 0.014	0.022	0.66	< 0.02	1.1	0.088	0.31	1.2	0.56
	04/13/10	0.01	0.004	< 0.0057	< 0.0036	0.0035	0.0047	< 0.0048	0.0046	0.0053	< 0.0032	0.0071	< 0.0048	< 0.0047	0.014	0.0075	0.21	< 0.0081	0.0072
	10/19/10	1.3	0.048	0.22	0.0059	0.003	< 0.0034	< 0.0048	< 0.0044	0.0075	< 0.0032	0.012	0.45	< 0.0047	0.9	0.072	0.3	0.85	0.39
	01/19/11	1.6	0.042	0.29	0.0057	< 0.047	< 0.047	< 0.047	< 0.047	0.0066	< 0.047	0.0077	0.68	< 0.047	1.1	0.036	0.13	2.1	0.54
	03/17/11	0.027	0.0047	0.021	0.005	< 0.047	0.005	0.0078	0.0049	0.0042	< 0.047	< 0.047	0.085	0.0052	0.006	< 0.047	0.0061	0.028	0.12
PZ16B	07/24/07	0.093	< 0.0082	< 0.012	< 0.016	< 0.019	< 0.016	< 0.019	< 0.02	< 0.019	< 0.019	< 0.016	< 0.0091	< 0.019	< 0.01	< 0.011	< 0.012	< 0.011	< 0.015
	10/22/07	0.16	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.01	< 0.011	0.031	0.017	< 0.015
	01/14/08	0.13	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016	< 0.019	< 0.019	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.017	0.013	0.28	0.015	< 0.015
	04/29/08	0.085	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.0058	< 0.0063	< 0.0036	< 0.0095	< 0.011	0.032	0.013	< 0.0068
	10/29/08	0.087	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	< 0.0063	< 0.0036	< 0.0095	0.011	0.025	0.0081	< 0.0068
	04/13/09	0.064	< 0.005	< 0.0065	< 0.0035	< 0.0054	< 0.0051	< 0.0062	< 0.0078	< 0.007	< 0.0043	< 0.0053	0.014	< 0.0036	0.026	< 0.011	0.092	< 0.0075	< 0.0068
	10/05/09	0.18	0.025	0.017	0.019	0.016	0.016	0.012	0.016	0.02	< 0.0068	0.03	0.032	< 0.0099	0.15	0.12	0.74	0.053	0.031
	04/14/10	0.25	0.0084	0.019	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	0.013	0.041	< 0.0047	0.079	0.037	0.28	0.08	0.012
	10/20/10	0.089	< 0.0036	< 0.0057	0.0057	0.0062	0.0053	< 0.0048	0.0061	0.0062	< 0.0032	0.0076	< 0.0048	< 0.0047	< 0.005	0.0076	0.04	0.009	0.009
	01/19/11	0.098	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.0099
03/16/11	0.072	< 0.047	< 0.047	< 0.047	0.0035	0.0058	0.0075	0.0056	0.0059	0.0032	< 0.047	< 0.047	0.0051	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047
TW01	10/30/08	< 0.0078	< 0.005	< 0.0065	0.0079	0.0089	0.011	0.0064	0.01	0.011	< 0.0043	0.027	< 0.0063	0.0051	< 0.0095	< 0.011	< 0.016	0.012	0.021
	04/14/09	0.01	< 0.005	< 0.0065	0.0096	0.011	0.013	0.011	0.011	0.013	< 0.0043	0.021	< 0.0063	0.0077	< 0.0095	< 0.011	< 0.016	0.015	0.02
	10/05/09	0.065	< 0.0076	< 0.012	< 0.0077	< 0.0061	0.0088	< 0.01	< 0.0093	0.0074	< 0.0068	< 0.0093	0.021	< 0.0099	0.046	0.013	0.54	0.018	< 0.01
	04/14/10	0.023	< 0.0036	0.0068	< 0.0036	0.0029	0.0052	< 0.0048	< 0.0044	0.004	< 0.0032	0.0067	0.0057	< 0.0047	0.056	0.093	0.11	0.012	0.0062
	10/20/10	< 0.0045	< 0.0036	0.0082	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	< 0.005	< 0.0039	0.012	< 0.0081	< 0.0047
	01/20/11	< 0.048	< 0.048	0.0059	< 0.048	< 0.048	< 0.048	< 0.048	< 0.048	< 0.048	< 0.048	< 0.048	< 0.048	< 0.048	< 0.048	0.0058	< 0.048	< 0.048	< 0.048
03/17/11	< 0.047	< 0.047	0.0067	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.005	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	0.0063	
TW02	10/30/08	< 0.0078	< 0.005	< 0.0065	< 0.0035	< 0.0054	0.0054	< 0.0062	< 0.0078	< 0.007	< 0.0043	0.0097	< 0.0063	< 0.0036	< 0.0095	< 0.011	0.016	0.011	0.007
	04/14/09	< 0.0078	< 0.005	< 0.0065	0.0065	0.0091	0.014	0.0097	0.011	0.015	< 0.0043	0.024	< 0.0063	0.0076	< 0.0095	< 0.011	< 0.016	0.013	0.019
	10/05/09	0.048	0.0063	0.0079	0.011	0.019	0.037	0.023	0.024	0.03	< 0.0034	0.03	0.016	0.019	0.031	0.013	0.15	0.025	0.022
	04/13/10	0.19	< 0.0036	0.015	< 0.0036	< 0.0029	< 0.0034	< 0.0048	0.0044	0.0039	< 0.0032	0.0097	0.016	< 0.0047	0.02	0.0066	0.075	0.048	0.0071
	10/19/10	0.0056	< 0.0036	< 0.0057	< 0.0036	< 0.0029	< 0.0034	< 0.0048	< 0.0044	< 0.0035	< 0.0032	< 0.0044	< 0.0048	< 0.0047	< 0.005	< 0.0039	0.026	< 0.0081	< 0.0047
	01/19/11	< 0.052	0.019	0.036	0.065	0.058	0.045	0.036	0.058	0.06	0.0094	0.16	0.026	0.032	< 0.052	0.007	< 0.052	0.14	0.13
03/16/11	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047	< 0.047

**NOTES:**

- Parameters that attain or exceed the EPA Groundwater Quality Standards (MCL) are shown in bold.
- If no MCL standard has been established, then the parameters that attain or exceed the NR 140 Wisconsin Groundwater Quality Enforcement Standard (ES) are identified in bold.
- Reference the laboratory analytical report for a full list of compounds analyzed.

< 2.0: Parameter not detected above the limit of detection indicated.

NS: No standard established for this compound.

--: Analysis not performed.

**Table 9. Groundwater Analytical Results - Benzene**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
OW01	06/02/93	ND
	09/16/93	--
	08/15/96	--
	08/16/96	< 0.5
	08/16/97	--
	09/03/97	0.4
	02/26/98	--
	06/22/99	--
	06/23/99	<b>15</b>
	01/31/00	--
	02/01/00	<b>56</b>
	05/31/00	--
	08/31/00	--
	11/21/00	--
	04/01/02	--
	04/02/02	1.4
	07/22/02	--
	10/28/02	0.71
	06/16/03	2.4
	11/20/03	0.36
	04/20/04	--
	07/20/04	--
	10/12/04	--
	01/25/05	--
	04/11/05	0.26
	07/11/05	--
	10/03/05	--
	01/05/06	--
	04/11/06	1.1
	07/21/06	--
	10/04/06	--
	02/22/07	1.5
	04/19/07	0.69
07/19/07	1.1	
10/22/07	1	
01/14/08	1.6	
04/28/08	1.2	
10/29/08	0.37	
04/13/09	<b>27.9</b>	
10/05/09	0.98	
04/13/10	<b>5.8</b>	
10/19/10	< 0.41	
01/20/11	0.42	
03/17/11	< 1	
OW02	06/03/93	2.4
	09/16/93	--
	08/15/96	--
	08/16/96	< 0.5
	08/16/97	--
	09/03/97	< 0.13
	02/26/98	--
	06/22/99	--
	06/23/99	0.19
	01/31/00	--
	02/01/00	< 0.5
	05/31/00	--
	08/31/00	--
	11/21/00	--
	04/01/02	--
	04/02/02	< 0.45
	07/22/02	--
	10/28/02	--
	06/16/03	< 0.3
	11/20/03	--
	04/20/04	--
	07/20/04	--
	10/12/04	--
	01/25/05	--
	04/11/05	< 0.14
	07/11/05	--
	10/03/05	--
	01/05/06	--
	04/11/06	< 0.14
	07/21/06	--
	10/04/06	--
	02/22/07	< 0.14
	04/19/07	< 0.41
07/19/07	< 0.41	
10/22/07	< 0.41	
01/14/08	< 0.14	
04/28/08	--	

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
OW08	06/02/93	ND
	09/16/93	--
	08/15/96	--
	08/16/96	--
	08/16/97	--
	09/03/97	--
	02/26/98	--
	06/22/99	--
	06/23/99	0.43
	01/31/00	--
	02/01/00	3.7
	05/31/00	--
	08/31/00	--
	11/21/00	--
	04/01/02	--
	04/02/02	--
	07/22/02	--
	10/28/02	--
	06/16/03	< 0.3
	11/20/03	--
	04/20/04	--
	07/20/04	--
	10/12/04	--
01/25/05	--	
04/11/05	0.44	
07/11/05	--	
10/03/05	--	
01/05/06	--	
04/11/06	< 0.14	
07/21/06	--	
10/04/06	--	
02/22/07	< 0.14	
04/20/07	< 0.41	
07/19/07	0.66	
10/22/07	< 0.41	
01/14/08	< 0.14	
04/28/08	--	
04/13/10	--	
10/19/10	--	
OW09	08/16/97	--
	09/03/97	--
	09/04/97	<b>240</b>
	02/26/98	--
	06/22/99	--
	06/23/99	<b>330</b>
	01/31/00	--
	02/01/00	<b>146</b>
	05/31/00	<b>123</b>
	08/31/00	<b>294</b>
	11/21/00	<b>259</b>
	04/01/02	--
	04/02/02	<b>77</b>
	07/22/02	--
	10/28/02	<b>6.1</b>
	06/16/03	<b>8.9</b>
	11/20/03	<b>100</b>
04/20/04	--	
07/20/04	<b>98</b>	
10/12/04	--	
01/25/05	--	
04/12/05	<b>100</b>	
07/11/05	--	
10/03/05	<b>180</b>	
01/05/06	--	
04/11/06	<b>98</b>	
07/21/06	--	
10/04/06	<b>150</b>	
02/21/07	<b>190</b>	
04/19/07	<b>130</b>	
07/19/07	<b>150</b>	
10/22/07	<b>88</b>	
01/14/08	<b>190</b>	
04/29/08	<b>144</b>	
08/12/08	<b>134</b>	
10/29/08	<b>349</b>	
04/13/09	<b>448</b>	
10/05/09	<b>358</b>	
04/13/10	<b>252</b>	
10/19/10	<b>137</b>	
01/20/11	<b>227</b>	
03/17/11	<b>210</b>	

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
PZ03B	09/16/93	--
	07/09/96	< 0.5
	08/15/96	--
	08/16/96	< 0.5
	08/16/97	--
	09/03/97	< 0.13
	02/26/98	--
	06/22/99	--
	06/23/99	< 0.13
	01/31/00	--
	02/01/00	< 0.5
	05/31/00	--
	08/31/00	--
	11/21/00	--
	04/01/02	--
	04/02/02	< 0.45
	07/22/02	--
	10/28/02	--
	06/16/03	< 0.3
	11/20/03	--
	04/20/04	--
	07/20/04	--
	10/12/04	--
01/25/05	--	
04/11/05	< 0.14	
07/11/05	--	
10/03/05	--	
01/05/06	--	
04/11/06	< 0.14	
07/21/06	--	
10/04/06	--	
02/21/07	< 0.14	
04/19/07	< 0.41	
07/19/07	< 0.41	
10/22/07	< 0.41	
01/14/08	< 0.14	
04/28/08	--	
10/29/08	< 0.23	
04/13/09	< 0.23	
10/05/09	< 0.23	
04/13/10	< 0.39	
10/19/10	< 0.41	
01/25/11	< 1	
03/17/11	< 1	
PZ07B	09/16/93	--
	07/09/96	3.7
	08/15/96	--
	08/16/96	2.9
	08/16/97	--
	09/03/97	3.3
	02/26/98	--
	06/22/99	--
	06/23/99	< 13
	01/31/00	--
	02/01/00	0.75
	05/31/00	0.75
	08/31/00	< 5
	11/21/00	< 10
	04/01/02	--
	04/02/02	< 9
	07/22/02	--
	10/28/02	< 0.9
	06/16/03	< 6
	11/20/03	< 7.5
	04/20/04	< 2.8
	07/20/04	2.3
	10/12/04	< 2.8
01/25/05	< 2.8	
04/11/05	1.5	
07/11/05	3.1	
10/03/05	1.4	
01/05/06	< 10	
04/11/06	< 2.8	
07/21/06	< 2.8	
10/04/06	1	
02/21/07	< 6.9	
04/19/07	< 10	
07/19/07	3.2	
10/22/07	< 10	
01/14/08	1.4	
04/28/08	0.8	

**Table 9. Groundwater Analytical Results - Benzene**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
OW02	10/29/08	< 0.23
	04/13/09	< 0.23
	10/05/09	< 0.23
	04/13/10	< 0.39
	10/19/10	< 0.41
	01/25/11	< 1
	03/17/11	< 1
OW03	06/04/93	<b>220</b>
	09/16/93	--
	08/15/96	--
	08/16/96	<b>700</b>
	08/16/97	--
	09/03/97	<b>1300</b>
	02/26/98	--
04/01/98	--	
OW03R	06/22/99	--
	01/31/00	--
	02/01/00	< 0.5
	05/31/00	1.1
	08/31/00	1.8
	11/21/00	< 5
	04/01/02	--
	04/02/02	0.46
	07/22/02	--
	10/28/02	0.73
	06/16/03	0.32
	11/20/03	< 0.3
	04/20/04	--
	07/20/04	--
	10/12/04	--
	01/25/05	--
	04/11/05	0.38
	07/11/05	--
	10/03/05	--
	01/05/06	--
	04/11/06	0.34
	07/21/06	--
	10/04/06	--
	02/21/07	0.5
	04/19/07	< 0.41
	07/19/07	< 0.41
	10/22/07	< 2
	01/14/08	< 0.14
	04/29/08	4.5
	10/29/08	2.8
	04/13/09	< 0.23
10/05/09	<b>33.7</b>	
04/13/10	< 0.39	
10/19/10	2.4	
01/25/11	< 1	
03/17/11	1.2	
OW04	06/10/93	ND
	09/16/93	--
	08/15/96	--
	08/16/96	< 0.5
	08/16/97	--
	09/03/97	< 0.13
	02/26/98	--
	06/22/99	--
	06/23/99	< 0.13
	01/31/00	--
	02/01/00	< 0.5
	05/31/00	--
	08/31/00	--
	11/21/00	--
	04/01/02	--
	04/02/02	< 0.45
	07/22/02	--
	10/28/02	--
	06/16/03	< 0.3
	11/20/03	--
	04/20/04	--
	07/20/04	--
	10/12/04	--
	01/25/05	--
	04/11/05	0.23
	07/11/05	--
	10/03/05	--
	01/05/06	--
	04/11/06	< 0.14
	07/21/06	--
	10/04/06	--
02/21/07	< 0.14	
04/19/07	< 0.41	
07/19/07	< 0.41	
10/22/07	< 0.41	
01/14/08	0.18	
04/28/08	--	
10/29/08	0.61	
04/13/09	< 0.23	

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
OW10	08/16/97	--
	09/03/97	--
	09/04/97	< 0.13
	02/26/98	--
	06/22/99	--
	06/23/99	1.9
	01/31/00	--
	02/01/00	3.9
	05/31/00	< 0.5
	08/31/00	1.4
	11/21/00	< 0.5
	04/01/02	--
	04/02/02	< 0.45
	07/22/02	--
	10/28/02	< 0.45
	06/16/03	< 0.3
	11/20/03	< 0.3
	04/20/04	--
	07/20/04	--
	10/12/04	--
01/25/05	--	
04/12/05	<b>47</b>	
07/11/05	--	
01/05/06	--	
04/11/06	1.8	
07/21/06	--	
10/04/06	<b>38</b>	
02/21/07	<b>30</b>	
04/19/07	1.9	
07/19/07	<b>76</b>	
10/23/07	<b>47</b>	
01/14/08	<b>51</b>	
04/29/08	0.88	
08/12/08	<b>9.2</b>	
10/29/08	<b>15.1</b>	
04/13/09	<b>46.7</b>	
10/05/09	<b>13.9</b>	
04/13/10	<b>9</b>	
10/19/10	4.9	
01/18/11	3.2	
03/16/11	1.8	
OW11	06/22/99	--
	01/31/00	--
	02/01/00	3.9
	05/31/00	3.1
	08/31/00	0.61
	11/21/00	< 0.5
	04/01/02	--
	04/02/02	< 0.45
	07/22/02	--
	10/28/02	< 0.45
	06/16/03	< 0.3
	11/20/03	< 0.3
	04/20/04	--
	07/20/04	0.3
	10/12/04	--
	01/25/05	--
	04/11/05	< 0.14
	07/11/05	--
	10/03/05	--
	01/05/06	--
04/11/06	0.26	
07/21/06	--	
10/04/06	--	
02/21/07	< 0.14	
04/19/07	< 0.41	
07/19/07	< 0.41	
10/22/07	< 0.41	
01/14/08	< 0.14	
04/28/08	--	
10/29/08	< 0.23	
04/13/09	0.23	
10/05/09	< 0.23	
04/13/10	< 0.39	
10/19/10	< 0.41	
01/25/11	< 1	
03/17/11	< 1	
OW12	07/20/04	--
	10/12/04	2.2
	01/25/05	<b>9.1</b>
	04/11/05	--
	04/12/05	3.6
	07/11/05	<b>8.8</b>
	10/03/05	<b>9.4</b>
	01/05/06	<b>6.9</b>
	04/11/06	< 0.14
	07/21/06	4
	10/04/06	<b>9.9</b>
02/21/07	<b>5.1</b>	
04/19/07	1	

Sample Location	Sample Date	Benzene (µg/l)	
Quality Standard <sup>1</sup>		5	
PZ07B	08/12/08	< 3.4	
	10/29/08	< 11.4	
	04/13/09	< 2.3	
	10/05/09	< 4.6	
	04/13/10	< 0.39	
	10/19/10	< 2	
	01/19/11	0.91	
	03/17/11	< 5	
	PZ09B	08/16/97	--
		09/03/97	--
		09/04/97	<b>37</b>
02/26/98		--	
06/22/99		--	
06/23/99		1.7	
01/31/00		--	
02/01/00		1.5	
05/31/00		0.6	
08/31/00		< 0.5	
11/21/00		1.7	
04/01/02	--		
04/02/02	< 0.45		
07/22/02	--		
10/28/02	< 0.45		
06/16/03	< 0.3		
11/20/03	1		
04/20/04	--		
07/20/04	< 0.14		
10/12/04	--		
01/25/05	--		
04/12/05	< 0.14		
07/11/05	--		
10/03/05	< 0.14		
01/05/06	--		
04/11/06	< 0.14		
07/21/06	--		
10/04/06	0.19		
02/21/07	0.92		
04/19/07	1		
07/19/07	< 0.41		
10/22/07	< 0.41		
01/14/08	0.41		
04/28/08	0.21		
10/29/08	0.39		
04/13/09	< 0.23		
PZ09B	10/05/09	0.27	
	04/13/10	< 0.39	
	10/19/10	1.4	
PZ10B	01/20/11	1.2	
	03/17/11	< 1	
	08/16/97	--	
PZ10B	09/03/97	--	
	09/04/97	0.14	
PZ10B	02/26/98	--	
	06/22/99	--	
	06/23/99	2.6	
	01/31/00	--	
	02/01/00	< 0.5	
	05/31/00	< 0.5	
	08/31/00	< 0.5	
	11/21/00	< 0.5	
	04/01/02	--	
	04/02/02	< 0.45	
	07/22/02	--	
	10/28/02	< 0.45	
	06/16/03	< 0.3	
	11/20/03	< 0.3	
	04/20/04	--	
	07/20/04	--	
	10/12/04	--	
	01/25/05	--	
	04/12/05	< 0.14	
	07/11/05	--	
10/03/05	--		
01/05/06	--		
04/11/06	< 0.14		
07/21/06	--		
10/04/06	< 0.14		
02/21/07	< 0.14		
04/19/07	< 0.41		
07/19/07	< 0.41		
10/23/07	< 0.41		
01/14/08	< 0.14		
04/28/08	< 0.14		
10/29/08	< 0.23		
04/13/09	< 0.23		
10/05/09	< 0.23		
04/13/10	< 0.39		
10/19/10	< 0.41		
01/18/11	< 1		
03/16/11	< 1		



**Table 9. Groundwater Analytical Results - Benzene**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
OW04	10/05/09	1.2
	04/13/10	3.1
	10/19/10	0.8
	01/20/11	0.96
	03/17/11	0.43
OW05	06/03/93	<b>1300</b>
	09/16/93	--
	08/15/96	--
	08/16/96	<b>750</b>
	08/16/97	--
	09/03/97	--
	09/04/97	<b>50</b>
	02/26/98	--
	04/01/98	--
OW05A	06/03/93	<b>820</b>
	09/16/93	--
	08/15/96	--
	08/16/96	<b>140</b>
	08/16/97	--
	09/03/97	--
	09/04/97	<b>650</b>
	02/26/98	--
	04/01/98	--
	OW05R	06/22/99
01/31/00		--
02/01/00		<b>529</b>
05/31/00		<b>66</b>
08/31/00		<b>45</b>
11/21/00		<b>52</b>
04/01/02		--
04/02/02		<b>36</b>
07/22/02		--
10/28/02		<b>5.5</b>
06/16/03		2.1
11/20/03		<b>34</b>
04/20/04		1.5
07/20/04		4.1
10/12/04		<b>64</b>
01/25/05		<b>77</b>
04/11/05		1.8
07/11/05		<b>10</b>
10/03/05		1.7
01/05/06		1.4
04/11/06		<b>15</b>
07/21/06		<b>69</b>
10/04/06		<b>90</b>
02/21/07		2.9
04/19/07		0.56
07/19/07		<b>150</b>
10/22/07		<b>96</b>
01/14/08		<b>10</b>
04/29/08		1.1
08/12/08		<b>110</b>
10/29/08		<b>114</b>
04/13/09		4.1
10/05/09	<b>54.7</b>	
04/14/10	<b>36.7</b>	
10/19/10	<b>13.2</b>	
01/25/11	2.1	
03/17/11	0.81	
OW06	06/03/93	<b>5.2</b>
	09/16/93	--
	08/15/96	--
	08/16/96	< 3
	08/16/97	--
	09/03/97	2.3
	02/26/98	--
	06/22/99	--
	06/23/99	<b>19</b>
	01/31/00	--
	02/01/00	<b>10</b>
	05/31/00	<b>6.8</b>
	08/31/00	<b>9.7</b>
	11/21/00	< 10
	04/01/02	--
	04/02/02	<b>7.3</b>
	07/22/02	--
	10/28/02	4.2
	06/16/03	<b>6.1</b>
	11/20/03	<b>5.4</b>
	07/20/04	0.77
	10/12/04	--
	01/25/05	--

Sample Location	Sample Date	Benzene (µg/l)	
Quality Standard <sup>1</sup>		5	
OW12	07/19/07	3.3	
	10/22/07	3.6	
	01/15/08	<b>20</b>	
	04/29/08	0.98	
	08/12/08	0.69	
	10/30/08	2.5	
	04/13/09	3.7	
	10/05/09	4.5	
	04/14/10	2.1	
	10/19/10	4.8	
	01/19/11	2.5	
	03/17/11	<b>5.4</b>	
	OW14	07/25/07	<b>23</b>
		10/22/07	<b>82</b>
04/29/08		<b>57.3</b>	
08/12/08		<b>27.7</b>	
10/30/08		<b>33.5</b>	
04/13/09		<b>43</b>	
10/05/09		<b>16.3</b>	
04/13/10		<b>11.7</b>	
OW15	10/19/10	<b>11.9</b>	
	01/18/11	<b>8.6</b>	
	03/16/11	<b>7.4</b>	
	07/24/07	< 0.41	
	10/22/07	< 0.41	
	01/15/08	< 0.14	
	04/29/08	< 0.14	
	08/12/08	< 0.14	
	10/30/08	< 0.23	
	04/13/09	< 0.23	
	10/05/09	< 0.23	
OW16	04/13/10	< 0.39	
	10/19/10	< 0.41	
	01/19/11	< 1	
	03/17/11	< 1	
	07/24/07	< 0.41	
	10/22/07	< 0.41	
	01/14/08	< 0.14	
	04/29/08	< 0.14	
	10/29/08	< 0.23	
	04/13/09	< 0.23	
	10/05/09	< 0.23	
OW17	04/14/10	< 0.39	
	10/19/10	< 0.41	
	01/19/11	< 1	
	03/16/11	< 1	
	07/24/07	< 0.41	
	10/22/07	< 0.41	
	01/14/08	< 0.14	
	04/29/08	< 0.14	
	10/29/08	< 0.23	
	04/13/09	< 0.23	
	10/05/09	< 0.23	
OW18	04/14/10	< 0.39	
	10/19/10	< 0.41	
	01/19/11	< 1	
	03/16/11	< 1	
OW19	01/20/11	< 1	
	03/17/11	< 1	
OW20	01/20/11	< 1	
	03/17/11	< 1	
OW21	01/20/11	< 1	
	03/16/11	< 1	
P05B	09/16/93	--	
	09/17/93	ND	
	08/15/96	--	
	08/16/96	< 2.5	
	08/16/97	--	
	09/03/97	--	
	09/04/97	2	
	02/26/98	--	
	06/22/99	--	
	06/23/99	< 0.13	
	01/31/00	--	
	02/01/00	<b>6.4</b>	
	05/31/00	4	
	08/31/00	<b>11</b>	
11/21/00	<b>12</b>		
P05B	04/01/02	--	
	04/02/02	<b>11</b>	
	07/22/02	--	
	07/22/02	--	

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
PZ11B	06/22/99	--
	01/31/00	--
	02/01/00	<b>10</b>
	05/31/00	<b>27</b>
	08/31/00	<b>53</b>
	11/21/00	<b>20</b>
	04/01/02	--
	04/02/02	<b>24</b>
	07/22/02	--
	10/28/02	<b>19</b>
	06/16/03	<b>18</b>
	11/20/03	<b>14</b>
	04/20/04	--
	07/20/04	0.75
	10/12/04	--
	01/25/05	--
	04/11/05	< 0.14
	07/11/05	--
	10/03/05	< 0.14
	01/05/06	--
	04/11/06	< 0.14
	07/21/06	--
	10/04/06	< 0.14
	02/21/07	< 0.14
04/19/07	< 0.41	
07/19/07	< 0.41	
10/22/07	< 0.41	
01/14/08	0.48	
04/28/08	--	
10/29/08	< 0.23	
04/13/09	< 0.23	
10/05/09	< 0.23	
04/13/10	< 0.39	
10/19/10	< 0.41	
01/25/11	<b>7.8</b>	
03/17/11	< 1	
PZ12B	07/20/04	--
	10/12/04	<b>25</b>
	01/25/05	<b>52</b>
	04/11/05	--
	04/12/05	<b>16</b>
	07/11/05	<b>33</b>
	10/03/05	< 0.14
	01/05/06	< 0.41
	04/11/06	3.3
	07/21/06	<b>15</b>
	10/04/06	<b>27</b>
PZ12B	02/21/07	3.5
	04/19/07	<b>30</b>
	07/19/07	<b>29</b>
	10/22/07	<b>27</b>
	01/15/08	<b>8.9</b>
	04/28/08	<b>22.8</b>
	08/12/08	<b>31.3</b>
	10/30/08	<b>29.7</b>
	04/13/09	<b>11.9</b>
	10/05/09	<b>27.2</b>
	04/14/10	<b>15.6</b>
PZ13B	10/20/10	<b>34.4</b>
	01/19/11	<b>13.2</b>
	03/17/11	<b>19.7</b>
	10/12/04	< 0.14
	01/25/05	< 0.14
	04/11/05	< 0.14
	07/11/05	--
	10/03/05	< 0.14
	01/05/06	--
	04/11/06	< 0.14
	07/21/06	--
10/04/06	< 0.14	
02/22/07	< 0.14	
04/20/07	< 0.41	
07/19/07	< 0.41	
10/22/07	< 0.41	
01/14/08	< 0.14	
04/28/08	< 0.14	
10/29/08	< 0.23	
04/13/09	< 0.23	
10/05/09	< 0.23	
04/14/10	< 0.39	
10/19/10	0.44	
01/19/11	< 1	
03/16/11	< 1	

**Table 9. Groundwater Analytical Results - Benzene**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
OW06	04/11/05	<b>5.7</b>
	07/11/05	--
	10/03/05	< 6.9
	01/05/06	--
	04/11/06	<b>5</b>
	07/21/06	--
	10/04/06	3.1
	02/21/07	4.9
	04/19/07	4.4
	07/19/07	2.7
	10/22/07	< 16
	01/14/08	4.4
	04/29/08	3.7
	08/12/08	4.1
	10/29/08	3.7
	04/13/09	4
	10/05/09	2.8
	04/13/10	1.6
	10/19/10	< 4.1
	01/19/11	< 50
03/17/11	3.3	
OW07	06/04/93	<b>21</b>
	09/16/93	--
	08/15/96	--
	08/16/96	< 0.5
	08/16/97	--
	09/03/97	0.23
	02/26/98	--
04/01/98	--	
OW07A	06/02/93	<b>6</b>
	09/16/93	--
	08/15/96	--
	08/16/96	<b>7</b>
	08/16/97	--
	09/03/97	2.1
	02/26/98	--
	06/22/99	--
	06/23/99	<b>14</b>
	01/31/00	--
	02/01/00	<b>23</b>
	05/31/00	<b>9.3</b>
	08/31/00	<b>14</b>
	11/21/00	<b>27</b>
	04/01/02	--
	04/02/02	<b>12</b>
	07/22/02	--
	10/28/02	<b>15</b>
	06/16/03	<b>11</b>
	11/20/03	<b>14</b>
	04/20/04	<b>8.3</b>
	07/20/04	<b>13</b>
	10/12/04	<b>18</b>
	01/25/05	<b>16</b>
	04/11/05	<b>8.1</b>
	07/11/05	<b>15</b>
	10/03/05	<b>14</b>
01/05/06	<b>13</b>	
04/11/06	<b>7.8</b>	
07/21/06	<b>14</b>	
10/04/06	<b>22</b>	
02/21/07	<b>9.1</b>	
04/19/07	<b>8.2</b>	
07/19/07	<b>16</b>	
10/22/07	<b>17</b>	
01/14/08	<b>13</b>	
04/29/08	<b>15.8</b>	
08/12/08	<b>15.2</b>	
10/29/08	<b>23.7</b>	
04/13/09	<b>6.9</b>	
10/05/09	<b>13.2</b>	
04/13/10	<b>10.2</b>	
10/19/10	<b>29.6</b>	
01/19/11	<b>18.4</b>	
03/17/11	<b>12.1</b>	

Sample Location	Sample Date	Benzene (µg/l)
Quality Standard <sup>1</sup>		5
P05B	10/28/02	<b>12</b>
	06/16/03	< 12
	11/20/03	<b>13</b>
	04/20/04	<b>13</b>
	07/20/04	<b>9.6</b>
	10/12/04	<b>14</b>
	01/25/05	<b>13</b>
	04/11/05	<b>6.7</b>
	07/11/05	<b>9.5</b>
	10/03/05	<b>8.4</b>
	01/05/06	2.8
	04/11/06	3.5
	07/21/06	<b>6.3</b>
	10/04/06	<b>9.2</b>
	02/21/07	<b>11</b>
	04/19/07	< 0.41
	07/19/07	< 8.2
	10/22/07	<b>5.2</b>
	01/14/08	0.25
	04/28/08	<b>8</b>
08/12/08	<b>7.1</b>	
10/29/08	<b>7.8</b>	
04/13/09	0.28	
10/05/09	<b>6</b>	
04/14/10	2.3	
10/20/10	<b>6.8</b>	
01/25/11	< 1	
03/17/11	< 1	

Sample Location	Sample Date	Benzene (µg/l)	
Quality Standard <sup>1</sup>		5	
PZ14B	07/25/07	<b>9.8</b>	
	10/22/07	0.69	
	04/28/08	< 0.14	
	08/12/08	< 0.14	
	10/30/08	< 0.23	
	04/13/09	< 0.23	
	10/05/09	< 0.23	
	04/13/10	< 0.39	
	10/19/10	< 0.41	
	01/18/11	0.63	
	03/16/11	< 1	
	PZ15B	07/24/07	< 0.41
		10/22/07	< 0.41
01/15/08		< 0.14	
04/29/08		< 0.14	
08/12/08		< 0.14	
10/30/08		< 0.23	
04/13/09		< 0.23	
PZ16B	10/05/09	< 0.23	
	04/13/10	< 0.39	
	10/19/10	< 0.41	
	01/19/11	< 1	
	03/17/11	< 1	
	07/24/07	< 0.41	
	10/22/07	< 0.41	
TW01	01/14/08	< 0.14	
	04/29/08	< 0.14	
	10/29/08	< 0.23	
	04/13/09	< 0.23	
	10/05/09	< 0.23	
	04/14/10	< 0.39	
	10/20/10	< 0.41	
TW02	01/20/11	< 1	
	03/17/11	< 1	
	10/30/08	< 0.23	
	04/14/09	< 0.23	
	10/05/09	< 0.23	
TW02	04/13/10	< 0.39	
	10/19/10	< 0.41	
	01/19/11	< 1	
	03/16/11	< 1	
	03/16/11	< 1	

**NOTES:**

- Parameters that attain or exceed the EPA Groundwater Quality Standards (MCL) are shown in bold.
- Reference the laboratory analytical report for a full list of compounds analyzed.

