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October 8, 2021

Ms. Sarah Krueger
Contaminated Sediments Specialist
Remediation & Redevelopment Program
Wisconsin Dept. of Natural Resources
2984 Shawano Ave.
Green Bay, WI 54313

RE: Transmittal of 2020-2021 Annual Groundwater Monitoring Report – Former We Energies Appleton MGP Site, 337 Water St., Appleton, WI WDNR BRRTs Activity #02-45-000042, FID #445033380

Dear Ms. Krueger:

Enclosed for your information and file is the 2020-2021 Annual Groundwater Monitoring Report for the above referenced site. Notifications to the abutting property owners were also sent. As noted in prior correspondence with the previous WDNR site project manager, Ms. Jennifer Borski, we are requesting DNR's formal response and acknowledgement to our January 2016 "Request for Technical Assistance" (submitted with \$700 fee), and subsequent technical memo report (submitted June 6, 2016) on the vapor intrusion (VI) assessment completed at the Fox River Mills property adjacent to the former Appleton MGP site. As presented in the report, we believe the report clearly documents the absence of a complete VI pathway at the site.

Based on the stability of the groundwater plumes and NAPL observations, Annual routine monitoring events will continue to occur in April of each year. Groundwater in Area 1 and Area 2 will continue to be monitored for the current Annual list of parameters as presented in this report.

Please do not hesitate to contact me at (414) 221-2156 or via email at frank.dombrowski@wecenergygroup.com if you have any questions or if further information may be required.

Sincerely,

A handwritten signature in black ink that reads "Frank Dombrowski".

Frank Dombrowski
Principal Environmental Consultant
WEC Energy Group – Business Services
Environmental Dept.

Enclosure

CC: Project File
B. Hennings, Ramboll
A. Cawrse, Ramboll

Mr. Frank Dombrowski
WEC Business Services, LLC- We Energies
333 W. Everett Street, A231
Milwaukee, WI 53203

2020-2021 Annual Report – January 1, 2020 through October 8, 2021

Appleton City (Coal Tar), aka Appleton MGP, 337 Water Street, Appleton, Wisconsin: WDNR BRRTs Activity #02-45-000042, FID #445033380

Dear Mr. Dombrowski:

October 8, 2021

Ramboll Americas Engineering Solutions, Inc. (Ramboll) is providing this 2020-2021 Annual Report for the former manufactured gas plant (MGP) site located at 337 Water Street in Appleton, Wisconsin. This report includes two annual groundwater sampling events completed in April 2020 and April 2021. The enclosed report contains the following Sections:

Ramboll
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- Executive Summary
- Section 1- 2020-2021 Field Activities: A summary of groundwater sampling activities and deviations
- Section 2 - Groundwater Flow: A summary of groundwater flow observations including water table and piezometric surface maps.
- Section 3 - Groundwater Quality: A summary of groundwater quality analyses including updated tables and graphs, as well as specific discussions of arsenic sampling and non-aqueous phase liquid (NAPL) observations
- Section 4 - Summary and Project Direction: A summary of observations and discussion of future reporting.

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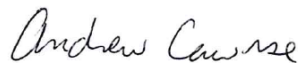
The Operation, Maintenance, Monitoring and Optimization Reporting of Soil and Groundwater Remediation Systems Form 4400-194 is attached as Appendix D.

Sincerely,



Brian G. Hennings, PG
Managing Hydrogeologist

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Scientist

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Attachments: 2020-2021 Annual Report

For Distribution to: Ms. Sarah Krueger, WDNR (Hardcopy & Electronic)
Mr. Ross Buetow, City of Appleton (Hardcopy & Electronic)
Mr. Dean Bornemann, Oakbrook Corp. (Hardcopy & Electronic)

Intended for
We Energies

Date
October 8, 2021

Project No.
19401001019

2020-2021 ANNUAL REPORT

APPLETON CITY (COAL TAR),


AKA APPLETON MGP

2020-2021 ANNUAL REPORT APPLETON CITY (COAL TAR), AKA APPLETON MGP

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Project no. **1940101019**
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Description **Annual report in support of groundwater monitoring from 2020 through 2021.**

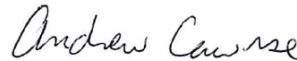
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Brian G. Hennings, PG
Senior Managing Hydrogeologist

"I, BRIAN G. HENNINGS, HEREBY CERTIFY THAT I AM A HYDROGEOLOGIST AS THAT TERM IS DEFINED IN S. NR 712.03 (1), WIS. ADM. CODE, AM REGISTERED IN ACCORDANCE WITH THE REQUIREMENTS OF CH. GHSS 2, WIS. ADM. CODE, OR LICENSED IN ACCORDANCE WITH THE REQUIREMENTS OF CH. GHSS 3, WIS. ADM. CODE, AND THAT, TO THE BEST OF MY KNOWLEDGE, ALL OF THE INFORMATION CONTAINED IN THIS DOCUMENT IS CORRECT AND THE DOCUMENT WAS PREPARED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS IN CHS. NR 700 TO 726, WIS. ADM. CODE."



Andrew G. Cawrse
Scientist

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
cm/s	centimeters per second
CSM	conceptual site model
DNAPL	dense non-aqueous phase liquid
ES	Enforcement Standard
ft	foot/feet
ft/ft	feet per foot
ft/yr	feet per year
ISS	in-situ solidification
MGP	Manufactured Gas Plant
NA	natural attenuation
NAPL	non-aqueous phase liquid
NAVD88	North American Vertical Datum of 1988
O&M	Operations and Maintenance
PAL	Preventive Action Limit
Ramboll	Ramboll Americas Engineering Solutions, Inc.
Site	Former We Energies Appleton MGP site
WDNR	Wisconsin Department of Natural Resources

EXECUTIVE SUMMARY

As proposed in the 2019 Annual Groundwater Monitoring Report, data collected from 2020 and 2021 have been combined into this single report. At the former We Energies Appleton MGP site and abutting properties, groundwater flow directions are consistent with previous years. Groundwater quality data collected in 2020 and 2021 are also consistent with previous data collected at the Site. Consistent with past results, wells with the highest concentrations of contaminants are located in the lower till unit beneath the in-situ solidification (ISS) treatment area. The concentrations of contaminants in the lower till unit display stable to decreasing trends.

Concentrations of contaminants in groundwater south of the canal (Area 2) are lower than those observed in at the former MGP site north of the Canal (Area 1). Residual dense non-aqueous phase liquid (DNAPL) is measurable in two wells screened in the upper weathered bedrock unit of Area 2 and was observed in trace amounts in one well screened in the lower till unit of Area 1. DNAPL levels are stable and, with Wisconsin Department of Natural Resources (WDNR) concurrence, product recovery efforts were discontinued in 2018.

On June 24, 2021, WDNR approved abandonment of well MW-10 to facilitate development of the Ellen Kort Peace Park, by the City of Appleton. The well was abandoned on July 16, 2021. Groundwater samples were collected from MW-10 prior to abandoning the well as requested by WDNR.

Routine annual groundwater and DNAPL monitoring events will continue in 2022.

1. FIELD ACTIVITIES

1.1 2020 Field Activities

Field activities on the former MGP property (Figure 1) began in April 2020. Site visits were reduced from semi-annually to annually starting in 2020, in accordance with the 2020 Groundwater Monitoring Plan. Groundwater and surface water conditions observed in April 2020 were consistent with previous observations. No additional field activities were completed.

1.2 2021 Field Activities

Field activities on the former MGP property (Figure 1) began in April 2021. An annual site visit was made in accordance with the 2021 Groundwater Monitoring Plan. Groundwater and surface water conditions observed in April 2021 were consistent with previous observations.

The City of Appleton is planning to construct a temporary gravel access road from West Water Street down to the Fox River on the City owned property located southwest of the former Appleton MGP site in preparation for the development of the Ellen Kort Peace Park. Monitoring well MW-10 was located directly in line with the curb cut/driveway opening for the access road so the City requested that MW-10 be converted to a flushmount well or abandoned. Due to utilities and the location of the existing driveway opening, the City was unable to relocate the access road. Ramboll determined that the best course of action was to abandon the well and provided WDNR with the following justification to abandon the well without replacement:

- There was a high likelihood of the well becoming lost/damaged during construction and use of the access road if it was converted to a flushmount.
- Contaminants of concern were either not detected or detected at very low levels during past groundwater sampling events. In addition, NAPL was not been observed in this well.
- MW-10 was only used for water levels, no groundwater parameters are analyzed at this well. Nearby well MW-19S also monitors shallow groundwater and water levels will continue to be collected from this well.
- The water level information collected from MW-10 was not used for creating groundwater contours provided in the Annual Reports for the Site.

On June 24, 2021, WDNR approved the well abandonment and well MW-10 was abandoned on July 16, 2021. Well abandonment documentation is provided in Appendix A. Groundwater samples were collected from MW-10 prior to abandoning the well and discussed in Section 3.0.

1.3 Lawrence University Academy of Music Property

WDNR was provided with a July 6, 2021 "Soil and Groundwater Sampling, Lawrence University Academy of Music Property (BRRTS #02-45-582612) Site Status Letter" prepared by Westwood Infrastructure, Inc. WDNR reviewed the data and concluded that elevated concentrations of benzene, naphthalene, and ethylbenzene that were observed at well MW-3 located on the Lawrence Academy of Music Property site are related to the release at the Appleton City (Coal Tar) MGP site. On August 9, 2021, WDNR issued a "Notification of Related Groundwater Data" letter to We Energies and indicated that the additional data from the Lawrence Academy of Music Property site should be included in the site investigation dataset for the Appleton City (Coal Tar) MGP site and "...used to guide further investigation." Following review of the information, We

Energies issued a response letter dated September 22, 2021 which disputes the conclusion that the impacts identified at this property are associated with the former Appleton MGP site. In addition, We Energies and WDNR discussed the issue in a teleconference on October 6, 2021 to determine possible next steps to resolve outstanding questions and concerns. No further discussion of the Lawrence University property is provided in this 2020-2021 Annual Report for the former MGP property.

2. GROUNDWATER FLOW

Due to differences in groundwater flow conditions between the former MGP property to the north of the Fox River, and the island of land on which Building 415 is located (Figure 2), the two areas have been designated as separate groundwater flow (hydrogeologic) areas (Figure 3).

Hydrogeologic Area 1 includes the former MGP property, completed remediation area, and surrounding areas to the north of the Fox River. Hydrogeologic Area 2 includes the island of land south of the Fox River Canal where Building 415 is located.

Area 1 is located entirely upstream of the Middle Appleton Dam and hydroelectric units located within the island area. Groundwater in Area 1 is monitored in the lower till/weathered bedrock unit (the flow zone below and surrounding the ISS treatment area, referred to as the "lower till" in this report) and the bedrock unit (piezometers are screened in more competent rock 10 to 15 ft below the weathered bedrock). Surface water in Area 1 is monitored at staff gauge SG-3 (see conceptual model profiles in Appendix B).

Area 2 is located on an island that is part of a collection of dams and hydroelectric units that span the Fox River and are collectively referred to as the Middle Appleton Dam. Building 415 and the areas around the building within Area 2 are effectively an extension of the Middle Appleton Dam spanning the distance between the surface water control gates south of Building 415 and the hydroelectric unit between Buildings 415 and 405. Groundwater in Area 2 is monitored in the fill unit (water table) and the upper weathered bedrock unit that is equivalent to the lower till/weathered bedrock unit present in Area 1. Upstream surface water is monitored at SG-3 (the same as Area 1); downstream surface water is monitored at SG-4 which is the outflow of water from the hydroelectric unit between Buildings 415 and 405 (see conceptual model profiles in Appendix B). Surface water measurements from SG-4 represent surface water elevation on the downstream side of the Middle Appleton Dam. Water levels observed at SG-4 are typically 10 ft lower than water levels observed at SG-3.

Groundwater elevations are provided in Table 1. Vertical gradient calculations and horizontal groundwater velocity calculations are not included in this report, and were last updated in 2016. Piezometric surface maps generated from annual groundwater monitoring data collected in April for Areas 1 and 2 are presented on Figures 4 through 7.

2.1 Lower Till Groundwater Flow (Area 1)

Groundwater measurements in Area 1 were collected on an annual basis during the month of April in 2020 and 2021 (Table 1). Piezometric surface maps for the 2020 (Figure 4A) and 2021 (Figure 4B) annual sampling events were prepared to illustrate groundwater flow. Groundwater elevation readings from shallow wells MW-08, MW-09, MW-10, and MW-19S are provided for reference on the lower till groundwater figures, but are not included in the contouring because these wells are screened above the lower till.

The lower till piezometric surface maps continue to display two distinct regions of groundwater flow:

- A western region, defined by the area between monitoring wells MW-02R, MW-12R, MW-13R, MW-19, MW 20, MW-21, and MW-25
- An eastern region, defined by the area between monitoring wells MW-20, MW-21, MW-22, and MW-24

The western region of the lower till is characterized by variable flow directions and hydraulic gradients. Groundwater elevation measurements at monitoring wells during April 2020 were approximately 0.5 to 1 ft higher than normal, and river elevations, both upstream and downstream of the dam, were higher than normal. River elevation upgradient of the dam at SG-3 was approximately 0.5 ft higher than normal, and the elevation downgradient of the dam at SG-4 was 1 ft higher than normal. The increased groundwater and surface water elevations are likely due to high precipitation leading up to the sampling event. Groundwater elevations during the April 2021 event were consistent with previous measurements. As discussed in previous reports, variable flow patterns observed beneath the western portion of the Site (including small scale flow reversals) are likely due to the convergence of upgradient recharge coming from the west and influx from the canal towards the Site. MW-25 has consistently higher groundwater elevations than neighboring wells and the flow map (Figures 4A and 4B) indicates this well is upgradient of the ISS treatment area.

The eastern region of the lower till is located closer to the Middle Appleton Dam and is characterized by consistent northeasterly flow direction. In proximity to MW-24, groundwater flow has a greater easterly component, towards the Fox River. The more consistent flow direction and gradient is associated with closer proximity to the dam. Groundwater elevation readings collected from MW-24 downgradient of the Site indicate the hydraulic gradients observed in the eastern region of the lower till continue toward the Middle Appleton Dam.

The surface water elevation measurements from SG-3 remain consistently higher than the lower till groundwater elevation measurements from the nearest wells on both sides of the canal (e.g., April 2020 and 2021 MW-22 and MW-23, Table 1); indicating that the canal is behaving as a losing stream.

2.2 Bedrock Groundwater Flow (Area 1)

Groundwater elevation measurements were collected from lower bedrock wells during April 2020 and 2021. Bedrock groundwater flow direction was east to northeast (Figures 5A and 5B), consistent with previous measurements and similar to the large-scale lower till groundwater flow direction.

2.3 Water Table Groundwater Flow (Area 2)

Soil borings in Area 2 indicate the presence of fill material over weathered bedrock. Water table wells (MW-23, MW-26, MW-27, and MW-28) monitor shallow groundwater flow and quality in Area 2. Semi-annual water level measurements were collected from water table wells (Table 1). Groundwater flow maps were generated using measurements collected in April 2020 (Figure 6A) and April 2021 (Figure 6B).

Water table groundwater flow is influenced by a historic needle dam structure, drains associated with Building 415, and a hydroelectric unit. The needle dam structure, located between wells MW-26 and MW-28, was identified through file searches and confirmed by the property manager (Figures 6A and 6B). Drains associated with Building 415 were identified through site visits and sub-slab investigation activities which indicate the presence of drains that redirect groundwater below Building 415 to the downstream side of the hydroelectric unit located between Buildings 415 and 405 (Figures 6A and 6B, and conceptual model profiles, Appendix B). File searches also indicate the infrastructure of the hydroelectric unit located between Buildings 405 and 415 was constructed with a flume that extends deep into the bedrock. The remnant of the needle dam,

the western wall of Building 415, and the hydroelectric turbine infrastructure form a structural barrier to shallow groundwater flow indicated by the orange line on Figures 6A and 6B. Groundwater above bedrock flows toward the structural barrier and is then intercepted by the drains and directed to the downstream side of the dam. Water table elevations collected from MW-26, immediately downgradient of the historic needle dam structure, are consistently 4 to 5 ft lower than water table elevations of the other wells. MW-26 is not believed to be directly connected with wells on the other side of this structural barrier as indicated in Figures 6A and 6B.

Groundwater flows primarily from southwest to northeast across Area 2 toward Building 415 where it is intercepted by drains and discharged in the Fox River near SG-4 on the downstream side of the hydroelectric unit (Figures 6A and 6B). Groundwater elevations at MW-26 are typically stable around the 712 ft NAVD88, which is about 7 to 8 ft lower than the surface water elevation of the Fox River upstream of the dam (SG-3) and about 2 ft higher than the surface water elevation of the Fox River downstream of the dam (SG-4). Note that the groundwater elevations at MW-26 remain relatively stable even though the surface water downstream of the dam changes a few feet between sampling events (Figures 6A and 6B) which suggests that the water table around MW-26 is not strongly influenced by changes in downstream or upstream surface water elevation. Relatively stable groundwater elevations at MW-26 likely reflect controls by drains that run under Building 415 which also creates a consistent north and northeast groundwater flow.

Groundwater flow is northeast to southeast during the April 2020 and 2021 events, which is consistent with flow direction during previous sampling events in Area 2. Hydraulic gradients and vertical gradients were last calculated for the 2016 Annual Report (NRT/OBG, 2017). Hydraulic gradients were calculated to be 0.0486 feet per foot (ft/ft), much steeper than those of Area 1, due to the drains below Building 415. Flow velocity in Area 2 was calculated using slug test conductivity values, the hydraulic gradient near MW-27, and an effective porosity of 30 percent (Maidment, 1993). Groundwater velocity in the fill unit was calculated to be 862 feet per year (ft/yr) in Area 2 (Table 3, OBG, 2018).