< 2.0: Parameter not detected above the limit of detection indicated.

NS: No standard established for this compound.

--: Analysis not performed.

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW01	06/23/99	--	1.32	--	--	--	179	7.9	0.047	--	20.94	--
OW01	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW01	02/01/00	--	--	--	--	--	--	--	--	--	--	--
OW01	05/31/00	--	4.48	--	--	--	300	6.24	0	--	15.25	--
OW01	08/31/00	--	--	--	--	--	--	--	--	--	--	--
OW01	11/21/00	--	--	--	--	--	--	--	--	--	--	--
OW01	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW01	04/02/02	--	4.81	--	--	--	499	6.94	0.002	--	9.13	--
OW01	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW01	10/28/02	--	5.93	--	--	--	350	6.85	0.732	--	13.26	--
OW01	06/16/03	--	1.35	--	--	--	100	--	0.478	--	9.58	--
OW01	11/20/03	--	--	--	--	--	--	--	--	--	--	--
OW01	04/20/04	--	--	--	--	--	--	--	--	--	--	--
OW01	07/20/04	--	--	--	--	--	--	--	--	--	--	--
OW01	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW01	01/25/05	--	--	--	--	--	--	--	--	--	--	--
OW01	04/11/05	230	0.47	<b>30000</b>	150	< 0.061	237	6.84	1.17	< 0.83	9.57	--
OW01	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW01	10/03/05	--	--	--	--	--	--	--	--	--	--	--
OW01	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW01	04/11/06	260	0.48	<b>20000</b>	260	0.25	-125	6.32	1.121	240	10.03	--
OW01	07/21/06	--	--	--	--	--	--	--	--	--	--	--
OW01	10/04/06	--	--	--	--	--	--	--	--	--	--	--
OW01	02/22/07	--	0.41	--	--	--	-209	6.49	1.062	--	8.43	--
OW01	04/19/07	340	0.33	<b>14000</b>	--	0.29	74	6.14	1.025	200	9.78	--
OW01	07/19/07	--	0.82	--	--	--	-62	6.62	0.93	--	12.57	--
OW01	10/22/07	300	3.64	<b>11000</b>	190	0.21	-80	6.61	0.866	180	13.09	--
OW01	01/14/08	--	0.41	--	--	--	-71	6.91	0.582	--	10	--
OW01	04/28/08	295	0.92	<b>2980</b>	--	5.8	25	6.61	1.02	180	11.21	--
OW01	10/29/08	267	1.46	<b>10700</b>	191	< 0.096	-88	7.3	0.76	126	12.51	4.8
OW01	04/13/09	237	1.07	<b>18600</b>	--	< 0.096	-53	6.7	0.96	<b>250</b>	8.36	10.3
OW01	10/05/09	338	0.44	<b>15100</b>	269	0.17	-18	6.47	0.955	179	13.27	3.6
OW01	04/13/10	276	0.76	<b>12600</b>	--	< 0.12	-60	6.98	0.823	111	9.31	74.9
OW01	10/19/10	378	0.36	<b>2860</b>	15.2	1.4	183	6.98	0.765	59.8	14.08	18.3
OW01	01/20/11	346	1	<b>7660</b>	--	< 0.25	3	7.42	0.684	87.7	9.09	15.2
OW01	03/17/11	318	0.26	<b>11800</b>	--	< 0.25	-41	6.63	0.839	101	9	49.3
OW02	06/23/99	--	1.96	--	--	--	146	8.49	0.33	--	15.07	--
OW02	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW02	02/01/00	--	--	--	--	--	--	--	--	--	--	--
OW02	05/31/00	--	3.67	--	--	--	212	6.7	0.148	--	11.87	--
OW02	08/31/00	--	--	--	--	--	--	--	--	--	--	--
OW02	11/21/00	--	--	--	--	--	--	--	--	--	--	--
OW02	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW02	04/02/02	--	1.4	<b>12000</b>	7400	0.031	316	7.37	0.412	9.4	6.53	--
OW02	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW02	10/28/02	--	3.29	<b>17000</b>	5300	0.39	332	7.14	0.294	2.5	15.62	--
OW02	06/16/03	--	1.51	<b>9400</b>	4100	< 0.047	91	--	0.214	19	11.64	--
OW02	11/20/03	--	--	<b>14000</b>	4300	0.055	--	--	--	3.5	--	--
OW02	04/20/04	--	--	--	--	--	--	--	--	--	--	--

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO3 + NO2, Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW02	07/20/04	--	--	--	--	--	--	--	--	--	--	--
OW02	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW02	01/25/05	--	--	--	--	--	--	--	--	--	--	--
OW02	04/11/05	120	0.28	<b>11000</b>	6200	< 0.061	148	6.77	0.56	2.4	5.82	--
OW02	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW02	10/03/05	--	--	--	--	--	--	--	--	--	--	--
OW02	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW02	04/11/06	100	0.21	<b>11000</b>	3800	< 0.11	119	6.76	0.522	3.7	8.31	--
OW02	07/21/06	--	--	--	--	--	--	--	--	--	--	--
OW02	10/04/06	--	--	--	--	--	--	--	--	--	--	--
OW02	02/22/07	--	0.4	--	--	--	-202	6.57	0.335	--	6.18	--
OW02	04/19/07	97	0.42	<b>11000</b>	--	< 0.096	100	6.42	0.5	2.8	6.79	--
OW02	07/19/07	--	0.78	--	--	--	-83	6.69	0.344	--	15.24	--
OW02	10/22/07	130	2.32	<b>9400</b>	5800	< 0.096	-60	6.52	0.428	2.9	16.29	--
OW02	01/14/08	--	0.43	--	--	--	-61	6.7	0.387	--	9.29	--
OW02	04/28/08	--	--	--	--	--	--	--	--	--	--	--
OW02	10/29/08	131	0.28	<b>9690</b>	6470	< 0.096	-136	6.4	0.287	2.2	14.84	1.4
OW02	04/13/09	112	0.37	<b>9860</b>	--	< 0.096	-113	6.73	0.63	6.5	5.35	5.8
OW02	10/05/09	103	0.34	<b>10700</b>	13000	< 0.12	-48	6.42	0.403	2.2	16.72	13.9
OW02	04/13/10	97.9	0.58	<b>11000</b>	--	< 0.12	-101	7.2	0.574	2.9	6.65	51.9
OW02	10/19/10	141	0.31	<b>18900</b>	9780	< 0.12	79	7.07	0.567	2.8	17.03	46
OW02	01/25/11	112	0.7	<b>10100</b>	--	< 0.25	-17	8.51	0.31	3.2	4.51	16.1
OW02	03/17/11	113	0.22	<b>10600</b>	--	< 0.25	-39	6.51	0.416	2.6	7	56.2
OW03R	06/22/99	--	--	--	--	--	--	--	--	--	--	--
OW03R	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW03R	02/01/00	176	--	<b>28000</b>	3420	< 0.069	--	--	--	4.3	--	--
OW03R	05/31/00	264	2.46	<b>9500</b>	3320	< 0.069	146	7.24	4.674	<b>866</b>	11.11	--
OW03R	08/31/00	244	1.35	<b>61000</b>	976	< 0.069	204	6.89	3.176	<b>626</b>	15.89	--
OW03R	11/21/00	137	2.8	<b>48000</b>	2080	< 0.069	174	6.47	0.582	9.1	13.04	--
OW03R	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW03R	04/02/02	--	3.4	<b>4400</b>	350	0.057	291	7.13	3.183	<b>910</b>	6.98	--
OW03R	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW03R	10/28/02	--	2.4	<b>31000</b>	750	0.14	303	6.93	1.263	200	13.47	--
OW03R	06/16/03	--	1.58	<b>3600</b>	150	0.42	105	--	1.15	<b>270</b>	12.85	--
OW03R	11/20/03	--	--	<b>63000</b>	1400	0.06	--	--	--	<b>380</b>	--	--
OW03R	04/20/04	--	--	--	--	--	--	--	--	--	--	--
OW03R	07/20/04	--	--	--	--	--	--	--	--	--	--	--
OW03R	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW03R	01/25/05	--	--	--	--	--	--	--	--	--	--	--
OW03R	04/11/05	450	0.4	<b>33000</b>	950	< 0.061	227	6.9	4.76	<b>320</b>	7.76	--
OW03R	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW03R	10/03/05	--	--	--	--	--	--	--	--	--	--	--
OW03R	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW03R	04/11/06	490	0.24	<b>16000</b>	260	< 0.11	93	6.79	0.616	<b>250</b>	8.47	--
OW03R	07/21/06	--	--	--	--	--	--	--	--	--	--	--
OW03R	10/04/06	--	--	--	--	--	--	--	--	--	--	--
OW03R	02/21/07	--	0.51	--	--	--	-242	6.42	0.788	--	8.75	--
OW03R	04/19/07	210	0.33	<b>10000</b>	--	< 0.096	137	6.47	1.387	87	9.31	--
OW03R	07/19/07	--	0.77	--	--	--	-93	6.62	0.63	--	13.18	--

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW03R	10/22/07	310	3.27	<b>27000</b>	1800	< 0.096	-91	6.71	3.01	120	14.37	--
OW03R	01/14/08	--	0.42	--	--	--	-83	6.76	0.622	--	9.49	--
OW03R	04/29/08	210	0.56	<b>13900</b>	--	2.1	-41	8.32	1.384	151	6.76	--
OW03R	10/29/08	141	1.22	<b>69600</b>	5880	< 0.096	-162	7.82	0.012	21.9	14.13	89.4
OW03R	04/13/09	362	0.22	<b>33300</b>	--	< 0.096	-87	6.43	5.09	244	7.28	100
OW03R	10/05/09	77.2	0.23	<b>53000</b>	6050	< 0.12	-81	6.66	0.575	5.7	14.33	39.3
OW03R	04/13/10	236	0.57	<b>41000</b>	--	< 0.12	-76	6.94	1.374	79	8.88	68.2
OW03R	10/19/10	252	0.29	<b>23600</b>	2290	0.38	140	6.99	0.975	63.8	14.82	10.7
OW03R	01/25/11	174	0.73	<b>11400</b>	--	0.15	18	8.13	0.467	31.5	3.98	55.1
OW03R	03/17/11	198	0.01	<b>14500</b>	--	< 0.25	-60	6.78	0.693	38.2	7.6	123
OW04	06/23/99	64	1.39	<b>15000</b>	--	0.07	106	8.86	0.203	15	13.95	--
OW04	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW04	02/01/00	63	--	<b>6800</b>	--	0.069	--	--	--	< 0.26	--	--
OW04	05/31/00	64	1.59	<b>9900</b>	--	< 0.069	143	6.85	0.3	< 0.38	10.57	--
OW04	08/31/00	54	1.02	<b>12000</b>	--	< 0.069	222	6.78	0.287	< 0.38	15.62	--
OW04	11/21/00	65	5.15	<b>12000</b>	--	< 0.069	169	6.84	0.26	< 0.38	11.32	--
OW04	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW04	04/02/02	--	3.39	<b>5100</b>	--	0.029	269	7.32	0.317	8.9	6.53	--
OW04	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW04	10/28/02	--	3.69	<b>15000</b>	--	< 0.022	314	7.36	0.38	2.7	12.99	--
OW04	06/16/03	--	0.36	<b>5600</b>	--	< 0.047	82	--	0.111	2.6	10.32	--
OW04	11/20/03	--	--	<b>11000</b>	--	0.052	--	--	--	< 1.1	--	--
OW04	04/20/04	--	--	--	--	--	--	--	--	--	--	--
OW04	07/20/04	--	--	--	--	--	--	--	--	--	--	--
OW04	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW04	01/25/05	--	--	--	--	--	--	--	--	--	--	--
OW04	04/11/05	140	0.39	<b>18000</b>	2800	< 0.061	259	6.96	0.5	1.6	7.51	--
OW04	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW04	10/03/05	--	--	--	--	--	--	--	--	--	--	--
OW04	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW04	04/11/06	110	0.24	<b>22000</b>	2300	< 0.11	117	6.84	2.54	2.3	8.26	--
OW04	07/21/06	--	--	--	--	--	--	--	--	--	--	--
OW04	10/04/06	--	--	--	--	--	--	--	--	--	--	--
OW04	02/21/07	--	0.41	--	--	--	-259	7.08	0.549	--	6.98	--
OW04	04/19/07	110	0.39	<b>15000</b>	--	< 0.096	106	6.33	0.35	1.8	9.04	--
OW04	07/19/07	--	0.76	--	--	--	-95	6.79	0.262	--	13.28	--
OW04	10/22/07	120	4.1	<b>9500</b>	2800	< 0.096	-94	6.84	0.234	< 0.51	13.52	--
OW04	01/14/08	--	--	--	--	--	-104	6.6	1.067	--	7.26	--
OW04	04/28/08	--	--	--	--	--	--	--	--	--	--	--
OW04	10/29/08	102	1.22	<b>28600</b>	3930	< 0.096	-138	7.52	0.621	1.9	13.58	26.3
OW04	04/13/09	115	0.76	<b>14100</b>	--	< 0.096	-72	6.9	0.433	4	6.83	46.3
OW04	10/05/09	83.8	0.6	<b>24400</b>	3300	< 0.12	-55	6.49	0.437	2	14.31	43.1
OW04	04/13/10	155	1.66	<b>27400</b>	--	< 0.12	-87	7.03	0.79	7.1	7.98	88.9
OW04	10/19/10	99.6	0.22	<b>18200</b>	2290	< 0.12	83	7.15	0.433	< 2	15.43	28.2
OW04	01/20/11	113	1.9	<b>20100</b>	--	< 0.25	-27	7.48	0.455	2.7	6.57	34.2
OW04	03/17/11	116	0.55	<b>15800</b>	--	< 0.25	-70	6.78	0.468	2.3	7.4	89.2
OW05R	06/22/99	--	--	--	--	--	--	--	--	--	--	--
OW05R	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW05R	02/01/00	388	--	<b>154000</b>	293	< 0.069	--	--	--	<b>2220</b>	--	--

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW05R	05/31/00	346	1.91	<b>49000</b>	153	< 0.069	164	6.66	3.811	<b>2030</b>	10.78	--
OW05R	08/31/00	352	4.66	<b>52000</b>	264	< 0.069	270	6.65	3.972	<b>2070</b>	17.12	--
OW05R	11/21/00	357	2.84	<b>69000</b>	349	0.13	201	6.5	3.811	<b>989</b>	11.21	--
OW05R	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW05R	04/02/02	--	3.67	<b>32000</b>	150	0.044	194	7.3	2.754	<b>1400</b>	6.56	--
OW05R	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW05R	10/28/02	--	0.77	<b>16000</b>	120	0.38	373	7.35	1.1	<b>940</b>	13.34	--
OW05R	06/16/03	--	2.22	24	11	1.8	102	--	0.639	<b>270</b>	10.07	--
OW05R	11/20/03	--	--	<b>33000</b>	420	< 0.047	--	--	--	<b>770</b>	--	--
OW05R	04/20/04	320	1.74	<b>8700</b>	42	0.3	-76	6.86	1.297	<b>420</b>	8.41	--
OW05R	07/20/04	360	0.67	<b>8400</b>	45	0.94	11	7.23	1.52	<b>470</b>	14.11	--
OW05R	10/12/04	300	0.59	<b>34000</b>	690	< 0.063	213	7.4	1.55	<b>480</b>	13.15	--
OW05R	01/25/05	300	1.22	<b>27000</b>	1100	< 0.063	139.3	7.98	0.392	<b>310</b>	9.23	--
OW05R	04/11/05	360	0.32	<b>30000</b>	190	< 0.061	269	6.82	0.36	<b>410</b>	10.21	--
OW05R	07/11/05	350	2.06	<b>23000</b>	34	< 0.061	75	7.68	1.41	<b>340</b>	14.06	--
OW05R	10/03/05	350	1.1	<b>11000</b>	49	< 0.061	-8	7.48	1.39	<b>400</b>	18.25	--
OW05R	01/05/06	300	1.25	<b>20000</b>	55	0.083	283	7.11	1.4	<b>380</b>	6.7	--
OW05R	04/11/06	350	1.06	<b>22000</b>	97	< 0.11	-153	6.57	1.311	<b>250</b>	8.06	--
OW05R	07/21/06	210	0.21	<b>3700</b>	2500	< 0.56	42	6.71	0.767	12	12.83	--
OW05R	10/04/06	200	0.24	<b>36000</b>	3700	< 0.11	-54	6.86	0.7	5.2	13.65	--
OW05R	02/21/07	--	1.68	--	--	--	-210	6.54	1.012	--	7.21	--
OW05R	04/19/07	300	2.28	<b>7400</b>	--	< 0.096	106	6.57	1.084	<b>270</b>	7.47	--
OW05R	07/19/07	--	0.8	--	--	--	-106	6.76	0.632	--	11.72	--
OW05R	10/22/07	200	--	<b>30000</b>	1800	0.11	-134	6.9	0.587	16	13.23	--
OW05R	01/14/08	--	--	--	--	--	--	--	--	--	--	--
OW05R	04/29/08	235	1.25	<b>7200</b>	--	< 0.096	-40	6.48	0.976	206	5.15	--
OW05R	08/12/08	167	0.24	<b>32700</b>	--	< 0.096	-70	6.35	0.6	4.2	12.88	80.1
OW05R	10/29/08	224	--	<b>47000</b>	2810	< 0.096	-127	6.77	0.78	44.6	13.01	28.3
OW05R	04/13/09	252	0.77	<b>15800</b>	--	< 0.096	-85	6.89	0.862	145	5.7	5.1
OW05R	10/05/09	251	0.24	<b>26900</b>	741	< 0.12	-53	6.62	1.51	83	13.83	45.5
OW05R	04/14/10	258	1.12	<b>17000</b>	--	< 0.12	-83	7.13	0.973	60.4	7.6	66.5
OW05R	10/19/10	350	0.2	<b>16400</b>	278	< 0.12	102	7.11	0.883	108	15.09	26.5
OW05R	01/25/11	339	1.01	<b>18500</b>	--	< 0.25	-36	8.64	0.718	94.2	4.04	25.4
OW05R	03/17/11	283	0.88	<b>21700</b>	--	< 0.25	-43	6.72	0.94	108	7.1	49.3
OW06	06/23/99	--	2.14	--	--	--	94	8.82	0.522	--	13.12	--
OW06	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW06	02/01/00	--	--	--	--	--	--	--	--	--	--	--
OW06	05/31/00	--	3.4	--	--	--	281	6.21	0.239	--	12.04	--
OW06	08/31/00	--	3.6	--	--	--	196	6.83	1.034	--	14.34	--
OW06	11/21/00	--	5.73	--	--	--	199	6.49	0.337	--	12	--
OW06	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW06	04/02/02	--	4.58	--	--	--	234	7.28	0.38	--	6.47	--
OW06	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW06	10/28/02	--	4.19	--	--	--	290	7.05	0.484	--	13.41	--
OW06	06/16/03	--	1.78	--	--	--	120	--	0.171	--	9.19	--
OW06	11/20/03	--	--	--	--	--	--	--	--	--	--	--
OW06	07/20/04	130	0.41	<b>9300</b>	2000	< 0.063	-2	7.49	0.353	3.7	11.68	--
OW06	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW06	01/25/05	--	--	--	--	--	--	--	--	--	--	--

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW06	04/11/05	110	0.38	12000	4900	< 0.061	119	6.66	0.001	4.9	7.44	--
OW06	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW06	10/03/05	350	0.34	4100	1600	< 0.061	-329	6.56	0.88	11	16.93	--
OW06	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW06	04/11/06	95	0.33	11000	6800	< 0.11	-126	5.98	0.494	6.2	7.4	--
OW06	07/21/06	--	--	--	--	--	--	--	--	--	--	--
OW06	10/04/06	190	0.44	16000	6100	< 0.11	-77	5.94	0.54	6.4	14.04	--
OW06	02/21/07	--	0.38	--	--	--	-241	6.55	0.571	--	7.27	--
OW06	04/19/07	93	0.31	10000	--	< 0.096	75	6.02	0.898	8.6	8	--
OW06	07/19/07	--	0.87	--	--	--	-71	6.22	0.531	--	12.49	--
OW06	10/22/07	290	1.84	5000	5300	< 0.096	-44	6.44	0.598	7.6	13.56	--
OW06	01/14/08	--	0.34	--	--	--	-61	6.45	0.53	--	9.03	--
OW06	04/29/08	338	1.55	7780	--	< 0.096	-105	7.75	0.717	7.4	7.17	--
OW06	08/12/08	294	0.44	5540	--	< 0.096	-70	6.7	0.681	4.2	11.81	20.4
OW06	10/29/08	243	--	8920	5880	< 0.096	-116	6.59	0.994	7.9	13.15	5.8
OW06	04/13/09	89.9	0.39	7180	--	< 0.096	-89	6.5	0.538	8	6.44	4
OW06	10/05/09	242	0.44	5920	7390	< 0.12	-44	6.43	0.62	6.9	13.75	0
OW06	04/13/10	65.2	0.65	8610	--	< 0.12	-81	6.83	0.363	7.9	7.79	105
OW06	10/19/10	324	0.35	4550	2680	< 0.12	85	7.41	0.854	< 2	14.51	7.2
OW06	01/19/11	328	2.4	4270	--	< 0.25	-23	7.98	0.653	2.4	7.39	2.6
OW06	03/17/11	121	0.07	8210	--	< 0.25	-19	6.48	0.426	2.3	9	24.3
OW07A	06/23/99	180	1.27	19000	6500	0.2	104	8.85	0.66	18	12.53	--
OW07A	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW07A	02/01/00	94	--	8700	12000	0.071	--	--	--	< 0.26	--	--
OW07A	05/31/00	106	2.72	5300	8300	< 0.069	178	6.55	0.343	< 0.38	10.54	--
OW07A	08/31/00	223	8.65	14000	7140	< 0.069	192	6.81	1.081	< 0.38	7.35	--
OW07A	11/21/00	127	4.53	8400	8820	< 0.069	193	6.47	0.44	< 0.38	10.81	--
OW07A	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW07A	04/02/02	--	2.96	6400	7800	0.026	226	7.21	0.391	5.4	6.57	--
OW07A	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW07A	10/28/02	--	4.92	20000	5200	< 0.022	385	7.14	0.507	< 1.1	13.96	--
OW07A	06/16/03	--	1.05	4300	2600	< 0.047	110	--	0.278	3	8.82	--
OW07A	11/20/03	--	--	12000	5700	0.06	--	--	--	< 1.1	--	--
OW07A	04/20/04	94	2.75	8400	3200	< 0.063	-119	6.72	0.487	2.3	7.17	--
OW07A	07/20/04	250	0.46	20000	3500	< 0.063	20	7.33	0.973	0.67	13.03	--
OW07A	10/12/04	210	1.13	25000	6400	< 0.063	195	7.42	0.91	3.5	14.64	--
OW07A	01/25/05	130	1.21	12000	4900	< 0.063	92	8.07	1.447	0.96	9.28	--
OW07A	04/11/05	110	0.26	8300	6100	< 0.061	113	6.67	0.54	1.3	7.77	--
OW07A	07/11/05	150	0.73	16000	5400	< 0.061	70	7.64	0.25	< 0.83	14.69	--
OW07A	10/03/05	210	0.44	26000	7100	< 0.061	-319	6.18	1.26	< 0.83	17.59	--
OW07A	01/05/06	130	0.78	13000	4900	< 0.061	237	6.68	0.61	1.9	8.82	--
OW07A	04/11/06	100	0.7	8200	7100	< 0.11	-157	6.4	0.507	2.2	7.29	--
OW07A	07/21/06	120	0.33	14000	5300	< 0.11	53	5.95	0.805	1.6	13.15	--
OW07A	10/04/06	180	0.4	20000	12000	< 0.11	-45	7.03	1.04	2.1	14.88	--
OW07A	02/21/07	--	0.48	--	--	--	-250	7.43	0.342	--	7.95	--
OW07A	04/19/07	100	0.49	8100	--	< 0.096	126	6.32	0.508	2.1	7.71	--
OW07A	07/19/07	--	1.13	--	--	--	-114	6.13	0.772	--	12.86	--
OW07A	10/22/07	220	1.12	17000	7000	< 0.096	-54	6.44	1.003	< 0.51	14.29	--
OW07A	01/14/08	--	--	--	--	--	-124	6.32	0.466	--	9.71	--



**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO3 + NO2, Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW07A	04/29/08	164	0.81	19800	--	< 0.096	-114	6.19	1.5	28.4	--	--
OW07A	08/12/08	203	0.87	18800	--	< 0.096	-65	6.31	1.27	2.2	13.31	18.3
OW07A	10/29/08	180	0.66	19600	10200	< 0.096	-111	6.4	0.905	< 0.51	13.29	6.9
OW07A	04/13/09	112	2.95	7130	--	< 0.096	-86	2.85	0.668	9.1	6.45	79.4
OW07A	10/05/09	167	0.41	18400	7800	< 0.12	-56	6.52	1.097	< 2	14.17	6.7
OW07A	04/13/10	118	-84	7880	--	< 0.12	152	6.23	0.565	2.3	6.16	19.4
OW07A	10/19/10	295	0.63	21100	6450	< 0.12	103	6.73	1.198	< 2	14.49	0.9
OW07A	01/19/11	202	2.4	17700	--	< 0.25	-14	8.59	0.673	2.3	2.55	10
OW07A	03/17/11	124	0	8890	--	< 0.25	-29	6.41	0.475	2.1	8.5	17.9
OW08	06/23/99	56	2.48	29000	--	0.33	116	8.8	0.26	4.9	14.85	--
OW08	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW08	02/01/00	85	--	15000	--	< 0.069	--	--	--	< 0.26	--	--
OW08	05/31/00	107	2.2	20000	--	< 0.069	141	6.92	0.395	0.52	11.82	--
OW08	08/31/00	101	3.52	28000	--	< 0.069	159	6.87	0.465	5.8	14.31	--
OW08	11/21/00	95	8.73	19000	--	< 0.069	166	6.84	0.294	0.51	12.89	--
OW08	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW08	04/02/02	--	--	--	--	--	--	--	--	--	--	--
OW08	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW08	10/28/02	--	2.4	23000	--	< 0.022	266	6.97	0.277	< 1.1	14.19	--
OW08	06/16/03	--	1.52	14000	--	< 0.047	67	--	0.118	< 1.1	12.21	--
OW08	11/20/03	--	--	35000	--	0.05	--	--	--	< 1.1	--	--
OW08	04/20/04	--	--	--	--	--	--	--	--	--	--	--
OW08	07/20/04	--	--	--	--	--	--	--	--	--	--	--
OW08	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW08	01/25/05	--	--	--	--	--	--	--	--	--	--	--
OW08	04/11/05	70	0.62	24000	2300	< 0.061	236	6.63	0.32	< 0.83	7.47	--
OW08	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW08	10/03/05	--	--	--	--	--	--	--	--	--	--	--
OW08	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW08	04/11/06	58	0.46	40000	2900	< 0.11	-169	6.23	0.727	< 0.77	8.5	--
OW08	07/21/06	--	--	--	--	--	--	--	--	--	--	--
OW08	10/04/06	--	--	--	--	--	--	--	--	--	--	--
OW08	02/22/07	--	0.62	--	--	--	-240	6.91	0.725	--	6.6	--
OW08	04/20/07	62	0.46	29000	--	< 0.096	143	6.54	0.311	< 0.51	9.32	--
OW08	07/19/07	--	0.67	--	--	--	-117	6.77	0.886	--	16.6	--
OW08	10/22/07	77	2.37	36000	3500	< 0.096	-92	6.7	0.573	< 0.51	14.89	--
OW08	01/14/08	--	--	--	--	--	-103	6.84	0.777	--	7.38	--
OW08	04/28/08	--	--	--	--	--	--	--	--	--	--	--
OW08	04/13/10	--	--	--	--	--	--	--	--	--	--	--
OW08	10/19/10	--	--	--	--	--	--	--	--	--	--	--
OW09	06/23/99	140	0.64	21000	--	0.62	125	8.59	0.517	42	11.01	--
OW09	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW09	02/01/00	127	--	14000	--	0.079	--	--	--	6.1	--	--
OW09	05/31/00	197	2.53	23000	--	< 0.069	143	6.62	0.775	68	11.01	--
OW09	08/31/00	107	3.41	28000	--	< 0.069	201	7.04	0.562	73	13.98	--
OW09	11/21/00	163	2.31	24000	--	< 0.069	208	6.49	0.811	75	13.39	--
OW09	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW09	04/02/02	--	3.82	14000	--	0.043	258	7.62	1.005	250	10.07	--
OW09	07/22/02	--	--	--	--	--	--	--	--	--	--	--