Vertical gradients were last calculated for all nested wells in Area 2 in 2018. The vertical gradients are generally downward and range from 2.9×10^{-1} to 8.1×10^{-3} ft/ft (Table 2, OBG, 2018) which is consistent for wells located upgradient of a dam. The most frequent exception is well nest 27 where vertical gradients have been consistently and strongly upward near 2.3×10^{-1} ft/ft. The upward gradients observed at this location are caused by the close proximity of these wells to the building drains which effectively lower the elevation of the water table (MW-27) relative to potentiometric head in the upper weathered bedrock below (PZ-27).

2.4 Upper Weathered Bedrock Groundwater Flow (Area 2)

Area 2 weathered bedrock monitoring wells PZ-23, PZ-26, PZ-27, and PZ-28 (Figures 7A and 7B) are screened in material that is similar in origin to the lower till/weathered bedrock in Area 1. Wells are screened in the top 15 ft of weathered bedrock. The building drains and former needle dam structure do not extend into the weathered bedrock and do not influence groundwater flow in this unit, as reflected by the southerly groundwater flow direction.

Groundwater flow in the weathered bedrock was from north to south across Area 2 during the April 2020 (Figure 7A) and April 2021 (Figure 7B) sampling events, which is consistent with flow direction during previous sampling events.

Slug testing was completed at PZ-27 on July 15, 2015 and included in the 2015 Annual Report. Calculated conductivity values ranged from a maximum of 1.2×10^{-2} centimeters per second (cm/s) to a minimum of 9.4×10^{-3} cm/s and a mean value of 1.0×10^{-2} cm/s, which is within the expected range for weathered or fractured bedrock (NRT, 2015).

Flow velocity through the bedrock in Area 2 was last calculated in 2018 using slug test conductivity values, the hydraulic gradient, and an effective porosity of 15 percent (Maidment, 1993). Groundwater velocity was calculated to be 5,089 ft/yr (Table 3, OBG, 2018) which is not unreasonable for groundwater flow through weathered or fractured rock. Groundwater flow velocities observed in the upper weathered bedrock of Area 2 appear to be driven by the steep gradient between headwaters of the dam (SG-3) and the tailwater (SG-4). Calculated flow velocities are limited to vicinity of the dam structures. Flow velocities outside the influence of the dam are expected to be similar to those in the lower till in Area 1.

3. GROUNDWATER QUALITY

Groundwater analytical results are summarized in Tables 2 through 4, presented on Figures 8 through 14, and analytical reports are included in Appendix C. Benzene, toluene, ethylbenzene, and xylenes (BTEX) and naphthalene have been identified as indicators of MGP constituents in groundwater, with benzene being the most frequently detected BTEX compound above the NR140 Enforcement Standard (ES) at the Site. Benzene and naphthalene concentrations and trends are discussed in Sections 3.1 through 3.4 below. Arsenic results for Area 1 and Area 2 are discussed in Section 3.5 below. Field and laboratory indicators of natural attenuation (NA) continue to be collected and are summarized on Table 4. NA parameters are considered in Form 4400-194 (Appendix D) as part of the Site evaluation. Benzene and naphthalene trends were analyzed at wells both on a short-term (over the preceding five years) and long-term (since installation of each well) basis. Trend analyses results are summarized in Appendix E with trend graphs provided in Appendices E1 and E2. Results of trend analyses are discussed in Sections 3.1 through 3.4 below.

Groundwater samples were also collected from well MW-10 (screened above the lower till) using the same low-flow sampling techniques used during routine groundwater monitoring events to evaluate groundwater quality prior to well abandonment on July 16, 2021. Samples were analyzed for BTEX, naphthalene, arsenic, and field parameters. Results are provided in Tables 2 and 3. BTEX and naphthalene were not detected in groundwater. Arsenic was detected at concentrations below the Preventive Action Limit (PAL) and ES.

3.1 Lower Till Groundwater Quality (Area 1)

Groundwater analytical results from MW-25 (upgradient) and MW-24 (downgradient) establish the lateral extent of the groundwater plume in the lower till of Area 1 (Table 2). The continued variable flow pattern in the lower till suggests that neither Mann-Kendall nor Mann-Whitney statistical analyses may be appropriate for trend analysis. Concentration (Log_{10}) time series, concentration (Log_{10}) versus groundwater elevation graphs, and isoconcentration contours provide the best means to evaluate concentration trends and plume stability.

In April 2020 and 2021, concentrations of benzene in wells MW-02R, MW-12R, MW-13R, MW-20, MW-21, and MW-22 were detected exceeding the ES. Benzene was not detected at well MW-19 during the April 2020 sampling event but was detected at concentrations exceeding the ES during the April 2021 sampling event.

Naphthalene concentrations were also above the ES in wells MW-12R, MW-13R, MW-20, MW-21, and MW-22 during the April 2020 and 2021 sampling events. At well MW-02R, naphthalene was detected at concentrations below the PAL during the April 2020 sampling event and above the PAL but below the ES during the April 2021 sampling event. In addition, naphthalene was not detected during either of the sampling events at well MW-19. Naphthalene has not exceeded the ES at MW-19 since 2014.

Concentrations of benzene and naphthalene at upgradient well MW-25 have been detected above and below the ES, but provide adequate upgradient definition of groundwater impacts in the lower till. Benzene and naphthalene were below the ES at MW-25 during the sampling events in 2020 and 2021. Benzene has been below the ES during 14 of 18 sampling events, and naphthalene has been below the ES during 15 of 18 sampling events. This is consistent with the

conceptual site model that MW-25 is located at the very upgradient edge of the benzene plume in the lower till. Benzene and naphthalene were both non-detect in downgradient well MW-24 during the 2020 and 2021 sampling events. Naphthalene has not been detected in MW-24, and benzene has been detected during 3 of 14 sampling event, all below the ES.

Long-term and short-term trends for benzene and naphthalene were evaluated for the lower till wells in Area 1 (Appendix E). All wells in the lower till Area 1 displayed decreasing to stable trends with the following exceptions:

- MW-12R displayed increasing short-term trends for benzene and increasing long-term and short-term trends for naphthalene; however, the slopes for these trend lines are very close to stable threshold (near 0.0001), and the coefficient of determination is low for both trend lines, indicating weak correlation between concentration and time.
- MW-13R displayed increasing short-term trends for benzene and naphthalene, while displaying flat (stable) long-term trends. The slopes for these trend lines are very close to stable threshold (near 0.0001), and the coefficient of determination is low for both trend lines, indicating weak correlation between concentration and time.
- MW-25 displayed increasing long-term trends for naphthalene, while displaying decreasing short-term trends for benzene and naphthalene and flat (stable) long-term trends for benzene. The coefficient of determination on the long-term trends has decreased from 0.78 to 0.25 for naphthalene between 2017 and 2021, indicating groundwater quality is trending more toward stable.

Isoconcentration contours are generated using the annual data collected in April of each year for benzene and naphthalene (Figures 8 and 9). The isoconcentration lines fluctuate slightly from year to year but remain in the same general location over time; indicating the plume is stable. Groundwater data from wells MW-24 and MW 25 allow for isoconcentration lines to be drawn that estimate the limits of benzene and naphthalene concentrations in groundwater above their respective ES in Area 1. Isoconcentration lines on Figures 8 and 9 indicate the limits of the plume are adequately defined by the monitoring well network. Improving groundwater quality, specifically reductions in benzene concentration at MW-21 below 1,000 µg/L illustrate portions of the Site above 1,000 µg/L are decreasing. Figure 9 also illustrates how the isoconcentration contours are stable and continue to contract toward the center of the Site, indicating improving groundwater quality.

3.2 Bedrock Groundwater Quality (Area 1)

Benzene concentrations have been below the ES in all Area 1 bedrock wells since 2015, and naphthalene concentrations have been below the ES in Area 1 bedrock wells, except for PZ-22B, since their installations (Table 2). Concentration graphs illustrate concentrations over time in the bedrock at individual well locations (Figure 10).

Concentration trends indicate stable (flat) to decreasing long-term trends in all deep bedrock wells for benzene and naphthalene (Appendix E1). PZ-21B was not evaluated for a short-term benzene trend since all data from 2015-2021 was non-detect. While all Area 1 bedrock wells had increasing naphthalene short-term trends in 2019, only PZ-21B continues to have an increasing short-term trend in 2021. Trends at PZ-20B are now decreasing and PZ-22B is now flat (stable) which further indicates improving groundwater quality. Isoconcentration lines were not generated for the

bedrock wells due to the presence of benzene and naphthalene detections above the ES being limited to a single well (PZ-22B).

3.3 Water Table Groundwater Quality (Area 2)

Of the four water table wells in Area 2, MW-23 and MW-28 contain very low to non-detectable concentrations of BTEX and naphthalene (Table 2). Analytical sampling of MW-23 was stopped in 2012 after three sampling events with no naphthalene detections, and seven events with no BTEX detections. A confirmation sample collected in October 2018 confirmed benzene and naphthalene were not detectable, and groundwater samples were not collected from MW-23 in 2020 or 2021. Monitoring of BTEX and naphthalene continues at MW-28 with no detections. MW-26 and MW-27 have consistently exceeded the ES for benzene since their installations in 2015, with the exception of 2021 when benzene did not exceed the ES at MW-26. MW-27 has also exceeded the ES for naphthalene since its installation. Concentrations of benzene and naphthalene in wells MW-26 and MW-27 are lower than concentrations observed in the lower till wells MW-21 and MW-22 (Area 1). Time series of concentrations in Area 2 water table wells are presented on Figures 11 and 12. Benzene and naphthalene trends indicate short- and long-term trends are decreasing in MW-26 and stable in MW-27 (Appendix E). Concentration trends at MW-27 have also improved from displaying increasing trends in 2017 to displaying flat trends in 2021. Visual inspection of the graphs presented on Figures 11 and 12 also indicate benzene and naphthalene trends are stabilizing in these wells.

3.4 Upper Weathered Bedrock Groundwater Quality (Area 2)

Upper weathered bedrock (lower till equivalent) wells PZ-26 and PZ-28 contain measurable amounts of free product (Table 5). No groundwater analysis is completed when product is present. Further discussion of free product (non-aqueous phase liquid [NAPL] observations) is provided below in Section 3.6. Remaining upper bedrock wells in Area 2, PZ-23 and PZ-27, have exceeded the ES for benzene and naphthalene during all sampling events since their installation, however, they remain lower than observed concentrations in lower till wells MW-21 and MW-22 (Area 1). Time series of benzene and naphthalene are presented on Figure 13. Benzene and naphthalene trends at PZ-23 and PZ-27 were stable to decreasing both long-term and short-term (Appendix E).

3.5 Arsenic in Groundwater

Dissolved arsenic is monitored annually in Area 1 and Area 2 (Table 3, Figure 14). In Area 1, samples are collected only from wells screened in the lower till. Arsenic concentrations in Area 1 bedrock were historically below the ES and sampling was discontinued. The highest arsenic concentrations continue to be observed in the lower till near the center of the Site around MW-13R, MW-20, and MW-21. Arsenic concentrations at MW-12R, MW-22, and MW-25 were above the PAL in 2020 and 2021. Arsenic concentrations at MW-19 were above the PAL in 2020 and below the PAL in 2021. The arsenic concentration at downgradient monitoring well MW-24 was non-detectable in 2020 and detected at concentrations below the PAL in 2021.

Area 2 wells are sampled for arsenic annually, contingent on the absence of NAPL, with the exception of MW-23. Sampling was discontinued at MW-23 in 2010, after six consecutive samples below the ES. Water table wells MW-26 and MW-28 contained arsenic concentrations greater than the ES (Table 3, Figure 14) in 2020 and 2021. Arsenic concentrations at MW-26 and MW-28 were consistent with previously observed arsenic concentrations at these locations. Arsenic at

MW-27 was also consistent with previously observed concentrations above the PAL in 2020 and 2021. Area 2 lower till/weathered bedrock wells PZ-23 and PZ-27 had detections of arsenic above the PAL (Table 3). PZ-26 and PZ-28 were not sampled in 2020 or 2021 due to free product in both wells; however, neither well had arsenic detections when first installed in 2015. Arsenic concentrations in Area 2 are generally lower than those observed in Area 1 lower till wells MW-21 and MW-22.

3.6 NAPL Observations (Area 1 and Area 2)

In Area 1, 2020 NAPL observations and thickness measurements (Table 5) indicate trace amounts of NAPL in lower till well MW-21. NAPL was not observed in any Area 1 wells in 2021. Despite the presence of DNAPL, both short-term and long-term benzene and naphthalene trends were stable to decreasing at MW-21 (Appendix E).

In Area 2, measurable amounts of DNAPL are present in shallow bedrock wells PZ-26 and PZ-28. DNAPL thicknesses were between 0.85 and 2.25 ft in 2020 and between 0.18 and 2.40 in 2021 (Table 5). NAPL was not observed in rock recovered during installation of wells PZ-26 and PZ-28 indicating that NAPL thicknesses observed in these wells represents accumulation in the well. Conversely, oil droplets and a strong MGP-like odor were noted in the rock recovered from 17-20 ft below ground surface (bgs) in PZ-27 of Area 2. This piezometer was constructed from across the zone of NAPL observations (15-20 ft bgs) with filter pack extending up to 15 ft bgs. Regardless of the well screen and filter pack overlapping with observations of NAPL in this boring location, no measurable NAPL has been observed in PZ-27. Due to the stable nature of the DNAPL accumulation in the shallow bedrock wells and limited recovery, DNAPL thickness will continue to be monitored during future sampling events, but attempts will not be made to recover DNAPL from the wells.

3.7 Limit of Groundwater Impacts

Groundwater flow in the lower till in Area 1 is illustrated on Figure 4. Topographic characteristics of the area immediately to the north of West Water Street prevent the installation of monitoring wells, which may otherwise be used to conclusively define lateral extent in this direction. To visualize groundwater flow outside of the well network north of the ISS area, a conceptual flow model was created for the 2014 Annual Report (Appendix B, Figure 14). Prior to the installation of the series of dams that span the Fox River in Appleton, groundwater would flow from upland areas (bluffs) toward the Fox River and discharge into the river, making the Fox River a gaining stream. Following the placement of the dam, groundwater flow upstream of the dam is locally reversed as increased surface water elevations caused a reversal of the hydraulic gradient and flow away from the canal, inland towards water flowing down from the bluffs (surface water recharge). This changed the river immediately upstream of the dam from a gaining stream (receiving groundwater) to a losing stream (discharging surface water into the ground) adjacent to the former MGP Site. Upland recharge is deflected downstream as it encounters the water flowing in from the river. Consequently, groundwater passing beneath the former MGP Site converges with the upland recharge and flows to the north around the dam (Appendix B, Figure 14). The flow from the upland bluffs creates a naturally occurring hydraulic barrier to further northward groundwater flow and contaminant migration beyond the area where these groundwater flow paths converge.

The information presented in the conceptual model was used to develop a line representing the limit of groundwater impacts (Figure 15). The limit of groundwater impacts (Figure 15) is based

on groundwater data collected from Site wells and the conceptual model which indicates groundwater flow paths converge between West Water Street and the top of the bluffs. Unclosed benzene contours from Figure 8 are included on this figure with examples of closed contours drawn using the limit of groundwater impacts. Exceedances of other constituents of concern (ethylbenzene, toluene, xylenes, and naphthalene) (Table 2) also occur within the limit of groundwater impacts.

NAPL and groundwater impacts observed in Area 2 are consistent with the conceptual site model (CSM) presented as a series of profiles in Appendix B. The CSM includes Area 1 and Area 2, including details of Building 415. Pre-remedial conditions are illustrated on CSM-1 where NAPL deposited in the Fox River (removed during remedial construction, CSM-2) may have been the source for NAPL observed in shallow bedrock of Area 2 (Appendix B). The CSM-3 and CSM-4 illustrate the location of soil vapor probes and the relationship between groundwater and Building 415. Investigation of Building 415 indicates drains are present that lower the water table below the lowest occupied level of the building. Previously completed vapor intrusion evaluations indicate the vapor pathway is incomplete within the building.

4. SUMMARY AND PROJECT DIRECTION

Data collected during the 2020 and 2021 groundwater monitoring indicate the following:

- In Area 1 deep bedrock benzene concentrations have declined below the ES and, with the exception PZ-22B, naphthalene concentrations have declined below the ES. In the lower till, variable groundwater flow patterns continue to be present in the western portion of the Site. The western extent of the area of variable flow is defined by MW-25. Trace amounts of residual DNAPL are stable in well MW-21. The presence of a groundwater hydraulic barrier located between West Water Street and the top of the bluffs allows for the limit of groundwater impacts north of the Fox River to be estimated and closed concentration contour lines to be drawn. MW-25 defines the upgradient edge of impacts and MW-24 defines the downgradient limit of impacts.
- In Area 2, the presence of DNAPL has been observed in wells PZ-26 and PZ-28 screened in upper weathered bedrock. DNAPL measurements are stable. Monitoring wells PZ-23 and PZ-27 have ES exceedances of benzene and naphthalene. In the water table zone, no DNAPL has been observed. Monitoring well MW-27 contained benzene and naphthalene concentrations above the ES in 2020 and 2021. Monitoring well MW-26 only contained benzene concentrations above the ES in 2020. Monitoring wells MW-23 and MW-28 have significantly lower (to non-detectable) benzene and naphthalene concentrations. All Area 2 water table and upper weathered bedrock wells have lower concentrations than the lower till wells MW-21 and MW-22 in Area 1. These results are consistent with the conceptual site model where trace amounts of MGP residual are contained within lower till/upper weathered bedrock. The upland and river sources of MGP residuals were removed during remedial construction.