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW09	10/28/02	--	3.45	<b>20000</b>	--	< 0.022	201	6.95	0.68	<b>270</b>	13.13	--
OW09	06/16/03	--	0.58	<b>16000</b>	--	0.34	124	--	0.589	200	9.59	--
OW09	11/20/03	--	--	<b>13000</b>	--	0.048	--	--	--	230	--	--
OW09	04/20/04	--	--	--	--	--	--	--	--	--	--	--
OW09	07/20/04	210	0.66	<b>12000</b>	750	< 0.063	34	7.29	1.111	<b>250</b>	11.8	--
OW09	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW09	01/25/05	--	--	--	--	--	--	--	--	--	--	--
OW09	04/12/05	210	0.8	<b>8800</b>	1900	< 0.061	153	6.81	0.63	2.2	9.76	--
OW09	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW09	10/03/05	230	0.28	<b>11000</b>	3300	< 0.061	-372	6.24	0.67	15	15.05	--
OW09	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW09	04/11/06	250	0.14	<b>10000</b>	2100	< 0.11	68	6.56	0.793	15	10.17	--
OW09	07/21/06	--	--	--	--	--	--	--	--	--	--	--
OW09	10/04/06	230	0.61	<b>13000</b>	3700	< 0.11	-61	6.08	0.87	6.9	13	--
OW09	02/21/07	--	-223	--	--	--	0.4	6.5	0.729	--	10.32	--
OW09	04/19/07	210	0.33	<b>9100</b>	--	< 0.096	115	6.11	0.538	8.1	11.68	--
OW09	07/19/07	--	0.89	--	--	--	-75	6.79	0.567	--	11.76	--
OW09	10/22/07	200	2.33	<b>12000</b>	3400	< 0.096	-46	6.53	0.522	4.4	12.49	--
OW09	01/14/08	--	--	--	--	--	-94	6.95	0.591	--	10.55	--
OW09	04/29/08	158	0.36	<b>14200</b>	--	< 0.096	-117	7.68	0.447	2.8	9.34	--
OW09	08/12/08	165	0.67	<b>20200</b>	--	< 0.096	-62	6.5	0.581	4.7	11.55	9.1
OW09	10/29/08	185	1.33	<b>18800</b>	5320	< 0.096	-176	8.4	0.56	7.3	12.47	6.2
OW09	04/13/09	220	0.25	<b>14800</b>	--	< 0.096	-82	6.5	0.648	4.6	9.48	19.4
OW09	10/05/09	114	0.35	<b>29800</b>	4180	< 0.12	-34	6.48	0.947	3.1	12.46	0
OW09	04/13/10	173	0.51	<b>12500</b>	--	< 0.12	-94	7.03	0.576	2.1	10.69	6
OW09	10/19/10	182	0.48	<b>19500</b>	2150	< 0.12	112	7.15	0.58	4.6	14.02	3
OW09	01/20/11	261	1.38	<b>13900</b>	--	< 0.25	-40	7.29	0.397	2.7	9.93	5.1
OW09	03/17/11	206	0.09	<b>17500</b>	--	< 0.25	-60	6.63	0.748	4.6	10.9	8.5
OW10	06/23/99	880	1.94	<b>340</b>	--	0.35	133	8.45	0.659	73	11.53	--
OW10	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW10	02/01/00	988	--	<b>5500</b>	--	0.099	--	--	--	2.2	--	--
OW10	05/31/00	1030	3.02	<b>890</b>	--	< 0.069	178	7.07	6.251	32	11.05	--
OW10	08/31/00	704	0.91	<b>1900</b>	--	< 0.069	155	7.11	6.588	31	13.61	--
OW10	11/21/00	921	2.5	<b>880</b>	--	< 0.069	150	6.91	6.22	11	13.39	--
OW10	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW10	04/02/02	--	5.01	<b>1200</b>	--	0.16	296	7.52	7.364	16	8.88	--
OW10	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW10	10/28/02	--	1.98	<b>1500</b>	--	0.041	275	6.95	1.412	51	13.26	--
OW10	06/16/03	--	1.24	< 18	--	0.14	52	--	3.39	210	10.39	--
OW10	11/20/03	--	--	<b>44000</b>	--	0.061	--	--	--	9.5	--	--
OW10	04/20/04	--	--	--	--	--	--	--	--	--	--	--
OW10	07/20/04	--	--	--	--	--	--	--	--	--	--	--
OW10	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW10	01/25/05	--	--	--	--	--	--	--	--	--	--	--
OW10	04/12/05	670	0.22	<b>13000</b>	2000	< 0.061	67	7.2	6.82	16	8.44	--
OW10	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW10	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW10	04/11/06	890	0.51	<b>17000</b>	3200	< 0.11	101	6.76	9.13	4.4	8.99	--
OW10	07/21/06	--	--	--	--	--	--	--	--	--	--	--

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW10	10/04/06	410	0.24	18000	1900	< 0.11	-67	7.08	5.69	9.5	13.62	--
OW10	02/21/07	--	0.29	--	--	--	-289	6.77	7.09	--	10.02	--
OW10	04/19/07	840	0.53	12000	--	< 0.096	80	6.58	9.19	7.2	9.32	--
OW10	07/19/07	--	0.69	--	--	--	-104	6.89	1.028	--	11.99	--
OW10	10/23/07	410	2.63	20000	2800	< 0.096	-115	6.63	3.88	5.9	13.13	--
OW10	01/14/08	--	0.24	--	--	--	-96	7.05	4.98	--	10.8	--
OW10	04/29/08	2330	1.7	2550	--	0.81	-20	6.75	13.59	408	6.54	--
OW10	08/12/08	163	0.15	8390	--	< 0.096	-67	6.61	0.623	21.5	12.02	8.7
OW10	10/29/08	353	0.31	18300	4370	< 0.096	-106	6.84	3.53	13.9	13.16	4.2
OW10	04/13/09	468	0.42	9650	--	< 0.096	-113	7.13	6.84	19.1	8.56	--
OW10	10/05/09	163	0.16	9490	6950	< 0.12	-81	6.86	1.67	< 2	12.35	6.4
OW10	04/13/10	832	5.44	12800	--	< 0.12	-95	7.15	13.27	55	8.94	128
OW10	10/19/10	688	0.32	9520	2110	< 0.12	60	7.47	6.08	91.9	12.41	7.1
OW10	01/18/11	614	0.65	10000	--	< 0.25	-97	7.59	5.8	73	7.34	9.9
OW10	03/16/11	778	0.21	10500	--	< 0.25	-98	6.74	8.72	192	8.8	31.8
OW11	06/22/99	--	--	--	--	--	--	--	--	--	--	--
OW11	01/31/00	--	--	--	--	--	--	--	--	--	--	--
OW11	02/01/00	74	--	7900	975	< 0.069	--	--	--	< 0.26	--	--
OW11	05/31/00	120	1.72	16000	591	< 0.069	149	6.86	0.654	1.2	9.21	--
OW11	08/31/00	94	1.81	30000	1550	< 0.069	197	6.92	0.368	15	16.37	--
OW11	11/21/00	99	2.1	17000	1040	< 0.069	146	6.76	0.542	3.4	14.18	--
OW11	04/01/02	--	--	--	--	--	--	--	--	--	--	--
OW11	04/02/02	--	3.25	12000	610	0.043	164	7.47	0.597	5	6.98	--
OW11	07/22/02	--	--	--	--	--	--	--	--	--	--	--
OW11	10/28/02	--	2.31	14000	360	0.1	2.68	6.92	0.489	7.2	16.59	--
OW11	06/16/03	--	1.18	16000	820	< 0.047	84	--	0.373	5.7	9.73	--
OW11	11/20/03	--	--	22000	1200	< 0.047	--	--	--	< 1.1	--	--
OW11	04/20/04	--	--	--	--	--	--	--	--	--	--	--
OW11	07/20/04	150	1.29	18000	410	0.38	163	6.8	0.858	16	14.13	--
OW11	10/12/04	--	--	--	--	--	--	--	--	--	--	--
OW11	01/25/05	--	--	--	--	--	--	--	--	--	--	--
OW11	04/11/05	170	0.52	34000	420	< 0.061	77	6.98	1.12	4.1	7.77	--
OW11	07/11/05	--	--	--	--	--	--	--	--	--	--	--
OW11	10/03/05	--	--	--	--	--	--	--	--	--	--	--
OW11	01/05/06	--	--	--	--	--	--	--	--	--	--	--
OW11	04/11/06	110	0.32	26000	670	< 0.11	74	6.5	1.275	5	8.72	--
OW11	07/21/06	--	--	--	--	--	--	--	--	--	--	--
OW11	10/04/06	--	--	--	--	--	--	--	--	--	--	--
OW11	02/21/07	--	0.54	--	--	--	-281	6.84	1.096	--	8.29	--
OW11	04/19/07	170	0.36	27000	--	< 0.096	89	6.2	1.118	2.2	8.17	--
OW11	07/19/07	--	0.85	--	--	--	-88	6.82	1.52	--	14.52	--
OW11	10/22/07	160	3	18000	880	< 0.096	-89	6.74	1.069	2.2	16.6	--
OW11	01/14/08	--	0.41	--	--	--	-99	7.11	0.661	--	9.94	--
OW11	04/28/08	--	--	--	--	--	--	--	--	--	--	--
OW11	10/29/08	123	1.32	28000	1870	< 0.096	-180	8.19	0.926	< 0.51	15.75	11.9
OW11	04/13/09	124	0.57	23900	--	< 0.096	-111	7.2	0.727	2.2	6.67	0.4
OW11	10/05/09	138	0.38	13300	523	< 0.12	-72	6.64	1.089	2.8	16.38	14.8
OW11	04/13/10	135	0.95	17700	--	< 0.12	-101	7.31	0.865	2	8.08	61.6
OW11	10/19/10	110	0.37	20000	940	< 0.12	81	7.02	0.771	< 2	17.32	10.1

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO3 + NO2, Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW11	01/25/11	111	0.95	15100	--	< 0.25	-60	8.23	0.673	2.2	6.33	13.2
OW11	03/17/11	191	0.18	16700	--	< 0.25	-98	6.9	1.2	6.7	8.2	19.7
OW12	07/20/04	--	--	--	--	--	--	--	--	--	--	--
OW12	10/12/04	180	0.48	11000	1300	< 0.063	219	7.5	0.86	6.6	15.51	--
OW12	01/25/05	170	2.13	15000	2200	< 0.063	139.7	7.51	0.73	2.5	10.34	--
OW12	04/11/05	--	--	--	--	--	--	--	--	--	--	--
OW12	04/12/05	97	1.14	28000	1600	< 0.061	56	6.97	1.68	3.1	8.27	--
OW12	07/11/05	170	1.47	17000	1300	< 0.061	91	6.8	1.54	3.4	13.71	--
OW12	10/03/05	150	0.61	19000	1700	< 0.061	-13	7.77	0.7	< 0.83	20.13	--
OW12	01/05/06	150	0.52	23000	1800	0.07	251	6.72	1.46	4.4	11.18	--
OW12	04/11/06	39	4.04	< 50	< 10	0.2	114	6.37	1.64	7	10.14	--
OW12	07/21/06	180	0.15	24000	780	< 0.11	-79	6.21	2.38	17	14.68	--
OW12	10/04/06	160	1.53	21000	1900	< 0.11	-38	6.16	1.12	2.1	16.47	--
OW12	02/21/07	--	0.32	--	--	--	-234	6.58	0.738	--	9.8	--
OW12	04/19/07	200	0.39	12000	--	< 0.096	128	6.38	4.79	18	9.25	--
OW12	07/19/07	--	0.77	--	--	--	-76	6.54	2.12	--	14.95	--
OW12	10/22/07	230	2.25	6400	1500	0.11	-70	6.61	1.068	5.6	15.93	--
OW12	01/15/08	--	0.33	--	--	--	-43	7.4	0.321	--	12.02	--
OW12	04/29/08	183	0.14	17100	--	0.23	-139	7.97	4.34	15.8	7.95	--
OW12	08/12/08	202	0.14	6590	--	< 0.096	-51	6.63	1.7	18	14.75	49.6
OW12	10/30/08	139	1	16200	3330	< 0.096	-60	6.66	0.947	2.1	14.72	24.5
OW12	04/13/09	124	0.27	21700	--	< 0.096	-78	6.95	0.771	9.5	7.74	77.3
OW12	10/05/09	133	0.41	19300	2970	< 0.12	-72	6.66	0.926	3.2	15.56	11.9
OW12	04/14/10	190	0.36	15800	--	< 0.12	-99	7.16	1.086	5	8.49	19.9
OW12	10/19/10	137	0.28	14400	2350	< 0.12	104	7.08	0.786	< 2	16.19	43.2
OW12	01/19/11	160	1.17	15200	--	< 0.25	-32	7.25	0.946	3.8	9.88	53.2
OW12	03/17/11	165	5.43	15500	--	< 0.25	-87	6.87	0.68	2	9.3	71.4
OW14	07/25/07	--	1.19	--	--	--	-22	6.74	1.76	--	16.35	--
OW14	10/22/07	210	6.39	2200	790	< 0.096	-14	6.32	0.78	2	16.24	--
OW14	04/29/08	225	0.49	5620	--	0.22	-70	7.81	0.954	7.9	8.25	--
OW14	08/12/08	246	0.2	3180	--	1.1	-10	6.46	1.51	33.4	16.4	9.2
OW14	10/30/08	234	1.32	11600	2560	< 0.096	-174	8.77	1.33	16.3	15.58	11
OW14	04/13/09	191	0.32	10600	--	< 0.096	-56	6.78	1.168	4.5	8.28	0
OW14	10/05/09	373	0.22	684	681	3.3	28	6.7	1.8	40.2	17.41	9.1
OW14	04/13/10	344	0.37	1100	--	5.2	-2	6.94	2.06	35.2	9.47	10
OW14	10/19/10	293	--	1500	519	0.13	--	--	--	22.8	--	--
OW14	01/18/11	333	97	1840	--	1.4	96	7.07	1.164	17.8	6.31	36.2
OW14	03/16/11	98.2	0.55	1340	--	0.93	-21	6.82	4.59	17.5	8.2	88.1
OW15	07/24/07	--	1.16	--	--	--	-109	6.47	1.48	--	15.1	--
OW15	10/22/07	130	3.35	22000	260	< 0.096	-56	6.4	1.93	8.7	14.93	--
OW15	01/15/08	--	0.81	--	--	--	-34	6.96	1.5	--	10.75	--
OW15	04/29/08	128	0.24	17100	--	0.1	-72	6.78	1.434	5.7	7.56	--
OW15	08/12/08	91.1	1.73	22100	--	< 0.096	-70	6.48	1.89	12.4	14.48	55.7
OW15	10/30/08	148	1.2	12200	386	0.31	-161	8.73	1.8	8.4	14.14	50
OW15	04/13/09	166	1.1	6640	--	< 0.096	-60	7.09	1.031	3.7	8.68	74
OW15	10/05/09	116	0.46	13400	275	< 0.12	-60	6.77	1.75	6.6	15.1	18.4
OW15	04/13/10	134	1.89	8780	--	0.5	-78	7.02	1.543	10.2	9.29	87.6
OW15	10/19/10	193	1.26	16	< 0.93	4.2	243	7	2.47	24.3	15.9	15.5
OW15	01/19/11	237	2.97	30.5	--	0.3	10	7.5	1.271	9.1	9.43	19.1

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
OW15	03/17/11	226	2.33	95.4	--	2.3	66	7.04	1.93	13.2	9.1	73.6
OW16	07/24/07	--	1.29	--	--	--	24	6.46	0.132	--	20.96	--
OW16	10/22/07	79	2.86	<b>8200</b>	3300	< 0.096	-43	6.67	0.212	7.4	15.12	--
OW16	01/14/08	--	--	--	--	--	-84	7.03	0.197	--	5.71	--
OW16	04/29/08	31.8	1.75	<b>10400</b>	--	< 0.096	-25	5.37	0.258	14.1	9.21	--
OW16	10/29/08	65.6	0.3	<b>17400</b>	4020	< 0.096	-97	6.48	0.3	71.6	13.98	8.5
OW16	04/13/09	68.8	0.47	<b>13400</b>	--	< 0.096	-103	6.83	0.255	8.7	4.04	7
OW16	10/05/09	41.1	0.18	<b>5780</b>	3170	< 0.12	-64	6.73	0.231	6.4	16.73	75.9
OW16	04/14/10	29.4	0.51	<b>5180</b>	--	< 0.12	-41	7.07	0.193	6.7	5.33	130
OW16	10/19/10	22.4	1	<b>4260</b>	4560	< 0.12	159	6.75	0.153	5.2	15.37	37
OW16	01/19/11	34.6	1	<b>10700</b>	--	< 0.25	-18	8.46	0.162	7	1.21	32
OW16	03/16/11	43.5	0.35	<b>12300</b>	--	< 0.25	-59	6.6	0.233	5	4.1	187
OW17	07/24/07	--	1.04	--	--	--	-79	6.43	0.184	--	15	--
OW17	10/22/07	81	2.42	<b>5000</b>	7400	< 0.096	-47	6.58	0.204	< 0.51	15.74	--
OW17	01/14/08	--	--	--	--	--	-77	7.02	0.207	--	6.52	--
OW17	04/29/08	71.2	0.66	<b>6380</b>	--	< 0.096	-150	8.43	0.209	2.2	5.82	--
OW17	10/29/08	74.9	1.26	<b>5260</b>	5810	< 0.096	-202	8.63	0.229	10	14.79	39.4
OW17	04/13/09	61.6	0.39	<b>4540</b>	--	< 0.096	-109	6.9	0.226	8.5	5.99	5.1
OW17	10/05/09	74.1	0.31	<b>4580</b>	11400	< 0.12	-40	6.6	0.238	< 2	15.57	12.3
OW17	04/14/10	73.6	0.5	<b>4530</b>	--	< 0.12	-66	6.86	0.21	4	5.59	19.4
OW17	10/19/10	73.1	0.35	<b>5170</b>	8720	< 0.12	139	6.93	0.207	< 2	15.39	60.1
OW17	01/19/11	61.3	1.45	<b>6000</b>	--	< 0.25	-35	8.25	0.156	2.9	7.53	11.7
OW17	03/16/11	66.3	0	<b>4240</b>	--	< 0.25	-62	6.29	0.204	3.9	6.6	56.9
OW18	01/20/11	135	0.51	<b>5740</b>	--	0.32	-61	7.44	1.159	7.4	9.96	10.8
OW18	03/16/11	154	1.12	<b>6180</b>	--	< 0.25	-110	7.31	0.943	3.4	10.2	88.7
OW19	01/20/11	145	0.79	<b>22000</b>	--	< 0.25	-44	8.3	1.55	8.2	6.21	39.1
OW19	03/17/11	188	0.57	<b>27400</b>	--	< 0.25	-100	6.91	2.07	10.5	8.6	134
OW20	01/20/11	216	0.84	11.5	--	4.9	25	7.75	1.358	14.2	6.37	23.2
OW20	03/17/11	194	0.3	40	--	0.39	-15	7.09	1.71	8.4	10.2	8.8
OW21	01/20/11	279	2.25	17	--	1.3	-10	7.83	1.358	23.4	6.82	26.4
OW21	03/16/11	222	0.05	< 100	--	2.9	70	6.7	1.9	19.6	10.8	24
P05B	06/23/99	100	2.43	<b>2300</b>	1200	0.07	84	8.95	0.199	5.4	12.92	--
P05B	01/31/00	--	--	--	--	--	--	--	--	--	--	--
P05B	02/01/00	107	--	<b>1900</b>	1140	< 0.069	--	--	--	8.3	--	--
P05B	05/31/00	118	2.98	32	62	< 0.069	107	7.27	0.282	0.8	11.18	--
P05B	08/31/00	119	1.84	<b>2700</b>	1430	< 0.069	175	7.28	0.306	1.9	15.05	--
P05B	11/21/00	121	3.8	<b>1200</b>	1210	< 0.069	174	7	0.329	2.2	12.33	--
P05B	04/01/02	--	--	--	--	--	--	--	--	--	--	--
P05B	04/02/02	--	3.81	<b>1100</b>	780	< 0.014	168	7.65	0.345	12	8.23	--
P05B	07/22/02	--	--	--	--	--	--	--	--	--	--	--
P05B	10/28/02	--	0.28	<b>4100</b>	610	< 0.022	367	7.81	0.235	< 1.1	13.46	--
P05B	06/16/03	--	1.28	<b>2900</b>	290	< 0.047	104	--	0.187	13	9.18	--
P05B	11/20/03	--	--	<b>4700</b>	750	< 0.047	--	--	--	< 1.1	--	--
P05B	04/20/04	150	1.6	<b>2500</b>	380	< 0.063	-83	6.98	0.355	0.71	9.6	--
P05B	07/20/04	150	0.83	<b>3500</b>	460	< 0.063	180	6.91	0.37	1.3	12.68	--
P05B	10/12/04	140	2.58	<b>3300</b>	640	< 0.063	245	7.64	0.37	0.77	10.08	--
P05B	01/25/05	150	1.81	<b>6400</b>	800	< 0.063	132.4	7.92	0.37	0.69	8.97	--
P05B	04/11/05	150	0.75	<b>1500</b>	160	< 0.061	94	6.94	1.23	< 0.83	6.89	--
P05B	07/11/05	140	0.77	<b>3600</b>	250	< 0.061	79	7.53	0.37	< 0.83	11.52	--

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
P05B	10/03/05	140	0.3	<b>3500</b>	560	< 0.061	-389	6.55	0.35	< 0.83	13.9	--
P05B	01/05/06	140	0.4	<b>880</b>	270	0.08	83	7.1	0.35	1.8	8.93	--
P05B	04/11/06	140	0.22	<b>1700</b>	230	< 0.11	84	6.74	0.361	1.9	10.01	--
P05B	07/21/06	130	0.24	<b>3800</b>	530	< 0.11	-10	6.02	0.371	< 0.77	11.72	--
P05B	10/04/06	130	1.39	<b>5100</b>	750	< 0.11	-62	6.15	0.37	< 0.77	11.56	--
P05B	02/21/07	--	0.39	--	--	--	-221	6.57	0.334	--	10.17	--
P05B	04/19/07	140	0.33	110	--	< 0.096	137	6.47	1.387	1.9	9.31	--
P05B	07/19/07	--	0.9	--	--	--	-80	6.86	0.309	--	11.03	--
P05B	10/22/07	120	--	<b>3800</b>	570	< 0.096	-115	7.35	0.316	< 0.51	11.46	--
P05B	01/14/08	--	2.07	--	--	--	165	7.14	0.326	--	9.45	--
P05B	04/28/08	129	0.63	<b>5200</b>	--	< 0.096	-133	7.96	0.339	2	9.74	--
P05B	08/12/08	140	0.28	<b>5180</b>	--	< 0.096	-37	6.37	0.351	< 0.51	11.67	1.6
P05B	10/29/08	123	1.04	<b>5990</b>	2020	< 0.096	-75	6.85	0.28	< 0.51	10.99	1.8
P05B	04/13/09	134	0.35	<b>812</b>	--	< 0.096	-37	6	0.33	1.9	9.25	26.5
P05B	10/05/09	106	0.46	<b>6440</b>	1130	< 0.12	-60	6.8	0.361	< 2	11.65	0
P05B	04/14/10	130	1.6	<b>4020</b>	--	< 0.12	-32	7.21	0.368	< 2	10.62	8.9
P05B	10/20/10	107	--	<b>7140</b>	495	< 0.12	--	--	--	< 2	--	--
P05B	01/25/11	129	3.3	<b>4460</b>	--	< 0.25	-26	8.81	0.305	< 4	7.56	8.5
P05B	04/13/09	134	0.35	<b>812</b>	--	< 0.096	-37	6	0.33	1.9	9.25	26.5
PZ03B	06/23/99	--	3.48	<b>2340</b>	--	--	214	7.59	0.17	--	15.12	--
PZ03B	01/31/00	--	--	--	--	--	--	--	--	--	--	--
PZ03B	02/01/00	63	--	<b>6000</b>	--	< 0.069	--	--	--	< 0.26	--	--
PZ03B	05/31/00	70	3.08	<b>10000</b>	--	< 0.069	198	7.16	0.162	< 0.38	12.02	--
PZ03B	08/31/00	61	1.83	<b>4000</b>	2200	< 0.069	151	7.28	0.246	< 0.38	15.89	--
PZ03B	11/21/00	--	--	--	--	--	--	--	--	--	--	--
PZ03B	04/01/02	--	--	--	--	--	--	--	--	--	--	--
PZ03B	04/02/02	--	3.19	<b>7200</b>	1400	0.017	246	7.41	0.171	3.3	8.27	--
PZ03B	07/22/02	--	--	--	--	--	--	--	--	--	--	--
PZ03B	10/28/02	--	2.8	<b>9100</b>	1400	< 0.022	265	7.45	0.131	< 1.1	15.04	--
PZ03B	06/16/03	--	2.16	<b>8500</b>	410	< 0.047	90	--	0.089	< 1.1	9.86	--
PZ03B	11/20/03	--	--	<b>7700</b>	1400	0.048	--	--	--	< 1.1	--	--
PZ03B	04/20/04	--	--	--	--	--	--	--	--	--	--	--
PZ03B	07/20/04	--	--	--	--	--	--	--	--	--	--	--
PZ03B	10/12/04	--	--	--	--	--	--	--	--	--	--	--
PZ03B	01/25/05	--	--	--	--	--	--	--	--	--	--	--
PZ03B	04/11/05	78	2.6	<b>5800</b>	190	0.12	267	7.09	0.19	< 0.83	9.53	--
PZ03B	07/11/05	--	--	--	--	--	--	--	--	--	--	--
PZ03B	10/03/05	--	--	--	--	--	--	--	--	--	--	--
PZ03B	01/05/06	--	--	--	--	--	--	--	--	--	--	--
PZ03B	04/11/06	45	0.38	< 50	14	0.26	-50	6.41	0.181	9.9	8.98	--
PZ03B	07/21/06	--	--	--	--	--	--	--	--	--	--	--
PZ03B	10/04/06	--	--	--	--	--	--	--	--	--	--	--
PZ03B	02/21/07	--	0.52	--	--	--	-223	6.41	0.229	--	10.67	--
PZ03B	04/19/07	64	5.31	<b>4700</b>	--	0.17	154	6.44	0.167	2	11.45	--
PZ03B	07/19/07	--	0.88	--	--	--	-86	6.93	0.183	--	13.15	--
PZ03B	10/22/07	67	3.38	<b>9600</b>	1900	< 0.096	-108	6.99	0.205	< 0.51	12.21	--
PZ03B	01/14/08	--	--	--	--	--	-97	7.04	0.221	--	10.24	--
PZ03B	04/28/08	--	--	--	--	--	--	--	--	--	--	--
PZ03B	10/29/08	81.2	0.52	130	27.1	0.12	67	6.85	0.153	1.9	12.6	8.7

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site

1111 Crosby Avenue, Stevens Point, Wisconsin

USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
PZ03B	04/13/09	68.5	1.3	<b>8090</b>	--	< 0.096	-55	6.97	0.216	1.8	9.66	6.9
PZ03B	10/05/09	73.6	0.29	<b>7290</b>	179	< 0.12	-70	6.75	0.231	< 2	13.09	6.7
PZ03B	04/13/10	75.8	5.19	253	--	0.41	-36	6.91	0.203	2.1	9.42	86
PZ03B	10/19/10	67.1	0.59	<b>10400</b>	132	< 0.12	170	7.25	0.209	< 2	13.4	15.5
PZ03B	01/25/11	63.6	0.68	<b>11100</b>	--	< 0.25	-36	7.8	0.198	< 4	6.75	6.8
PZ03B	03/17/11	66.8	0.9	<b>12500</b>	--	< 0.25	-109	6.94	0.257	2	9.9	9.6
PZ07B	06/23/99	130	1.97	220	1600	0.17	113	8.85	0.177	11	11.69	--
PZ07B	01/31/00	--	--	--	--	--	--	--	--	--	--	--
PZ07B	02/01/00	113	--	160	1530	< 0.069	--	--	--	< 0.26	--	--
PZ07B	05/31/00	125	3.2	65	1520	< 0.069	189	7.19	0.207	< 0.38	10.6	--
PZ07B	08/31/00	116	5.28	64	1820	< 0.069	172	7.35	0.298	< 0.38	9.8	--
PZ07B	11/21/00	120	4.18	91	1250	< 0.069	173	6.91	0.23	2.6	12.89	--
PZ07B	04/01/02	--	--	--	--	--	--	--	--	--	--	--
PZ07B	04/02/02	--	3.92	<b>630</b>	960	< 0.014	189	7.66	0.241	3.3	7.23	--
PZ07B	07/22/02	--	--	--	--	--	--	--	--	--	--	--
PZ07B	10/28/02	--	4.64	<b>1500</b>	850	< 0.022	281	7.35	0.15	< 1.1	14.8	--
PZ07B	06/16/03	--	1.11	<b>1700</b>	710	< 0.047	112	--	0.132	< 1.1	8.56	--
PZ07B	11/20/03	--	--	<b>2000</b>	1000	< 0.047	--	--	--	< 1.1	--	--
PZ07B	04/20/04	99	1.29	<b>2000</b>	1000	< 0.063	-109	7.25	0.227	0.72	9.63	--
PZ07B	07/20/04	97	2.73	<b>2900</b>	1100	< 0.063	188	7.05	0.236	< 0.37	11.79	--
PZ07B	10/12/04	47	0.55	<b>3100</b>	1500	< 0.063	222	7.58	0.24	53	12.3	--
PZ07B	01/25/05	120	2	<b>2200</b>	980	< 0.063	86.7	8.05	0.229	< 0.36	9.7	--
PZ07B	04/11/05	110	0.37	<b>1600</b>	1500	< 0.061	337	6.92	0.25	< 0.83	10.96	--
PZ07B	07/11/05	100	0.81	<b>3000</b>	1200	< 0.061	54	7.61	0.25	< 0.83	12.59	--
PZ07B	10/03/05	96	0.54	<b>3000</b>	1900	< 0.061	-83	7.31	0.26	< 0.83	16.57	--
PZ07B	01/05/06	95	0.4	<b>3000</b>	1200	< 0.061	63	7.33	0.25	< 0.83	10.01	--
PZ07B	04/11/06	94	0.17	<b>2000</b>	830	< 0.11	99	6.53	0.251	< 0.77	9.19	--
PZ07B	07/21/06	120	0.53	<b>1500</b>	1200	< 0.11	0.261	6.54	0.261	< 0.77	11.72	--
PZ07B	10/04/06	120	2.18	<b>1800</b>	1500	< 0.11	1	6.66	0.26	< 0.77	11.78	--
PZ07B	02/21/07	--	0.46	--	--	--	-224	6.94	0.228	--	9.72	--
PZ07B	04/19/07	110	0.34	<b>1800</b>	--	< 0.096	126	6.5	0.226	< 0.51	10.16	--
PZ07B	07/19/07	--	0.95	--	--	--	-68	6.87	0.205	--	11.85	--
PZ07B	10/22/07	150	2.3	<b>1300</b>	940	< 0.096	-89	6.93	0.249	< 0.51	11.94	--
PZ07B	01/14/08	--	0.64	--	--	--	26	7.06	0.222	--	10.54	--
PZ07B	04/28/08	93	1.63	<b>1900</b>	--	< 0.096	-66	7.88	0.222	< 0.51	7.67	--
PZ07B	08/12/08	108	0.29	<b>1700</b>	--	< 0.096	-78	6.95	0.275	< 0.51	11.92	7.5
PZ07B	10/29/08	121	2.26	<b>3040</b>	2780	< 0.096	-78	6.63	0.32	< 0.51	11.73	2.6
PZ07B	04/13/09	100	0.61	<b>2020</b>	--	< 0.096	-74	6.99	0.236	< 0.51	9.75	0
PZ07B	10/05/09	128	0.75	<b>2040</b>	1930	< 0.12	-50	6.76	0.268	< 2	11.82	0
PZ07B	04/13/10	96.8	0.82	<b>1330</b>	--	< 0.12	-5	6.95	0.254	2.6	9.22	11.7
PZ07B	10/19/10	129	--	<b>1860</b>	1150	< 0.12	--	--	--	< 2	--	--
PZ07B	01/19/11	129	1.27	<b>1930</b>	--	< 0.25	-43	8.54	0.23	< 4	7.32	0.3
PZ07B	03/17/11	96.3	1.29	<b>1210</b>	--	< 0.25	-49	6.81	0.261	< 4	9.6	8.2
PZ09B	06/23/99	110	3.55	< 24	--	< 0.017	181	7.78	0.424	10	12.07	--
PZ09B	01/31/00	--	--	--	--	--	--	--	--	--	--	--
PZ09B	02/01/00	108	--	120	--	< 0.069	--	--	--	10	--	--
PZ09B	05/31/00	107	5.48	41	--	< 0.069	179	7.45	0.533	9.4	11.41	--
PZ09B	08/31/00	106	2.38	<b>1000</b>	86	< 0.069	206	6.62	0.717	7.6	12.8	--
PZ09B	11/21/00	111	11.2	120	--	< 0.069	402	7.5	0.559	4.9	12.89	--



**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
PZ09B	04/01/02	--	--	--	--	--	--	--	--	--	--	--
PZ09B	04/02/02	--	4.65	130	40	< 0.014	225	7.54	0.577	12	9.92	--
PZ09B	07/22/02	--	--	--	--	--	--	--	--	--	--	--
PZ09B	10/28/02	--	3.26	< 61000	< 10	< 0.022	267	7	0.381	19	13.59	--
PZ09B	06/16/03	--	0.81	100	13	< 0.047	131	--	0.328	18	10.18	--
PZ09B	11/20/03	--	--	200	120	< 0.047	--	--	--	--	--	--
PZ09B	04/20/04	--	--	--	--	--	--	--	--	--	--	--
PZ09B	07/20/04	110	2.73	<b>800</b>	< 10	< 0.063	356	6.91	0.532	9.1	13.46	--
PZ09B	10/12/04	--	--	--	--	--	--	--	--	--	--	--
PZ09B	01/25/05	--	--	--	--	--	--	--	--	--	--	--
PZ09B	04/12/05	120	7.77	<b>3300</b>	< 10	0.12	451	7.2	0.55	11	9.45	--
PZ09B	07/11/05	--	--	--	--	--	--	--	--	--	--	--
PZ09B	10/03/05	110	4.08	<b>3400</b>	< 10	0.066	33	7.28	0.57	11	15.15	--
PZ09B	01/05/06	--	--	--	--	--	--	--	--	--	--	--
PZ09B	04/11/06	110	4.64	<b>3200</b>	18	< 0.11	5	7.18	0.577	11	10.76	--
PZ09B	07/21/06	--	--	--	--	--	--	--	--	--	--	--
PZ09B	10/04/06	120	3.72	<b>4000</b>	77	< 0.11	-40	6.96	0.55	9.5	12.01	--
PZ09B	02/21/07	--	0.73	--	--	--	-225	6.59	0.462	--	10.88	--
PZ09B	04/19/07	130	1.45	<b>2700</b>	--	< 0.096	120	6.11	0.443	8.2	11.73	--
PZ09B	07/19/07	--	4.32	--	--	--	-27	7.29	0.423	--	11.91	--
PZ09B	10/22/07	110	4.1	<b>870</b>	< 10	< 0.096	-1	6.9	0.426	9	12.05	--
PZ09B	01/14/08	--	0.26	--	--	--	-2	6.95	0.447	--	10.57	--
PZ09B	04/28/08	121	6.74	<b>2090</b>	--	< 0.096	47	7.04	0.527	9	8.8	--
PZ09B	10/29/08	136	2.43	<b>1980</b>	35.7	< 0.096	-30	6.89	0.33	8.3	11.78	6.6
PZ09B	04/13/09	123	6.78	<b>1200</b>	--	< 0.096	22	7.47	0.441	7.6	9.98	0
PZ09B	10/05/09	109	3.57	<b>1310</b>	24.3	< 0.12	41	7.25	0.453	7	11.76	25.5
PZ09B	04/13/10	129	10.78	<b>931</b>	--	< 0.12	-45	7.3	0	6.9	11.41	271
PZ09B	10/19/10	138	0.52	<b>1100</b>	170	< 0.12	112	7.55	0.411	5.2	13.49	6.1
PZ09B	01/20/11	137	0.88	<b>989</b>	--	0.17	-30	7.29	0.342	6	9.22	3.3
PZ09B	03/17/11	136	8.73	<b>826</b>	--	< 0.25	-60	7.21	0.447	5.8	10.9	7.8
PZ10B	06/23/99	180	1.76	82	--	0.34	215	7.25	0.405	54	11.9	--
PZ10B	01/31/00	--	--	--	--	--	--	--	--	--	--	--
PZ10B	02/01/00	--	--	< 8.9	--	--	--	--	--	--	--	--
PZ10B	05/31/00	84	5.04	200	--	< 0.069	246	7.59	0.357	20	10.86	--
PZ10B	08/31/00	118	8.47	66	--	< 0.069	172	7.83	0.375	18	11.55	--
PZ10B	11/21/00	123	7.26	< 15	--	0.097	155	7.21	0.368	15	12.36	--
PZ10B	04/01/02	--	--	--	--	--	--	--	--	--	--	--
PZ10B	04/02/02	--	3.62	47	--	0.096	224	8.54	0.391	28	11.13	--
PZ10B	07/22/02	--	--	--	--	--	--	--	--	--	--	--
PZ10B	10/28/02	--	7.72	< 61	--	0.12	--	7.4	0.302	18	14.04	--
PZ10B	06/16/03	--	2.89	290	--	0.12	89	--	0.213	16	11.69	--
PZ10B	11/20/03	--	--	110	--	0.16	--	--	--	16	--	--
PZ10B	04/20/04	--	--	--	--	--	--	--	--	--	--	--
PZ10B	07/20/04	--	--	--	--	--	--	--	--	--	--	--
PZ10B	10/12/04	--	--	--	--	--	--	--	--	--	--	--
PZ10B	01/25/05	--	--	--	--	--	--	--	--	--	--	--
PZ10B	04/12/05	150	8.27	< 17	< 10	0.11	4.61	7.17	0.42	15	9.17	--
PZ10B	07/11/05	--	--	--	--	--	--	--	--	--	--	--
PZ10B	10/03/05	--	--	--	--	--	--	--	--	--	--	--

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
PZ10B	01/05/06	--	--	--	--	--	--	--	--	--	--	--
PZ10B	04/11/06	120	0.49	< 50	< 10	0.17	-18	7.62	0.442	16	10.32	--
PZ10B	07/21/06	--	--	--	--	--	--	--	--	--	--	--
PZ10B	10/04/06	130	7.03	< 50	< 10	0.16	-19	6.67	0.44	16	13.95	--
PZ10B	02/21/07	--	6.2	--	--	--	-244	7.11	0.4	--	10.84	--
PZ10B	04/19/07	140	6.57	< 50	--	0.15	118	6.92	0.387	16	11.69	--
PZ10B	07/19/07	--	5.22	--	--	--	-19	7.54	0.346	--	12.6	--
PZ10B	10/23/07	140	5.16	< 25	< 10	0.17	-47	7.32	0.357	16	11.8	--
PZ10B	01/14/08	--	--	--	--	--	-40	7.36	0.393	--	8.96	--
PZ10B	04/28/08	135	6.62	< 6.9	--	< 0.096	-48	8.68	0.379	15.2	8.5	--
PZ10B	10/29/08	139	6.99	< 6.9	< 2	< 0.096	-148	9.58	0.369	14.4	12.01	6.1
PZ10B	04/13/09	136	6.99	16.4	--	< 0.096	7	7.65	0.392	13.8	8.9	11
PZ10B	10/05/09	126	5.86	3.7	< 0.93	0.14	15	7.3	0.38	14.1	12.1	0
PZ10B	04/13/10	139	7.73	< 8.3	--	< 0.12	-25	7.75	0.399	13.8	10.94	100.1
PZ10B	10/19/10	139	4.4	< 8.3	< 0.93	< 0.12	132	8	0.382	12.2	13	4.2
PZ10B	01/18/11	140	6.57	< 100	--	< 0.25	-20	8.2	0.324	12.4	8.43	0
PZ10B	03/16/11	146	6.8	< 100	--	< 0.25	-57	7.79	0.451	12.2	10.5	46.5
PZ11B	06/22/99	--	--	--	--	--	--	--	--	--	--	--
PZ11B	01/31/00	--	--	--	--	--	--	--	--	--	--	--
PZ11B	02/01/00	116	--	220	243	0.094	--	--	--	0.81	--	--
PZ11B	05/31/00	145	4.46	<b>300</b>	141	< 0.069	205	7.38	0.286	< 0.38	10.84	--
PZ11B	08/31/00	< 5.8	3.64	<b>3000</b>	4250	< 0.069	165	7.56	0.318	<b>5920</b>	17.2	--
PZ11B	11/21/00	155	5.44	<b>2600</b>	1980	< 0.069	128	7.1	0.3	3.4	14.71	--
PZ11B	04/01/02	--	--	--	--	--	--	--	--	--	--	--
PZ11B	04/02/02	--	3.34	<b>1500</b>	5500	0.044	195	7.55	0.339	5.1	9.2	--
PZ11B	07/22/02	--	--	--	--	--	--	--	--	--	--	--
PZ11B	10/28/02	--	3.19	270	970	0.041	251	7.07	0.214	5.8	15.74	--
PZ11B	06/16/03	--	1.59	<b>1300</b>	490	< 0.047	72	--	0.156	3.8	10.85	--
PZ11B	11/20/03	--	--	<b>4000</b>	590	< 0.047	--	--	--	5.4	--	--
PZ11B	04/20/04	--	--	--	--	--	--	--	--	--	--	--
PZ11B	07/20/04	150	3.22	< 17	< 10	0.091	48	7.76	0.332	7.8	17.25	--
PZ11B	10/12/04	--	--	--	--	--	--	--	--	--	--	--
PZ11B	01/25/05	--	--	--	--	--	--	--	--	--	--	--
PZ11B	04/11/05	160	6.41	< 17	< 10	0.11	352	6.86	0.33	7.9	7.28	--
PZ11B	07/11/05	--	--	--	--	--	--	--	--	--	--	--
PZ11B	10/03/05	140	3.87	54	< 10	0.17	278	7.15	0.34	8.3	16.51	--
PZ11B	01/05/06	--	--	--	--	--	--	--	--	--	--	--
PZ11B	04/11/06	--	0.82	< 50	< 10	0.17	4	7.47	0.353	--	8.98	--
PZ11B	07/21/06	--	--	--	--	--	--	--	--	--	--	--
PZ11B	10/04/06	140	4.89	< 50	< 10	0.14	-32	7.03	0.34	9.5	12.26	--
PZ11B	02/21/07	--	5.72	--	--	--	-226	6.86	0.316	--	9.45	--
PZ11B	04/19/07	160	3.98	< 50	--	< 0.096	112	6.54	0.313	9.5	9.93	--
PZ11B	07/19/07	--	0.94	--	--	--	-50	7.41	0.282	--	12.87	--
PZ11B	10/22/07	140	1.38	54	< 10	< 0.096	-46	7.2	0.29	8.4	14.81	--
PZ11B	01/14/08	--	--	--	--	--	-74	7.36	0.32	--	9.91	--
PZ11B	04/28/08	--	--	--	--	--	--	--	--	--	--	--
PZ11B	10/29/08	151	2	12.6	< 2	< 0.096	45	7.37	0.254	7.7	14.33	38
PZ11B	04/13/09	149	4.9	8.5	--	< 0.096	43	7.48	0.322	8.9	7.05	14.5
PZ11B	10/05/09	132	5.52	22.7	< 0.93	< 0.12	-1	7.21	0.327	6.6	15.25	8.4

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
PZ11B	04/13/10	154	5.06	63.1	--	< 0.12	-67	8.14	0.324	6.8	9.41	40.2
PZ11B	10/19/10	156	2.5	< 8.3	< 0.93	< 0.12	142	7.6	0.312	5.9	14.13	13.6
PZ11B	01/25/11	156	0.73	<b>1400</b>	--	< 0.25	-79	9.21	0.27	6.5	4.45	18.5
PZ11B	03/17/11	152	5.75	< 100	--	< 0.25	-66	7.3	0.346	6.4	9.9	4.2
PZ12B	07/20/04	--	--	--	--	--	--	--	--	--	--	--
PZ12B	10/12/04	110	0.36	<b>330</b>	330	< 0.063	139	8	0.31	6.2	13.62	--
PZ12B	01/25/05	140	--	<b>510</b>	930	< 0.063	125.6	7.78	0.358	< 0.36	10.96	--
PZ12B	04/11/05	--	--	--	--	--	--	--	--	--	--	--
PZ12B	04/12/05	150	1.09	<b>490</b>	120	< 0.061	400	7.08	0.36	1.8	10.56	--
PZ12B	07/11/05	--	--	--	--	--	--	--	--	--	--	--
PZ12B	10/03/05	27	0.26	9	< 10	0.24	-403	6.46	0.07	1.6	15.7	--
PZ12B	01/05/06	14	4.83	41	< 10	0.42	140	7.5	0.09	3.5	10.89	--
PZ12B	04/11/06	140	0.49	<b>16000</b>	590	< 0.11	-147	6.46	3.01	10	8.85	--
PZ12B	07/21/06	130	0.22	<b>1200</b>	820	< 0.11	6	6.58	0.314	1.6	12.44	--
PZ12B	10/04/06	130	0.67	<b>1400</b>	1000	< 0.11	-37	6.67	0.32	1.5	12.98	--
PZ12B	02/21/07	--	2.9	--	--	--	-158	6.6	0.271	--	11.11	--
PZ12B	04/19/07	150	0.75	<b>730</b>	--	< 0.096	151	6.61	0.301	1.5	12.1	--
PZ12B	07/19/07	--	1.26	--	--	--	-123	7.35	0.277	--	13.39	--
PZ12B	10/22/07	150	3.03	<b>800</b>	4500	< 0.096	-100	7.02	0.287	< 0.51	12.67	--
PZ12B	01/15/08	--	--	--	--	--	-105	7.04	0.841	--	11.41	--
PZ12B	04/28/08	149	0.66	<b>659</b>	--	< 0.096	-62	7	0.375	2	9.75	--
PZ12B	08/12/08	145	--	<b>788</b>	--	< 0.096	-81	7.21	0.321	3.1	12.86	7.3
PZ12B	10/30/08	163	1.46	<b>969</b>	1320	< 0.096	-228	9.32	0.31	< 0.51	12.77	5.4
PZ12B	04/13/09	153	1.23	<b>386</b>	--	< 0.096	-69	7.35	0.437	2.3	10.14	0
PZ12B	10/05/09	132	0.41	<b>1370</b>	1460	< 0.12	-93	7.42	0.371	< 2	13.38	6.5
PZ12B	04/14/10	162	4.03	<b>608</b>	--	< 0.12	-93	7.75	0.367	2.1	10.75	0.2
PZ12B	10/20/10	150	0.3	<b>791</b>	1470	< 0.12	73	7.72	0.329	< 2	12.7	131
PZ12B	01/19/11	160	0.73	<b>746</b>	--	< 0.25	-56	7.96	0.411	2.5	8.15	1.1
PZ12B	03/17/11	157	0.02	<b>750</b>	--	< 0.25	-68	7.08	0.454	2.1	11	9
PZ13B	10/12/04	--	--	--	--	--	--	--	--	--	--	--
PZ13B	01/25/05	--	--	--	--	--	--	--	--	--	--	--
PZ13B	04/11/05	--	--	--	--	--	--	--	--	--	--	--
PZ13B	07/11/05	--	--	--	--	--	--	--	--	--	--	--
PZ13B	10/03/05	180	0.88	210	36	< 0.061	-96	7.47	0.54	13	18.18	--
PZ13B	01/05/06	--	--	--	--	--	--	--	--	--	--	--
PZ13B	04/11/06	170	1.21	< 50	< 10	< 0.11	157	6.91	0.569	17	8.21	--
PZ13B	07/21/06	--	--	--	--	--	--	--	--	--	--	--
PZ13B	10/04/06	190	0.6	<b>430</b>	40	< 0.11	-8	7.14	0.58	27	14.49	--
PZ13B	02/22/07	--	2.7	--	--	--	-189	6.77	0.544	--	9.73	--
PZ13B	04/20/07	200	3	< 50	--	< 0.096	238	7.05	0.565	39	11.82	--
PZ13B	07/19/07	--	0.9	--	--	--	-15	7.41	0.526	--	13.95	--
PZ13B	10/22/07	220	3.57	< 25	< 10	0.12	-21	7.04	0.536	46	16.75	--
PZ13B	01/14/08	--	--	--	--	--	1	7.46	0.586	--	11.25	--
PZ13B	04/28/08	199	5.97	< 6.9	--	< 0.096	15	8.38	0.592	46.6	9.17	--
PZ13B	10/29/08	206	2.13	< 6.9	< 2	0.1	64	7.16	0.5	54.1	15.91	5.8
PZ13B	04/13/09	198	5.96	14.1	--	< 0.096	57	7.49	0.678	54.9	9.18	21.3
PZ13B	10/05/09	176	5.84	14	< 0.93	< 0.12	-3	7.23	0.663	61.4	17.12	0
PZ13B	04/14/10	210	7	< 8.3	--	< 0.12	38	7.57	0.701	61	10.62	7.6
PZ13B	10/19/10	205	0.45	< 8.3	6	< 0.12	190	7.62	0.707	63.4	14.65	6.3

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Sample ID	Sample Date	Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
		Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO3 + NO2, Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
PZ13B	01/19/11	199	1.69	< 100	--	< 0.25	13	8.18	0.571	55.2	7.33	1.9
PZ13B	03/16/11	193	5.67	9.4	--	< 0.25	80	7.18	0.737	47.5	11.2	7.5
PZ14B	07/25/07	--	--	--	--	--	--	--	--	--	--	--
PZ14B	10/22/07	130	--	<b>330</b>	< 10	5.8	--	--	--	20	--	--
PZ14B	04/28/08	159	5.87	<b>353</b>	--	< 0.096	14	6.92	0.625	16.4	9.88	--
PZ14B	08/12/08	136	4.26	34.6	--	0.24	10	6.53	0.368	16.4	21.25	53.5
PZ14B	10/30/08	141	3.55	39.3	< 2	0.23	110	6.72	0.32	16	11.12	15.7
PZ14B	04/13/09	148	2.77	99.4	--	< 0.096	2	7	0.547	15.4	11.56	118
PZ14B	10/05/09	128	5.27	<b>310</b>	9.1	< 0.12	2	6.76	0.474	15.4	13.19	42.6
PZ14B	04/13/10	141	2.48	< 8.3	--	< 0.12	81	6.92	0.192	16.6	16.13	138
PZ14B	10/19/10	139	3.83	< 8.3	< 0.93	< 0.12	209	7.28	0.432	15.1	13.89	18.7
PZ14B	01/18/11	116	2.46	80	--	< 0.25	159	6.75	0.574	17.3	7.03	16
PZ14B	03/16/11	134	2.28	< 100	--	< 0.25	70	7.28	0.91	17.6	9.9	109
PZ15B	07/24/07	--	1.13	--	--	--	-117	6.81	0.218	--	13.02	--
PZ15B	10/22/07	63	5.95	<b>15000</b>	2400	< 0.096	-99	6.78	0.235	< 0.51	12.58	--
PZ15B	01/15/08	--	--	--	--	--	-135	7.22	0.228	--	11.95	--
PZ15B	04/29/08	51.5	0.94	<b>11000</b>	--	< 0.096	-31	7.74	0.189	< 0.51	10.38	--
PZ15B	08/12/08	68.8	--	<b>20500</b>	--	< 0.096	-104	6.79	0.29	2.1	11.99	9.8
PZ15B	10/30/08	68.4	0.52	<b>20600</b>	4310	< 0.096	-122	7.05	0.232	< 0.51	12.22	2.7
PZ15B	04/13/09	25.4	0.29	<b>3860</b>	--	< 0.096	3	6.79	0.191	2	10.26	99.1
PZ15B	10/05/09	44.1	0.32	<b>20500</b>	1390	< 0.12	-108	6.86	0.258	< 2	14.55	1.1
PZ15B	04/13/10	39.1	0.67	236	--	0.27	40	7.59	0.191	2	11.81	150
PZ15B	10/19/10	52.7	0.4	<b>18600</b>	1180	< 0.12	48	7.6	0.256	< 2	12.93	13.6
PZ15B	01/19/11	48.6	0.6	<b>16800</b>	--	< 0.25	-51	7.41	0.206	2.6	9.18	1.4
PZ15B	03/17/11	57.6	1.48	<b>3500</b>	--	< 0.25	55	7.07	0.282	2.2	11.5	89.7
PZ16B	07/24/07	--	1	--	--	--	-122	6.94	0.194	--	12.29	--
PZ16B	10/22/07	81	1.9	<b>1200</b>	1900	< 0.096	-42	6.96	0.195	< 0.51	11.23	--
PZ16B	01/14/08	--	--	--	--	--	-81	7.32	0.22	--	9.03	--
PZ16B	04/29/08	101	0.47	<b>2440</b>	--	< 0.096	-180	8.66	0.205	2.2	9.6	--
PZ16B	10/29/08	102	1.6	<b>747</b>	3070	< 0.096	-159	8.56	0.233	< 0.51	10.9	5
PZ16B	04/13/09	76.2	0.39	81.1	--	0.16	75	6.58	0.207	4.2	8.88	6.9
PZ16B	10/05/09	72.2	1.06	<b>3160</b>	2590	< 0.12	-21	6.83	0.249	< 2	11.36	0
PZ16B	04/14/10	93.6	0.43	240	--	< 0.12	-35	7.46	0.256	2	10.34	11.1
PZ16B	10/20/10	91	0.46	<b>5340</b>	1880	< 0.12	94	7.52	0.258	< 2	12.01	6.8
PZ16B	01/19/11	71	0.97	<b>4860</b>	--	< 0.25	-26	8.61	0.211	< 4	4.5	1.1
PZ16B	03/16/11	96.2	1	<b>2600</b>	--	< 0.25	-15	6.87	0.259	2	11	10.7
TW01	10/30/08	203	1.28	< 6.9	2.2	0.45	-66	9.1	1.88	19	15.19	56.9
TW01	04/14/09	208	2.16	14.3	--	2.4	79	7.76	2.13	38	8.9	90
TW01	10/05/09	168	3.28	11.5	< 0.93	6.1	23	7.02	2.51	31.7	15.06	12.2
TW01	04/14/10	217	1.07	< 8.3	--	1	78	7.23	1.75	16.8	9.85	23.5
TW01	10/20/10	207	0.67	< 8.3	2.8	2.6	277	6.91	2.1	23.1	14.98	147
TW01	01/20/11	226	0.66	< 100	--	0.92	57	7.65	1.65	18.4	8.8	20.1
TW01	03/17/11	229	0.2	< 100	--	< 0.25	57	7.02	1.89	18.2	9.9	55

**Table 10. Groundwater Results - Laboratory and Field MNA Parameters (After 1998)**  
 Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

		Laboratory and Field Monitored Natural Attenuation (MNA) Parameters										
Sample ID	Sample Date	Alkalinity, Total (mg/l)	Dissolved Oxygen (mg/l)	Iron, Dissolved <sup>2</sup> (µg/l)	Methane (µg/l)	Nitrogen, NO <sub>3</sub> + NO <sub>2</sub> , Total (mg/l)	Oxidation Reduction Potential (mV)	PH, Field (Standard Units)	Specific Conductance, Field (mmhos/cm)	Sulfate, Total (mg/l)	Temperature, Water (Degrees Centigrade)	Turbidity, Quantitative (NTU)
Quality Standard <sup>1</sup>		NS	NS	300	NS	10	NS	NS	NS	250	NS	NS
TW02	10/30/08	215	1.39	40.9	< 2	0.2	-50	8.64	1.83	19	14.35	43.1
TW02	04/14/09	237	0.45	48	--	0.12	73	7.28	1.76	17.7	6.95	10.5
TW02	10/05/09	173	0.23	179	25.8	0.28	26	6.68	2.33	22.6	15.63	13.8
TW02	04/13/10	198	0.2	8.6	--	< 0.12	10	7.19	1.459	17.6	8.83	17.1
TW02	10/19/10	145	0.23	17.8	16.4	1.1	211	7.03	0.397	15.1	15.16	19.2
TW02	01/19/11	95.3	1.21	23.4	--	0.12	16	7.8	0.79	15.6	4	6.4
TW02	03/16/11	201	0.03	17.4	--	< 0.25	8	6.7	1.4	20	9.6	132

**NOTES:**

- Parameters that attain or exceed the EPA Groundwater Quality Standards (MCL) are shown in bold.
- If no MCL standard has been established, then the parameters that attain or exceed the NR 140 Wisconsin Groundwater Quality Enforcement Standard (ES) are identified in bold.
- Reference the laboratory analytical report for a full list of compounds analyzed.

< 2.0: Parameter not detected above the limit of detection indicated.

NS: No standard established for this compound.

--: Analysis not performed.

**Table 11. Groundwater Concentration Trends and Relationships**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Location	Benzene Relationships	R <sup>2</sup>	Confidence Limit Slopes (Min)	Confidence Limit Slopes (Max)	Trend/Relationship	Naphthalene Relationships	R <sup>2</sup>	Confidence Limit Slopes (Min)	Confidence Limit Slopes (Max)	Trend/Relationship
OW-3R	Time	0.2%	-1.87E-04	2.29E-04	None	Time	13.3%	-6.77E-04	4.95E-05	None
	GW Elevation	0.2%	-1.40E+00	1.14E+00	None	GW Elevation	0.4%	-2.06E+00	2.70E+00	None
OW-5R	Time	6.5%	-4.48E-04	5.52E-05	None	Time	26.4%	-1.09E-03	-2.80E-04	<b>Decreasing</b>
	GW Elevation	37.2%	-2.45E+00	-8.33E-01	<b>Inverse</b>	GW Elevation	27.1%	-4.15E+00	-9.68E-01	<b>Inverse</b>
P-5B	Time	29.8%	-4.25E-04	-1.02E-04	<b>Decreasing</b>	Time	4.4%	-9.69E-04	2.81E-04	None
	GW Elevation	2.4%	-4.82E-01	1.19E+00	None	GW Elevation	4.8%	-1.10E+00	4.48E+00	None
OW-6	Time	16.9%	-1.54E-04	-7.11E-06	None	Time	4.9%	-6.02E-04	1.74E-04	None
	GW Elevation	14.4%	-9.84E-01	8.11E-04	None	GW Elevation	6.9%	-8.51E-01	4.22E+00	None
OW-7	Time	<0.1%	-5.16E-05	4.90E-05	None	Time	<0.1%	-2.30E-04	2.03E-04	None
	GW Elevation	6.7%	-9.91E-01	1.52E-01	None	GW Elevation	<0.1%	-2.58E+00	2.52E+00	None
PZ-7B	Time	2.6%	-1.54E-04	5.94E-05	None	Time	5.4%	-4.90E-04	1.03E-04	None
	GW Elevation	1.0%	-6.77E-01	3.90E-01	None	GW Elevation	8.6%	-2.66E+00	2.35E-01	None
OW-9	Time	13.6%	-4.31E-06	2.46E-04	None	Time	10.6%	-7.24E-05	3.76E-04	<b>Variable</b>
	GW Elevation	14.6%	-1.13E+00	-3.68E-03	None	GW Elevation	2.7%	-1.57E+00	4.90E-01	None
OW-10	Time	31.3%	1.42E-04	6.41E-04	<b>Increasing</b>	Time	32.7%	1.90E-04	8.02E-04	<b>Increasing</b>
	GW Elevation	7.9%	-1.74E+00	3.33E-01	None	GW Elevation	29.2%	-2.81E+00	-5.56E-01	<b>Inverse</b>
PZ-11B	Time	50.9%	-8.37E-04	-3.40E-04	<b>Decreasing</b>	Time	40.2%	-1.19E-03	-3.69E-04	<b>Decreasing</b>
	GW Elevation	0.2%	-1.52E+00	1.88E+00	None	GW Elevation	0.2%	-2.27E+00	2.78E+00	None
OW-12	Time	0.3%	-3.54E-04	2.74E-04	None	Time	<0.1%	-5.50E-04	5.68E-04	None
	GW Elevation	<0.1%	-8.85E-01	8.50E-01	None	GW Elevation	2.3%	-1.01E+00	2.04E+00	None
PZ-12B	Time	7.2%	-1.62E-04	6.82E-04	None	Time	19.6%	-1.66E-03	-7.13E-05	<b>Decreasing</b>
	GW Elevation	2.6%	-7.61E-01	1.61E+00	None	GW Elevation	0.1%	-2.61E+00	2.22E+00	None
OW-14	Time	72.2%	-8.98E-04	-3.31E-04	<b>Decreasing</b>	Time	34.3%	-2.79E-03	3.83E-05	<b>Variable/Decreasing</b>
	GW Elevation	0.4%	-7.54E-01	9.02E-01	None	GW Elevation	22.4%	-6.56E-01	4.09E+00	None

Notes:

- 1) Time Trends: "Decreasing" or "Increasing" indicate concentrations show this particular trend at this location for the specific parameter.  
 "Variable" indicates concentrations fluctuate and no definitive trend has been observed (also supported by the Mann-Kendall analysis).
- 2) "Direct" or "Inverse" indicate the relationship between the parameter concentration and groundwater elevation at this location.