4.1 Groundwater Monitoring Program

Based on the stability of the groundwater plumes and NAPL observations, Annual routine monitoring events will occur in April of each year (Table 6). Groundwater in Area 1 and Area 2 will continue to be monitored for the current Annual list of parameters presented on Table 6.

4.2 Future Reporting

We propose to submit the following documents in 2022:

- Semi-annual progress reports will be submitted electronically as required by WDNR.
- 10-Day notification letters and data summaries will be prepared for the Fox River Mills Apartments and submitted as required by regulation following routine groundwater monitoring events.
- A 2022 Annual Report. The 2022 Annual report will include a summary tables and figures of the groundwater sampling events and Operations and Maintenance (O&M) Reporting Form 4400-194.

5. REFERENCES

Maidment, David R., 1993. *Handbook of Hydrology*. The University of Michigan, McGraw-Hill.

Natural Resource Technology, Inc., April 8, 2016. *2015 Annual Groundwater Report*, Table 3a.

Natural Resource Technology, Inc., December 23, 2015. *December 2015 Technical Memorandum*.

Natural Resource Technology, an OBG Company, April 13, 2017. *2016 Annual Update Report*.

O'Brien & Gere Engineers, Inc. (OBG), May 29, 2018. *2017 Annual Update Report*.

TABLES

TABLE 1. GROUNDWATER ELEVATION SUMMARY

2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-02	727.34	726.01	721.94		02/18/2002	721.06	6.28
					05/07/2002	721.45	5.89
					08/19/2002	720.15	7.19
					09/06/2002	720.78	6.56
					11/12/2002	720.84	6.50
					02/20/2003	719.78	7.56
					05/22/2003	722.15	5.19
					08/01/2003	722.96	4.38
Well Abandoned, replaced with MW-2R							
MW-02R	743.93	741.41	706.00	43.02	10/19/2004	720.26	23.67
					11/30/2004	720.43	23.50
					01/11/2005	720.62	23.31
					02/08/2005	720.36	23.57
					03/08/2005	720.47	23.46
					04/18/2005	720.56	23.37
					07/05/2005	720.35	23.58
					10/17/2005	720.32	23.61
					01/10/2006	720.45	23.48
					04/19/2006	720.64	23.29
					07/19/2006	720.27	23.66
					08/28/2006	720.31	23.62
					10/24/2006	720.27	23.66
					03/08/2007	720.35	23.58
					04/25/2007	720.43	23.50
					10/08/2007	720.45	23.48
					04/07/2008	721.16	22.77
					10/20/2008	720.43	23.50
					04/20/2009	720.65	23.28
					09/15/2009	720.51	23.42
					10/07/2009	720.45	23.48
					04/06/2010	720.56	23.37
					10/04/2010	720.72	23.21
					01/18/2011	720.60	23.33
					04/11/2011	721.58	22.35
					07/13/2011	720.63	23.30
					10/03/2011	720.62	23.31
					10/10/2011	718.75	25.18
					10/14/2011	718.77	25.16
					10/20/2011	718.52	25.41
					11/17/2011	719.23	24.70
					01/04/2012	720.11	23.82
04/23/2012	720.66	23.27					
06/26/2012	720.12	23.81					
09/12/2012	719.99	23.94					
01/28/2013	720.41	23.52					
04/23/2013	721.85	22.08					
07/16/2013	720.61	23.32					
10/15/2013	719.97	23.96					
04/29/2014	721.43	22.50					
10/13/2014	720.33	23.60					
04/21/2015	720.72	23.21					
10/19/2015	720.49	23.44					
04/21/2016	721.25	22.68					
10/04/2016	720.75	23.18					
04/19/2017	721.28	22.65					
10/23/2017	719.14	24.79					
04/10/2018	720.30	23.63					
10/25/2018	721.30	22.63					
04/22/2019	721.81	22.12					
10/30/2019	721.11	22.82					
04/21/2020	721.63	22.30					
04/27/2021	720.74	23.19					

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Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-08	726.19	724.51			02/18/2003	720.37	5.82
					05/07/2002	720.20	5.99
					08/19/2002	719.88	6.31
					09/06/2002	719.77	6.42
					11/12/2002	719.93	6.26
					02/20/2003	719.98	6.21
					05/22/2003	721.64	4.55
					08/01/2003	720.89	5.30
					10/18/2004	720.90	5.29
					12/02/2004	720.08	6.11
					01/11/2005	719.98	6.21
					02/10/2005	720.12	6.07
					03/10/2005	719.96	6.23
					04/19/2005	720.21	5.98
					07/07/2005	719.91	6.28
					10/17/2005	719.94	6.25
					01/11/2006	720.00	6.19
					04/20/2006	720.04	6.15
					07/20/2006	719.88	6.31
					08/28/2006	719.92	6.27
					10/24/2006	719.80	6.39
					03/08/2007	719.97	6.22
					04/26/2007	720.01	6.18
					10/09/2007	720.28	5.91
					04/08/2008	721.54	4.65
					10/20/2008	719.90	6.29
					04/20/2009	720.11	6.08
					09/15/2009	720.08	6.11
					10/08/2009	719.94	6.25
					04/07/2010	720.33	5.86
					10/05/2010	720.27	5.92
					01/18/2011	720.10	6.09
					04/12/2011	720.78	5.41
					07/13/2011	720.01	6.18
					10/03/2011	720.28	5.91
					10/10/2011	718.88	7.31
					10/14/2011	718.91	7.28
					10/20/2011	718.41	7.78
					11/17/2011	719.71	6.48
					01/04/2012	719.57	6.62
					04/23/2012	720.14	6.05
					06/26/2012	719.70	6.49
					09/12/2012	719.62	6.57
					01/28/2013	720.04	6.18
					04/23/2013	721.40	4.82
					07/16/2013	720.34	5.88
					10/15/2013	719.63	6.59
04/29/2014	721.09	5.13					
10/13/2014	720.06	6.16					
04/21/2015	720.37	5.85					
10/19/2015	720.18	6.04					
04/21/2016	720.83	5.39					
10/04/2016	720.53	5.69					
04/19/2017	720.81	5.41					
10/23/2017	719.93	6.29					
04/10/2018	720.91	5.31					
10/23/2018	721.64	4.58					
04/22/2019	722.48	3.74					
10/30/2019	721.61	4.61					
04/20/2020	722.00	4.22					
04/26/2021	720.80	5.42					

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MW-09	727.47	725.46			02/18/2003	721.00	6.47
					05/07/2002	721.17	6.30
					08/19/2002	720.60	6.87
					09/06/2002	720.47	7.00
					11/12/2002	720.75	6.72
					02/20/2003	720.62	6.85
					05/22/2003	721.38	6.09
					08/01/2003	721.13	6.34
					10/18/2004	720.52	6.95
					12/02/2004	721.34	6.13
					01/11/2005	720.65	6.82
					02/08/2005	720.75	6.72
					03/10/2005	720.59	6.88
					04/20/2005	720.79	6.68
					07/07/2005	720.53	6.94
					10/17/2005	720.59	6.88
					01/11/2006	720.89	6.58
					04/20/2006	720.59	6.88
					07/20/2006	720.49	6.98
					08/28/2006	720.57	6.90
					10/24/2006	720.66	6.81
					03/08/2007	720.51	6.96
					04/26/2007	720.77	6.70
					10/09/2007	720.83	6.64
					04/08/2008	721.44	6.03
					10/20/2008	720.63	6.84
					04/20/2009	721.07	6.40
					09/15/2009	720.77	6.70
					10/08/2009	720.71	6.76
					04/07/2010	721.04	6.43
					10/05/2010	721.23	6.24
					01/18/2011	720.96	6.51
					04/12/2011	721.57	5.90
					07/13/2011	Not Accessible	
					10/04/2011	720.77	6.70
					10/10/2011	719.94	7.53
					10/14/2011	719.78	7.69
					10/20/2011	719.32	8.15
					11/17/2011	720.11	7.36
					01/04/2012	720.29	7.18
					04/23/2012	721.09	6.38
					06/26/2012	720.61	6.86
					09/12/2012	720.35	7.12
					01/28/2013	720.66	6.81
					04/23/2013	722.30	5.17
					07/16/2013	721.18	6.29
					10/15/2013	720.49	6.98
					04/29/2014	721.95	5.52
					10/13/2014	720.94	6.53
					04/21/2015	720.98	6.49
					10/19/2015	720.78	6.69
					04/21/2016	721.48	5.99
					10/04/2016	721.35	6.12
					04/19/2017	721.62	5.85
					10/23/2017	720.14	7.33
					04/10/2018	720.82	6.65
					10/23/2018	721.78	5.69
					04/22/2019	722.34	5.13
					10/30/2019	722.01	5.46
					04/20/2020	722.14	5.33
					04/26/2021	720.95	6.52

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MW-10	740.66	738.96			02/18/2002	727.10	13.56
					05/07/2002	726.69	13.97
					08/19/2002	725.73	14.93
					09/06/2002	725.78	14.88
					11/12/2002	726.14	14.52
					02/20/2003	726.24	14.42
					05/22/2003	725.53	15.13
					08/01/2003	724.69	15.97
Well Relocated after WWTP Demolition in 2012							
					01/28/2013	722.72	17.94
					04/23/2013	725.14	15.52
					07/16/2013	723.72	16.94
					10/15/2013	722.52	18.14
					04/29/2014	Well Damaged	
					04/21/2015	Well Damaged	
					10/19/2015	Well Damaged	
					04/21/2016	Well Damaged	
					10/04/2016	Well Damaged	
					04/19/2017	Well Damaged	
					10/23/2017	722.81	17.85
					04/10/2018	722.11	18.55
					10/23/2018	725.45	15.21
					04/22/2019	725.02	15.64
					10/30/2019	724.98	15.68
					04/20/2020	725.44	15.22
04/26/2021	724.51	16.15					
Well Abandoned July 16, 2021							
MW-12D	727.58	725.68	713.08		02/18/2002	720.98	6.60
					05/07/2002	721.04	6.54
					08/19/2002	720.53	7.05
					09/06/2002	720.59	6.99
					11/12/2002	720.79	6.79
					02/20/2003	720.66	6.92
					05/20/2003	721.12	6.46
					08/05/2003	717.55	10.03
Well Abandoned, replaced with MW-12R							
MW-12R	728.31	725.71	710.71	25.10	10/21/2004	720.48	7.83
					11/30/2004	720.60	7.71
					01/11/2005	720.57	7.74
					02/10/2005	720.70	7.61
					03/08/2005	720.61	7.70
					04/20/2005	720.79	7.52
					07/07/2005	720.48	7.83
					10/19/2005	720.57	7.74
					01/12/2006	720.62	7.69
					04/20/2006	720.63	7.68
					07/20/2006	720.47	7.84
					08/28/2006	720.52	7.79
					10/23/2006	720.54	7.77
					03/08/2007	720.57	7.74
					04/26/2007	720.67	7.64
					10/09/2007	720.67	7.64
					04/08/2008	721.12	7.19
					10/20/2008	719.66	8.65
					04/20/2009	720.60	7.71
					09/15/2009	719.68	8.63
					10/08/2009	720.52	7.79
					04/07/2010	720.79	7.52
					10/04/2010	720.85	7.46
					01/18/2011	720.70	7.61
					04/12/2011	721.44	6.87
					07/13/2011	720.63	7.68
					10/03/2011	720.73	7.58
					10/10/2011	719.07	9.24
					10/14/2011	719.08	9.23
					10/20/2011	718.56	9.75
					11/17/2011	719.42	8.89
					01/04/2012	720.08	8.23
04/24/2012	720.63	7.68					
06/26/2012	720.12	8.19					
09/12/2012	720.17	8.14					
01/28/2013	720.53	7.78					
01/28/2013	720.53	7.78					
04/23/2013	721.74	6.57					
07/16/2013	720.62	7.69					
10/15/2013	719.87	8.44					
04/29/2014	721.33	6.98					
10/13/2014	720.54	7.77					

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<i>MW-12R, Cont'd</i>					04/21/2015	720.77	7.54
					10/20/2015	720.64	7.67
					04/21/2016	721.17	7.14
					10/04/2016	720.99	7.32
					04/19/2017	721.16	7.15
					10/23/2017	719.09	9.22
					04/10/2018	717.49	10.82
					10/24/2018	721.32	6.99
					04/22/2019	721.86	6.45
					10/30/2019	721.16	7.15
					04/20/2020	721.72	6.59
					04/26/2021	720.67	7.64
	PZ-12B	727.41	725.02	694.02	45.89	10/21/2004	711.99
					11/30/2004	712.31	15.10
					01/11/2005	712.66	14.75
					02/10/2005	712.74	14.67
					03/08/2005	712.81	14.60
					04/20/2005	712.78	14.63
					07/07/2005	712.31	15.10
					10/19/2005	712.19	15.22
					01/12/2006	712.47	14.94
					04/20/2006	713.34	14.07
					07/20/2006	711.81	15.60
					08/28/2006	711.49	15.92
					10/23/2006	712.39	15.02
					03/08/2007	711.95	15.46
					04/26/2007	712.22	15.19
					10/09/2007	712.53	14.88
					04/08/2008	713.41	14.00
					10/20/2008	711.97	15.44
					04/20/2009	713.24	14.17
					09/15/2009	711.78	15.63
					10/08/2009	712.23	15.18
					04/07/2010	713.40	14.01
					10/04/2010	712.98	14.43
					01/18/2011	712.83	14.58
					04/12/2011	713.93	13.48
					07/13/2011	713.29	14.12
					10/03/2011	713.71	13.70
					10/10/2011	713.32	14.09
					10/14/2011	713.32	14.09
					10/20/2011	712.93	14.48
					11/17/2011	713.06	14.35
					01/04/2012	713.34	14.07
					04/24/2012	713.77	13.64
				06/26/2012	713.48	13.93	
				09/12/2012	712.90	14.51	
				04/23/2013	714.56	12.85	
				07/16/2013	713.44	13.97	
				10/15/2013	712.81	14.60	
				04/29/2014	714.45	12.96	
				10/13/2014	713.36	14.05	
				04/21/2015	713.56	13.85	
				10/19/2015	713.25	14.16	
				04/21/2016	714.22	13.19	
				10/04/2016	713.60	13.81	
				04/19/2017	714.23	13.18	
				04/10/2018	713.49	13.92	
				10/23/2018	714.09	13.32	
				04/22/2019	714.84	12.57	
				10/30/2019	713.87	13.54	
				04/20/2020	714.56	12.85	
				04/26/2021	713.56	13.85	

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 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-13D	726.07	723.99	710.57		02/18/2002	720.97	5.10
					05/07/2002	720.86	5.21
					08/19/2002	720.46	5.61
					09/06/2002	720.35	5.72
					11/12/2002	720.82	5.25
					02/20/2003	720.58	5.49
					05/20/2003	720.95	5.12
					08/05/2003	717.24	8.83
Well Abandoned, replaced with MW-13R							
MW-13R	726.72	724.22	707.22	25.00	10/20/2004	720.20	6.52
					12/02/2004	720.68	6.04
					01/12/2005	720.42	6.30
					02/09/2005	720.62	6.10
					03/10/2005	720.49	6.23
					04/19/2005	720.68	6.04
					07/06/2005	720.29	6.43
					10/19/2005	720.35	6.37
					01/10/2006	720.59	6.13
					04/19/2006	720.69	6.03
					07/19/2006	720.44	6.28
					08/28/2006	720.44	6.28
					10/24/2006	720.30	6.42
					03/08/2007	720.47	6.25
					04/25/2007	720.37	6.35
					10/08/2007	720.55	6.17
					04/08/2008	721.08	5.64
					10/20/2008	720.05	6.67
					04/20/2009	721.24	5.48
					09/15/2009	720.63	6.09
					10/07/2009	720.33	6.39
					04/06/2010	720.60	6.12
					10/04/2010	720.79	5.93
					01/18/2011	720.67	6.05
					04/11/2011	721.24	5.48
					07/13/2011	720.63	6.09
					10/03/2011	720.69	6.03
					10/10/2011	718.41	8.31
					10/14/2011	718.44	8.28
					10/20/2011	718.08	8.64
					11/17/2011	719.06	7.66
					01/04/2012	720.13	6.59
04/23/2012	720.65	6.07					
06/26/2012	720.09	6.63					
09/13/2012	720.13	6.59					
01/28/2013	720.47	6.25					
04/23/2013	721.55	5.17					
07/16/2013	720.58	6.14					
10/15/2013	719.84	6.88					
04/29/2014	721.22	5.50					
10/13/2014	720.43	6.29					
04/21/2015	720.66	6.06					
10/20/2015	720.49	6.23					
04/21/2016	720.87	5.85					
10/04/2016	720.81	5.91					
04/19/2017	720.90	5.82					
10/23/2017	718.85	7.87					
04/10/2018	720.26	6.46					
10/24/2018	721.00	5.72					
04/22/2019	721.42	5.30					
10/30/2019	720.81	5.91					
04/20/2020	721.30	5.42					
04/26/2021	720.47	6.25					