**Table 12. Comparison of Benzene and Naphthalene Concentrations with MNA Indicator Parameters  
Former Stevens Point MGP Site**

Well	Benzene Concentration Range (µg/l)	Average Dissolved Oxygen (mg/l) (# of samples)	Average Oxidation Reduction Potential (millivolts) (# of samples)	Average Specific Conductance (mhos/cm) (# of samples)	Average Nitrogen, NO3 + NO2, Total (mg/l) (# of samples)	Average Dissolved Iron (µg/l) (# of samples)	Average Sulfate (mg/l) (# of samples)
OW01	< 0.5	0.71 (5)	58.80 (5)	0.84 (5)	0.32 (5)	12,604 (5)	75.0 (5)
	< 5	0.93 (8)	-58.25 (8)	0.95 (8)	1.34 (5)	12,616 (5)	195.8 (5)
	> 5	0.92 (2)	-56.50 (2)	0.89 (2)	0.08 (2)	15,600 (2)	180.5 (2)
OW02	< 0.5	0.84 (17)	12.06 (17)	0.41 (17)	0.05 (13)	11,127 (13)	4.8 (13)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
OW03R	< 0.5	0.87 (10)	53.20 (10)	1.93 (10)	0.10 (10)	24,370 (10)	257.6 (10)
	< 5	1.49 (10)	37.10 (10)	1.66 (10)	0.32 (9)	33,122 (9)	232.9 (9)
	> 5	0.23 (1)	-81.00 (1)	0.58 (1)	0.06 (1)	53,000 (1)	5.7 (1)
OW04	< 0.5	1.18 (12)	23.50 (12)	0.59 (12)	0.05 (9)	12,433 (9)	2.7 (9)
	< 5	1.12 (5)	-44.80 (5)	0.55 (5)	0.06 (5)	23,740 (5)	2.9 (5)
	> 5	---	---	---	---	---	---
OW05R	< 0.5	---	---	---	---	---	---
	< 5	1.26 (12)	22.75 (12)	1.02 (12)	0.31 (11)	13,520 (11)	288.5 (11)
	> 5	1.36 (18)	55.18 (18)	1.53 (18)	0.08 (19)	37,932 (19)	638.5 (19)
OW06	< 0.5	---	---	---	---	---	---
	< 5	0.50 (15)	-76.33 (15)	0.63 (15)	0.05 (12)	8,009 (12)	6.3 (12)
	> 5	1.24 (4)	-18.50 (4)	0.44 (4)	0.05 (4)	8,068 (4)	5.3 (4)
OW07A	< 0.5	---	---	---	---	---	---
	< 5	---	---	---	---	---	---
	> 5	1.54 (31)	17.81 (31)	0.75 (31)	0.04 (30)	13,813 (30)	2.6 (30)
OW08	< 0.5	1.01 (7)	-22.57 (7)	0.51 (7)	0.04 (5)	28,600 (5)	0.4 (5)
	< 5	1.44 (2)	12.00 (2)	0.64 (2)	0.03 (1)	15,000 (1)	0.1 (1)
	> 5	---	---	---	---	---	---
OW09	< 0.5	---	---	---	---	---	---
	< 5	---	---	---	---	---	---
	> 5	1.17 (25)	3.24 (25)	0.68 (25)	0.06 (24)	16,213 (24)	62.9 (24)
OW10	< 0.5	2.75 (5)	190.20 (5)	4.93 (5)	0.08 (6)	8,080 (6)	54.9 (6)
	< 5	0.69 (7)	25.86 (7)	8.44 (7)	0.15 (8)	8,621 (8)	101.2 (8)
	> 5	0.98 (11)	-96.91 (11)	5.04 (11)	0.05 (8)	13,704 (8)	17.7 (8)
OW11	< 0.5	1.10 (19)	-15.70 (19)	0.89 (19)	0.07 (17)	19,924 (17)	4.0 (17)
	< 5	1.77 (2)	173.00 (2)	0.51 (2)	0.03 (3)	17,967 (3)	5.4 (3)
	> 5	---	---	---	---	---	---
OW12	< 0.5	4.04 (1)	114.00 (1)	1.64 (1)	0.20 (1)	25 (1)	7.0 (1)
	< 5	0.64 (14)	-17.79 (14)	1.74 (14)	0.07 (13)	15,976 (13)	8.4 (13)
	> 5	1.54 (8)	8.34 (8)	18.98 (8)	0.05 (6)	18,417 (6)	2.5 (6)
OW14	< 0.5	---	---	---	---	---	---
	< 5	---	---	---	---	---	---
	> 5	1.20 (10)	-24.50 (10)	1.71 (10)	1.24 (10)	3,966 (10)	19.8 (10)
OW15	< 0.5	1.54 (12)	-31.75 (12)	1.67 (12)	0.79 (10)	10,236 (10)	10.2 (10)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
OW16	< 0.5	0.97 (11)	-31.91 (11)	0.21 (11)	0.05 (9)	9,736 (9)	14.7 (9)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
OW17	< 0.5	0.84 (11)	-66.18 (11)	0.21 (11)	0.05 (9)	5,078 (9)	3.8 (9)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---



**Table 12. Comparison of Benzene and Naphthalene Concentrations with MNA Indicator Parameters  
Former Stevens Point MGP Site**

Well	Benzene Concentration Range (µg/l)	Average Dissolved Oxygen (mg/l) (# of samples)	Average Oxidation Reduction Potential (millivolts) (# of samples)	Average Specific Conductance (mhos/cm) (# of samples)	Average Nitrogen, NO3 + NO2, Total (mg/l) (# of samples)	Average Dissolved Iron (µg/l) (# of samples)	Average Sulfate (mg/l) (# of samples)
P05B	< 0.5	1.51 (5)	43.00 (5)	0.55 (5)	0.05 (4)	1,393 (4)	1.7 (4)
	< 5	1.22 (5)	32.40 (5)	0.33 (5)	0.05 (4)	1,283 (4)	1.7 (4)
	> 5	1.27 (20)	26.67 (20)	0.38 (20)	0.04 (22)	3,889 (22)	2.2 (22)
PZ03B	< 0.5	1.94 (17)	18.94 (17)	0.19 (17)	0.11 (14)	6,542 (14)	2.0 (14)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
PZ07B	< 0.5	2.73 (2)	138.00 (2)	0.20 (2)	0.04 (2)	1,415 (2)	1.6 (2)
	< 5	1.42 (23)	36.17 (23)	0.24 (23)	0.04 (23)	1,756 (23)	2.9 (23)
	> 5	1.90 (5)	39.00 (5)	0.26 (5)	0.04 (5)	1,846 (5)	0.8 (5)
PZ09B	< 0.5	4.54 (18)	87.72 (18)	0.46 (18)	0.05 (16)	3,477 (16)	10.1 (16)
	< 5	3.38 (6)	93.00 (6)	0.46 (6)	0.06 (7)	753 (7)	7.3 (7)
	> 5	---	---	---	---	---	---
PZ10B	< 0.5	6.00 (22)	22.74 (22)	0.38 (22)	0.10 (20)	45 (20)	15.9 (20)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
PZ11B	< 0.5	3.84 (15)	27.60 (15)	0.32 (15)	0.09 (12)	26 (12)	7.8 (12)
	< 5	3.22 (1)	48.00 (1)	0.33 (1)	0.09 (1)	9 (1)	7.8 (1)
	> 5	3.20 (7)	133.86 (7)	0.27 (7)	0.04 (9)	1,621 (9)	4.1 (9)
PZ12B	< 0.5	2.55 (2)	-131.50 (2)	0.08 (2)	0.33 (2)	25 (2)	2.6 (2)
	< 5	1.70 (2)	-152.50 (2)	1.64 (2)	0.06 (1)	16,000 (1)	10.0 (1)
	> 5	1.08 (18)	-12.24 (18)	0.37 (18)	0.05 (16)	783 (16)	1.8 (16)
PZ13B	< 0.5	3.17 (16)	32.56 (16)	0.60 (16)	0.06 (13)	58 (13)	45.1 (13)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
PZ14B	< 0.5	3.79 (8)	62.25 (8)	0.48 (8)	0.10 (8)	106 (8)	16.1 (8)
	< 5	2.46 (1)	159.00 (1)	0.57 (1)	2.93 (2)	205 (2)	18.7 (2)
	> 5	---	---	---	---	---	---
PZ15B	< 0.5	1.23 (12)	-51.75 (12)	0.23 (12)	0.08 (10)	13,060 (10)	1.4 (10)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
PZ16B	< 0.5	0.93 (11)	-46.55 (11)	0.23 (11)	0.07 (9)	2,296 (9)	1.5 (9)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
TW01	< 0.5	1.33 (7)	72.14 (7)	1.99 (7)	1.93 (7)	7 (7)	23.6 (7)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---
TW02	< 0.5	0.53 (7)	42.00 (7)	1.42 (7)	0.28 (7)	48 (7)	18.2 (7)
	< 5	---	---	---	---	---	---
	> 5	---	---	---	---	---	---

**Table 12. Comparison of Benzene and Naphthalene Concentrations with MNA Indicator Parameters  
Former Stevens Point MGP Site**

Well	Naphthalene Concentration Range (µg/l)	Average Dissolved Oxygen (mg/l) (# of samples)	Average Oxidation Reduction Potential (millivolts) (# of samples)	Average Specific Conductance (mhos/cm) (# of samples)	Average Nitrogen, NO3 + NO2, Total (mg/l) (# of samples)	Average Dissolved Iron (µg/l) (# of samples)	Average Sulfate (mg/l) (# of samples)
OW01	< 1	0.85 (12)	-5.50 (12)	0.95 (12)	0.83 (10)	13,400 (10)	147.8 (10)
	< 100	0.88 (3)	-73.00 (3)	0.72 (3)	0.08 (2)	11,650 (2)	118.5 (2)
	> 100	---	---	---	---	---	---
OW02	< 1	0.61 (15)	-21.53 (15)	0.43 (15)	0.05 (12)	11,054 (12)	4.4 (12)
	< 100	2.54 (2)	264.00 (2)	0.28 (2)	0.03 (1)	12,000 (1)	9.4 (1)
	> 100	---	---	---	---	---	---
OW03R	< 1	0.38 (3)	51.33 (3)	1.13 (3)	0.05 (3)	22,333 (3)	138.7 (3)
	< 100	0.86 (9)	39.00 (9)	2.05 (9)	0.37 (9)	22,300 (9)	267.6 (9)
	> 100	1.66 (9)	35.22 (9)	1.62 (9)	0.05 (8)	40,888 (8)	231.6 (8)
OW04	< 1	1.31 (12)	7.75 (12)	0.45 (12)	0.05 (9)	13,989 (9)	3.2 (9)
	< 100	0.83 (5)	-7.00 (5)	0.90 (5)	0.06 (5)	20,940 (5)	2.0 (5)
	> 100	---	---	---	---	---	---
OW05R	< 1	1.22 (9)	42.33 (9)	0.99 (9)	0.25 (9)	13,114 (9)	220.1 (9)
	< 100	1.07 (9)	17.00 (9)	1.17 (9)	0.21 (9)	20,556 (9)	415.9 (9)
	> 100	1.64 (12)	61.03 (12)	1.70 (12)	0.07 (12)	47,200 (12)	798.4 (12)
OW06	< 1	0.36 (2)	-50.00 (2)	0.39 (2)	0.06 (2)	8,410 (2)	5.1 (2)
	< 100	0.36 (6)	-53.83 (6)	0.51 (6)	0.05 (4)	10,045 (4)	6.9 (4)
	> 100	0.91 (11)	-72.36 (11)	0.67 (11)	0.05 (10)	7,138 (10)	5.9 (10)
OW07A	< 1	0.48 (1)	-250.00 (1)	0.34 (1)	---	---	---
	< 100	1.61 (8)	40.88 (8)	0.50 (8)	0.04 (8)	8,653 (8)	3.5 (8)
	> 100	1.57 (22)	21.59 (22)	0.86 (22)	0.04 (22)	15,690 (22)	2.3 (22)
OW08	< 1	1.69 (4)	-0.25 (4)	0.49 (4)	0.04 (3)	21,667 (3)	0.3 (3)
	< 100	0.54 (5)	-26.60 (5)	0.57 (5)	0.04 (2)	32,000 (2)	0.4 (2)
	> 100	---	---	---	---	---	---
OW09	< 1	---	---	---	---	---	---
	< 100	2.02 (2)	162.50 (2)	0.63 (2)	0.13 (3)	16,333 (3)	233.3 (3)
	> 100	1.09 (23)	-10.61 (23)	0.68 (23)	0.05 (21)	16,195 (21)	38.6 (21)
OW10	< 1	1.38 (3)	160.67 (3)	3.80 (3)	0.07 (4)	11,852 (4)	75.4 (4)
	< 100	1.46 (10)	58.30 (10)	7.30 (10)	0.13 (11)	7,130 (11)	78.1 (11)
	> 100	1.06 (10)	-99.90 (10)	5.48 (10)	0.05 (7)	14,463 (7)	17.2 (7)
OW11	< 1	1.18 (19)	-9.23 (19)	0.85 (19)	0.07 (18)	19,478 (18)	4.4 (18)
	< 100	1.02 (2)	111.50 (2)	0.96 (2)	0.04 (2)	21,000 (2)	3.1 (2)
	> 100	---	---	---	---	---	---
OW12	< 1	0.87 (8)	-54.13 (8)	1.82 (8)	0.11 (6)	13,286 (6)	10.8 (6)
	< 100	1.23 (15)	24.31 (15)	10.89 (15)	0.05 (14)	17,036 (14)	4.7 (14)
	> 100	---	---	---	---	---	---
OW14	< 1	0.55 (1)	-21.00 (1)	4.59 (1)	0.93 (1)	1,340 (1)	17.5 (1)
	< 100	0.78 (4)	-42.50 (4)	1.74 (4)	2.85 (3)	4,461 (3)	30.6 (3)
	> 100	0.50 (5)	-10.80 (5)	1.12 (5)	0.49 (6)	4,157 (6)	14.7 (6)
OW15	< 1	1.54 (12)	-31.75 (12)	1.67 (12)	0.79 (10)	10,236 (10)	10.2 (10)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---
OW16	< 1	0.97 (11)	-31.91 (11)	0.21 (11)	0.05 (9)	9,736 (9)	14.7 (9)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---
OW17	< 1	0.84 (11)	-66.18 (11)	0.21 (11)	0.05 (9)	5,078 (9)	3.8 (9)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---

**Table 12. Comparison of Benzene and Naphthalene Concentrations with MNA Indicator Parameters  
Former Stevens Point MGP Site**

Well	Naphthalene Concentration Range (µg/l)	Average Dissolved Oxygen (mg/l) (# of samples)	Average Oxidation Reduction Potential (millivolts) (# of samples)	Average Specific Conductance (mhos/cm) (# of samples)	Average Nitrogen, NO3 + NO2, Total (mg/l) (# of samples)	Average Dissolved Iron (µg/l) (# of samples)	Average Sulfate (mg/l) (# of samples)
P05B	< 1	1.32 (7)	57.00 (7)	0.49 (7)	0.05 (7)	1,135 (7)	2.5 (7)
	< 100	1.28 (4)	83.00 (4)	0.57 (4)	0.04 (4)	2,790 (4)	1.2 (4)
	> 100	1.30 (19)	9.44 (19)	0.33 (19)	0.04 (19)	4,139 (19)	2.0 (19)
PZ03B	< 1	1.94 (17)	18.94 (17)	0.19 (17)	0.11 (14)	6,542 (14)	2.0 (14)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---
PZ07B	< 1	0.95 (1)	-68.00 (1)	0.21 (1)	---	---	---
	< 100	1.35 (7)	-0.43 (7)	0.22 (7)	0.04 (7)	1,866 (7)	0.8 (7)
	> 100	1.69 (22)	62.45 (22)	0.25 (22)	0.04 (23)	1,712 (23)	2.9 (23)
PZ09B	< 1	4.22 (20)	80.60 (20)	0.46 (20)	0.05 (18)	2,972 (18)	9.7 (18)
	< 100	4.40 (4)	131.25 (4)	0.48 (4)	0.07 (5)	1,482 (5)	7.5 (5)
	> 100	---	---	---	---	---	---
PZ10B	< 1	5.97 (21)	17.98 (21)	0.38 (21)	0.09 (19)	46 (19)	15.9 (19)
	< 100	6.57 (1)	118.00 (1)	0.39 (1)	0.15 (1)	25 (1)	16.0 (1)
	> 100	---	---	---	---	---	---
PZ11B	< 1	3.65 (17)	29.71 (17)	0.31 (17)	0.08 (16)	202 (16)	7.0 (16)
	< 100	3.19 (3)	109.67 (3)	0.27 (3)	0.03 (3)	2,290 (3)	4.9 (3)
	> 100	3.81 (3)	188.33 (3)	0.31 (3)	0.04 (3)	1,600 (3)	3.7 (3)
PZ12B	< 1	1.61 (11)	-89.55 (11)	0.55 (11)	0.12 (9)	2,235 (9)	3.1 (9)
	< 100	0.77 (6)	-9.50 (6)	0.42 (6)	0.05 (5)	1,086 (5)	1.2 (5)
	> 100	1.20 (5)	50.72 (5)	0.33 (5)	0.04 (5)	606 (5)	2.0 (5)
PZ13B	< 1	2.98 (15)	34.93 (15)	0.60 (15)	0.06 (12)	62 (12)	43.7 (12)
	< 100	5.84 (1)	-3.00 (1)	0.66 (1)	0.06 (1)	14 (1)	61.4 (1)
	> 100	---	---	---	---	---	---
PZ14B	< 1	3.64 (9)	73.00 (9)	0.49 (9)	0.67 (10)	126 (10)	16.6 (10)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---
PZ15B	< 1	1.23 (12)	-51.75 (12)	0.23 (12)	0.08 (10)	13,060 (10)	1.4 (10)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---
PZ16B	< 1	0.93 (11)	-46.55 (11)	0.23 (11)	0.07 (9)	2,296 (9)	1.5 (9)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---
TW01	< 1	1.33 (7)	72.14 (7)	1.99 (7)	1.93 (7)	7 (7)	23.6 (7)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---
TW02	< 1	0.53 (7)	42.00 (7)	1.42 (7)	0.28 (7)	48 (7)	18.2 (7)
	< 100	---	---	---	---	---	---
	> 100	---	---	---	---	---	---

Table 13. Storm Water Analytical Results - Polynuclear Aromatic Hydrocarbons (PAH, µg/L)

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities  
 1111 Crosby Avenue, Steven's Point, Wisconsin  
 USEPA# : WIN000509983 BRRTS# : 0250000079

Sample ID	Collection Date	1-Methyl naphthalene	2-Methyl naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene
Wisconsin Groundwater Quality Standards (NR 140, January 2007)																			
Enforcement Standard		NS	NS	NS	NS	3000	NS	0.2	0.2	NS	NS	0.2	NS	400	400	NS	100	NS	250
EPA Groundwater Quality Standards																			
Maximum Contaminant Levels (MCLs)		NS	NS	NS	NS	NS	NS	0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MH01	7/24/2007	0.019 Q	< 0.011	0.04	< 0.0081	< 0.012	< 0.016	< 0.018	0.016 Q U	< 0.019	0.019 Q U	< 0.019	< 0.019	< 0.015	0.012 Q	< 0.019	< 0.012	0.013 Q	< 0.015
	10/23/2007	0.026 Q	0.022 Q	0.037	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016 Q	< 0.019	< 0.019 Q	< 0.019	< 0.019	< 0.015	0.0099 Q	< 0.019	0.066	0.013 Q	< 0.015
	1/15/2008	0.018 Q	0.018 Q	0.029	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016 Q	< 0.019	< 0.019 Q	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	0.094	0.012 Q	< 0.015
MH03	7/24/2007	4 Q	0.019 Q	17 Q	0.27	1.7 Q	0.057	0.021 Q	0.038 Q J	0.02 Q	0.021 Q J	0.063	< 0.019	0.86 Q	8.7 Q	< 0.019	0.031 Q	7.9 Q	0.62 Q
	10/23/2007	12	7.9	22	< 1.6	4 Q	< 3.1	< 3.7	< 3.1 Q	< 3.9	< 3.9 Q	< 3.8	< 3.8	< 3.1	9.7	< 3.8	56	14	< 2.9
MH04	7/24/2007	0.33	< 0.011	7.6 Q	0.35	1.7 Q	0.13	0.045 Q	0.058 Q J	0.031 Q	0.043 Q J	0.11	< 0.019	2.3 Q	6.1 Q	0.024 Q	0.022 Q	0.44	1.4 Q
	10/23/2007	16	13	23	< 0.81	5.4	< 1.6	< 1.8	< 1.6 Q	< 1.9	< 1.9 Q	< 1.9	< 1.9	3.1 Q	11	< 1.9	39	18	1.6 Q
	1/15/2008	17	18	26	< 1.6	4.9 Q	< 3.1	< 3.7	< 3.2 Q	< 3.9	< 3.9 Q	< 3.8	< 3.8	< 3.1	14	< 3.8	78	18	< 2.9
MH05	7/24/2007	0.17	< 0.011	0.65 Q	0.034	0.03 Q	< 0.016	< 0.018	0.016 Q U	< 0.019	0.019 Q U	< 0.019	< 0.019	0.08	0.22	< 0.019	< 0.012	0.063	0.046 Q
	10/23/2007	0.7 Q	0.02 Q	1.5 Q	0.1	0.086	< 0.016	< 0.018	< 0.016 Q	< 0.019	< 0.019 Q	< 0.019	< 0.019	0.12	0.46 Q	< 0.019	0.09	0.28	0.07
	1/15/2008	0.96	0.21	1.5	0.076 Q	0.11 Q	< 0.078	< 0.092	< 0.078 Q	< 0.096	< 0.097 Q	< 0.095	< 0.094	0.11 Q	0.59	< 0.094	2	0.79	< 0.073
QC01	7/24/2007	0.33	< 0.011	9.1 Q	0.36	1.6 Q	0.12	0.022 Q	0.022 Q J	< 0.019	0.02 Q J	0.081	< 0.019	1.8 Q	8 Q	< 0.019	0.023 Q	1.5 Q	1.4 Q
	10/23/2007	1.3	0.28 Q	2.5	0.22 Q	0.38 Q	0.35 Q	<b>0.48 Q</b>	<b>0.51 Q</b>	0.47 Q	0.7 Q	<b>0.74 Q</b>	< 0.38	1.4	0.99	< 0.38	5.5	1.8	0.88 Q
	1/15/2008	15	7.1	25	0.88 Q	4.2	< 1.6	< 1.9	< 1.6 Q	< 1.9	< 2 Q	< 1.9	< 1.9	3.8 Q	13	< 1.9	3.5 Q	16	2.8 Q

Notes

- Parameters that attain or exceed the EPA Groundwater Quality Standards (MCL) are shown in bold and underlined.
  - If no MCL standard has been established, then parameters that attain or exceed the NR 140 Wisconsin Groundwater Quality Enforcement Standard (ES) are identified in bold and underlined.
  - Reference the laboratory analytical report for full list of compounds analyzed.
- <2.0 : Parameter not detected above the Limit of Detection indicated.  
 NS : NR 140 Wisconsin Groundwater Quality Standard has not been established for this parameter.  
 QC: Quality Control duplicate sample.  
 Q: Analyte result has been qualified, see laboratory analytical report for additional information.  
 Other Qualifiers (J, N, R, etc.): Analyte result has been qualified by data validator, see validation report for additional information.  
 --: Analysis not performed.

**Table 14. Storm Water Analytical Results - Petroleum Volatile Organic Compounds (PVOCs, µg/L)**

**1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities**

**1111 Crosby Avenue, Steven's Point, Wisconsin**

**USEPA# : WIN000509983**

**BRRTS# : 0250000079**

<i>Sample ID</i>	<i>Collection Date</i>	<i>Benzene</i>	<i>Ethyl- benzene</i>	<i>Toluene</i>	<i>Xylene, O</i>	<i>Xylenes, m+p</i>	<i>1,2,4 - Trimethyl- benzene</i>	<i>1,,3,5 - Trimethyl - benzene</i>	<i>MTBE</i>
<b>Wisconsin Groundwater Quality Standards (NR 140, February 2004)</b>									
<b>Enforcement Standard (ES)</b>		5	700	1000	10000	10000	480	480	60
<b>EPA Groundwater Quality Standards</b>									
<b>Maximum Contaminant Level (MCLs)</b>		5	700	1000	10000	10000	NS	NS	NS
MH01	7/24/2007	< 0.21	< 0.4	< 0.36	< 0.36	< 0.74	< 0.39	< 0.4	< 0.36
	10/23/2007	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.39	< 0.4	< 0.36
	1/15/2008	< 0.14	< 0.4	< 0.36	< 0.36	< 0.74	< 0.39	< 0.4	< 0.36
MH03	7/24/2007	<b><u>6.9</u></b>	5	0.69 Q	3.7	4.8	2.6	0.73 Q	< 0.36
	10/23/2007	<b><u>7.5</u></b>	7.2	0.91 Q	5.3	8	5	1.7	< 0.36
MH04	7/24/2007	4.8	9.3	1.4	5.2	9.5	5.5	1.6	< 0.36
	10/23/2007	<b><u>5.7</u></b>	12	1.7	6.8	13	7.4	2.6	< 0.36
	1/15/2008	4.9	14	2.2	7.8	15	9.2	3.4	< 0.36
MH05	7/24/2007	0.6 Q	< 0.4	< 0.36	< 0.36	< 0.74	< 0.39	< 0.4	< 0.36
	10/23/2007	0.67	0.49 Q	< 0.36	0.39 Q	< 0.74	0.47 Q	< 0.4	< 0.36
	1/15/2008	0.7	0.4 Q	< 0.36	0.36 Q	< 0.74	< 0.39	< 0.4	< 0.36
QC01	(MH04) 7/24/2007	4.9	9.9	1.3	5.1	9.2	4.4	1.2 Q	< 0.36
	(MH05) 10/23/2007	0.67	0.53 Q	< 0.36	0.4 Q	< 0.74	0.49 Q	< 0.4	< 0.36
	(MH04) 1/15/2008	4.7	13	2.1	7.7	15	9	3.4	< 0.36

Notes

- 1) Parameters that attain or exceed the EPA Groundwater Quality Standards (MCL) are shown in bold and underlined.
  - 2) If no MCL standard has been established, then parameters that attain or exceed the NR 140 Wisconsin Groundwater Quality Enforcement Standard (ES) are identified in bold and underlined.
  - 3) Reference the laboratory analytical report for full list of compounds analyzed.
  - 4) 1,2,4 and 1,3,5- Trimethylbenzene analytical results combined for comparison against the NR 140 PAL and ES standards.
- <2.0 : Parameter not detected above the Limit of Detection indicated.  
 Q : Analyte result has been qualified, see laboratory analytical report for additional information.  
 NS : Groundwater Quality Standard not established for this parameter.  
 --: Analysis not performed.  
 QC: Quality Control duplicate sample.

**Table 15. Sediment Screening Benchmark Values**

Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site  
 1111 Crosby Avenue, Stevens Point, Wisconsin  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Analyte	Unit	Screening Criteria		MacDonald et al. 2000		DiToro/McGrath 2000		Wisconsin DNR 2003	
		Source	Value	TEC Consensus-based threshold effect concentrations	PEC Consensus-based probable effect concentrations	EQP-SQG and PAH criteria	Narcotic chemicals	CBSQG threshold concentrations	CBSQG probable effect concentrations
<b>PVOCs</b>									
Benzene	µg/kg	EQP-SQG	308			308		57	110
Ethylbenzene	µg/kg	EQP-SQG	459			459			
Toluene	µg/kg	EQP-SQG	383			383		890	1,800
Xylene isomers (total)	µg/kg	EQP-SQG	465			465		25	50
1,3,5-Trimethylbenzene	µg/kg		NA						
2,4,6-Trimethylbenzene	µg/kg		NA						
<b>Semivolatile Organic Compounds</b>									
<b>PAHs</b>									
Total PAHs	µg/kg	TEC	1610	1610	22800			1610	22800
Acenaphthene	µg/kg	EQP-SQG	396			396		6.7	89
Acenaphthylene	µg/kg	EQP-SQG	365			365		5.9	128
Anthracene	µg/kg	TEC	57.2	57.2	845	479		57.2	845
Benz[a]anthracene	µg/kg	TEC	108	108	1050	677		108	1,050
Benzo[b]fluoranthene	µg/kg	EQP-SQG	788			788		240	13,400
Benzo[k]fluoranthene	µg/kg	EQP-SQG	791			791		240	13,400
Benzo[a]pyrene	µg/kg	TEC	150	150	1450	777		150	1,450
Chrysene	µg/kg	TEC	166	166	1290	679		166	1,290
Fluoranthene	µg/kg	TEC	423	423	2230	570		423	2,230
Fluorene	µg/kg	TEC	77.4	77.4	536	434		77.4	536
Naphthalene	µg/kg	TEC	176	176	561	311		176	561
Phenanthrene	µg/kg	TEC	204	204	1170	480		204	1,170
Pyrene	µg/kg	TEC	195	195	1520	562		195	1,520
Benzo[ghi]perylene	µg/kg	EQP-SQG	882			882		170	3,200
Dibenz[a,h]anthracene	µg/kg	TEC	33	33		904		33	135
Indeno[1,2,3-cd]pyrene	µg/kg	EQP-SQG	899			899		200	3,200
2-Methylnaphthalene	µg/kg	EQP-SQG	360			360		20.2	201
<b>Phenols</b>									
2,4-Dimethylphenol	µg/kg	CBSQG-TEC	290					290	290
2-Methylphenol	µg/kg	CBSQG-TEC	6700					6,700	6,700
4-Methylphenol	µg/kg		NA						
Phenol	µg/kg	CBSQG-TEC	4200					4,200	12,000

**Table 15. Sediment Screening Benchmark Values**  
**Wisconsin Public Service - Former Stevens Point Manufactured Gas Plant Site**  
**1111 Crosby Avenue, Stevens Point, Wisconsin**  
 USEPA WIN000509983 / BRRTS # 02-50-000079 / FID # 750081200

Analyte	Unit	Screening Criteria		MacDonald et al. 2000		DiToro/McGrath 2000	Wisconsin DNR 2003	
		Source	Value	TEC Consensus-based threshold effect concentrations	PEC Consensus-based probable effect concentrations	EQP-SQG Narcotic chemicals and PAH criteria	CBSQG threshold effect concentrations	CBSQG probable effect concentrations
<b>Inorganics</b>								
Aluminum	mg/kg		NA					
Antimony	mg/kg	CBSQG-TEC	2					
Arsenic	mg/kg	TEC	9.79	9.79	33		2.0	25
Barium	mg/kg		NA				9.8	33
Cadmium	mg/kg	TEC	0.99	0.99	4.98		0.99	5.0
Chromium	mg/kg	TEC	43.4	43.4	111		43	110
Copper	mg/kg	TEC	31.6	31.6	149		32	150
Cyanide, Total	mg/kg		NA					
Iron	mg/kg	CBSQG-TEC	20000				20,000	40,000
Lead	mg/kg	TEC	35.8	35.8	128		36	130
Manganese	mg/kg	CBSQG-TEC	460				460	1,100
Mercury	mg/kg	TEC	0.18	0.18	1.06		0.18	1.1
Nickel	mg/kg	TEC	22.7	22.7	48.6		23	49
Selenium	mg/kg		NA					
Silver	mg/kg	CBSQG-TEC	1.6				1.6	2.2
Vanadium	mg/kg		NA					
Zinc	mg/kg	TEC	121	121	459		120	460

**Notes:**

PAHs are screened against the Total PAH criteria based on the sum of 13 PAHs (boxed above). Individual PAHs are not screened against their respective criteria. The screening values for individual PAHs are provided for informational purposes only.