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Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)				
MW-19S	746.81	744.21	729.71	29.60	10/19/2004	722.94	23.87				
					12/01/2004	723.58	23.23				
					01/12/2005	724.62	22.19				
					02/09/2005	724.94	21.87				
					03/10/2005	720.72	26.09				
					04/20/2005	726.32	20.49				
					07/06/2005	724.19	22.62				
					10/17/2005	723.61	23.20				
					01/11/2006	725.04	21.77				
					04/19/2006	Well damaged					
					08/28/2006	Well damaged					
					10/23/2006	Well damaged					
					03/08/2007	743.59	744.10	729.70	29.60	Well under 3-ft of snow	
					04/26/2007	Well surveyed 05/11/07				727.02	16.57
					10/09/2007					723.69	19.9
					04/08/2008					730.46	13.13
					10/20/2008					723.72	19.87
					04/20/2009					727.48	16.11
					09/15/2009					723.74	19.85
					10/08/2009					723.61	19.98
					04/07/2010					726.65	16.94
					10/05/2010					725.90	17.69
					01/18/2011					Not Accessible	
					04/12/2011					734.82	8.77
					07/13/2011					726.29	17.3
10/04/2011					724.27	19.32					
10/10/2011					724.36	19.23					
10/14/2011					724.49	19.1					
10/20/2011					724.47	19.12					
11/17/2011					725.36	18.23					
01/04/2012					725.64	17.95					
04/23/2012					727.41	16.18					
06/26/2012					724.71	18.88					
09/12/2012					723.27	20.32					
01/28/2013					724.75	18.84					
04/23/2013					732.74	10.85					
07/16/2013					726.78	16.81					
10/15/2013					723.74	19.85					
04/29/2014					729.70	13.89					
10/13/2014					724.93	18.66					
04/21/2015					726.94	16.65					
10/19/2015					725.09	18.50					
04/21/2016					731.22	12.37					
10/04/2016					725.73	17.86					
04/19/2017					731.14	12.45					
10/23/2017					724.79	18.80					
04/10/2018					724.93	18.66					
10/24/2018					728.27	15.32					
04/22/2019					731.49	12.10					
10/30/2019					727.18	16.41					
04/20/2020					730.66	12.93					
04/26/2021					727.37	16.22					

TABLE 1. GROUNDWATER ELEVATION SUMMARY

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 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)				
MW-19D	746.40	744.09	708.09	45.81	10/19/2004	720.16	26.24				
					12/01/2004	720.37	26.03				
					01/11/2005	720.26	26.14				
					02/09/2005	720.35	26.05				
					03/10/2005	720.42	25.98				
					04/20/2005	720.54	25.86				
					07/06/2005	720.13	26.27				
					10/17/2005	720.25	26.15				
					01/11/2006	720.38	26.02				
					04/19/2006	Well damaged					
					07/20/2006	n/a	23.22				
					08/28/2006	n/a	23.45				
					10/23/2006	n/a	23.11				
					03/08/2007	Well under 3-ft of snow					
					04/26/2007	743.35	744.10	708.10	Well surveyed 05/11/07	720.43	22.92
					10/09/2007					720.34	23.01
					04/08/2008					720.97	22.38
					10/20/2008					720.25	23.10
					04/20/2009					720.58	22.77
					09/15/2009					720.20	23.15
					10/08/2009					720.29	23.06
					04/07/2010					720.57	22.78
					10/05/2010					720.62	22.73
					01/18/2011	Well under ice and snow					
					04/12/2011					721.43	21.92
					07/13/2011					720.52	22.83
					10/04/2011					720.59	22.76
					10/10/2011					718.85	24.50
					10/14/2011					718.91	24.44
					10/20/2011					718.58	24.77
					11/17/2011					719.24	24.11
					01/04/2012					719.90	23.45
					04/23/2012					720.56	22.79
					06/26/2012					719.97	23.38
					09/12/2012					719.93	23.42
					01/28/2013					720.28	23.07
04/23/2013					721.77	21.58					
07/16/2013					720.48	22.87					
10/15/2013					719.78	23.57					
04/29/2014					721.32	22.03					
10/13/2014					720.25	23.10					
04/21/2015					720.60	22.75					
10/19/2015					720.37	22.98					
04/21/2016					721.22	22.13					
10/04/2016					720.70	22.65					
04/19/2017					721.15	22.20					
10/23/2017					719.03	24.32					
04/10/2018					720.17	23.18					
10/24/2018					721.04	22.31					
04/22/2019					721.66	21.69					
10/30/2019					720.93	22.42					
04/20/2020					721.58	21.77					
04/26/2021					720.62	22.73					

TABLE 1. GROUNDWATER ELEVATION SUMMARY

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Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-20	739.06	736.46	710.46	36.10	10/20/2004	720.38	18.68
					11/30/2004	720.52	18.54
					01/11/2005	720.52	18.54
					02/08/2005	720.47	18.59
					03/09/2005	720.44	18.62
					04/18/2005	720.65	18.41
					07/05/2005	720.47	18.59
					10/17/2005	719.95	19.11
					01/10/2006	720.54	18.52
					04/19/2006	720.69	18.37
					07/20/2006	720.36	18.70
					08/28/2006	720.45	18.61
					10/24/2006	720.12	18.94
					03/08/2007	720.49	18.57
					04/25/2007	720.41	18.65
					10/08/2007	720.57	18.49
					04/09/2008	721.13	17.93
					10/20/2008	720.55	18.51
					04/20/2009	720.64	18.42
					09/15/2009	720.62	18.44
					10/07/2009	720.51	18.55
					04/06/2010	720.62	18.44
					10/04/2010	720.79	18.27
					01/18/2011	720.63	18.43
					04/11/2011	721.18	17.88
					07/13/2011	720.40	18.66
					10/03/2011	720.67	18.39
					10/10/2011	717.04	22.02
					10/14/2011	717.12	21.94
					10/20/2011	716.91	22.15
					11/17/2011	719.03	20.03
					01/04/2012	720.12	18.94
					04/23/2012	720.66	18.40
					06/26/2012	720.09	18.97
					09/12/2012	720.12	18.94
					01/28/2013	720.47	18.59
					04/23/2013	721.52	17.54
					07/16/2013	720.63	18.43
					10/15/2013	719.95	19.11
					04/29/2014	721.22	17.84
10/13/2014	720.43	18.63					
04/21/2015	720.77	18.29					
10/19/2015	720.57	18.49					
04/21/2016	720.88	18.18					
10/04/2016	720.96	18.10					
04/19/2017	721.08	17.98					
10/23/2017	719.07	19.99					
04/10/2018	720.49	18.57					
10/25/2018	721.13	17.93					
04/22/2019	721.66	17.40					
10/30/2019	720.13	18.93					
04/21/2020	721.41	17.65					
04/27/2021	720.75	18.31					

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Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
PZ-20B	739.31	736.49	692.49	59.32	10/20/2004	711.96	27.35
					11/30/2004	712.27	27.04
					01/11/2005	712.45	26.86
					02/08/2005	712.55	26.76
					03/09/2005	712.64	26.67
					04/18/2005	712.69	26.62
					07/05/2005	712.29	27.02
					10/17/2005	712.05	27.26
					01/10/2006	712.27	27.04
					04/19/2006	713.19	26.12
					07/20/2006	711.78	27.53
					08/28/2006	711.45	27.86
					10/24/2006	711.27	28.04
					03/08/2007	711.92	27.39
					04/25/2007	712.09	27.22
					10/08/2007	712.47	26.84
					04/07/2008	713.41	25.90
					10/20/2008	712.23	27.08
					04/20/2009	712.62	26.69
					09/15/2009	711.67	27.64
					10/07/2009	712.14	27.17
					04/06/2010	712.92	26.39
					10/04/2010	712.82	26.49
					01/18/2011	712.59	26.72
					04/11/2011	713.83	25.48
					07/13/2011	713.17	26.14
					10/03/2011	713.64	25.67
					10/10/2011	713.23	26.08
					10/14/2011	713.16	26.15
					10/20/2011	712.86	26.45
					11/17/2011	713.01	26.30
					01/04/2012	713.24	26.07
04/23/2012	713.68	25.63					
06/26/2012	713.35	25.96					
09/12/2012	712.79	26.52					
04/23/2013	714.51	24.80					
07/16/2013	713.40	25.91					
10/15/2013	712.71	26.60					
04/29/2014	714.37	24.94					
10/13/2014	713.27	26.04					
04/21/2015	713.51	25.80					
10/19/2015	713.05	26.26					
04/21/2016	714.06	25.25					
10/04/2016	713.51	25.80					
04/19/2017	714.11	25.20					
04/10/2018	713.40	25.91					
10/23/2018	714.04	25.27					
04/22/2019	714.72	24.59					
10/30/2019	713.82	25.49					
04/21/2020	714.45	24.86					
04/27/2021	713.46	25.85					

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Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-21	728.20	726.09	712.09	24.11	10/20/2004	720.45	7.75
					12/02/2004	720.52	7.68
					01/12/2005	720.43	7.77
					02/09/2005	720.51	7.69
					03/09/2005	720.52	7.68
					04/19/2005	720.79	7.41
					07/06/2005	720.28	7.92
					10/18/2005	720.33	7.87
					01/11/2006	720.60	7.60
					04/20/2006	720.72	7.48
					07/19/2006	720.46	7.74
					08/28/2006	720.50	7.70
					10/24/2006	720.33	7.87
					03/08/2007	720.49	7.71
					04/26/2007	720.68	7.52
					10/08/2007	720.67	7.53
					04/09/2008	721.58	6.62
					10/20/2008	720.45	7.75
					04/20/2009	720.63	7.57
					09/15/2009	720.66	7.54
					10/07/2009	720.53	7.67
					04/06/2010	720.62	7.58
					10/04/2010	720.90	7.30
					01/18/2011	720.68	7.52
					04/11/2011	721.65	6.55
					07/13/2011	720.65	7.55
					10/03/2011	720.73	7.47
					10/10/2011	716.59	11.61
					10/14/2011	716.63	11.57
					10/20/2011	716.33	11.87
					11/17/2011	719.47	8.73
					01/04/2012	720.20	8.00
					04/23/2012	720.84	7.36
					06/26/2012	720.11	8.09
					09/12/2012	720.15	8.05
					01/28/2013	720.52	7.68
					04/23/2013	721.92	6.28
					07/16/2013	720.72	7.48
					10/15/2013	719.93	8.27
					04/29/2014	721.50	6.70
07/21/2014	720.05	8.15					
10/13/2014	720.46	7.74					
04/21/2015	720.92	7.28					
10/19/2015	720.76	7.44					
04/21/2016	721.19	7.01					
10/04/2016	721.07	7.13					
04/19/2017	721.36	6.84					
10/23/2017	719.19	9.01					
04/10/2018	720.54	7.66					
10/25/2018	721.32	6.88					
04/22/2019	721.15	7.05					
10/30/2019	721.24	6.96					
04/21/2020	721.29	6.91					
04/27/2021	720.66	7.54					

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Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
PZ-21B	728.13	725.70	694.20	46.43	10/20/2004	711.93	16.20
					12/02/2004	712.32	15.81
					01/12/2005	712.63	15.50
					02/09/2005	712.66	15.47
					03/09/2005	712.64	15.49
					04/19/2005	712.69	15.44
					07/06/2005	712.22	15.91
					10/18/2005	712.15	15.98
					01/10/2006	712.40	15.73
					04/20/2006	713.19	14.94
					07/19/2006	711.80	16.33
					08/28/2006	711.47	16.66
					10/24/2006	711.38	16.75
					03/08/2007	711.93	16.20
					04/26/2007	712.21	15.92
					10/08/2007	712.52	15.61
					04/09/2008	713.53	14.60
					10/20/2008	712.15	15.98
					04/20/2009	712.96	15.17
					09/15/2009	711.66	16.47
					10/07/2009	712.16	15.97
					04/06/2010	712.24	15.89
					10/04/2010	712.81	15.32
					01/18/2011	712.55	15.58
					04/11/2011	713.83	14.30
					07/13/2011	713.12	15.01
					10/03/2011	713.64	14.49
					10/10/2011	713.23	14.90
					10/14/2011	713.25	14.88
					10/20/2011	712.91	15.22
					11/17/2011	713.02	15.11
					01/04/2012	713.21	14.92
04/24/2012	713.66	14.47					
06/26/2012	713.36	14.77					
09/12/2012	712.78	15.35					
04/23/2013	714.51	13.62					
07/16/2013	713.41	14.72					
10/15/2013	712.72	15.41					
04/29/2014	714.34	13.79					
10/13/2014	713.24	14.89					
04/21/2015	713.51	14.62					
10/19/2015	713.04	15.09					
04/21/2016	714.06	14.07					
10/04/2016	713.45	14.68					
04/19/2017	714.09	14.04					
04/10/2018	713.32	14.81					
10/23/2018	713.92	14.21					
04/22/2019	713.67	14.46					
10/30/2019	713.79	14.34					
04/21/2020	714.44	13.69					
04/27/2021	713.39	14.74					

TABLE 1. GROUNDWATER ELEVATION SUMMARY

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 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-22	728.42	725.88	707.88	25.54	10/18/2004	719.34	9.08
					12/01/2004	719.50	8.92
					01/11/2005	719.51	8.91
					02/08/2005	719.45	8.97
					03/09/2005	719.45	8.97
					04/19/2005	719.85	8.57
					07/06/2005	719.35	9.07
					10/18/2005	719.33	9.09
					01/10/2006	719.51	8.91
					04/19/2006	719.80	8.62
					07/19/2006	719.38	9.04
					08/28/2006	719.39	9.03
					10/24/2006	719.19	9.23
					03/08/2007	719.23	9.19
					04/25/2007	719.40	9.02
					10/09/2007	719.64	8.78
					04/09/2008	720.36	8.06
					10/20/2008	719.50	8.92
					04/20/2009	719.82	8.60
					09/15/2009	719.58	8.84
					10/07/2009	719.79	8.63
					04/06/2010	719.79	8.63
					10/04/2010	720.01	8.41
					01/18/2011	719.67	8.75
					04/11/2011	720.69	7.73
					07/13/2011	719.84	8.58
					10/03/2011	719.78	8.64
					10/10/2011	714.51	13.91
					10/14/2011	714.50	13.92
					10/20/2011	714.54	13.88
					11/17/2011	719.10	9.32
					01/04/2012	719.33	9.09
					04/23/2012	719.95	8.47
					06/26/2012	719.30	9.12
					09/13/2012	719.18	9.24
					01/28/2013	719.40	9.02
					04/23/2013	720.76	7.66
					07/16/2013	719.77	8.65
					10/15/2013	719.25	9.17
					04/29/2014	720.37	8.05
					10/13/2014	719.51	8.91
					04/21/2015	719.76	8.66
					10/19/2015	719.44	8.98
					04/21/2016	720.08	8.34
					10/04/2016	719.83	8.59
					04/19/2017	719.74	8.68
					10/23/2017	718.50	9.92
					04/10/2018	719.05	9.37
					10/25/2018	719.89	8.53
					04/22/2019	720.53	7.89
					10/30/2019	720.03	8.39
					04/21/2020	720.20	8.22
					04/27/2021	719.51	8.91

TABLE 1. GROUNDWATER ELEVATION SUMMARY

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 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
PZ-22B	727.63	725.02	693.72	46.51	10/18/2004	711.82	15.81
					12/01/2004	712.10	15.53
					01/11/2005	712.21	15.42
					02/08/2005	712.32	15.31
					03/09/2005	712.40	15.23
					04/19/2005	712.53	15.10
					07/06/2005	711.95	15.68
					10/18/2005	711.79	15.84
					01/10/2006	712.11	15.52
					04/19/2006	712.85	14.78
					07/19/2006	711.58	16.05
					08/28/2006	711.23	16.40
					10/24/2006	711.23	16.40
					03/08/2007	711.69	15.94
					04/25/2007	711.90	15.73
					10/09/2007	712.25	15.38
					04/09/2008	712.77	14.86
					10/20/2008	711.90	15.73
					04/20/2009	712.59	15.04
					09/15/2009	710.91	16.72
					10/07/2009	711.82	15.81
					04/06/2010	712.55	15.08
					10/04/2010	712.37	15.26
					01/18/2011	712.15	15.48
					04/11/2011	713.39	14.24
					07/13/2011	712.67	14.96
					10/03/2011	713.29	14.34
					10/10/2011	712.88	14.75
					10/14/2011	712.87	14.76
					10/20/2011	712.55	15.08
					11/17/2011	712.76	14.87
					01/04/2012	712.80	14.83
04/23/2012	713.31	14.32					
06/26/2012	712.95	14.68					
09/12/2012	712.41	15.22					
04/23/2013	714.24	13.39					
07/16/2013	713.15	14.48					
10/15/2013	712.40	15.23					
04/29/2014	714.05	13.58					
10/13/2014	712.92	14.71					
04/21/2015	713.29	14.34					
10/19/2015	712.65	14.98					
04/21/2016	713.78	13.85					
10/04/2016	713.22	14.41					
04/19/2017	713.75	13.88					
04/10/2018	713.08	14.55					
10/23/2018	713.69	13.94					
04/22/2019	714.43	13.20					
10/30/2019	713.52	14.11					
04/21/2020	714.16	13.47					
04/27/2021	713.05	14.58					

TABLE 1. GROUNDWATER ELEVATION SUMMARY

2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-23	Well Installed 9/15/2008				10/20/2008	719.92	3.73
	723.65	724.10	712.60	16.05	02/19/2009	719.67	3.98
					04/20/2009	719.87	3.78
					09/15/2009	719.62	4.03
		Well surveyed 10/9/2009			10/08/2009	719.57	4.08
	723.65	724.07	712.60	16.08	11/12/2009	719.66	3.99
					04/07/2010	719.41	4.24
					10/05/2010	719.69	3.96
					01/18/2011	719.34	4.31
					04/12/2011	719.74	3.91
					07/13/2011	719.53	4.12
					10/04/2011	719.66	3.99
					10/10/2011	714.13	9.52
					10/14/2011	714.03	9.62
					10/20/2011	Not Accessible	
					11/17/2011	718.34	5.31
					01/04/2012	718.81	4.84
					04/24/2012	719.37	4.28
					06/26/2012	718.98	4.67
					09/12/2012	719.27	4.38
					01/28/2013	719.24	4.41
					04/23/2013	719.88	3.77
					07/16/2013	719.37	4.28
		Well surveyed 5/1/2014			10/15/2013	719.17	4.48
	723.90	724.07	712.60	16.08	04/29/2014	719.92	3.98
					05/14/2014	720.14	3.76
					10/13/2014	Not Accessible	
					01/28/2015	719.02	4.88
					04/22/2015	719.17	4.73
					07/14/2015	718.87	5.03
					10/19/2015	719.44	4.46
					01/07/2016	719.02	4.88
					04/21/2016	719.54	4.36
				07/14/2016	Not Accessible		
				10/04/2016	719.56	4.34	
				04/19/2017	719.44	4.46	
	Well surveyed 1/22/2018			07/12/2017	718.87	4.78	
723.43	724.03			10/23/2017	718.25	5.18	
				01/22/2018	718.82	4.61	
				04/10/2018	Not accessible		
				07/26/2018	719.11	4.32	
				10/24/2018	719.51	3.92	
				04/22/2019	720.01	3.42	
				10/30/2019	719.75	3.68	
				04/20/2020	719.73	3.70	
				04/26/2021	718.95	4.48	

TABLE 1. GROUNDWATER ELEVATION SUMMARY

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 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)	
PZ-23	Well Installed 10/05/2009				10/08/2009	719.56	4.00	
	723.56	723.94	703.94	24.62	11/12/2009	719.59	3.97	
					02/02/2010	719.28	4.28	
					04/07/2010	719.30	4.26	
					10/05/2010	719.59	3.97	
					01/18/2011	719.17	4.39	
					04/12/2011	719.67	3.89	
					07/13/2011	719.39	4.17	
					10/04/2011	719.50	4.06	
					10/10/2011	713.78	9.78	
					10/14/2011	713.76	9.80	
					10/20/2011	713.67	9.89	
					11/17/2011	718.14	5.42	
					01/04/2012	718.68	4.88	
					04/24/2012	719.18	4.38	
					06/26/2012	718.84	4.72	
					09/12/2012	718.96	4.60	
					01/29/2013	718.90	4.66	
					04/23/2013	719.88	3.68	
					07/17/2013	719.19	4.37	
			Well surveyed 5/1/2014		10/15/2013	718.67	4.89	
		723.56	723.94	703.94	24.62	04/29/2014	719.42	4.14
						05/12/2014	719.64	3.92
						05/14/2014	719.62	3.94
						07/21/2014	718.78	4.78
						10/13/2014	718.92	4.64
						01/28/2015	718.67	4.89
						04/22/2015	718.61	4.95
						07/14/2015	718.23	5.33
						10/20/2015	718.46	5.10
						01/07/2016	718.21	5.35
						04/21/2016	718.58	4.98
						07/14/2016	718.34	5.22
					10/04/2016	718.64	4.92	
					01/08/2017	718.25	5.31	
					04/19/2017	718.41	5.15	
					07/12/2017	718.17	5.39	
					10/23/2017	717.23	6.33	
					01/22/2018	717.82	5.74	
					04/11/2018	717.94	5.62	
					07/26/2018	717.99	5.57	
					10/24/2018	718.64	4.92	
					04/22/2019	718.86	4.70	
					10/30/2019	718.44	5.12	
					04/20/2020	718.64	4.92	
					04/26/2021	717.94	5.62	
MW-24	Well Installed 1/14/2013				01/29/2013	718.33	18.54	
	736.87	734.60	709.31	32.56	04/23/2013	720.19	16.68	
					07/17/2013	718.43	18.44	
					10/15/2013	718.02	18.85	
					04/29/2014	719.79	17.08	
					10/14/2014	718.45	18.42	
					04/22/2015	719.27	17.60	
					10/20/2015	718.68	18.19	
					04/22/2016	720.41	16.46	
					10/05/2016	719.65	17.22	
			Well surveyed 1/22/2018		04/19/2017	720.42	16.45	
		736.71	734.38		10/23/2017	719.15	17.72	
					04/11/2018	719.00	17.71	
					10/24/2018	719.76	16.95	
					04/22/2019	720.76	15.95	
					10/30/2019	720.20	16.51	
					04/20/2020	720.82	15.89	
				04/26/2021	719.96	16.75		

TABLE 1. GROUNDWATER ELEVATION SUMMARY

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 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-25	730.30	727.73	709.05	26.25	Well Installed 1/15/2013		
					01/28/2013	720.89	9.41
					04/23/2013	722.83	7.47
					07/16/2013	721.32	8.98
					10/15/2013	720.44	9.86
					04/29/2014	722.36	7.94
					10/14/2014	720.69	9.61
					04/21/2015	721.28	9.02
					10/20/2015	720.72	9.58
					04/21/2016	722.19	8.11
					10/05/2016	721.21	9.09
					04/19/2017	722.29	8.01
					10/23/2017	720.30	10.00
					04/10/2018	720.75	9.55
					10/24/2018	722.25	8.05
					04/22/2019	722.75	7.55
10/30/2019	722.12	8.18					
04/20/2020	722.51	7.79					
04/26/2021	721.42	8.88					
MW-26	722.87	723.26	718.26	14.85	Well Installed 04/06/2015		
					04/22/2015	712.07	10.80
					07/14/2015	712.07	10.80
					10/19/2015	712.51	10.36
					01/07/2016	712.13	10.74
					04/22/2016	712.61	10.26
					07/14/2016	711.84	11.03
					10/05/2016	717.56*	5.31*
					01/08/2017	712.23	10.64
					04/19/2017	712.49	10.38
					07/12/2017	712.09	10.78
					10/23/2017	711.90	10.97
					01/22/2018	712.12	10.75
					04/11/2018	712.22	10.65
					07/26/2018	711.90	10.97
					10/24/2018	712.35	10.52
04/22/2019	713.44	9.43					
10/30/2019	712.33	10.54					
04/20/2020	713.06	9.81					
04/26/2021	712.14	10.73					
PZ-26	723.06	723.28	703.30	24.78	Well Installed 04/15/2014		
					04/29/2014	712.64	10.42
					05/12/2014	712.81	10.25
					05/14/2014	712.75	10.31
					07/21/2014	711.68	11.38
					10/14/2014	711.51	11.55
					01/28/2015	711.76	11.30
					04/21/2015	712.42	10.64
					07/14/2015	711.76	11.30
					10/19/2015	711.99	11.07
					01/07/2016	712.04	11.02
					04/21/2016	712.07	10.99
					07/14/2016	712.37	10.69
					10/05/2016	713.40	9.66
					01/18/2017	712.23	10.83
					04/19/2017	712.61	10.45
07/12/2017	711.94	11.12					
10/23/2017	710.64	12.42					
01/22/2018	710.60	12.46					
04/10/2018	712.23	10.83					
07/26/2018	711.67	11.39					
10/23/2018	712.08	10.98					
04/22/2019	713.37	9.69					
10/30/2019	712.85	10.21					
04/20/2020	714.96	8.10					
04/26/2021	721.16	1.90					

TABLE 1. GROUNDWATER ELEVATION SUMMARY

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 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
MW-27	722.76	723.03	720.03	12.73	Well Installed 04/07/2015		
					04/22/2015	715.05	7.71
					07/14/2015	715.07	7.69
					10/20/2015	715.08	7.68
					01/07/2016	715.11	7.65
					04/22/2016	715.40	7.36
					07/14/2016	715.29	7.47
					10/05/2016	715.22	7.54
					01/08/2017	715.15	7.61
					04/19/2017	715.36	7.40
					07/12/2017	715.28	7.48
					10/23/2017	715.09	7.67
					01/22/2018	715.04	7.72
					04/11/2018	715.46	7.30
					07/26/2018	715.31	7.45
					10/24/2018	715.19	7.57
					04/22/2019	718.88	3.88
10/30/2019	715.48	7.28					
04/20/2020	715.91	6.85					
04/26/2021	715.66	7.10					
PZ-27	722.69	723.00	704.00	23.69	Well Installed 04/07/2015		
					04/22/2015	718.38	4.31
					07/14/2015	718.07	4.62
					10/20/2015	718.33	4.36
					01/07/2016	718.08	4.61
					04/22/2016	718.37	4.32
					07/14/2016	718.20	4.49
					10/05/2016	718.48	4.21
					01/08/2017	718.03	4.66
					04/19/2017	718.19	4.50
					07/12/2017	718.00	4.69
					10/23/2017	717.23	5.46
					01/22/2018	717.70	4.99
					04/11/2018	717.77	4.92
					07/26/2018	718.08	4.61
					10/24/2018	718.34	4.35
					04/22/2019	718.73	3.96
10/30/2019	718.13	4.56					
04/20/2020	718.47	4.22					
04/26/2021	717.66	5.03					
MW-28	722.11	722.48	719.48	14.63	Well Installed 04/06/2015		
					04/22/2015	717.16	4.95
					07/14/2015	716.06	6.05
					10/20/2015	716.48	5.63
					01/07/2016	716.52	5.59
					04/22/2016	717.25	4.86
					07/14/2016	716.43	5.68
					10/05/2016	716.80	5.31
					01/08/2017	716.75	5.36
					04/19/2017	717.13	4.98
					07/12/2017	716.37	5.74
					10/23/2017	715.92	6.19
					01/22/2018	716.79	5.32
					04/11/2018	716.79	5.32
					07/26/2018	716.55	5.56
					10/24/2018	717.09	5.02
					04/22/2019	717.51	4.60
10/30/2019	717.18	4.93					
04/20/2020	717.75	4.36					
04/26/2021	717.01	5.10					

TABLE 1. GROUNDWATER ELEVATION SUMMARY

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 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Well	TOC ^A Elevation (feet) ^B	Ground Elevation (feet) ^B	Top of Screen Elevation (feet) ^B	Well Depth from TOC (feet)	Monitoring Date	Groundwater Elevation (feet) ^B	Depth to Groundwater (feet)
PZ-28	722.38	722.66	702.86	24.50	Well Installed 04/06/2015		
					04/22/2015	716.23	6.15
					07/14/2015	712.90	9.48
					10/19/2015	712.82	9.56
					01/07/2016	713.09	9.29
					04/21/2016	713.15	9.23
					07/14/2016	712.78	9.60
					10/05/2016	712.72	9.66
					01/18/2017	712.82	9.56
					04/19/2017	714.28	8.10
					07/12/2017	712.67	9.71
					10/23/2017	712.26	10.12
					01/22/2018	Not Measured	
					04/10/2018	712.95	9.43
					07/26/2018	713.00	9.38
					10/23/2018	713.10	9.28
					04/22/2019	713.55	8.83
					10/30/2019	713.17	9.21
					04/20/2020	714.58	7.80
					04/26/2021	713.28	9.10
SG-3		724.12			04/23/2013	721.79	2.33
					07/16/2013	720.55	3.57
					10/15/2013	719.80	4.32
					04/29/2014	721.60	2.52
					05/12/2014	721.94	2.18
					05/14/2014	721.75	2.37
					07/21/2014	720.22	3.90
					10/13/2014	720.42	3.70
					01/28/2015	720.31	3.81
					04/21/2015	720.77	3.35
					07/14/2015	720.21	3.91
					10/19/2015	720.28	3.84
					01/07/2016	720.56	3.56
					04/21/2016	721.16	2.96
					07/14/2016	720.67	3.45
					10/04/2016	721.04	3.08
					01/08/2017	720.80	3.32
					04/19/2017	1.00	3.10
					07/12/2017	720.63	3.49
					10/23/2017	719.11	5.01
01/22/2018	720.40	3.72					
04/10/2018	719.36	4.76					
07/26/2018	720.25	3.87					
10/23/2018	721.26	2.86					
04/22/2019	722.99	1.13					
10/30/2019	721.14	2.98					
04/20/2020	722.00	2.12					
04/26/2021	720.72	3.40					
SG-4		715.36			04/21/2015	710.61	4.75
					07/14/2015	709.41	5.95
					09/09/2015	709.06	6.30
					10/19/2015	708.51	6.85
					01/07/2016	Not accessible	
					04/21/2016	711.25	4.11
					07/14/2016	709.62	5.74
					10/04/2016	710.01	5.35
					01/08/2017	710.04	5.32
					04/19/2017	710.63	4.73
					07/12/2017	709.91	5.45
					10/23/2017	709.89	5.47
					01/22/2018	709.85	5.51
					04/10/2018	709.83	5.53
					07/26/2018	709.72	5.64
					10/23/2018	711.33	4.03
					04/22/2019	712.07	3.29
					10/30/2019	711.12	4.24
					04/20/2020	711.78	3.58
					04/26/2021	709.81	5.55

[JTB/RH 5/05; PAR/JTB 11/05; PAR/JTB 9/06; RJG/JTB 10/07; BGH/RMW 6/08; RJG/BGH 1/09; BGH/RJG 3/09; RMN/BGH 5/10; AMM/KJB 2/11; KJB/RJG 05/11; CJM/AMM 1/12; AMM/JJW 5/12; AMM/ANS 7/12; AMM/RJG 10/12; RJG/ 3/13; ETO/RJG 5/13; PMH/NDK 9/13; ETE/NDK 10/13; U-ECK 06/14; U-KLT 1/29/15, C- PMH 2/15; U- KLT 11/12/15, C:PMH 11/18/15] [U: PMH 2/17, C: ANS 2/3/17 ; U: KLT 11/20/17, C:KJK 11/21/17; U-KLT 2/27/19, C- 3QW 2/27/19; U-KLT 4/10/20, C-MHM 4/13/20; U-KJS 8/2/21, C-AGC 8/14/21]

A: TOC-Top of Well Casing
 B: Elevations relative to National Geodetic Vertical Datum.
 C: Well drawdown due to slow recharge rate after well was purged / sampled.
 D: TOC elevation was found to be incorrectly reported and was updated August 2011 by Natural Resource Technology, Inc.
 1. MW-19 and MW-19S repaired October 27, 2006; surveyed by Martenson & Eisele May 11, 2007.
 2. MW-23 surveyed by Martenson & Eisele September 18, 2008.

3. MW-23 and PZ-23 surveyed by Martenson & Eisele October 9, 2009.
 4. MW-24 and MW-25 surveyed by Martenson & Eisele January 30, 2013
 5. MW-23, PZ-23, MW-26, PZ-26, MW-27, PZ-27, MW-28, PZ-28, SG-3, and SG-4 were all surveyed/resurveyed by Martenson and Eisele April 4, 2015.
 *Depth to water significantly deviates from normal measurement. Well under pressure prior to depth measurement.

The TOC elevation at MW-2R was incorrectly entered on the table, this resulted in approximately 1-foot change in elevation. The error was tracked to a data table which contained a summary of post-construction survey data used to create Table 1. The error was corrected using data from the original post-construction survey drawing.