- CBSQG-PEC - CBSQG probable effect concentrations (WIDNR, 2003)
- CBSQG-TEC - CBSQG threshold effect concentrations (WIDNR, 2003)
- EQP-SQG - Narcotic chemicals and PAH criteria (DiToro and McGrath, 2000). The values have been normalized to 1 % total organic carbon, and reduced by a factor of 21 to account for potential additive effects among 17 PAHs and 4 BETX.
- PEC - Consensus-based probable effect concentrations (MacDonald et al., 2000)
- TEC - Consensus-based threshold effect concentrations (MacDonald et al., 2000)
- Total PAH - Total PAHs are the 13 specified in Swartz et. al. 1999, and these are boxed above.



Table 16. Sediment Analytical Results - Polynuclear Aromatic Hydrocarbon (PAH, µg/Kg)

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample Depth ID	Collection Date	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(g,h,i)-pyrene	Benzo(k)-fluoranthene	Chrysene	Dibenzo(a,h)-anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naph - thalene	Phenanthrene	Pyrene
<b>Sediment Screening Benchmarks</b>																		
<b>Benchmarks</b>		360	396	365	57.2	108	150	788	882	791	166	33	423	77.4	899	176	204	195
Psed-201																		
0 - 6 "	7/11/2007	< 179	< 179	190	<u>270</u>	<u>1400</u>	<u>1300</u>	<u>2200 J</u>	360 J	<u>1200 J</u>	<u>1200</u>	<u>440 J</u>	<u>2300</u>	< 179	380 J	< 179	<u>710</u>	<u>2400</u>
6 - 18 "	7/11/2007	< 700	< 700	< 700	<u>1200</u>	<u>5000</u>	<u>2700</u>	<u>2900 J</u>	<u>1000 J</u>	<u>3500 J</u>	<u>3700</u>	< 700 UJ	<u>6200</u>	< 700	<u>2100 J</u>	< 700	<u>4100</u>	<u>12000</u>
18 - 30 "	7/11/2007	< 225	< 225	< 225	<u>190</u>	<u>930</u>	<u>580</u>	<u>1200 J</u>	< 225 UJ	620 J	<u>700</u>	< 225 UJ	<u>1400</u>	< 225	< 225 UJ	< 225	<u>480</u>	<u>1500</u>
Psed-202																		
0 - 6 "	7/11/2007	< 2041	< 2041	< 2041	< 2041 UJ	< 2041	< 2041 UJ	<u>22000 J</u>	< 2041	< 2041	< 2041	< 2041 UJ	< 2041 UJ	< 2041	< 2041	< 2041	< 2041 UJ	<u>12000 J</u>
6 - 18 "	7/11/2007	< 2703 Q	<u>9800</u>	<u>3100</u>	<u>29000 J</u>	<u>36000</u>	<u>28000</u>	<u>51000 J</u>	<u>12000 J</u>	<u>31000 J</u>	<u>34000</u>	<u>5500 J</u>	<u>50000 J</u>	<u>13000</u>	<u>10000 J</u>	< 2703 Q	<u>42000 J</u>	<u>81000 Q J</u>
18 - 30 "	7/11/2007	< 2564	<u>7800</u>	< 2564	<u>16000 J</u>	<u>38000</u>	<u>21000</u>	<u>40000 J</u>	<u>8200 J</u>	<u>23000 J</u>	<u>42000</u>	< 2564 UJ	<u>51000 J</u>	<u>9500</u>	<u>9400 J</u>	< 2564	<u>38000 J</u>	<u>97000 Q J</u>
Psed-203																		
0 - 6 "	7/11/2007	< 4000	< 4000	< 4000	< 4000 UJ	< 4000	< 4000 UJ	<u>29000 J</u>	< 4000	< 4000	< 4000	< 4000 UJ	< 4000 UJ	< 4000	< 4000	< 4000	< 4000 UJ	< 4000 UJ
6 - 18 "	7/11/2007	< 2564	<u>68000</u>	< 2564	<u>26000 J</u>	<u>40000</u>	<u>56000 J</u>	<u>130000 J</u>	<u>37000</u>	<u>48000 J</u>	<u>52000</u>	<u>27000 J</u>	<u>79000 J</u>	<u>48000</u>	<u>50000</u>	<u>16000</u>	<u>170000 J</u>	<u>81000 J</u>
18 - 25 "	7/11/2007	< 3571	< 3571	< 3571	< 3571 UJ	<u>33000</u>	<u>37000 J</u>	<u>59000 J</u>	< 3571	<u>25000 J</u>	<u>30000</u>	< 3571 UJ	<u>22000 J</u>	< 3571	<u>52000</u>	< 3571	<u>38000 J</u>	<u>39000 J</u>
T1-A1																		
0 - 6 "	7/10/2007	< 145	< 145	< 145 UJ	< 145 UJ	< 145	< 145	< 145 UJ	< 145	< 145	< 145	< 145 UJ	< 145 UJ	< 145	< 145	< 145 UJ	< 145 UJ	< 145
6 - 18 "	7/10/2007	< 141	< 141	< 141 UJ	< 141 UJ	< 141	< 141	< 141 UJ	< 141	< 141	< 141	< 141 UJ	< 141 UJ	< 141	< 141	< 141 UJ	< 141 UJ	< 141
18 - 30 "	7/10/2007	< 125	< 125	< 125 UJ	< 125 UJ	< 125	< 125	< 125 UJ	< 125	< 125	< 125	< 125 UJ	< 125 UJ	< 125	< 125	< 125 UJ	< 125 UJ	< 125
30 - 42 "	7/10/2007	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R	< 125 R
42 - 54 "	7/10/2007	< 128	< 128	< 128	< 128	< 128	< 128 UJ	< 128	< 128	< 128	< 128	< 128 UJ	< 128	< 128	< 128 UJ	< 128	< 128 UJ	< 128 UJ
54 - 66 "	7/10/2007	< 119	< 119	< 119	< 119	< 119	< 119 UJ	< 119	< 119	< 119	< 119	< 119 UJ	< 119	< 119	< 119 UJ	< 119	< 119 UJ	< 119 UJ
66 - 78 "	7/10/2007	< 118	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	< 118 UJ	< 118	< 118 UJ	< 118 UJ
78 - 90 "	7/10/2007	< 109	< 109	< 109	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109 UJ	< 109 UJ
90 - 102 "	7/10/2007	< 111	< 111	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111 UJ	< 111	< 111 UJ	< 111 UJ
102 - 114 "	7/10/2007	< 111	< 111	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111 UJ	< 111	< 111 UJ	< 111 UJ
114 - 120 "	7/10/2007	< 112	< 112	< 112	< 112	< 112	< 112 UJ	< 112	< 112	< 112	< 112	< 112 UJ	< 112	< 112	< 112 UJ	< 112	< 112 UJ	< 112 UJ
T1-B1																		
0 - 6 "	7/10/2007	< 114 R	< 114 R	< 114 R	< 114 R	< 114 R	< 114 R	< 114 R	< 114 R	< 114 R	< 114 R	< 114 R	< 114 R	< 114	< 114 R	< 114 R	< 114 R	< 114 R
6 - 18 "	7/10/2007	< 114	< 114	< 114 UJ	< 114 UJ	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114 UJ	< 114 UJ	< 114	< 114	< 114 UJ	< 114 UJ	< 114
18 - 30 "	7/10/2007	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R	< 116 Q R
30 - 42 "	7/10/2007	< 118	< 118	< 118 UJ	< 118 UJ	< 118	< 118	< 118 UJ	160	< 118	< 118	<u>220 J</u>	< 118 UJ	< 118	300	< 118 UJ	< 118 UJ	< 118
T1-C1a																		
6 - 18 "	7/9/2007	< 211	< 211	< 211 UJ	< 211 UJ	< 211	< 211	< 211 UJ	< 211	< 211	< 211	< 211 UJ	< 211 UJ	< 211	< 211	< 211 UJ	< 211 UJ	< 211
60 - 72 "	7/9/2007	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R	< 172 R
72 - 84 "	7/9/2007	< 187	< 187	< 187 UJ	< 187 UJ	< 187	< 187	< 187	< 187	< 187	< 187	< 187 UJ	< 187 UJ	< 187	< 187	< 187 UJ	< 187 UJ	< 187
84 - 96 "	7/9/2007	< 175	< 175	< 175 UJ	< 175 UJ	< 175	< 175	< 175 UJ	< 175	< 175	< 175	< 175 UJ	< 175 UJ	< 175 R	< 175	< 175 UJ	< 175 UJ	< 175
96 - 108 "	7/9/2007	< 174	< 174	< 174 UJ	< 174 UJ	< 174	< 174	< 174 UJ	< 174	< 174	< 174	< 174 UJ	< 174 UJ	< 174	< 174	< 174 UJ	< 174 UJ	< 174
108 - 120 "	7/9/2007	< 177	< 177	< 177 UJ	< 177 UJ	< 177	< 177	< 177 UJ	< 177	< 177	< 177	< 177 UJ	< 177 UJ	< 177	< 177	< 177 UJ	< 177 UJ	< 177
120 - 132 "	7/9/2007	< 170	< 170	< 170 UJ	< 170 UJ	< 170	< 170	< 170 UJ	< 170	< 170	< 170	< 170 UJ	< 170 UJ	< 170	< 170	< 170 UJ	< 170 UJ	< 170
132 - 144 "	7/9/2007	< 179	< 179	< 179 UJ	< 179 UJ	< 179	< 179	< 179 UJ	< 179	< 179	< 179	< 179 UJ	< 179 UJ	< 179	< 179	< 179 UJ	< 179 UJ	< 179

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample Depth ID	Collection Date	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(g,h,i)-pyrene	Benzo(k)-fluoranthene	Chrysene	Dibenzo(a,h)-anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naph - thalene	Phenanthrene	Pyrene	
<b>Sediment Screening Benchmarks</b>																			
<b>Benchmarks</b>		360	396	365	57.2	108	150	788	882	791	166	33	423	77.4	899	176	204	195	
T1-D1	0 - 6 "	7/9/2007	< 189	< 189	< 189 UJ	< 189 UJ	< 189	< 189	< 189 UJ	< 189	< 189	< 189 UJ	< 189 UJ	< 189	430	< 189 UJ	< 189 UJ	< 189	
	6 - 18 "	7/9/2007	< 208	< 208	< 208 UJ	< 208 UJ	< 208	< 208	< 208 UJ	< 208	< 208	< 208 UJ	< 208 UJ	< 208	< 208	< 208 UJ	< 208 UJ	< 208	
	18 - 24 "	7/9/2007	< 189	< 189	< 189 UJ	< 189 UJ	< 189	< 189	< 189 UJ	< 189	< 189	< 189 UJ	< 189 UJ	< 189	< 189	< 189 UJ	< 189 UJ	< 189	
T2-A1	0 - 6 "	7/10/2007	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	< 118 UJ	< 118	< 118 UJ	< 118 UJ	
	6 - 18 "	7/10/2007	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	< 118 UJ	< 118	< 118 UJ	< 118 UJ	
	18 - 30 "	7/10/2007	< 110	< 110	< 110	< 110	< 110 UJ	< 110	< 110	< 110	< 110	< 110 UJ	< 110	< 110	< 110 UJ	< 110	< 110 UJ	< 110 UJ	
	30 - 42 "	7/10/2007	< 109 Q	< 109 Q	< 109 Q	< 109 Q	< 109 Q UJ	< 109 Q	< 109 Q	< 109 Q	< 109 Q	< 109 Q UJ	< 109 Q	< 109 Q	< 109 Q UJ	< 109 Q	< 109 Q UJ	< 109 Q UJ	
	42 - 48 "	7/10/2007	< 109	< 109	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109 UJ	< 109 UJ	
T3-A1	0 - 6 "	7/11/2007	<u>130000</u>	<u>960000 J</u>	<u>150000 J</u>	<u>930000 J</u>	<u>1800000 J</u>	<u>1100000 J</u>	<u>2600000 J</u>	<u>460000 J</u>	<u>430000 J</u>	<u>1500000 J</u>	<u>300000 J</u>	<u>1800000 J</u>	<u>1300000 J</u>	<u>490000 J</u>	<u>320000 J</u>	<u>2800000 Q J</u>	<u>2300000 J</u>
	6 - 18 "	7/11/2007	<u>340000</u>	<u>1300000 J</u>	< 185185	<u>1100000 J</u>	<u>1400000 J</u>	<u>1300000 J</u>	<u>3100000 J</u>	<u>530000 J</u>	<u>690000 J</u>	<u>1200000 J</u>	<u>420000 J</u>	<u>1800000 J</u>	<u>1700000 J</u>	<u>740000 J</u>	<u>940000 J</u>	<u>3000000 J</u>	<u>2000000 J</u>
	18 - 30 "	7/11/2007	<u>1400000</u>	<u>1500000 J</u>	< 1307190	<u>500000 J</u>	<u>830000 J</u>	<u>830000 J</u>	<u>2700000 J</u>	<u>580000 J</u>	<u>950000 J</u>	<u>890000 J</u>	<u>490000 J</u>	<u>1600000 J</u>	<u>1500000 J</u>	<u>870000 J</u>	<u>4900000 J</u>	<u>2800000 J</u>	<u>1500000 J</u>
	30 - 42 "	7/11/2007	<u>35000 Q</u>	<u>35000</u>	<u>5900</u>	<u>31000 J</u>	<u>37000 Q</u>	<u>24000 J</u>	<u>44000 Q J</u>	<u>11000</u>	<u>8100 J</u>	<u>27000</u>	<u>6500 J</u>	<u>35000 J</u>	<u>33000</u>	<u>12000</u>	<u>83000 Q</u>	<u>51000 Q J</u>	<u>52000 Q J</u>
	42 - 54 "	7/11/2007	<u>990</u>	<u>1900</u>	< 633	<u>2200 J</u>	<u>1600</u>	<u>1200 J</u>	<u>2000 J</u>	730	<u>900 J</u>	<u>1300</u>	<u>740 J</u>	<u>2100 J</u>	<u>1900</u>	<u>1700</u>	<u>2000</u>	<u>3800 J</u>	<u>2300 J</u>
	54 - 66 "	7/11/2007	<u>670</u>	<u>530</u>	< 119	<u>710 J</u>	<u>490</u>	<u>350 J</u>	510 J	240	220 J	<u>430</u>	<u>220 J</u>	<u>600 J</u>	<u>570</u>	370	<u>670</u>	<u>1000 J</u>	<u>680 J</u>
	66 - 78 "	7/11/2007	< 109	< 109	< 109	< 109	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109
	78 - 90 "	7/11/2007	< 109	< 109	< 109	< 109	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109
	90 - 102 "	7/11/2007	< 118	< 118	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	< 118	140	<u>120</u>	< 118 UJ	< 118	<u>240</u>	< 118	< 118
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	6 - 18 "	7/11/2007	< 116 Q	< 116 Q	< 116 Q	< 116 Q UJ	< 116 Q	< 116 Q UJ	< 116 Q	< 116 Q	< 116 Q	< 116 Q UJ	< 116 Q UJ	< 116 Q	< 116 Q	< 116 Q	< 116 Q	< 116 Q UJ	< 116 Q UJ
	18 - 30 "	7/11/2007	< 111	< 111	< 111	<u>160 J</u>	<u>140</u>	< 111	140 J	< 111 UJ	< 111	150	< 111 UJ	230 J	< 111	< 111 UJ	< 111	<u>260 J</u>	<u>360 J</u>
	30 - 42 "	7/11/2007	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109 UJ	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109
	42 - 54 "	7/11/2007	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109 UJ	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109
	54 - 66 "	7/11/2007	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114 UJ	< 114 UJ	< 114	< 114	< 114 UJ	< 114	< 114	< 114 UJ	< 114	< 114	< 114
T3-A3	0 - 6 "	7/12/2007	<u>63000</u>	<u>87000</u>	<u>14000</u>	<u>140000</u>	<u>120000</u>	<u>70000</u>	<u>130000 J</u>	<u>13000 J</u>	<u>53000 J</u>	<u>74000</u>	<u>21000 J</u>	<u>170000</u>	<u>78000</u>	<u>18000 J</u>	<u>140000 Q</u>	<u>210000</u>	<u>190000</u>
	6 - 18 "	7/12/2007	<u>380</u>	<u>610</u>	< 203	<u>520</u>	<u>380</u>	< 203	400 J	< 203 UJ	< 203	<u>260</u>	< 203 UJ	<u>890</u>	<u>530</u>	< 203 UJ	<u>900</u>	<u>1500</u>	<u>740</u>
	18 - 30 "	7/12/2007	< 203	260	< 203	<u>240</u>	< 203	< 203	< 203	< 203 UJ	< 203	< 203	< 203 UJ	330	<u>250</u>	< 203 UJ	<u>390</u>	<u>710</u>	<u>310</u>
	30 - 42 "	7/12/2007	< 203	< 203	< 203	<u>300</u>	< 203	< 203	< 203	< 203 UJ	< 203	< 203	< 203 UJ	260	<u>460</u>	< 203 UJ	<u>400</u>	<u>550</u>	<u>210</u>
	42 - 54 "	7/12/2007	< 183	< 183	< 183	<u>710</u>	< 183	< 183	< 183	< 183 UJ	< 183	< 183	< 183 UJ	260	<u>1300</u>	< 183 UJ	<u>1000</u>	<u>630</u>	<u>240</u>
	54 - 66 "	7/12/2007	< 185	< 185	< 185	< 185	< 185	< 185	< 185	< 185 UJ	< 185	< 185	< 185 UJ	< 185	< 185	< 185 UJ	< 185	< 185	< 185
	66 - 78 "	7/12/2007	< 198	< 198	< 198	< 198	< 198	< 198	< 198	< 198 UJ	< 198	< 198	< 198 UJ	< 198	< 198	< 198 UJ	< 198	< 198	< 198
T3-A3a	0 - 6 "	7/12/2007	< 208	< 208	< 208	< 208	< 208	< 208	< 208 UJ	< 208	< 208	< 208 UJ	< 208	< 208	< 208 UJ	< 208	< 208	< 208	< 208
	6 - 18 "	7/12/2007	< 187	< 187	< 187	< 187	< 187	< 187	< 187 UJ	< 187	< 187	< 187 UJ	< 187	< 187	< 187 UJ	< 187	< 187	< 187	< 187
	18 - 30 "	7/12/2007	< 185	< 185	< 185	< 185	< 185	< 185	< 185 UJ	< 185	< 185	< 185 UJ	< 185	< 185	< 185 UJ	< 185	< 185	< 185	< 185
	30 - 42 "	7/12/2007	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J	< 108 J
	42 - 54 "	7/12/2007	< 108	< 108	< 108 UJ	< 108	< 108	< 108	< 108 UJ	< 108 UJ	< 108	< 108	< 108 UJ	< 108	< 108	< 108 UJ	< 108	< 108	< 108
	54 - 60 "	7/12/2007	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109 UJ	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109

Table 16. Sediment Analytical Results - Polynuclear Aromatic Hydrocarbon (PAH, µg/Kg)



1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample Depth ID	Collection Date	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(g,h,i)-pyrene	Benzo(k)-fluoranthene	Chrysene	Dibenzo(a,h)-anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naph - thalene	Phenanthrene	Pyrene	
Sediment Screening Benchmarks																			
Benchmarks		360	396	365	57.2	108	150	788	882	791	166	33	423	77.4	899	176	204	195	
T3-B1																			
	0 - 6 "	7/10/2007	< 110	< 110	< 110	< 110	< 110	< 110 UJ	< 110	< 110	< 110	< 110 UJ	< 110	< 110	< 110 UJ	< 110	< 110 UJ	< 110 UJ	
	6 - 18 "	7/10/2007	< 111	< 111	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111 UJ	< 111	< 111 UJ	< 111 UJ	
	42 - 54 "	7/10/2007	< 108	< 108	< 108 UJ	< 108	< 108 UJ	< 108 UJ	< 108 UJ	< 108	< 108	< 108	< 108	< 108	< 108 UJ	< 108	< 108	< 108 UJ	
	54 - 66 "	7/10/2007	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	< 106 R	
T3-C1																			
	30 - 42 "	7/10/2007	< 114	< 114	< 114 UJ	< 114	< 114 UJ	< 114	< 114 UJ	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114 UJ	
T4-A1																			
	0 - 6 "	7/11/2007	< 122	< 122	< 122	< 122 UJ	< 122	< 122 UJ	< 122	< 122	< 122	< 122 UJ	< 122 UJ	< 122	< 122	< 122	< 122 UJ	< 122 UJ	
	6 - 18 "	7/11/2007	< 123	< 123	< 123	< 123 UJ	< 123	< 123 UJ	190 J	160	< 123	< 123	<u>150 J</u>	150 J	< 123	320	< 123	< 123 UJ	<u>200 J</u>
	18 - 30 "	7/11/2007	< 549	< 549	< 549	<u>820 J</u>	<u>2700</u>	<u>2200 J</u>	<u>4300 J</u>	<u>1200</u>	<u>1700 J</u>	<u>2200</u>	<u>770 J</u>	<u>3500 J</u>	< 549	<u>1900</u>	< 549	<u>2200 J</u>	<u>5200 J</u>
	30 - 42 "	7/11/2007	< 147	<u>880</u>	< 147	<u>1200</u>	<u>1100</u>	<u>460</u>	<u>1100 J</u>	< 147 UJ	480 J	<u>650</u>	< 147	<u>2000</u>	<u>1000</u>	< 147 UJ	<u>230</u>	<u>3600</u>	<u>2600</u>
	42 - 54 "	7/11/2007	< 238	<u>450</u>	< 238	< 238	< 238	< 238	< 238	< 238 UJ	< 238	< 238	< 238	< 238	< 238	< 238 UJ	<u>340</u>	< 238	< 238
	54 - 66 "	7/11/2007	< 114	< 114	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	
	66 - 72 "	7/11/2007	< 118	< 118	< 118	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	< 118	< 118	< 118	< 118 UJ	< 118	< 118	
T4-A2																			
	0 - 6 "	7/12/2007	< 201	< 201	< 201	< 201	< 201	< 201	< 201 UJ	< 201	< 201	< 201 UJ	< 201	< 201	< 201 UJ	< 201	< 201	< 201	
	6 - 18 "	7/12/2007	< 183	< 183	< 183	< 183	< 183	< 183	< 183 UJ	< 183	< 183	< 183 UJ	< 183	< 183	< 183 UJ	< 183	< 183	< 183	
	18 - 30 "	7/12/2007	< 198	< 198	< 198	< 198	< 198	< 198	< 198 UJ	< 198	< 198	< 198 UJ	< 198	< 198	< 198 UJ	< 198	< 198	< 198	
	30 - 42 "	7/12/2007	< 192	< 192	< 192	< 192	< 192	< 192	< 192 UJ	< 192	< 192	< 192 UJ	< 192	< 192	< 192 UJ	< 192	< 192	< 192	
T4-B1																			
	30 - 42 "	7/10/2007	< 122	< 122	< 122	< 122	< 122	< 122	< 122 UJ	< 122	< 122	< 122	< 122	< 122	< 122 UJ	< 122	< 122	< 122	
	42 - 54 "	7/10/2007	< 114	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114	
T4-C1																			
	0 - 6 "	7/11/2007	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114 UJ	< 114 UJ	< 114	< 114 UJ	< 114	< 114 UJ	<u>230 J</u>
	6 - 18 "	7/11/2007	< 121 Q	< 121 Q	< 121 Q	< 121 Q UJ	< 122 Q	< 122 Q	< 122 Q	< 122 Q UJ	< 122 Q	< 121 Q	< 121 Q UJ	< 121 Q UJ	< 121 Q	< 122 Q U.	< 122 Q	< 121 Q UJ	< 121 Q UJ
	30 - 42 "	7/11/2007	< 111 Q	< 111 Q	< 111 Q	< 111 Q	< 111 Q	< 111 Q	< 111 Q	< 111 Q UJ	< 111 Q	< 111 Q	< 111 Q	< 111 Q	< 111 Q	< 111 Q U.	< 111 Q	< 111 Q	< 111 Q
T4-D1																			
	0 - 6 "	7/11/2007	< 115	< 115	< 115	< 115 UJ	< 115	< 115	< 115	< 115 UJ	< 115	< 115	< 115 UJ	< 115 UJ	< 115	< 115 UJ	< 115	< 115 UJ	< 115 UJ
	6 - 18 "	7/11/2007	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114 UJ	< 114 UJ	< 114	< 114	< 114 UJ	< 114	< 114	< 114 UJ	< 114	< 114	< 114
	18 - 24 "	7/11/2007	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109 UJ	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109
T5-A1																			
	0 - 6 "	7/11/2007	< 137	< 137	160	<u>210 J</u>	<u>1000</u>	<u>1000 J</u>	<u>1900 J</u>	500	740 J	<u>890</u>	<u>390 J</u>	<u>900 J</u>	< 137	610	< 137	<u>720 J</u>	<u>1600 J</u>
	6 - 18 "	7/11/2007	< 152	< 152	< 152	< 152 UJ	< 152	<u>170 J</u>	190 J	180	< 152	< 152	<u>170 J</u>	180 J	< 152	380	< 152	<u>210 J</u>	< 152 UJ
	18 - 30 "	7/11/2007	< 123	< 123	< 123	< 123 UJ	< 123	< 123 UJ	< 123	< 123	< 123	< 123	< 123 UJ	< 123 UJ	< 123	< 123	< 123	< 123 UJ	< 123 UJ
	30 - 42 "	7/11/2007	< 116	< 116	< 116	< 116	< 116	< 116	< 116	< 116 UJ	< 116	< 116	< 116	< 116	< 116	< 116 UJ	< 116	< 116	< 116
	42 - 54 "	7/11/2007	< 115	< 115	< 115	< 115	< 115	< 115	< 115	< 115 UJ	< 115	< 115	< 115	< 115	< 115	< 115 UJ	< 115	< 115	< 115

**1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities**

**1111 Crosby Avenue, Steven's Point, Wisconsin**

**USEPA# : WIN000509983**

**BRRTS# : 0250000079**

<i>Sample Depth ID</i>	<i>Collection Date</i>	<i>2-Methyl-naphthalene</i>	<i>Acenaphthene</i>	<i>Acenaphthylene</i>	<i>Anthracene</i>	<i>Benzo(a)-anthracene</i>	<i>Benzo(a)-pyrene</i>	<i>Benzo(b)-fluoranthene</i>	<i>Benzo(g,h,i)-pyrene</i>	<i>Benzo(k)-fluoranthene</i>	<i>Chrysene</i>	<i>Dibenzo(a,h)-anthracene</i>	<i>Fluoranthene</i>	<i>Fluorene</i>	<i>Indeno (1,2,3-cd) pyrene</i>	<i>Naph - thalene</i>	<i>Phenanthrene</i>	<i>Pyrene</i>
<b>Sediment Screening Benchmarks</b>																		
<b>Benchmarks</b>		360	396	365	57.2	108	150	788	882	791	166	33	423	77.4	899	176	204	195
T5-B1																		
0 - 6 "	7/11/2007	< 122	< 122	< 122	< 122 UJ	< 122	< 122	< 122	< 122 UJ	< 122	< 122	< 122 UJ	< 122 UJ	< 122	< 122 UJ	< 122	< 122 UJ	< 122 UJ
6 - 18 "	7/11/2007	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J	< 116 J
18 - 30 "	7/11/2007	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111 UJ	< 111 UJ	< 111	< 111 UJ	< 111	< 111 UJ	< 111 UJ
30 - 42 "	7/11/2007	< 115	< 115	< 115	< 115	< 115	< 115	< 115	< 115 UJ	< 115	< 115	< 115	< 115	< 115	< 115 UJ	< 115	< 115	< 115
42 - 54 "	7/11/2007	< 114	< 114	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	150 J
T5-C1a																		
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6 - 18 "	7/11/2007	< 114	< 114	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114
18 - 24 "	7/11/2007	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114 UJ	< 114 UJ	< 114	< 114	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114 UJ
T5-D1																		
0 - 6 "	7/11/2007	< 120	< 120	< 120	< 120 UJ	< 120	< 120	< 120	< 120 UJ	< 120	< 120	< 120 UJ	< 120 UJ	< 120	< 120 UJ	< 120	< 120 UJ	< 120 UJ
T6-A1																		
0 - 6 "	7/11/2007	< 179	< 179	< 179	< 179 UJ	<b>1300 J</b>	<b>970 J</b>	<b>2100 J</b>	570 J	<b>900 J</b>	<b>1100 J</b>	<b>230 J</b>	<b>1100 J</b>	< 179	720 J	< 179	<b>450 J</b>	<b>2200 J</b>
6 - 18 "	7/11/2007	< 192	< 192	< 192	< 192 UJ	< 192	< 192 UJ	< 192	< 192	< 192	< 192	< 192 UJ	< 192 UJ	< 192	< 192	< 192	< 192 UJ	< 192 UJ
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30 - 42 "	7/11/2007	< 123	< 123	< 123 UJ	< 123	< 123 UJ	< 123	< 123 UJ	< 123 UJ	< 123	< 123	< 123	< 123	< 123	< 123 UJ	< 123	< 123	< 123 UJ
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T6-B1																		
0 - 6 "	7/12/2007	< 169	< 169	< 169 UJ	< 169	< 169 UJ	< 169	< 169 UJ	< 169 UJ	< 169	< 169	< 169	< 169	< 169	< 169 UJ	< 169	< 169	< 169 UJ
6 - 18 "	7/12/2007	< 103	< 103	< 103 UJ	< 103	< 103 UJ	< 103	< 103 UJ	< 103 UJ	< 103	< 103	< 103	< 103	< 103	< 103 UJ	< 103	< 103	< 103 UJ
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30 - 42 "	7/12/2007	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109 UJ	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109
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T6-C1																		
0 - 6 "	7/12/2007	< 106	< 106	< 106 UJ	< 106	< 106 UJ	< 106	< 106 UJ	< 106 UJ	< 106	< 106	< 106	< 106	< 106	< 106 UJ	< 106	< 106	< 106 UJ
6 - 18 "	7/12/2007	< 104	< 104	< 104 UJ	< 104	< 104 UJ	< 104	< 104 UJ	< 104 UJ	< 104	< 104	< 104	< 104	< 104	< 104 UJ	< 104	< 104	< 104 UJ
18 - 30 "	7/12/2007	< 111	< 111	< 111 UJ	< 111	< 111	< 111	< 111 UJ	< 111 UJ	< 111	< 111	< 111 UJ	< 111	< 111	< 111 UJ	< 111	< 111	< 111
T6-D1																		
0 - 6 "	7/12/2007	< 102	< 102	< 102 UJ	< 102	< 102 UJ	< 102	< 102 UJ	< 102 UJ	< 102	< 102	< 102	< 102	< 102	< 102 UJ	< 102	< 102	< 102 UJ
6 - 18 "	7/12/2007	< 104	< 104	< 104 UJ	< 104	< 104 UJ	< 104	< 104 UJ	< 104 UJ	< 104	< 104	< 104	< 104	< 104	< 104 UJ	< 104	< 104	< 104 UJ
18 - 30 "	7/12/2007	< 109	< 109	< 109 UJ	< 109	< 109	< 109	< 109 UJ	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109 UJ	< 109	< 109	< 109
T6T3-A1																		
0 - 6 "	7/12/2007	< 187	< 187	< 187	< 187	< 187	< 187	< 187	< 187 UJ	< 187	< 187	< 187 UJ	< 187	< 187	< 187 UJ	< 187	< 187	< 187
6 - 18 "	7/12/2007	< 183	< 183	< 183	< 183	< 183	< 183	< 183	< 183 UJ	< 183	< 183	< 183 UJ	< 183	< 183	< 183 UJ	< 183	< 183	< 183
18 - 30 "	7/12/2007	< 181	< 181	< 181	< 181	< 181	< 181	< 181	< 181 UJ	< 181	< 181	< 181 UJ	< 181	< 181	< 181 UJ	< 181	< 181	< 181
30 - 42 "	7/12/2007	< 108	< 108	< 108 UJ	< 108	< 108	< 108	< 108 UJ	< 108 UJ	< 108	< 108	< 108 UJ	< 108	< 108	< 108 UJ	< 108	< 108	< 108
42 - 54 "	7/12/2007	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R	< 110 R
54 - 66 "	7/12/2007	< 110	< 110	< 110 UJ	< 110	< 110	< 110	< 110 UJ	< 110 UJ	< 110	< 110	< 110 UJ	< 110	< 110	< 110 UJ	< 110	< 110	< 110