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

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 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)															
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
MW-02R	10/19/04	710	260	12	110	1092	<12	<3.3	<2.0	<1.8	<1.2	--	<4.3	<2.4	<0.90	1092	
	11/30/04	770	290	10	110	1180	<23	<6.6	<4.1	<3.7	<2.4	--	<8.6	<4.8	<1.8	1180	
	01/11/05	650	250	11	100	1011	<23	<6.6	<4.1	<3.7	<2.4	--	<8.6	<4.8	<1.8	1011	
	02/08/05	590	230	9.7	83	912.7	<23	--	--	<3.7	<2.4	--	--	--	--	912.7	
	03/08/05	650	290	13	106	1059	--	--	--	--	--	--	--	--	--	--	1059
	04/18/05	700	290	15	65	1070	--	--	--	--	--	--	--	--	--	--	1070
	07/05/05	800	320	20	129	1269	--	--	--	--	--	--	--	--	--	--	1269
	10/17/05	890	340	33	147	1410	--	--	--	--	--	--	--	--	--	--	1410
	01/10/06	850	350	30	156	1386	--	--	--	--	--	--	--	--	--	--	1386
	04/19/06	790	370	41	215	1416	--	--	--	--	--	--	--	--	--	--	1416
	07/19/06	840	300	51	175	1366	--	--	--	--	--	--	--	--	--	--	1366
	10/24/06	930	400	57	250	1637	--	--	--	--	--	--	--	--	--	--	1637
	04/25/07	780	380	34	240	1434	--	--	--	--	--	--	--	--	--	--	1434
	10/08/07	980	440	<27	270	1690	--	--	--	--	--	--	--	--	--	--	1690
	04/07/08	658	372	36.1	285	1351.1	--	--	--	--	--	2280	--	--	--	--	3631.1
	10/20/08	618	325	28.3	222.1	1193.4	--	--	--	--	--	1500	--	--	--	--	2693.4
	04/20/09	638	305	28.8	217.7	1189.5	--	--	--	--	--	1430	--	--	--	--	2619.5
	10/07/09	819	402	28.3	289	1538.3	--	--	--	--	--	1460	--	--	--	--	2998.3
	04/06/10	680	298	32.5	220.4	1230.9	--	--	--	--	--	1240	--	--	--	--	2470.9
	10/04/10	598	308	36.2	248	1190.2	--	--	--	--	--	1340	--	--	--	--	2530.2
	01/18/11	732	365	33.2	242.2	1372.4	--	--	--	--	--	1210	--	--	--	--	2582.4
	04/11/11	737	380	53.8	326	1496.8	--	--	--	--	--	2070	--	--	--	--	3566.8
	07/13/11	528	196	30.4	91.7	846.1	--	--	--	--	--	1140	--	--	--	--	1986.1
	10/03/11	602	278	30.4	205.8	1116.2	--	--	--	--	--	1150	--	--	--	--	2266.2
	01/04/12	620	282	31.9	218.1	1152	--	--	--	--	--	1170	--	--	--	--	2322
	Dup (QC-1)	04/23/12	568	267	29.4	180.6	1045	--	--	--	--	--	1070	--	--	--	2115
		04/23/12	229	104	9.4	74.4	416.8	--	--	--	--	--	442	--	--	--	858.8
	Dup (QC-1)	06/26/12	831	318	27.3	196.8	1373.1	--	--	--	--	--	1150	--	--	--	2523.1
		06/26/12	847	353	29.4	249	1478.4	--	--	--	--	--	1170	--	--	--	2648.4
	Dup (QC-1)	09/12/12	984	363	25.6	265	1637.6	--	--	--	--	--	1310	--	--	--	2947.6
		09/12/12	719	375	23.6	274	1391.6	--	--	--	--	--	1220	--	--	--	2611.6
	Dup (QC-1)	01/28/13	949	301	19.4	168.9	1438.3	--	--	--	--	--	1010	--	--	--	2448.3
		04/23/13	578	269	37	205.2	1089.2	--	--	--	--	--	1240	--	--	--	2329.2
07/16/13		814	369	30.4	235.1	1448.5	--	--	--	--	--	1170	--	--	--	2618.5	
10/15/13		1500	493	36.3	349	2378.3	--	--	--	--	--	1540	--	--	--	3918.3	
04/29/14		736	309	25.1	159.8	1229.9	--	--	--	--	--	805	--	--	--	2034.9	
10/13/14		1040	446	17.1	221	1724.1	--	--	--	--	--	1110	--	--	--	2834.1	
04/21/15		653	361	13.2	203.7	1230.9	--	--	--	--	--	668	--	--	--	1898.9	
10/19/15		1030	433	20.7	251.6	1735.3	--	--	--	--	--	855	--	--	--	2590.3	
04/21/16		422	223	28.7	163.5	837.2	--	--	--	--	--	784	--	--	--	1621.2	
10/04/16		718	304	9.8	162.8	1194.6	--	--	--	--	--	621	--	--	--	1815.6	
04/19/17		602	238	21.9	147.3	1009.2	--	--	--	--	--	503	--	--	--	1512.2	
04/19/17		543	219	18.8	139.7	920.5	--	--	--	--	--	474	--	--	--	1394.5	
10/24/17		890	305	10.8	143.3	1349.1	--	--	--	--	--	352	--	--	--	1701.1	
04/10/18		35.0	<0.50	<0.50	4.3	39.3	--	--	--	--	--	6.3	--	--	--	--	45.6
10/25/18		398	197	23.5	134.2	752.7	--	--	--	--	--	490	--	--	--	--	1242.7
04/22/19		334	161	11.7	106.8	613.5	--	--	--	--	--	235	--	--	--	--	848.5
10/31/19		93.1	0.23	0.26	0.85	94.44	--	--	--	--	--	1.2	--	--	--	--	95.64
04/21/20	121	<0.32	<0.27	0.3	121.3	--	--	--	--	--	1.5	--	--	--	--	122.8	
04/27/21	290	122	7.1	68.6	487.7	--	--	--	--	--	47.1	--	--	--	--	534.8	
MW-08*	07/15/96	<0.5	<0.5	<0.8	<1.9	<3.7	<1.4	<0.5	<0.4	<0.8	--	--	<0.6	--	--	<7.4	
	09/09/97	<0.4	<0.4	<0.32	<1	<2.12	<3.3	<0.45	<0.29	<0.5	--	--	<0.23	--	--	<6.89	
	10/05/10	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	<1.3	
	01/18/11	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	<1.3	
	04/12/11	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	<1.3	
	07/13/11	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	<1.3	
	10/03/11	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	<1.3	
	01/04/12	1.8	--	--	--	1.8	--	--	--	--	--	<0.89	--	--	--	1.8	
	04/23/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/26/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-09*	07/15/96	<0.5	<0.5	<0.8	<1.9	<3.7	<1.4	<0.5	<0.4	<0.8	--	--	<0.6	--	--	<7.4	
	09/09/97	<0.4	<0.4	<0.32	<1	<2.12	<3.3	<0.45	<0.29	<0.5	--	--	<0.23	--	--	<6.89	
	04/23/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)															
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
MW-10*	07/15/96	<0.5	<0.5	<0.8	<1.9	<3.7	<1.4	<0.5	<0.4	11	--	--	<0.6	--	--	11	
	09/09/97	<0.4	<0.4	<0.32	<1	<2.12	<3.3	<0.45	<0.29	<0.5	--	--	<0.23	--	--	<6.89	
	04/23/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/26/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Well abandoned	07/16/21	<0.30	<0.33	<0.29	<1.05	<1.97	--	--	--	--	--	--	<1.1	--	--	<3.07
MW-12R	10/21/04	15	66	6.3	61	148.3	4.6	<0.66	<0.41	<0.37	0.59	--	<0.86	<0.48	<0.18	153.49	
	11/30/04	12	47	3.9	39	101.9	9.8	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	111.7	
	01/13/05	11	39	3	33	86	6.6	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	92.6	
	02/10/05	11	43	4	34	92	<12	--	--	<1.8	<1.2	--	--	--	--	92	
	03/08/05	8.9	37	<3.4	30	75.9	--	--	--	--	--	--	--	--	--	--	75.9
	04/20/05	9.4	29	<3.4	12	50.4	--	--	--	--	--	--	--	--	--	--	50.4
	07/07/05	7.2	25	<3.4	11	43.2	--	--	--	--	--	--	--	--	--	--	43.2
	10/19/05	7	21	<3.4	9.3	37.3	--	--	--	--	--	--	--	--	--	--	37.3
	01/12/06	5.9	24	2	17.1	49	--	--	--	--	--	--	--	--	--	--	49
	04/20/06	9.8	32	3.6	24.9	70.3	--	--	--	--	--	--	--	--	--	--	70.3
	07/20/06	8.7	25	<3.4	9	42.7	--	--	--	--	--	--	--	--	--	--	42.7
	10/23/06	5.4	--	--	--	5.4	--	--	--	--	--	--	--	--	--	--	5.4
	04/26/07	10	--	--	--	10	--	--	--	--	--	--	--	--	--	--	10
	10/09/07	5	--	--	--	5	--	--	--	--	--	--	--	--	--	--	5
	04/08/08	20.8	--	--	--	20.8	--	--	--	--	--	--	--	--	--	--	20.8
	10/20/08	5.2	--	--	--	5.2	--	--	--	--	--	--	--	--	--	--	5.2
	04/21/09	26	--	--	--	26	--	--	--	--	--	--	1130	--	--	--	1156
	10/08/09	8.8	--	--	--	8.8	--	--	--	--	--	--	291	--	--	--	299.8
	04/07/10	27.1	75	9.9	57	169	--	--	--	--	--	--	968	--	--	--	1137
	10/04/10	27.2	--	--	--	27.2	--	--	--	--	--	--	790	--	--	--	817.2
	01/18/11	22.2	--	--	--	22.2	--	--	--	--	--	--	568	--	--	--	590.2
	04/12/11	56.4	--	--	--	56.4	--	--	--	--	--	--	2090	--	--	--	2146.4
	07/13/11	46.6	89.7	14.3	72.6	223.2	--	--	--	--	--	--	1790	--	--	--	2013.2
	07/13/11	52.3	99.6	15.1	39.6	206.6	--	--	--	--	--	--	1870	--	--	--	2076.6
	10/03/11	19.4	--	--	--	19.4	--	--	--	--	--	--	554	--	--	--	573.4
	01/04/12	30.6	--	--	--	30.6	--	--	--	--	--	--	799	--	--	--	829.6
	04/24/12	36.4	--	--	--	36.4	--	--	--	--	--	--	885	--	--	--	921.4
	06/26/12	22.9	--	--	--	22.9	--	--	--	--	--	--	588	--	--	--	610.9
	09/12/12	19.7	--	--	--	19.7	--	--	--	--	--	--	357	--	--	--	376.7
	01/28/13	19.6	--	--	--	19.6	--	--	--	--	--	--	453	--	--	--	472.6
	04/24/13	36.3	--	--	--	36.3	--	--	--	--	--	--	1350	--	--	--	1386.3
	07/16/13	24	--	--	--	24	--	--	--	--	--	--	673	--	--	--	697
	10/15/13	16.3	--	--	--	16.3	--	--	--	--	--	--	402	--	--	--	418.3
	04/29/14	30.2	68.7	9.6	46	154.5	--	--	--	--	--	--	1000	--	--	--	1154.5
	10/13/14	12.5	28.3	<5.0	<10	40.8	--	--	--	--	--	--	515	--	--	--	555.8
	04/21/15	13.9	44.1	6.2	31.8	96	--	--	--	--	--	--	487	--	--	--	583
10/20/15	14.7	43	6.6	34.1	98.4	--	--	--	--	--	--	530	--	--	--	628.4	
04/21/16	26.7	73.2	10.8	57.2	167.9	--	--	--	--	--	--	961	--	--	--	1128.9	
10/04/16	11	43.4	5.9	39.1	99.4	--	--	--	--	--	--	758	--	--	--	857.4	
04/19/17	44.3	85	12.9	66.8	209	--	--	--	--	--	--	1110	--	--	--	1319	
Dup (QC-1)	10/24/17	14.8	36.1	6.4	24.7	82	--	--	--	--	--	604	--	--	--	686	
	10/24/17	12.2	33.5	<5.0	28.8	74.5	--	--	--	--	--	658	--	--	--	732.5	
	04/10/18	5.9	24.9	3.1	20.6	54.5	--	--	--	--	--	372	--	--	--	426.5	
	10/24/18	29.8	70.6	12.8	60.1	173.3	--	--	--	--	--	1070	--	--	--	1243.3	
	04/22/19	19.4	67	10.5	60.4	157.3	--	--	--	--	--	966	--	--	--	1123.3	
	10/31/19	30	74.7	11.3	60.1	176.1	--	--	--	--	--	1110	--	--	--	1286.1	
	04/20/20	37.8	98.1	13.6	75.4	224.9	--	--	--	--	--	1090	--	--	--	1314.9	
04/26/21	30.1	67.9	9.8	54.9	162.7	--	--	--	--	--	950	--	--	--	1112.7		

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		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
MW-13R	10/20/04	2500	350	54	300	3204	<58	<16	<10	<9.2	<6.0	--	<22	22	<4.5	3226	
	12/02/04	2700	410	48	340	3498	<58	<16	<10	<9.2	<6.0	--	<22	<12	<4.5	3498	
	01/12/05	3000	430	42	340	3812	<58	<16	<10	<9.2	<6	--	<22	<12	<4.5	3812	
	02/09/05	2200	350	<34	258	2808	<120	--	--	<18	<12	--	--	<24	<9	2808	
	03/10/05	2300	360	29	270	2959	--	--	--	--	--	--	--	--	--	2959	
	04/19/05	2200	310	<34	237	2747	--	--	--	--	--	--	--	--	--	2747	
	07/06/05	2200	320	<34	228	2748	--	--	--	--	--	--	--	--	--	2748	
	10/19/05	2100	290	17	153	2560	--	--	--	--	--	--	--	--	--	2560	
	01/10/06	2400	340	42	227	3009	--	--	--	--	--	--	--	--	--	3009	
	04/19/06	3700	500	160	560	4920	--	--	--	--	--	--	--	--	--	4920	
	07/19/06	3300	440	100	360	4200	--	--	--	--	--	--	--	--	--	4200	
	10/24/06	1700	250	28	144	2122	--	--	--	--	--	--	--	--	--	2122	
	Dup (QC-1)	04/25/07	3700	580	240	820	5340	--	--	--	--	--	--	--	--	--	5340
		04/25/07	3600	560	230	780	5170	--	--	--	--	--	--	--	--	--	5170
		10/08/07	2000	290	29	186	2505	--	--	--	--	--	--	--	--	--	2505
		04/08/08	2260	362	234	552	3408	--	--	--	--	3180	--	--	--	--	6588
	10/20/08	1800	334	29.7	238	2401.7	--	--	--	--	1850	--	--	--	--	4251.7	
	04/21/09	2020	406	253	643	3322	--	--	--	--	2930	--	--	--	--	6252	
	10/07/09	2190	399	34.8	304	2927.8	--	--	--	--	2120	--	--	--	--	5047.8	
	04/06/10	3440	492	245	707	4884	--	--	--	--	3270	--	--	--	--	8154	
	10/04/10	2710	536	293	759	4298	--	--	--	--	3890	--	--	--	--	8188	
	Dup (QC-1)	01/18/11	3920	724	372	1080	6096	--	--	--	--	4710	--	--	--	--	10806
		01/18/11	3680	664	332	981	5657	--	--	--	--	4840	--	--	--	--	10497
		04/11/11	2010	504	408	931	3853	--	--	--	--	4750	--	--	--	--	8603
		07/13/11	3100	514	441	825	4880	--	--	--	--	5500	--	--	--	--	10380
	Dup (QC-1)	10/03/11	1970	406	140	516	3032	--	--	--	--	3440	--	--	--	--	6472
		01/04/12	3150	632	452	1046	5280	--	--	--	--	4950	--	--	--	--	10230
		01/04/12	3070	605	432	1016	5123	--	--	--	--	4840	--	--	--	--	9963
04/23/12		4240	668	590	1175	6673	--	--	--	--	6520	--	--	--	--	13193	
06/26/12	4710	690	418	1175	6993	--	--	--	--	4600	--	--	--	--	11593		
09/13/12	2640	417	78.2	460	3595.2	--	--	--	--	3070	--	--	--	--	6665.2		
01/28/13	4450	570	477	669	6166	--	--	--	--	5600	--	--	--	--	11766		
Dup (QC-1)	04/23/13	2180	511	469	989	4149	--	--	--	--	4900	--	--	--	--	9049	
	04/23/13	1200	276	277	523	2276	--	--	--	--	2760	--	--	--	--	5036	
	07/16/13	3150	557	496	3792	7995	--	--	--	--	4820	--	--	--	--	12815	
	10/15/13	3230	530	103	589	4452	--	--	--	--	4250	--	--	--	--	8702	
Dup (QC-1)	04/29/14	1780	403	381	775	3339	--	--	--	--	4630	--	--	--	--	7969	
	04/29/14	1430	435	376	837	3078	--	--	--	--	4540	--	--	--	--	7618	
	10/13/14	2740	438	112	341.9	3631.9	--	--	--	--	4390	--	--	--	--	8021.9	
	04/21/15	1190	424	280	746	2640	--	--	--	--	4330	--	--	--	--	6970	
10/20/15	1930	463	135	601	3129	--	--	--	--	4700	--	--	--	--	7829		
04/21/16	1090	345	251	553	2239	--	--	--	--	3240	--	--	--	--	5479		
10/04/16	1130	353	107	446	2036	--	--	--	--	4300	--	--	--	--	6336		
04/19/17	2390	459	438	922	4209	--	--	--	--	4900	--	--	--	--	9109		
10/24/17	1320	277	97.5	300	1994.5	--	--	--	--	2970	--	--	--	--	4964.5		
Dup (QC-1)	04/10/18	1070	300	85.9	324	1779.9	--	--	--	--	2520	--	--	--	--	4299.9	
	04/10/18	1050	290	80.4	315	1735.4	--	--	--	--	2630	--	--	--	--	4365.4	
	10/24/18	1530	411	360	711	3012	--	--	--	--	4650	--	--	--	--	7662	
	10/24/18	2010	505	461	897	3873	--	--	--	--	5030	--	--	--	--	8903	
Dup (QC-2)	04/23/19	1640	398	347	664	3049	--	--	--	--	3960	--	--	--	--	7009	
	04/23/19	1920	446	404	774	3544	--	--	--	--	4170	--	--	--	--	7714	
Dup (QC-2)	10/31/19	1260	423	298	629	2610	--	--	--	--	5620	--	--	--	--	8230	
	10/31/19	1270	431	281	633	2615	--	--	--	--	5180	--	--	--	--	7795	
Dup (QC-2)	04/20/20	1250	413	302	644	2609	--	--	--	--	3840	--	--	--	--	6449	
	04/20/20	1310	418	304	644	2676	--	--	--	--	3870	--	--	--	--	6546	
Dup (QC-2)	04/26/21	6480	1030	1120	2012	10642	--	--	--	--	8380	--	--	--	--	19022	
	04/26/21	6940	1110	1260	2116	11426	--	--	--	--	8990	--	--	--	--	20416	

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)															
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
MW-19 Dup (QC-1) well damaged, scribed for repair	10/19/04	390	72	3.9	36	501.9	11	<1.6	<1	<0.92	<0.60	--	<2.2	<1.2	<0.45	512.9	
	12/01/04	390	86	4.3	53	533.3	<12	<3.3	<2.0	<1.8	<1.2	--	<4.3	<2.4	<0.9	533.3	
	12/01/04	420	80	3.6	45	548.6	<5.8	<1.6	<1	<0.92	<0.60	--	<2.2	<1.2	<0.45	548.6	
	01/12/05	370	86	2.8	48	506.8	<4.6	<1.3	<0.82	<0.74	<0.48	--	<1.7	<0.96	<0.36	506.8	
	02/09/05	370	84	3	51	508	<4.6	--	--	<0.74	<0.48	--	--	--	--	--	508
	03/10/05	400	89	3.1	50	542.1	--	--	--	--	--	--	--	--	--	--	542.1
	04/20/05	440	74	1.9	38.3	554.2	--	--	--	--	--	--	--	--	--	--	554.2
	07/06/05	440	77	2.3	41.3	560.6	--	--	--	--	--	--	--	--	--	--	560.6
	10/17/05	430	62	<3.4	25	517	--	--	--	--	--	--	--	--	--	--	517
	01/11/06	310	81	2.7	42.5	436.2	--	--	--	--	--	--	--	--	--	--	436.2
	04/19/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/20/06	360	51	<3.4	18	429	--	--	--	--	--	--	--	--	--	--	429
	10/23/06	320	--	--	--	320	--	--	--	--	--	--	--	--	--	--	320
	04/26/07	250	--	--	--	250	--	--	--	--	--	--	--	--	--	--	250
	10/09/07	210	--	--	--	210	--	--	--	--	--	--	--	--	--	--	210
	04/08/08	153	--	--	--	153	--	--	--	--	--	157	--	--	--	--	310
	10/21/08	521	--	--	--	521	--	--	--	--	--	104	--	--	--	--	625
	04/21/09	635	--	--	--	635	--	--	--	--	--	118	--	--	--	--	753
	10/08/09	648	--	--	--	648	--	--	--	--	--	32.4	--	--	--	--	680.4
	04/07/10	926	55.6	<3.4	27.5	1009.1	--	--	--	--	--	37.9	--	--	--	--	1083
	10/05/10	1330	--	--	--	1330	--	--	--	--	--	62	--	--	--	--	1392
	04/12/11	158	--	--	--	158	--	--	--	--	--	241	--	--	--	--	399
	07/13/11	1640	--	--	--	1640	--	--	--	--	--	17.8	--	--	--	--	1657.8
	10/04/11	820	--	--	--	820	--	--	--	--	--	11.9	--	--	--	--	831.9
	01/04/12	1010	--	--	--	1010	--	--	--	--	--	<8.9	--	--	--	--	1010
	04/23/12	1110	--	--	--	1110	--	--	--	--	--	37.8	--	--	--	--	1147.8
	06/26/12	977	--	--	--	977	--	--	--	--	--	<8.9	--	--	--	--	977
	09/12/12	520	--	--	--	520	--	--	--	--	--	5.6	--	--	--	--	525.6
	01/28/13	686	--	--	--	686	--	--	--	--	--	<8.9	--	--	--	--	686
	04/23/13	173	--	--	--	173	--	--	--	--	--	57	--	--	--	--	230
	07/16/13	1080	--	--	--	1080	--	--	--	--	--	<25.0	--	--	--	--	1080
	10/15/13	495	--	--	--	495	--	--	--	--	--	32.8	--	--	--	--	527.8
04/29/14	197	98.2	4.2	47.7	347.1	--	--	--	--	--	30.8	--	--	--	--	377.9	
10/13/14	<2.5	220	<2.5	1279	1499	--	--	--	--	--	105	--	--	--	--	1604	
04/21/15	523	47.4	<2.5	3.1	573.5	--	--	--	--	--	<12.5	--	--	--	--	573.5	
10/19/15	396	49.5	<1.2	11.2	456.7	--	--	--	--	--	<6.2	--	--	--	--	456.7	
04/21/16	116	62.5	3.2	30.4	212.1	--	--	--	--	--	21.4	--	--	--	--	233.5	
10/04/16	303	27.8	<1.2	7.3	338.1	--	--	--	--	--	<6.2	--	--	--	--	338.1	
04/19/17	637	67	3.3	32.1	739.4	--	--	--	--	--	12.1	--	--	--	--	751.5	
10/23/17	2.4	<0.50	<0.50	<1.0	2.4	--	--	--	--	--	<2.5	--	--	--	--	2.4	
04/10/18	256	19.1	<2.5	4.5	279.6	--	--	--	--	--	<12.5	--	--	--	--	279.6	
10/24/18	292	68.2	4.2	35	399.4	--	--	--	--	--	22.0	--	--	--	--	421.4	
04/22/19	749	87.1	6.7	42.8	885.6	--	--	--	--	--	55.7	--	--	--	--	941.3	
10/30/19	803	91	4.5	38.6	937.1	--	--	--	--	--	23.2	--	--	--	--	960.3	
04/20/20	<0.25	<0.32	<0.27	<0.73	<1.57	--	--	--	--	--	<1.2	--	--	--	--	<2.77	
04/26/21	120	6.3	0.48	2.2	128.98	--	--	--	--	--	<1.1	--	--	--	--	128.98	
MW-19S well damaged, scribed for repair or abandonment	10/19/04	0.95	<0.54	<0.67	<2.6	0.95	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	0.95	
	12/01/04	0.41	<0.54	<0.67	<2.6	0.41	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	0.41	
	01/12/05	<0.41	<0.54	<0.67	<2.6	<4.22	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	<9.72	
	02/09/05	<0.41	<0.54	<0.67	<1.8	<3.42	<2.3	--	--	<0.37	<0.24	--	--	--	--	--	<6.33
	03/10/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	04/20/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	07/06/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	10/17/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	01/11/06	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	04/19/06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/26/07	<0.41	--	--	--	<0.41	--	--	--	--	--	--	--	--	--	--	<0.41
	10/09/07	<0.41	--	--	--	<0.41	--	--	--	--	--	--	--	--	--	--	<0.41
	04/08/08	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.74	--	--	--	--	<1.15
	10/21/08	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	--	<1.3
	04/21/09	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	--	<1.3
	10/08/09	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	--	<1.3
	04/07/10	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	--	<4.31
	10/24/18	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	--	<2.57
	04/23/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)														
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS
MW-20	10/20/04	490	680	170	860	2200	<12	<3.3	<2.0	<1.8	<1.2	--	<4.3	<2.4	<0.90	2200
	11/30/04	1900	690	370	870	3830	<58	<16	<10	<9.2	<6	--	<22	<12	<4.5	3830
	01/11/05	2100	640	580	840	4160	<58	<16	<10	<9.2	<6	--	<22	<12	<4.5	4160
	02/08/05	1500	650	450	860	3460	<120	--	--	<18	<12	--	--	--	--	3460
	03/09/05	2000	720	600	880	4200	<230	--	--	--	--	--	--	--	--	4200
	04/18/05	2500	700	850	910	4960	--	--	--	--	--	--	--	--	--	4960
	07/05/05	890	500	280	550	2220	--	--	--	--	--	--	--	--	--	2220
	10/17/05	1300	470	310	510	2590	--	--	--	--	--	--	--	--	--	2590
	01/10/06	3700	710	1200	1000	6610	--	--	--	--	--	--	--	--	--	6610
	04/19/06	3400	660	1200	1160	6420	--	--	--	--	--	--	--	--	--	6420
	07/20/06	3000	470	1200	830	5500	--	--	--	--	--	--	--	--	--	5500
	10/24/06	2800	610	630	840	4880	--	--	--	--	--	--	--	--	--	4880
	<i>Dup (QC-1)</i>	10/24/06	2700	650	700	990	5040	--	--	--	--	--	--	--	--	5040
		04/25/07	3400	880	880	1120	6280	--	--	--	--	--	--	--	--	6280
		10/08/07	3100	880	800	1170	5950	--	--	--	--	--	--	--	--	5950
		04/07/08	3020	779	1040	1179	6018	--	--	--	--	6720	--	--	--	12738
		10/20/08	2740	866	956	1243	5805	--	--	--	--	7350	--	--	--	13155
		04/20/09	3280	872	837	1163	6152	--	--	--	--	6620	--	--	--	12772
	<i>Dup (QC-1)</i>	04/20/09	2920	771	742	1020	5453	--	--	--	--	5670	--	--	--	11123
		10/07/09	2890	878	841	1139	5748	--	--	--	--	6290	--	--	--	12038
	<i>Dup (QC-1)</i>	04/06/10	3660	1020	997	1299	6976	--	--	--	--	7510	--	--	--	14486
	<i>Dup (QC-1)</i>	04/06/10	3510	982	953	1260	6705	--	--	--	--	7300	--	--	--	14005
	<i>Dup (QC-1)</i>	10/04/10	3250	957	1050	1191	6448	--	--	--	--	6770	--	--	--	13218
	<i>Dup (QC-1)</i>	10/04/10	3150	837	958	987	5932	--	--	--	--	6660	--	--	--	12592
		04/11/11	3140	1020	1100	1329	6589	--	--	--	--	8270	--	--	--	14859
		10/03/11	2500	759	807	1033	5099	--	--	--	--	6170	--	--	--	11269
	<i>Dup (QC-1)</i>	10/03/11	2500	767	807	956	5030	--	--	--	--	6000	--	--	--	11030
		04/23/12	2460	794	899	1076	5229	--	--	--	--	7280	--	--	--	12509
		06/26/12	2650	702	846	789	4987	--	--	--	--	5260	--	--	--	10247
		09/12/12	3000	870	810	1139	5819	--	--	--	--	6900	--	--	--	12719
		01/28/13	2950	785	963	584	5282	--	--	--	--	7760	--	--	--	13042
		04/23/13	2430	823	975	643	4871	--	--	--	--	6540	--	--	--	11411
		07/16/13	2050	698	872	955	4575	--	--	--	--	5680	--	--	--	10255
		10/15/13	2250	715	795	568	4328	--	--	--	--	5520	--	--	--	9848
		04/29/14	2470	841	986	1100	5397	--	--	--	--	7420	--	--	--	12817
		10/13/14	2810	878	1150	1088	5926	--	--	--	--	7290	--	--	--	13216
		04/21/15	2160	791	971	943	4865	--	--	--	--	6290	--	--	--	11155
		10/19/15	2180	822	950	1132	5084	--	--	--	--	7310	--	--	--	12394
		04/21/16	1780	616	822	853	4071	--	--	--	--	4730	--	--	--	8801
		10/04/16	1560	537	767	844	3708	--	--	--	--	5260	--	--	--	8968
	04/19/17	2080	606	930	939	4555	--	--	--	--	5660	--	--	--	10215	
	10/24/17	1750	457	787	695	3689	--	--	--	--	4370	--	--	--	8059	
	04/10/18	1750	712	752	957	4171	--	--	--	--	4760	--	--	--	8931	
	10/25/18	1890	693	1030	1060	4673	--	--	--	--	5450	--	--	--	10123	
	04/23/19	1550	480	850	858	3738	--	--	--	--	3650	--	--	--	7388	
	10/31/19	1690	582	1000	960	4232	--	--	--	--	5170	--	--	--	9402	
	04/21/20	1450	494	1010	911	3865	--	--	--	--	2860	--	--	--	6725	
	04/27/21	861	350	646	650	2507	--	--	--	--	2110	--	--	--	4617	

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

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 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)														
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS
MW-21	10/20/04	8900	1200	2400	1600	14100	500	<66	<41	<37	<24	--	<86	<48	<18	14600
	12/02/04	12000	1400	3900	1900	19200	<230	<66	<41	<37	<24	--	<86	<48	<18	19200
	01/12/05	9300	1400	3600	2000	16300	<230	<66	<41	<37	<24	--	<86	<48	<18	16300
	02/09/05	9100	1300	3700	1950	16050	<230	--	--	<37	<24	--	--	--	--	16050
	03/09/05	8300	1400	3900	1900	15500	<230	--	--	--	--	--	--	--	--	15500
	04/19/05	6800	1300	3400	2030	13530	170	--	--	--	--	--	--	--	--	13700
	07/06/05	6600	1100	3100	1720	12520	--	--	--	--	--	--	--	--	--	12520
	10/18/05	7300	1100	3000	1580	12980	--	--	--	--	--	--	--	--	--	12980
	01/11/06	4500	850	2700	1530	9580	--	--	--	--	--	--	--	--	--	9580
	04/20/06	3200	590	1900	1230	6920	--	--	--	--	--	--	--	--	--	6920
	07/19/06	4300	650	2200	1220	8370	--	--	--	--	--	--	--	--	--	8370
	10/24/06	4900	700	2100	1250	8950	--	--	--	--	--	--	--	--	--	8950
	04/26/07	3500	620	2100	1340	7560	--	--	--	--	--	--	--	--	--	7560
	10/09/07	4300	640	2400	1300	8640	--	--	--	--	--	--	--	--	--	8640
	04/09/08	2300	434	1780	1283	5797	--	--	--	--	--	9980	--	--	--	15777
	10/21/08	3230	625	2160	1452	7467	--	--	--	--	--	10400	--	--	--	17867
	04/20/09	2350	322	1630	923	5225	--	--	--	--	--	9120	--	--	--	14345
	10/07/09	3170	597	1970	1379	7116	--	--	--	--	--	9910	--	--	--	17026
	04/06/10	2660	469	1820	1207	6156	--	--	--	--	--	10800	--	--	--	16956
	10/04/10	2550	326	1900	982	5758	--	--	--	--	--	9700	--	--	--	15458
	04/11/11	1480	353	1380	1132	4345	--	--	--	--	--	10200	--	--	--	14545
	10/03/11	2030	392	1460	1028	4910	--	--	--	--	--	8910	--	--	--	13820
	04/24/12	1280	256	1240	856	3632	--	--	--	--	--	9730	--	--	--	13362
	06/26/12	1950	275	1460	804	4489	--	--	--	--	--	7710	--	--	--	12199
	09/12/12	2450	364	1500	1003	5317	--	--	--	--	--	9180	--	--	--	14497
	01/28/13	2140	287	1550	888	4865	--	--	--	--	--	10800	--	--	--	15665
	04/23/13	1240	256	1180	963	3639	--	--	--	--	--	9010	--	--	--	12649
	07/16/13	1440	244	1280	800	3764	--	--	--	--	--	8200	--	--	--	11964
	10/15/13	2140	334	1390	1009	4873	--	--	--	--	--	9250	--	--	--	14123
	10/15/13	1950	308	1290	938	4486	--	--	--	--	--	8620	--	--	--	13106
	04/29/14	1180	197	1100	750	3227	--	--	--	--	--	9660	--	--	--	12887
	10/13/14	2080	231	1510	<544	3821	--	--	--	--	--	10400	--	--	--	14221
	04/21/15	1520	272	1400	765	3957	--	--	--	--	--	10300	--	--	--	14257
	10/19/15	1670	308	1420	986	4384	--	--	--	--	--	10700	--	--	--	15084
	04/21/16	1040	225	995	785	3045	--	--	--	--	--	7370	--	--	--	10415
10/04/16	1240	267	1150	964	3621	--	--	--	--	--	10700	--	--	--	14321	
04/19/17	1190	224	1040	912	3366	--	--	--	--	--	9320	--	--	--	12686	
10/24/17	1660	212	1160	751	3783	--	--	--	--	--	8950	--	--	--	12733	
04/10/18	1580	296	1120	910	3906	--	--	--	--	--	8020	--	--	--	11926	
10/25/18	977	184	946	765	2872	--	--	--	--	--	8770	--	--	--	11642	
04/23/19	981	248	988	817	3034	--	--	--	--	--	8660	--	--	--	11694	
10/31/19	1040	208	913	743	2904	--	--	--	--	--	9270	--	--	--	12174	
04/21/20	775	178	809	740	2502	--	--	--	--	--	8680	--	--	--	11182	
04/27/21	993	209	844	743	2789	--	--	--	--	--	9700	--	--	--	12489	

Dup (QC-1)