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample Depth ID	Collection Date	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-anthracene	Benzo(a)-pyrene	Benzo(b)-fluoranthene	Benzo(g,h,i)-pyrene	Benzo(k)-fluoranthene	Chrysene	Dibenzo(a,h)-anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naph - thalene	Phenanthrene	Pyrene	
<b>Sediment Screening Benchmarks</b>																			
<b>Benchmarks</b>		360	396	365	57.2	108	150	788	882	791	166	33	423	77.4	899	176	204	195	
T7-A1																			
0 - 6 "	7/11/2007	<b>4200</b>	<b>8800</b>	<b>1500</b>	<b>10000 J</b>	<b>12000</b>	<b>6700</b>	<b>13000 J</b>	<b>2700 J</b>	<b>7400 J</b>	<b>11000</b>	<b>1500</b>	<b>19000 J</b>	<b>9200</b>	<b>3700 J</b>	<b>2500</b>	<b>26000 J</b>	<b>35000 Q J</b>	
6 - 18 "	7/11/2007	<b>3400</b>	<b>7400 J</b>	< 1235	<b>8400 J</b>	<b>10000 J</b>	<b>5500 J</b>	<b>11000 J</b>	<b>2600 J</b>	<b>6100 J</b>	<b>8200 J</b>	<b>1300</b>	<b>16000 J</b>	<b>7300 J</b>	<b>3600 J</b>	<b>2100 J</b>	<b>21000 J</b>	<b>23000 J</b>	
18 - 30 "	7/11/2007	<b>640</b>	240	< 118	<b>1600 J</b>	<b>1800</b>	<b>980</b>	<b>2000 J</b>	360 J	<b>1100 J</b>	<b>1500</b>	<b>140</b>	<b>2700 J</b>	<b>980</b>	400 J	<b>340</b>	<b>4000 Q J</b>	<b>2600 J</b>	
30 - 42 "	7/11/2007	< 111	160 J	< 111	<b>170 J</b>	<b>270 J</b>	<b>230 J</b>	320 J	< 111 UJ	120 J	<b>180 J</b>	< 111	<b>470 J</b>	<b>150 J</b>	< 111 UJ	< 111	<b>540 J</b>	<b>700 J</b>	
42 - 54 "	7/11/2007	< 110	< 110	< 110	< 110	< 110	< 110	< 110	< 110 UJ	< 110	< 110	< 110	< 110	< 110	< 110 UJ	< 110	< 110	< 110	
54 - 66 "	7/11/2007	< 105	< 105	< 105 UJ	< 105	< 105 UJ	< 105	< 105 UJ	< 105 UJ	< 105	< 105	< 105	< 105	< 105	< 105 UJ	< 105	< 105	< 105 UJ	
66 - 72 "	7/11/2007	< 111	< 111	< 111 UJ	< 111	< 111 UJ	< 111	< 111 UJ	< 111 UJ	< 111	< 111	< 111	< 111	< 111	< 111 UJ	< 111	< 111	< 111 UJ	
T7-B1																			
0 - 6 "	7/11/2007	<b>39000 Q</b>	<b>42000 Q</b>	<b>7900</b>	<b>54000 Q J</b>	<b>44000 Q</b>	<b>26000</b>	<b>48000 Q J</b>	<b>6400 J</b>	<b>28000 J</b>	<b>43000 Q</b>	<b>2400</b>	<b>58000 Q J</b>	<b>40000 Q</b>	<b>6100 J</b>	<b>80000 Q</b>	<b>85000 Q J</b>	<b>110000 Q J</b>	
6 - 18 "	7/11/2007	270	<b>400</b>	< 115	<b>370 J</b>	<b>420</b>	<b>210</b>	390 J	< 115 UJ	260 J	<b>330</b>	< 115 UJ	<b>620 J</b>	<b>400</b>	< 115 UJ	<b>530</b>	<b>1000 J</b>	<b>980 J</b>	
18 - 30 "	7/11/2007	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114 UJ	< 114	< 114	< 114 UJ	< 114 UJ	< 114	< 114 UJ	< 114	< 114 UJ	170 J	
30 - 42 "	7/11/2007	< 110	< 110	< 110	< 110	< 110	< 110	< 110	< 110 UJ	< 110	< 110	< 110	< 110	< 110	< 110 UJ	< 110	< 110	< 110	
T7-C1																			
0 - 6 "	7/11/2007	< 125	< 125	< 125	< 125 UJ	< 125	< 125	< 125	< 125 UJ	< 125	< 125	< 125 UJ	< 125 UJ	< 125	< 125 UJ	< 125	< 125 UJ	< 125 UJ	
6 - 18 "	7/11/2007	< 123	< 123	< 123	< 123 UJ	< 123	< 123	< 123	< 123 UJ	< 123	< 123	< 123 UJ	< 123 UJ	< 123	< 123 UJ	< 123	< 123 UJ	< 123 UJ	
18 - 30 "	7/11/2007	< 116	< 116	< 116 UJ	< 116	< 116	< 116	< 116 UJ	< 116 UJ	< 116	< 116	< 116 UJ	< 116	< 116	< 116 UJ	< 116	< 116	< 116	
T7-C2																			
0 - 6 "	7/11/2007	< 125	< 125	< 125	< 125 UJ	< 125	< 125	< 125	< 125 UJ	< 125	< 125	< 125 UJ	< 125 UJ	< 125	< 125 UJ	< 125	< 125 UJ	< 125 UJ	
6 - 18 "	7/11/2007	< 112	< 112	< 112 UJ	< 112	< 112	< 112	< 112 UJ	< 112 UJ	< 112	< 112	< 112 UJ	< 112	< 112	< 112 UJ	< 112	< 112	< 112	
18 - 30 "	7/11/2007	< 114	< 114	< 114 UJ	< 114	< 114	< 114	< 114 UJ	< 114 UJ	< 114	< 114	< 114 UJ	< 114	< 114	< 114 UJ	< 114	< 114	< 114	

Notes

- 1) Parameters that attain or exceed a Sediment Screening Benchmark are identified in bold and underlined.
- 2) The hierarchy for the Sediment Benchmarks is provided on Table 14 - Sediment Screening Benchmark Values.
- <2.0 : Parameter not detected above the Limit of Detection indicated.
- NS : Sediment Quality Guideline Value has not been established for this parameter.
- Q: Analyte result has been qualified, see laboratory analytical report for additional information.
- Other Qualifiers (J, N, R, etc.): Analyte result has been qualified by data validator, see validation report for additional information.
- : Analysis not performed.
- QC: Quality Control duplicate sample.



1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample ID	Depth	Collection Date	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Vanadium	Zinc	Benzene	Ethyl-benzene	Toluene	Xylene - Total	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Cyanide, Total		
<b>Sediment Screening Benchmarks</b>																											
<b>Benchmarks</b>			NS	2000	9790	NS	990	43400	31600	20000000	35800	460000	180	22700	NS	1600	NS	121000	308	459	383	465	NS	NS	NS		
T2-A1																											
	0 - 6 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 58 Q	< 58 Q	< 58 Q	29 Q	< 114 Q	< 114 Q	--		
	6 - 18 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 105 Q	< 105 Q	< 105 Q	59 Q	< 210 Q	< 210 Q	--		
	18 - 30 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 61 Q	< 61 Q	< 61 Q	37 Q	< 121 Q	< 121 Q	--		
	30 - 42 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	< 108 Q	< 108 Q	< 108 Q	--		
T3-A1																											
	0 - 6 "	7/11/2007	4300000	< 3300 Q UJ	7300 J-	53000 J-	<u>2600 J-</u>	6600 J-	8300 J-	13000000 R	<u>69000 J-</u>	240000 J-	<u>1600</u>	3300 J-	3300 J-	< 1700 Q UJ	18000 J-	59000 J-	< 169	270	< 169	<u>790</u>	270	610	--		
	6 - 18 "	7/11/2007	4200000	< 2800 Q UJ	5100 J-	51000 J-	< 1400 Q	13000 J-	7600 J-	13000000 R	<u>42000 J-</u>	310000 J-	<u>370</u>	5100 J-	< 2800 Q UJ	< 1400 Q UJ	23000 J-	45000 J-	<u>2900</u>	<u>9400</u>	<u>7600</u>	<u>25000</u>	4400	10000	--		
	18 - 30 "	7/11/2007	4900000	< 2000 Q UJ	5300 J-	51000 J-	<u>1200 J-</u>	11000 J-	6800 J-	9200000 R	23000 J-	150000 J-	<u>210</u>	4900 J-	2700 J-	< 1000 Q UJ	20000 J-	39000 J-	<u>21000</u>	<u>49000</u>	<u>43000</u>	<u>130000</u>	19000	45000	--		
	30 - 42 "	7/11/2007	4300000	< 1500 Q UJ	1900 J-	28000 J-	< 700 Q UJ	8300 J-	3700 J-	7500000 R	9000 J-	90000 J-	65	5200 J-	< 1500 Q UJ	< 700 Q UJ	18000 J-	16000 J-	<u>4000</u>	<u>12000</u>	<u>5800</u>	<u>31000</u>	5400	14000	--		
	42 - 54 "	7/11/2007	3300000	< 1300 Q UJ	< 1300 Q UJ	19000 J-	< 600 Q UJ	6400 J-	3900 J-	5300000 R	1400 J-	61000 J-	4.2	4700 J-	< 1300 Q UJ	< 600 Q UJ	15000 J-	16000 J-	< 62	94	< 62	260	< 124	140	--		
	54 - 66 "	7/11/2007	3300000	< 1200 Q UJ	< 1200 Q UJ	20000 J-	< 600 Q UJ	6600 J-	8000 J-	6900000 R	1400 J-	77000 J-	4.1	4500 J-	< 1200 Q UJ	< 600 Q UJ	17000 J-	14000 J-	< 59	170	86	460	< 118	240	--		
	66 - 78 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 50 Q	< 50 Q	< 50 Q	34 Q J+	< 100 Q	< 100 Q	--		
	78 - 90 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 50 Q	< 49 Q	< 49 Q	38 Q J+	< 98 Q	< 98 Q	--		
	90 - 102 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	< 53 Q	< 53 Q	71 Q J+	< 107 Q	30 Q J+	--		
T3-A2																											
	0 - 6 "	7/11/2007	3200000	< 1200 Q UJ	1700 J-	21000 J-	< 600 Q UJ	8000 J-	7400 J-	9000000 R	2100 J-	110000 J-	14	5700 J-	< 1200 Q UJ	< 600 Q UJ	15000 J-	17000 J-	< 53	< 53	< 53	< 106	< 106	< 106	--		
	6 - 18 "	7/11/2007	4300000	< 1200 Q UJ	1900 J-	23000 J-	< 600 Q UJ	7300 J-	6700 J-	11000000 R	2300 J-	120000 J-	6.5	6600 J-	< 1200 Q UJ	< 600 Q UJ	14000 J-	23000 J-	< 56	< 56	< 56	< 113	< 113	< 113	--		
	18 - 30 "	7/11/2007	3600000	< 1100 Q UJ	1300 J-	17000 J-	< 600 Q UJ	8700 J-	8300 J-	9800000 R	2100 J-	100000 J-	11	8200 J-	1300 J-	< 600 Q UJ	18000 J-	19000 J-	< 55	< 55	< 55	< 111	< 111	< 111	--		
	30 - 42 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	< 53 Q	< 53 Q	32 Q	< 106 Q	< 106 Q	--		
	42 - 54 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 51 Q	< 51 Q	< 51 Q	32 Q	< 102 Q	< 102 Q	--		
	54 - 66 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 46 Q	< 46 Q	< 46 Q	63 Q J+	< 92 Q	< 92 Q	--		
T3-A3																											
	0 - 6 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 113 Q	71 Q	26 Q	200 Q	47 Q	120 Q	--		
	6 - 18 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 48 Q	50	< 48 Q	120	< 96 Q	56 Q	--		
	18 - 30 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 59 Q	30 Q	< 59 Q	61 Q	< 118 Q	48 Q	--		
	30 - 42 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	< 53 Q	< 53 Q	35 Q	< 107 Q	< 50 Q	--		
	42 - 54 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	< 108 Q	< 108 Q	< 108 Q	--		
	54 - 66 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 52 Q	< 52 Q	< 52 Q	48 Q J+	< 105 Q	< 105 Q	--		
	66 - 78 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 60 Q	< 60 Q	< 60 Q	53 Q J+	< 120 Q	< 120 Q	--		
T3-A3a																											
	0 - 6 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 52 Q	< 52 Q	< 52 Q	56 Q J+	< 104 Q	< 104 Q	--		
	6 - 18 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55 Q	< 55 Q	< 55 Q	56 Q	< 110 Q	< 110 Q	--		
	18 - 30 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	78 J+	29 Q J+	240 J+	50 Q J+	53 Q J+	--		
	42 - 54 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 77 Q	< 77 Q	< 77 Q	< 154 Q	< 154 Q	< 154 Q	--		
	54 - 66 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 52 Q	< 52 Q	< 52 Q	51 Q J+	< 104 Q	< 104 Q	--		

Table 17. Sediment Analytical Results - Petroleum Volatile Organic Compounds (PVOC, µg/Kg), Cyanide (µg/Kg), and Metals (µg/Kg)





1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample ID	Depth	Collection Date	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Vanadium	Zinc	Benzene	Ethyl-benzene	Toluene	Xylene - Total	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Cyanide, Total	
<b>Sediment Screening Benchmarks</b>																										
<b>Benchmarks</b>			NS	2000	9790	NS	990	43400	31600	20000000	35800	460000	180	22700	NS	1600	NS	121000	308	459	383	465	NS	NS	NS	
T3-B1																										
	0 - 6 "	7/10/2007	5000000	< 1300 Q UJ	1800 J-	21000 J+	< 600 Q UJ	8300 J-	10000	11000000 R	2300	200000 R	11	6900 J-	< 1300 Q U.	< 600 Q UJ	18000 J-	31000 R	< 64	< 64	< 64	< 128	< 128	< 128	< 74	
	6 - 18 "	7/10/2007	1900000	< 1200 Q UJ	< 1200 Q UJ	12000 J+	< 600 Q UJ	2900 J-	4200	5100000 R	1400	85000 R	13	3300 J-	< 1200 Q U.	< 600 Q UJ	7300 J-	17000 R	< 61	< 61	< 61	< 121	< 121	< 121	< 67	
	18 - 30 "	7/10/2007	5300000	< 1200 Q UJ	< 1200 Q UJ	24000 J+	< 600 Q UJ	13000 J-	7000	8100000 R	1700	140000 R	9.1	13000 J-	< 1200 Q U.	< 600 Q UJ	16000 J-	18000 R	< 60	< 60	< 60	< 120	< 120	< 120	< 64	
	30 - 42 "	7/10/2007	6700000	< 1100 Q UJ	< 1100 Q UJ	52000 J+	< 500 Q UJ	20000 J-	26000	14000000 R	2600	200000 R	14	11000 J-	< 1100 Q U.	< 500 Q UJ	34000 J-	23000 R	< 53	< 53	< 53	< 106	< 106	< 106	< 74	
	42 - 54 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	< 53 Q	< 53 Q	< 106 Q	< 106 Q	< 106 Q	--	
	54 - 66 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 59 Q	< 59 Q	< 59 Q	< 118 Q	< 118 Q	< 118 Q	--	
T3-C1																										
	0 - 6 "	7/10/2007	3000000	< 1100 Q UJ	< 1100 Q UJ	27000 J+	< 600 Q UJ	9900 J-	12000	7200000 R	1900	100000 R	16	8100 J-	< 1100 Q U.	< 600 Q UJ	19000 J-	14000 R	< 54	< 54	< 54	< 109	< 109	< 109	< 69	
	6 - 18 "	7/10/2007	6200000	< 1100 Q UJ	< 1100 Q UJ	41000 J+	< 600 Q UJ	29000 J-	14000	13000000 R	2000	190000 R	10	17000 J-	< 1100 Q U.	< 600 Q UJ	28000 J-	30000 R	< 49	< 49	< 49	< 97	< 97	< 97	< 77	
	18 - 30 "	7/10/2007	3600000	< 1100 Q UJ	< 1100 Q UJ	29000 J+	< 600 Q UJ	9000 J-	17000	7100000 R	1200	88000 R	4.7	7200 J-	< 1100 Q U.	< 600 Q UJ	19000 J-	16000 R	< 51	< 51	< 51	< 101	< 101	< 101	< 67	
	30 - 42 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55 Q	< 55 Q	< 55 Q	< 110 Q	< 110 Q	< 110 Q	--	
T3-D1a																										
	0 - 6 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	< 48	< 48	< 48	< 96	< 96	< 96	< 56	
	6 - 18 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	< 41	< 41	< 41	< 83	< 83	< 83	< 63	
	18 - 30 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	8.8	--	--	--	--	--	< 46	< 46	< 46	< 93	< 93	< 93	< 75	
	30 - 36 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	8.9	--	--	--	--	--	< 56	< 56	< 56	< 111	< 111	< 111	< 87	
T4-A1																										
	0 - 6 "	7/11/2007	20000000	< 1200 Q UJ	1800 J-	250000 J-	< 600 Q UJ	26000 J-	7800 J-	<u>44000000 R</u>	1800 J-	380000 J-	3.2	<u>23000 J-</u>	< 1200 Q U.	< 600 Q UJ	54000 J-	26000 J-	< 61	< 61	< 61	< 121	< 121	< 121	--	
	6 - 18 "	7/11/2007	12000000	< 1200 Q UJ	1400 J-	170000 J-	750 J-	18000 J-	5900 J-	<u>34000000 R</u>	1200 Q U.	270000 J-	4.3	17000 J-	< 1200 Q U.	< 600 Q UJ	38000 J-	28000 J-	< 57	< 57	< 57	< 113	< 113	< 113	--	
	18 - 30 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55	< 55	< 55	< 109	< 109	< 109	--	
	30 - 42 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 69 Q	< 69 Q	< 69 Q	86 Q J+	< 137 Q	< 137 Q	--	
	42 - 54 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 57 Q	< 57 Q	31 Q	32 Q	< 114 Q	< 114 Q	--	
	54 - 66 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 62 Q	36 Q J+	< 62 Q	122 Q J+	105 Q J+	122 Q J+	--	
T4-A2																										
	0 - 6 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 57 Q	65	32 Q	200	50 Q	55 Q	--	
	6 - 18 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 62 Q	< 62 Q	33 Q J+	160 J+	41 Q J+	45 Q J+	--	
	18 - 30 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 63 Q	< 63 Q	< 63 Q	61 Q J+	< 127 Q	< 127 Q	--	
	30 - 42 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 60 Q	< 60 Q	< 60 Q	40 Q J+	< 120 Q	< 120 Q	--	
T4-B1																										
	0 - 6 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	6.4	--	--	--	--	--	< 56	< 56	< 56	< 112	< 112	< 112	< 170	
	6 - 18 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	19	--	--	--	--	--	< 48	< 48	< 48	< 95	< 95	< 95	< 44	
	18 - 30 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	77	--	--	--	--	--	< 57	< 57	< 57	< 115	< 115	< 115	< 60	
	30 - 42 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 58 Q	< 58 Q	< 58 Q	33 Q	< 117 Q	< 117 Q	--	
	42 - 54 "	7/10/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 48 Q	< 48 Q	< 48 Q	32 Q	< 97 Q	< 97 Q	--	
T4-C1																										
	0 - 6 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 51 Q	< 51 Q	< 51 Q	< 102 Q	< 102 Q	< 102 Q	--	
	6 - 18 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 59 Q	< 59 Q	< 59 Q	< 118 Q	< 118 Q	< 118 Q	--	
	18 - 30 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 57 Q	< 57 Q	< 57 Q	69 Q J+	< 114 Q	< 114 Q	--	
	30 - 42 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55 Q	< 55 Q	< 55 Q	< 110 Q	< 110 Q	< 110 Q	--	

Table 17. Sediment Analytical Results - Petroleum Volatile Organic Compounds (PVOC, µg/Kg), Cyanide (µg/Kg), and Metals (µg/Kg)



1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample ID	Depth	Collection Date	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Vanadium	Zinc	Benzene	Ethyl-benzene	Toluene	Xylene - Total	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Cyanide, Total	
Sediment Screening Benchmarks																										
Benchmarks			NS	2000	9790	NS	990	43400	31600	20000000	35800	460000	180	22700	NS	1600	NS	121000	308	459	383	465	NS	NS	NS	
T4-D1																										
	0 - 6 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 51 Q	< 51 Q	< 51 Q	< 101 Q	< 101 Q	< 101 Q	--	
	6 - 18 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 56 Q	< 56 Q	< 56 Q	33 Q	< 111 Q	< 111 Q	< 111 Q	--
	18 - 24 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 51 Q	< 51 Q	< 51 Q	< 103 Q	< 103 Q	< 103 Q	< 103 Q	--
T5-A1																										
	0 - 6 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 71	< 71	< 71	< 143	< 143	< 143	< 143	--
	6 - 18 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 78	< 78	< 78	< 157	< 157	< 157	< 157	--
	18 - 30 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 63	< 63	< 63	< 125	< 125	< 125	< 125	--
	30 - 42 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55 Q	< 55 Q	< 55 Q	40 Q	< 110 Q	< 110 Q	< 110 Q	--
	42 - 54 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	67 Q	< 108 Q	28 Q	< 108 Q	--
T5-B1																										
	0 - 6 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 60 Q	< 60 Q	< 60 Q	< 119 Q	< 119 Q	< 119 Q	< 119 Q	--
	6 - 18 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 58 Q	< 58 Q	< 58 Q	51 Q J+	< 115 Q	< 115 Q	< 115 Q	--
	18 - 30 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 52 Q	< 52 Q	< 52 Q	42 Q J+	< 103 Q	< 103 Q	< 103 Q	--
	30 - 42 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55 Q	< 55 Q	< 55 Q	35 Q	< 109 Q	< 109 Q	< 109 Q	--
	42 - 54 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 57 Q	< 57 Q	< 57 Q	28 Q	< 113 Q	< 113 Q	< 113 Q	--
T5-C1a																										
	0 - 6 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 56 Q	< 56 Q	< 56 Q	35 Q	< 112 Q	< 112 Q	< 112 Q	--
	18 - 24 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55 Q	< 55 Q	< 55 Q	< 110 Q	< 110 Q	< 110 Q	< 110 Q	--
T5-D1																										
	0 - 6 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 46 Q	< 46 Q	< 46 Q	< 92 Q	< 92 Q	< 92 Q	< 92 Q	--
T6-A1																										
	0 - 6 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 89	< 89	< 89	< 178	< 178	< 178	< 178	--
	6 - 18 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 95	< 95	< 95	< 190	< 190	< 190	< 190	--
	18 - 30 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 59	< 59	< 59	< 118	< 118	< 118	< 118	--
T6-B1																										
	0 - 6 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 114 Q	< 114 Q	< 114 Q	86 Q	72 Q	86 Q	86 Q	--
	6 - 18 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 48 Q	< 48 Q	< 48 Q	< 96 Q	< 96 Q	< 96 Q	< 96 Q	--
	18 - 30 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	< 109 Q	< 109 Q	< 109 Q	< 109 Q	--
	30 - 42 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	< 53 Q	< 53 Q	< 106 Q	< 106 Q	< 106 Q	< 106 Q	--
	42 - 54 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	< 53 Q	< 53 Q	83 Q J+	< 106 Q	< 106 Q	< 106 Q	--
T6-C1																										
	0 - 6 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	36 Q	< 108 Q	< 108 Q	< 108 Q	--
	6 - 18 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 48 Q	< 48 Q	< 48 Q	< 96 Q	< 96 Q	< 96 Q	< 96 Q	--
	18 - 30 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	< 109 Q	< 109 Q	< 109 Q	< 109 Q	--
T6-D1																										
	0 - 6 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 50 Q	< 50 Q	< 50 Q	28 Q	< 100 Q	< 100 Q	< 100 Q	--
	6 - 18 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 50 Q	< 50 Q	< 50 Q	< 100 Q	< 100 Q	< 100 Q	< 100 Q	--
	18 - 30 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	< 53 Q	< 53 Q	< 106 Q	< 106 Q	< 106 Q	< 106 Q	--

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 025000079

Sample ID	Depth	Collection Date	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Vanadium	Zinc	Benzene	Ethyl-benzene	Toluene	Xylene - Total	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	Cyanide, Total	
<b>Sediment Screening Benchmarks</b>																										
<b>Benchmarks</b>			NS	2000	9790	NS	990	43400	31600	20000000	35800	460000	180	22700	NS	1600	NS	121000	308	459	383	465	NS	NS	NS	
T6T3-A1																										
	0 - 6 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 63 Q	< 63 Q	< 63 Q	< 126 Q	< 126 Q	< 126 Q	--	
	6 - 18 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 58 Q	< 58 Q	< 58 Q	< 117 Q	< 117 Q	< 117 Q	--	
	18 - 30 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 45 Q	< 45 Q	< 45 Q	46 Q	< 91 Q	< 91 Q	--	
	30 - 42 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	39 Q J+	< 108 Q	< 108 Q	--	
	42 - 54 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 60 Q	< 60 Q	< 60 Q	< 119 Q	< 119 Q	< 119 Q	--	
	54 - 66 "	7/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 56 Q	< 56 Q	< 56 Q	< 113 Q	< 113 Q	< 113 Q	--	
T7-A1																										
	0 - 6 "	7/11/2007	3800000 R	< 1200 Q UJ	3700	35000 J-	< 600 Q	7200 J-	10000 J-	9000000 R	<b>43000 J-</b>	150000	30 J+	5100	1300	< 600 Q	15000	17000 J-	< 60	< 60	< 60	< 121	< 121	< 121	--	
	6 - 18 "	7/11/2007	9600000 R	< 1200 Q	4100	< 1200	< 600 Q	12000 J-	28000 J-	<b>20000000 R</b>	31000	330000	13 J+	12000	1500	< 600 Q	33000	44000 J-	< 54	< 54	< 54	< 109	< 109	170	--	
	18 - 30 "	7/11/2007	10000000 R	< 1200 Q	2800	190000	< 600 Q	18000 J-	26000 J-	<b>24000000 R</b>	2800	<b>570000</b>	10 J+	14000	< 1200 Q	< 600 Q	40000	61000 J-	< 57	< 57	< 57	< 114	< 114	< 114	--	
	30 - 42 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	< 108 Q	< 108 Q	< 108 Q	--	
	42 - 54 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55 Q	< 55 Q	< 55 Q	29 Q	< 110 Q	< 110 Q	--	
	54 - 66 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 59 Q	< 59 Q	< 59 Q	< 118 Q	< 118 Q	< 118 Q	--	
	66 - 72 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 53 Q	< 53 Q	< 53 Q	< 105 Q	< 105 Q	< 105 Q	--	
T7-B1																										
	0 - 6 "	7/11/2007	3000000 R	< 1300 Q	3600	18000	< 600 Q	5900 J-	<b>91000 J-</b>	7100000 R	1900	120000	42 J+	4400	< 1300	< 600 Q	8600	13000 J-	< 58	130	< 58	410	190	440	--	
	6 - 18 "	7/11/2007	2100000 R	< 1500 Q	2600	13000	< 600 Q	< 2300 Q UJ	3100 J-	4600000 R	< 1500 Q	60000	10 J+	2400	< 1500 Q	< 600 Q	11000	5500 J-	< 53	60	< 53	200	< 106	170	--	
	18 - 30 "	7/11/2007	13000000 R	< 1100 Q	2400	56000	< 600 Q	14000 J-	4800 J-	<b>28000000 R</b>	< 1100 Q	210000	8.3 J+	<b>25000</b>	< 1100 Q	< 600 Q	31000	19000 J-	< 55	< 55	< 55	< 111	< 111	< 111	--	
	30 - 42 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 55 Q	< 55 Q	< 55 Q	< 109 Q	< 109 Q	< 109 Q	--	
T7-C1																										
	0 - 6 "	7/11/2007	2000000 R	< 1200 Q	3100	12000	< 600 Q	600 J-	< 1200 Q UJ	5400000 R	1300	66000	29 J+	2500	1000	< 600 Q	5700	8700 J-	< 59 Q	< 59 Q	< 59 Q	< 119 Q	< 119 Q	< 119 Q	--	
	6 - 18 "	7/11/2007	24000000 R	< 1300 Q	3800	210000	< 600 Q	26000 J-	<b>45000 J-</b>	<b>35000000 R</b>	2300	450000	3.6 J+	19000	2100	< 600 Q	53000	83000 J-	< 59 Q	< 59 Q	< 59 Q	31 Q	< 118 Q	< 118 Q	--	
	18 - 30 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 62 Q	< 62 Q	< 62 Q	32 Q	< 124 Q	< 124 Q	--	
T7-C2																										
	0 - 6 "	7/11/2007	3300000 R	< 1200 Q	3200	26000	< 600 Q	2800 J-	2300 J-	8800000 R	1500	120000	< 2 Q UJ	4300	1100	< 600 Q	14000	16000 J-	< 59 Q	< 59 Q	< 59 Q	31 Q	< 117 Q	< 117 Q	--	
	6 - 18 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 51 Q	< 51 Q	< 51 Q	53 Q J+	< 101 Q	< 101 Q	--	
	18 - 30 "	7/11/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 54 Q	< 54 Q	< 54 Q	53 Q J+	< 108 Q	< 108 Q	--	

Notes

- 1) Parameters that attain or exceed a Sediment Screening Benchmark are identified in bold and underlined.
- 2) The hierarchy for the Sediment Benchmarks is provided on Table 14 - Sediment Screening Benchmark Values.
- <2.0 : Parameter not detected above the Limit of Detection indicated.
- NS : Sediment Quality Guideline Value has not been established for this parameter.
- Q: Analyte result has been qualified, see laboratory analytical report for additional information.
- Other Qualifiers (J, N, R, etc.): Analyte result has been qualified by data validator, see validation report for additional information.
- : Analysis not performed.
- QC: Quality Control duplicate sample.

Table 18. Surface Water Analytical Results - Polynuclear Aromatic Hydrocarbons (PAH, µg/L) and Phenols (µg/L)

1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities

1111 Crosby Avenue, Steven's Point, Wisconsin

USEPA# : WIN000509983

BRRTS# : 0250000079

Sample ID	Collection Date	1-Methyl naphthalene	2-Methyl naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	Phenanthrene	Pyrene	2-Methylphenol	3 and 4 Methylphenol	2,4-Dimethylphenol
QC01 (SWT02)	7/13/2007	< 0.01	< 0.011	< 0.0082	< 0.0082	< 0.012	< 0.016	< 0.019	< 0.016 Q UJ	< 0.019	< 0.02 Q UJ	< 0.019	< 0.019	< 0.016	< 0.0091	< 0.019	< 0.012	< 0.011	< 0.015	--	--	--
SW01	7/20/2007	< 0.01	< 0.011	< 0.0082	0.054	0.033 Q	0.18	0.25	0.22 J	0.15	0.2 Q J	0.17	0.051 Q	0.32	0.011 Q	0.14	< 0.012	0.046	0.29	< 0.73 Q	< 0.71 Q	< 0.72
SW02	7/20/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.73 Q	< 0.71 Q	< 0.72
SW03	7/20/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.73 Q	< 0.71 Q	< 0.72
SW04	7/20/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.73 Q	< 0.71 Q	< 0.72
SWT01	7/13/2007	< 0.01	< 0.011	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016 Q UJ	< 0.019	< 0.019 Q UJ	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.012	< 0.011	< 0.015	--	--	--
SWT02	7/13/2007	< 0.01	< 0.011	< 0.0082	< 0.0082	< 0.012	< 0.016	< 0.019	< 0.016 Q UJ	< 0.019	< 0.02 Q UJ	< 0.019	< 0.019	< 0.016	< 0.0091	< 0.019	< 0.012	< 0.011	< 0.015	--	--	--
SWT03	7/13/2007	< 0.01	< 0.011	< 0.0082	< 0.0081	< 0.012	< 0.016	< 0.018	< 0.016 Q UJ	< 0.019	< 0.019 Q UJ	< 0.019	< 0.019	< 0.015	< 0.0091	< 0.019	< 0.012	< 0.011	< 0.015	--	--	--

Notes

<2.0 : Parameter not detected above the Limit of Detection indicated.

Q: Analyte result has been qualified, see laboratory analytical report for additional information.

Other Qualifiers (J, N, R, etc.): Analyte result has been qualified by data validator, see validation report for additional information.

--: Analysis not performed.

QC: Quality Control duplicate sample.

**Table 19. Surface Water Analytical Results - Petroleum Volatile Organic Compounds (PVOC, µg/L), Cyanide (µg/L), and Metals (µg/L)**

**1177 Wisconsin Public Service Corp., Stevens Point MGP Site Remediation Activities**

**1111 Crosby Avenue, Steven's Point, Wisconsin**

**USEPA# : WIN000509983**

**BRRTS# : 0250000079**

Sample ID	Depth	Collection Date	Aluminum	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Vanadium	Zinc	Benzene	Ethyl-benzene	Toluene	Xylene - Total	1,3,5-Trimethyl-benzene	1,2,4-Trimethyl-benzene	Cyanide, Available
QC01		(SWT02) 7/13/2007	24 Q	< 0.34 Q U	0.89 Q J	20 J	< 0.097	< 0.43	1.2	300 Q J	0.14 Q	170	< 0.1	0.34 Q	0.52 Q J	< 0.11	1.4	< 7 Q U	< 0.14	< 0.4	< 0.36	< 0.74	< 0.4	< 0.39	< 2
SW01		7/20/2007	26 Q J	0.59 Q J	0.97	22	0.1 Q	0.78 Q	2.6 Q J	260	5.8	65	< 0.1	1.4	< 0.5 Q U	< 0.11	1.5	< 7 Q U	< 0.21	< 0.4	< 0.36	< 0.74	< 0.4	< 0.39	--
SWT01		7/13/2007	11 Q	< 0.34 Q U	0.77 Q J	20 J	< 0.097	< 0.43	2.2	310 Q J	0.17	160	< 0.1	2.2 Q	0.5 Q U	< 0.11	1.4	< 7 Q U	< 0.14	< 0.4	< 0.36	< 0.74	< 0.4	< 0.39	< 2
SWT02		7/13/2007	55 Q	1.4 Q J	1.2 Q J	21 Q J	0.34	< 0.43	3.4	310 Q J	0.47	170	< 0.1	3.7	< 0.5 Q U	0.19 Q	1.8 Q	7.2 Q J	< 0.14	< 0.4	< 0.36	< 0.74	< 0.4	< 0.39	< 2
SWT03		7/13/2007	< 4.4 Q	0.47 Q J	0.94 Q J	20 J	0.1 Q	< 0.43	1.9	250 Q J	0.18	160	< 0.1	1.2 Q	0.7 Q J	< 0.11	1.4	< 7 Q U	< 0.14	< 0.4	< 0.36	< 0.74	< 0.4	< 0.39	< 2

Notes

- <2.0 : Parameter not detected above the Limit of Detection indicated.
- Q: Analyte result has been qualified, see laboratory analytical report for additional information.
- Other Qualifiers (J, N, R, etc.): Analyte has been qualified by data validator, see validation report for additional information.
- : Analysis not performed.
- QC: Quality Control duplicate sample.



**Table 20. Soil Vapor Analytical Results**  
**Remedial Investigation (Revision 1)**  
**Stevens Point Former Manufactured Gas Plant Site**  
**Stevens Point, Wisconsin, USEPA ID #WIN000509983**

Vapor Intrusion Point	Sample Date	Benzene ppbv	Benzene ug/m <sup>3</sup>	Naphthalene ppbv	Naphthalene ug/m <sup>3</sup>	Carbon Dioxide mol %	Oxygen mol %	Methane mol %
<b>Screening Levels/Pathways (ug/m3)</b>								
Shallow Soil Gas, Residential		---	3.1	---	0.72	<b>No Screening Levels</b>		
Deep Soil Gas, Residential		---	31	---	7.2			
Shallow Soil Gas, Industrial		---	16	---	3.6			
Deep Soil Gas, Industrial		---	160	---	36			
SV1S	01/25/11	1.0	<b>3.2</b>	<0.44	<2.3	8.42	8.50	<0.110
	03/18/11	0.57	1.8	<0.41	<2.1	4.39	8.57	<0.102
SV1D	01/25/11	0.89	2.9	<0.43	<2.2	9.87	5.18	<0.106
	03/18/11	1.1	3.4	<0.42	<2.2	6.15	5.02	<0.105
SV2S	01/20/11	<0.43	<1.3	<0.43	<2.3	7.42	7.61	<0.107
	03/18/11	0.47	1.5	<0.41	<2.1	7.74	5.37	<0.102
SV2D	01/20/11	<0.42	<1.3	<0.42	<2.2	10.3	4.42	<0.106
	03/18/11	0.53	1.7	<0.39	<2.0	10.7	2.58	<0.0977
SV3S	01/20/11	0.53	1.7	<0.39	<2.0	11.6	4.61	<0.0974
	03/18/11	0.62	2.0	<0.43	<2.2	9.09	5.16	<0.107
SV3D	01/20/11	<0.36	<1.1	<0.36	<1.9	13	2.40	<0.0911
	03/18/11	<0.43	<1.3	<0.43	<2.2	12.9	1.99	<0.107
SV4S	01/20/11	0.40	1.3	<0.38	<2.0	6.68	10.9	<0.0952
	03/18/11	<0.43	<1.3	<0.43	<2.3	8.9	7.58	<0.107
SV4D	01/20/11	0.62	2.0	<0.4	<2.1	9.59	8.37	<0.100
	03/18/11	<0.41	<1.2	<0.41	<2.1	10.4	6.34	<0.102
SV5S	01/19/11	10	<b>33</b>	<0.37	<1.9	0.166	15.7	<0.0924
	03/15/11	No Sample Due to Blocked Air Line						
SV5D	01/19/11	1.1	3.4	<0.43	<2.3	0.812	15.5	<0.107
	03/15/11	1.5	4.9	<0.4	<2.1	0.796	15.2	<0.099
SV6S	01/19/11	0.87	2.8	<0.4	<2.1	0.316	16.7	<0.0989
	03/15/11	1.0	<b>3.3</b>	<0.39	<2.0	0.271	15.8	<0.0963
SV6D	01/19/11	0.92	2.9	<0.4	<2.1	0.496	16.2	<0.0997
	03/15/11	0.60	1.9	<0.4	<2.1	0.416	15.9	<0.0999
SV7S	01/20/11	2.9	<b>9.3</b>	<0.38	<2.0	0.378	16.6	<0.0949
	03/15/11	0.72	2.3	<0.4	<2.1	0.257	15.4	<0.101
SV7D	01/20/11	<0.38	<1.1	<0.38	<2.0	0.668	16.4	<0.0946
	03/15/11	<0.41	<1.3	<0.41	<2.1	0.538	15.6	<0.101
SV8S	01/17/11	1.5	<b>4.7</b>	<0.37	<2.0	1.27	15.4	<0.0934
	03/16/11	0.58	1.8	<0.38	<2.0	1.05	14.6	<0.0961
SV8D	01/17/11	0.98	3.1	<0.36	<1.9	1.51	14.3	<0.0906
	03/16/11	0.39	1.2	<0.39	<2.0	1.46	14.3	<0.0977
SV9S	01/18/11	12	<b>38</b>	<0.41	<2.1	0.376	13.1	<0.102
	03/16/11	4.1	<b>13</b>	<0.41	<2.2	2.06	13.0	<0.103
SV9D	01/18/11	2.8	9.0	<0.36	<1.9	2.54	12.4	<0.0896
	03/16/11	1.2	3.7	<0.39	<2.0	2.47	12.3	<0.0975
SV10S	01/18/11	2.8	<b>9.0</b>	<0.42	<2.2	1.15	15.3	<0.104
	03/16/11	1.1	<b>3.4</b>	<0.42	<2.2	1.22	14.8	<0.104
SV10D	01/18/11	0.56	1.8	<0.39	<2.0	1.25	15.5	<0.0968
	03/16/11	0.95	3.0	<0.41	<2.2	1.41	14.6	<0.103
SV11S	01/19/11	0.40	1.3	<0.38	<2.0	2.58	14.2	<0.0942
	03/16/11	0.82	2.6	<0.42	<2.2	2.16	13.9	<0.105
SV11D	01/19/11	<0.39	<1.2	<0.39	<2.1	2.58	14.3	<0.0979
	03/16/11	0.63	2.0	<0.45	<2.4	2.38	14.0	<0.113
SV12S	01/25/11	2.1	<b>6.8</b>	<0.4	<2.1	4.84	12.3	<0.0999
	03/16/11	2.9	<b>9.3</b>	<0.43	<2.3	4.34	11.9	<0.109
SV12D	01/25/11	3.1	9.7	<0.41	<2.2	5.36	11.8	<0.103
	03/16/11	2.9	9.1	<0.43	<2.2	4.89	11.4	<0.106
SV13S	01/25/11	0.66	2.1	<0.44	<2.3	2.25	14.2	<0.110
	03/18/11	<0.43	<1.3	<0.43	<2.3	2.14	13.7	<0.108
SV13D	01/25/11	<0.41	<1.2	<0.41	<2.2	2.87	13.4	<0.103
	03/18/11	<0.41	<1.2	<0.41	<2.2	2.76	13.1	<0.103
<b>Quality Control/Quality Assurance Duplicate Samples</b>								
SV1S - Dup	03/18/11	0.55	1.8	<0.41	<2.1	4.25	9.08	<0.102
SV2S-Dup	01/20/11	<0.41	<1.2	<0.41	<2.2	6.86	8.37	<0.103
SV3D-Dup	03/18/11	<0.42	<1.3	<0.42	<2.2	12.2	2.81	<0.105
SV10S-Dup	01/18/11	2.8	<b>8.9</b>	<0.43	<2.2	1.07	14.9	<0.107
SV10S-Dup	03/16/11	1.1	<b>3.5</b>	<0.42	<2.2	1.29	14.5	<0.104
SV13D-Dup	01/25/11	<0.42	<1.3	<0.42	<2.2	3.19	13.3	<0.106

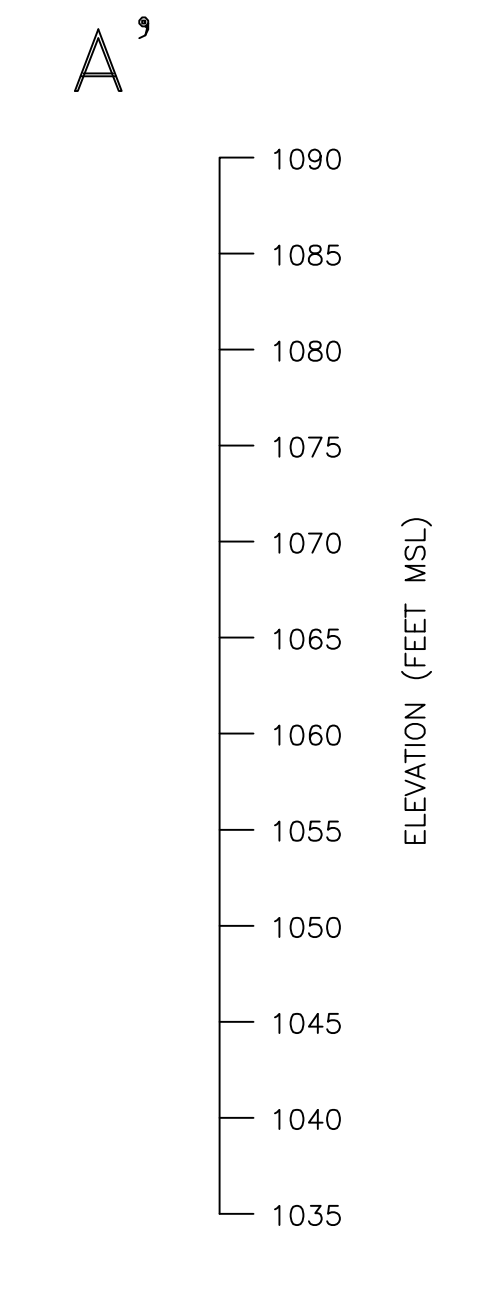
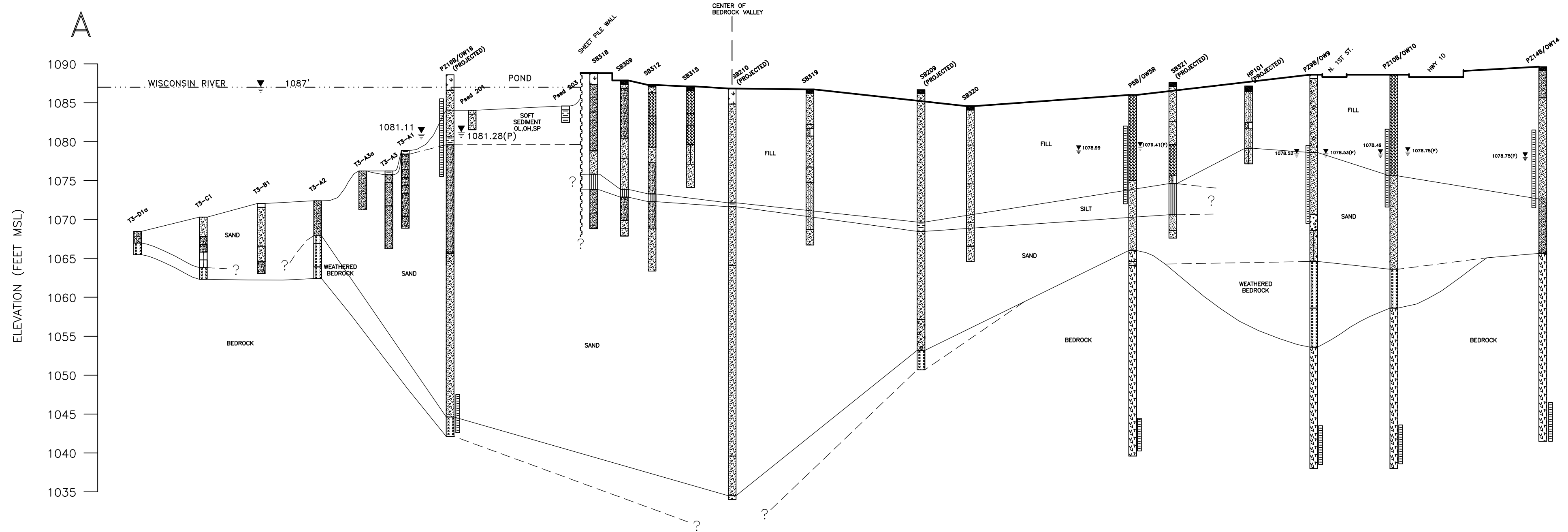
[EPK/BGH 4/22/11]

**Notes:**

- 1) Residential vapor intrusion screening values based on a target cancer risk of 1 x10<sup>-6</sup> (benzene) or hazard quotient of one (naphthalene). Results exceeding the residential vapor intrusion screening values are bold.
- 2) Industrial/commercial worker vapor intrusion screening values based on a target cancer risk of 1 x10<sup>-6</sup> (benzene) or hazard quotient of one (naphthalene). Results exceeding the industrial/commercial worker vapor intrusion screening values are italicized/underlined.
- 3) Shallow samples are those collected <5 feet bgs.
- 4) Deep samples are those collected >5 feet bgs.

# **SHEETS**



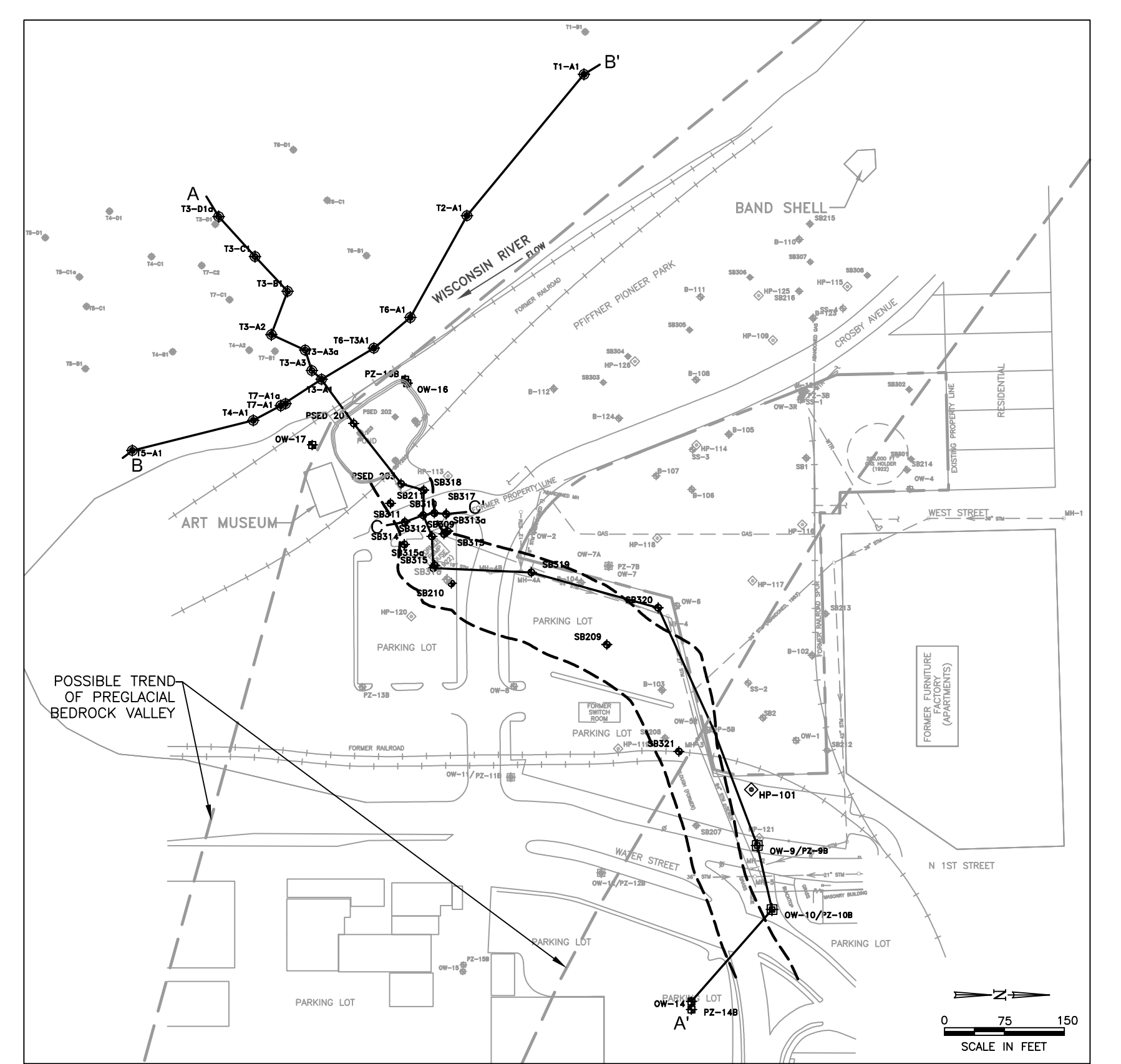
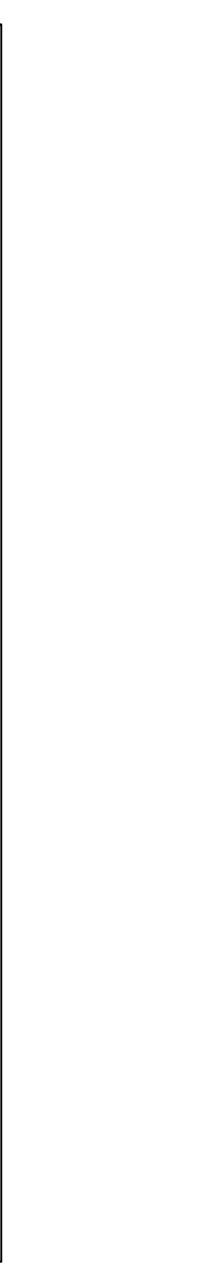
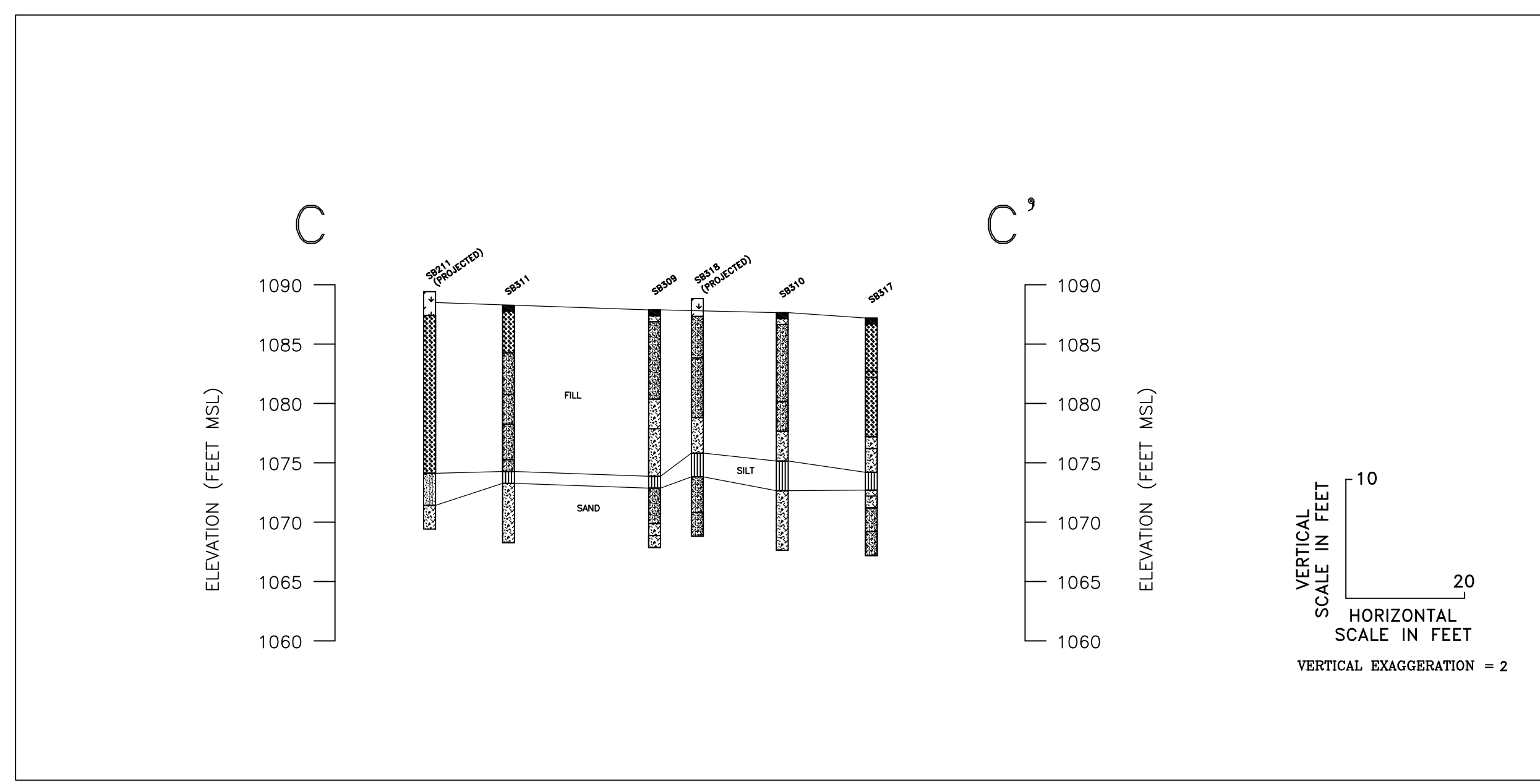
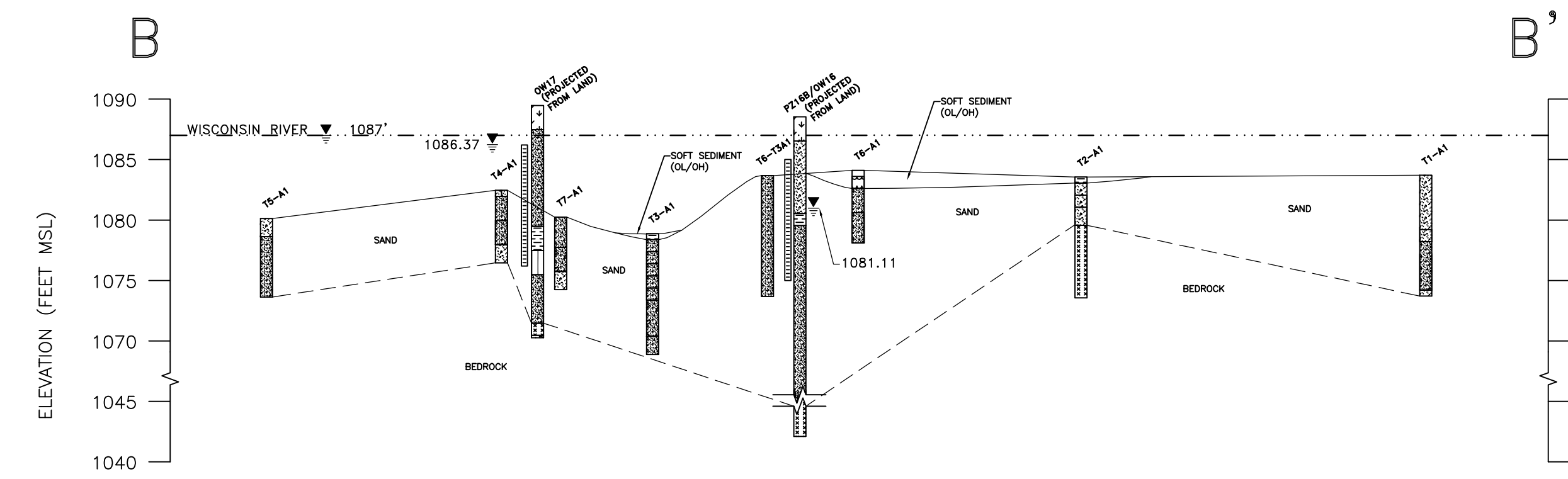


**LEGEND**

ORGANIC SILT	POORLY-GRADED SAND	SCREENED
HIGH PLASTICITY	WELL-GRADED SAND	INTERNA
ORGANIC SILT OR CLAY	GRAVELLY SAND	ND
POORLY-GRADED SAND WITH SILT	ELASTIC SILT	NOT DETECTED
POORLY-GRADED GRAVEL	TORSOL	NOT ANALYZED
POORLY-GRADED SAND WITH SILT AND GRAVEL	SALT	µg/L
WELL-GRADED SAND	SALTY SAND	MG/L
POORLY-GRADED SAND	WEATHERED BEDROCK	EXCEEDS NR 142
ASPHALT	BOUNDARY SAND	PREFERENTIAL LIMIT
WELL-GRADED SAND WITH SILT	GRANITE	ENFORCEMENT STANDARDS

NOTES:  
 1. PORTIONS OF CROSS SECTION BASED ON PREVIOUS BORINGS AND CHANGES TO 3075-010 BY SIMON HYDRO-SEARCH DATED 11/92 WITH INTERPRETATION BY NIT.  
 2. BEDROCK BORING FOR INSTALLED BY SIMON HYDRO-SEARCH USING WATER ROTARY METHOD WITH FRACTURE ZONES AS NOTED. BEDROCK BORINGS P2-78, P2-98, P2-108 AND P2-118 INSTALLED BY NIT USING SONIC METHOD AND CORE SAMPLING WITH FRACURES AS NOTED.  
 3. CROSS SECTION REPRESENTS A GENERALIZED INTERPRETATION OF SUBSURFACE CONDITIONS. STRATUM LINES ARE BASED ON INTERPOLATION BETWEEN BORINGS AND MAY NOT REPRESENT ACTUAL SUBSURFACE CONDITIONS. FOR A DETAILED DESCRIPTION OF INDIVIDUAL BORINGS, REFER TO SOIL BORING LOGS IN PREVIOUS REPORTS.  
 4. GROUNDWATER ELEVATIONS SHOWN ARE APPROXIMATE BASED ON MEASUREMENTS BY NIT.

VERTICAL SCALE IN FEET: 10  
 HORIZONTAL SCALE IN FEET: 80  
 VERTICAL EXAGGERATION = 8



**NATURAL RESOURCE TECHNOLOGY**

**GEOLOGIC CROSS SECTIONS**

PROJECT NO. 1177/14.12  
 DRAWN BY: RLH 05/28/08  
 CHECKED BY: EPK 05/30/08  
 APPROVED BY: JMK 06/04/08

REMEDIAL INVESTIGATION REPORT  
 WISCONSIN PUBLIC SERVICE CORPORATION  
 FORMER MANUFACTURED GAS PLANT, STEVENS POINT, WISCONSIN

REFERENCE: SHEET NO. 1