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

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 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)															
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
MW-22	10/18/04	2700	480	<17	190	3370	<58	<16	<10	<9.2	<6.0	--	<22	<12	<4.5	3370	
	12/01/04	2600	440	<34	160	3200	<120	<33	<20	<18	<12	--	<43	<24	<9	3200	
	01/11/05	2700	480	<34	170	3350	<120	<33	<20	<18	<12	--	<43	<24	<9	3350	
	02/08/05	2600	480	<17	158	3238	<58	--	--	<9.2	<6.0	--	--	--	--	3238	
	03/09/05	2600	510	16	169	3295	--	--	--	--	--	--	--	--	--	3295	
	04/19/05	2900	490	<34	160	3550	--	--	--	--	--	--	--	--	--	3550	
	07/06/05	2900	570	<34	210	3680	--	--	--	--	--	--	--	--	--	3680	
	10/18/05	3300	600	<34	220	4120	--	--	--	--	--	--	--	--	--	4120	
	01/10/06	3300	680	<17	250	4230	--	--	--	--	--	--	--	--	--	4230	
	04/19/06	3400	680	<34	230	4310	--	--	--	--	--	--	--	--	--	4310	
	07/19/06	3700	760	<34	242	4702	--	--	--	--	--	--	--	--	--	4702	
	10/24/06	3500	690	<67	100	4290	--	--	--	--	--	--	--	--	--	4290	
	04/25/07	2900	580	<17	187	3667	--	--	--	--	--	--	--	--	--	3667	
	Dup (QC-1)	10/09/07	3000	590	<34	175	3765	--	--	--	--	--	--	--	--	3765	
		10/09/07	2800	550	<34	174	3524	--	--	--	--	--	--	--	--	3524	
	Dup (QC-1)	04/09/08	2300	512	20.2	165.9	2998.1	--	--	--	--	2370	--	--	--	5368.1	
		04/09/08	2460	542	45.4	190.4	3237.8	--	--	--	--	2680	--	--	--	5917.8	
	Dup (QC-1)	10/21/08	2050	543	<67	<180	2593	--	--	--	--	3930	--	--	--	6523	
		10/21/08	2150	564	<33.5	206.2	2920.2	--	--	--	--	2800	--	--	--	5720.2	
	Dup (QC-1)	04/20/09	1980	524	<13.4	177.7	2681.7	--	--	--	--	2220	--	--	--	4901.7	
		10/07/09	1960	538	<16.8	162.9	2660.9	--	--	--	--	2340	--	--	--	5000.9	
	Dup (QC-1)	04/06/10	2040	532	<16.8	146.7	2718.7	--	--	--	--	2290	--	--	--	5008.7	
		10/04/10	2190	524	<16.8	120.4	2834.4	--	--	--	--	2670	--	--	--	5504.4	
	Dup (QC-1)	04/11/11	1920	601	<16.8	160.3	2681.3	--	--	--	--	3270	--	--	--	5951.3	
		04/11/11	1730	535	<16.8	149.6	2414.6	--	--	--	--	2650	--	--	--	5064.6	
	Dup (QC-1)	10/03/11	1970	445	<16.8	87.9	2502.9	--	--	--	--	2220	--	--	--	4722.9	
		04/23/12	1600	458	<16.8	33.3	2091.3	--	--	--	--	2110	--	--	--	4201.3	
	Dup (QC-1)	06/26/12	1820	474	<16.8	23	2317	--	--	--	--	1470	--	--	--	3787	
		09/13/12	2070	452	<16.8	33.1	2555.1	--	--	--	--	1750	--	--	--	4305.1	
	Dup (QC-1)	01/28/13	2230	481	<16.8	25.9	2736.9	--	--	--	--	2320	--	--	--	5056.9	
04/23/13		1840	509	<11.0	47.5	2396.5	--	--	--	--	1850	--	--	--	4246.5		
Dup (QC-1)	07/16/13	1810	524	<11.0	43.1	2377.1	--	--	--	--	2400	--	--	--	4777.1		
	07/16/13	1670	520	<8.8	78.5	2268.5	--	--	--	--	2400	--	--	--	4668.5		
Dup (QC-1)	10/15/13	2630	574	<11.0	105.4	3309.4	--	--	--	--	2890	--	--	--	6199.4		
	04/30/14	1860	454	<12.5	26.5	2340.5	--	--	--	--	2500	--	--	--	4840.5		
Dup (QC-1)	10/13/14	2450	522	<12.5	<25	2972	--	--	--	--	3440	--	--	--	6412		
	04/21/15	1690	444	<12.5	<25.0	2134	--	--	--	--	2170	--	--	--	4304		
Dup (QC-1)	10/19/15	1450	432	<12.5	35.4	1917.4	--	--	--	--	2570	--	--	--	4487.4		
	04/21/16	1310	399	<12.5	32.5	1741.5	--	--	--	--	1710	--	--	--	3451.5		
Dup (QC-1)	04/21/16	1430	472	<10	70.1	1972.1	--	--	--	--	2220	--	--	--	4192.1		
	10/04/16	1380	409	<12.5	38.1	1827.1	--	--	--	--	2070	--	--	--	3897.1		
Dup (QC-1)	04/19/17	1770	489	<12.5	77.7	2336.7	--	--	--	--	2660	--	--	--	4996.7		
	10/24/17	1860	368	<12.5	26.5	2254.5	--	--	--	--	2050	--	--	--	4304.5		
Dup (QC-1)	04/10/18	1690	405	<12.5	30.0	2125	--	--	--	--	1930	--	--	--	4055		
	10/25/18	1370	332	<6.9	54	1756	--	--	--	--	1810	--	--	--	3566		
Dup (QC-1)	04/23/19	1690	417	5.5	56.9	2169.4	--	--	--	--	1930	--	--	--	4099.4		
	10/31/19	1400	349	<4.3	45.4	1794.4	--	--	--	--	1910	--	--	--	3704.4		
Dup (QC-1)	04/21/20	1280	206	<6.7	30.7	1516.7	--	--	--	--	897	--	--	--	2413.7		
	04/27/21	1120	358	<7.2	63	1541	--	--	--	--	2870	--	--	--	4411		
MW-23	10/21/08	<0.41	<0.54	0.94	<1.8	0.94	--	--	--	--	3.3	--	--	--	4.24		
	Well Installed 9/15/2008	02/19/09	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	1.1	--	--	--	1.1	
		04/21/09	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	1.2	--	--	--	1.2	
	Dup (QC-1)	10/08/09	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	<0.41	<1.3	<0.24	0.097	<0.86	<0.48	<0.18	0.097
		10/08/09	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	<0.41	<1.3	<0.24	1.1	<0.86	<0.48	<0.18	1.1
	Dup (QC-1)	11/12/09	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	<0.41	<1.3	<0.24	<0.89	<0.86	<0.48	<0.18	<7.78
		04/07/10	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	<0.89	--	--	--	<4.31	
	Dup (QC-1)	04/24/12	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	<0.89	--	--	--	<4.31	
		10/24/18	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	<1.2	--	--	--	<2.57	
	Dup (QC-1)	04/23/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Dup (QC-1)	04/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		04/26/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)														
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS
MW-24 Well Installed 1/14/2013	01/29/13	2.4	<0.54	2.7	<1.8	5.1	--	--	<0.41	<1.3	<0.24	<0.89	<0.86	<0.48	<0.18	5.1
	04/24/13	<0.5	<0.5	<0.44	<0.82	<2.26	--	--	<0.36	<0.69	<0.39	<2.5	<0.35	<0.43	<0.18	<7.16
	07/16/13	7	<0.50	<0.44	<0.82	1	--	--	--	--	--	<2.5	--	--	--	1
	10/15/13	1.4	<0.50	<0.44	<0.82	1.4	--	--	--	--	--	<2.5	--	--	--	1.4
	04/29/14	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/14/14	<0.50	<0.50	<0.50	<1.5	<3	--	--	--	--	--	<2.5	--	--	--	<5.5
	04/22/15	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/20/15	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	04/22/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/05/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	04/20/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/23/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	04/11/18	<0.50	<0.50	<0.50	<1.5	<3.0	--	--	--	--	--	<2.5	--	--	--	<5.5
	10/24/18	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	04/22/19	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	10/30/19	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
04/20/20	<0.25	<0.32	<0.27	<0.73	<1.57	--	--	--	--	--	<1.2	--	--	--	<2.77	
04/26/21	<0.30	<0.33	<0.29	<1.05	<1.97	--	--	--	--	--	<1.1	--	--	--	<3.07	
MW-25 Well Installed 1/15/2013	01/28/13	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	<0.41	<1.3	<0.24	<0.89	<0.86	<0.48	<0.18	<7.78
	04/24/13	1.1	0.71	<0.44	<0.82	1.81	--	--	<0.36	<0.69	<0.39	<2.5	<0.35	<0.47	<0.18	1.81
	07/16/13	7	<0.50	<0.44	<0.82	1	--	--	--	--	--	<2.5	--	--	--	1
	10/15/13	1.4	<0.5	<0.44	<0.82	1.4	--	--	--	--	--	<2.5	--	--	--	1.4
	04/29/14	5.9	9.1	3	14	32	--	--	--	--	--	70.4	--	--	--	102.4
	10/14/14	3.6	1.7	0.74	<1.9	6.04	--	--	--	--	--	9.9	--	--	--	15.94
	04/21/15	2.8	3.9	1.5	5.8	14	--	--	--	--	--	28.6	--	--	--	42.6
	10/20/15	6.1	6.4	1.9	9.3	23.7	--	--	--	--	--	63.5	--	--	--	87.2
	04/21/16	2.3	5.2	1.1	6.8	15.4	--	--	--	--	--	68.5	--	--	--	83.9
	10/04/16	6.7	10.3	2.5	14.6	34.1	--	--	--	--	--	149	--	--	--	183.1
	10/04/16	6.6	10.4	2.6	14.4	34	--	--	--	--	--	149	--	--	--	183
	04/20/17	3.7	9	1.8	13.4	27.9	--	--	--	--	--	141	--	--	--	168.9
	10/24/17	3.9	3.7	1.2	5.4	14.2	--	--	--	--	--	86.2	--	--	--	100.4
	04/10/18	12.9	10.3	4.0	14.8	42	--	--	--	--	--	93.8	--	--	--	135.8
	10/24/18	3.7	8.5	2	12.7	26.9	--	--	--	--	--	125	--	--	--	151.9
	04/22/19	0.9	1.6	0.23	1.98	4.71	--	--	--	--	--	22.7	--	--	--	27.41
10/31/19	7	1.3	0.23	1.75	4.28	--	--	--	--	--	19.4	--	--	--	23.68	
04/20/20	0.94	1.5	0.31	1.95	4.7	--	--	--	--	--	26.7	--	--	--	31.4	
04/26/21	0.74	1.1	<0.29	1.82	3.66	--	--	--	--	--	12.4	--	--	--	16.06	
MW-26	04/22/15	18.9	2.4	1	3.4	25.7	--	--	--	--	--	19.8	--	--	--	45.5
	07/14/15	71.1	6.5	0.57	6.1	84.27	--	--	<0.50	<2.5	<0.50	53.1	<0.50	<0.33	<0.18	137.37
	10/19/15	58.9	5.9	0.75	5.8	71.35	--	--	<0.50	<2.5	<0.50	70.3	<0.50	<0.33	<0.18	141.65
	01/07/16	58.7	4.7	<0.5	6	69.4	--	--	--	--	--	45.8	--	--	--	115.2
	04/22/16	27.1	1.5	<0.5	1.4	30	--	--	--	--	--	16.7	--	--	--	46.7
	07/14/16	32.1	<0.5	<0.5	1.3	33.4	--	--	--	--	--	15.6	--	--	--	49
	10/05/16	70.2	0.74	<0.5	4	74.94	--	--	--	--	--	--	--	--	--	74.94
	01/18/17	56.9	<0.50	<0.50	2.5	59.4	--	--	--	--	--	34.9	--	--	--	94.3
	04/20/17	24.7	<0.50	<0.50	0.95	25.65	--	--	--	--	--	10.0	--	--	--	35.65
	07/12/17	8.0	<0.50	<0.50	<1.0	8	--	--	--	--	--	4.5	--	--	--	12.5
	01/22/18	86.4	<0.50	<0.50	5.2	91.6	--	--	--	--	--	78.4	--	--	--	170
	04/12/18	25.1	<0.50	<0.50	0.82	25.92	--	--	--	--	--	11.3	--	--	--	37.22
	07/26/18	9.6	<0.22	<0.17	0.34	9.94	--	--	--	--	--	2.2	--	--	--	12.14
	10/24/18	54.2	0.23	0.22	4.2	57.85	--	--	--	--	--	35	--	--	--	92.85
	04/22/19	26.1	<0.22	<0.17	2.41	28.51	--	--	--	--	--	28	--	--	--	56.51
	10/30/19	29.1	0.25	<0.17	2.71	32.06	--	--	--	--	--	13.6	--	--	--	45.66
04/20/20	6.8	<0.32	<0.27	0.37	7.17	--	--	--	--	--	1.5	--	--	--	8.67	
04/26/21	3.3	<0.33	<0.29	<1.05	3.3	--	--	--	--	--	<1.1	--	--	--	3.3	

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

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 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)														
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS
MW-27	04/22/15	207	47.8	2.1	13.5	270.4	--	--	--	--	--	382	--	--	--	652.4
	07/14/15	474	91.2	2.2	20.5	587.9	--	--	<2.0	<10.0	<2.0	633	<2.0	<1.3	<0.70	1220.9
	07/14/15	436	80.1	<5.0	9.2	525.3	--	--	<5.0	<25.0	<5.0	615	<5.0	<3.3	<1.8	1140.3
	10/20/15	404	63.1	2.1	15.8	485	--	--	<2.0	<10.0	<2.0	691	<2.0	<1.3	<0.70	1176
	01/07/16	526	113	3.8	27	669.8	--	--	--	--	--	734	--	--	--	1403.8
	04/22/16	556	107	4.1	24	691.1	--	--	--	--	--	605	--	--	--	1296.1
	07/14/16	597	115	2.8	26.7	741.5	--	--	--	--	--	894	--	--	--	1635.5
	07/14/16	597	121	<5	31.8	749.8	--	--	--	--	--	998	--	--	--	1747.8
	10/05/16	560	111	<2.5	22.9	693.9	--	--	--	--	--	1100	--	--	--	1793.9
	01/18/17	529	118	2.8	25.8	675.6	--	--	--	--	--	828	--	--	--	1503.6
	04/20/17	569	94.4	2.8	23.3	689.5	--	--	--	--	--	620	--	--	--	1309.5
	07/12/17	420	88.5	<2.5	21.4	529.9	--	--	--	--	--	727	--	--	--	1256.9
	01/22/18	359	72.3	<2.5	17.6	448.9	--	--	--	--	--	599	--	--	--	1047.9
	04/12/18	342	54.6	<2.5	14.7	411.3	--	--	--	--	--	467	--	--	--	878.3
	07/26/18	458	64.9	1.5	17.3	553.84	--	--	--	--	--	671	--	--	--	1224.84
	07/26/18	450	62.9	1.5	16	530.4	--	--	--	--	--	660	--	--	--	1190.4
	10/24/18	357	48.3	<1.7	7.1	412.4	--	--	--	--	--	468	--	--	--	880.4
	04/22/19	258	43.3	2.1	12.1	315.5	--	--	--	--	--	339	--	--	--	654.5
	10/30/19	437	78.9	1.7	18.4	536	--	--	--	--	--	853	--	--	--	1389
	04/20/20	335	67.2	1.8	13.4	417.4	--	--	--	--	--	381	--	--	--	798.4
04/26/21	285	70.2	1.9	17.1	374.2	--	--	--	--	--	523	--	--	--	897.2	
MW-28	04/22/15	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	07/14/15	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	<0.50	<2.5	<0.50	<2.5	<0.50	<0.33	<0.18	<9.51
	10/20/15	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	<0.50	<2.5	<0.50	<2.5	<0.50	<0.33	<0.18	<9.51
	01/07/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	01/07/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	04/22/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	07/14/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/04/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	01/18/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	01/18/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	04/20/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	07/12/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/23/17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/22/18	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5.0
	01/22/18	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5.0
	04/12/18	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5.0
	07/26/18	<0.25	<0.22	<0.17	<0.73	<1.4	--	--	--	--	--	<1.2	--	--	--	<3.97
	10/24/18	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	04/22/19	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	10/30/19	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
04/20/20	<0.25	<0.32	<0.27	<0.73	<1.57	--	--	--	--	--	<1.2	--	--	--	<2.77	
04/26/21	<0.30	<0.33	<0.29	<1.05	<1.97	--	--	--	--	--	<1.1	--	--	--	<3.07	

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

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 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)															
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
PZ-12B	10/21/04	0.99	0.56	<0.67	<2.6	1.55	<2.3	<0.66	<0.41	1.4	0.54	--	<0.86	<0.48	<0.18	3.49	
	11/30/04	0.77	<0.54	<0.67	<2.6	0.77	<2.3	<0.66	<0.41	1.3	<0.24	--	<0.86	<0.48	<0.18	2.07	
	01/13/05	0.86	<0.54	<0.67	<2.6	0.86	2.7	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	3.56	
	02/10/05	0.93	<0.54	<0.67	<1.8	0.93	<2.3	--	--	<0.37	<0.24	--	--	--	--	0.93	
	02/10/05	0.93	<0.54	<0.67	<1.8	0.93	<2.3	--	--	<0.37	<0.24	--	--	--	--	0.93	
	03/08/05	0.58	<0.54	<0.67	<1.8	0.58	--	--	--	--	--	--	--	--	--	--	0.58
	04/20/05	0.86	<0.54	<0.67	<1.8	0.86	--	--	--	--	--	--	--	--	--	--	0.86
	07/07/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	07/07/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	10/19/05	0.54	<0.54	<0.67	<1.8	0.54	--	--	--	--	--	--	--	--	--	--	0.54
	01/12/06	0.68	<0.54	<0.67	<1.8	0.68	--	--	--	--	--	--	--	--	--	--	0.68
	04/20/06	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	07/20/06	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	04/26/07	1.2	--	--	--	1.2	--	--	--	--	--	--	--	--	--	--	1.2
	04/08/08	1.5	--	--	--	1.5	--	--	--	--	--	<0.74	--	--	--	--	1.5
	04/21/09	0.44	--	--	--	0.44	--	--	--	--	--	<2.5	--	--	--	--	0.44
	04/07/10	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	04/24/12	<0.41	--	--	--	<0.41	--	--	--	--	--	<0.89	--	--	--	--	<1.3
	04/24/13	<0.50	--	--	--	<0.5	--	--	--	--	--	<2.5	--	--	--	--	<3
	04/29/14	<0.50	<2.5	--	--	<3	--	--	--	--	--	<2.5	--	--	--	--	<5.5
	04/21/15	<0.50	--	--	--	<0.5	--	--	--	--	--	<2.5	--	--	--	--	<3
	04/21/16	<0.5	--	--	--	<0.5	--	--	--	--	--	<2.5	--	--	--	--	<3
	04/19/17	<0.50	--	--	--	<0.5	--	--	--	--	--	<2.5	--	--	--	--	<3
	04/10/18	<0.50	--	--	--	<0.50	--	--	--	--	--	<2.5	--	--	--	--	<3.0
	04/22/19	<0.25	--	--	--	<0.25	--	--	--	--	--	1.3	--	--	--	--	1.3
	10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/20	<0.25	--	--	--	<0.25	--	--	--	--	--	<1.2	--	--	--	--	<1.45
04/26/21	<0.30	--	--	--	<0.30	--	--	--	--	--	<1.1	--	--	--	--	<1.40	
PZ-20B	10/20/04	110	15	2.2	21	148.2	<2.3	<0.66	<0.41	<0.37	0.36	--	<0.86	<0.48	<0.18	148.56	
	11/30/04	100	19	2.3	27	148.3	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	148.3	
	01/11/05	62	15	1.9	21	99.9	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	99.9	
	02/08/05	47	14	1.7	18.6	81.3	<2.3	--	--	<0.37	<0.24	--	--	--	--	81.3	
	03/09/05	43	14	1.6	17.2	75.8	--	--	--	--	--	--	--	--	--	75.8	
	04/18/05	28	7.6	1	8.8	45.4	--	--	--	--	--	--	--	--	--	45.4	
	07/05/05	18	6.6	<0.67	7.1	31.7	--	--	--	--	--	--	--	--	--	31.7	
	10/17/05	14	6.1	<0.67	5.6	25.7	--	--	--	--	--	--	--	--	--	25.7	
	01/10/06	15	6	<0.67	5.8	26.8	--	--	--	--	--	--	--	--	--	26.8	
	04/19/06	10	3.9	<0.67	2.6	16.5	--	--	--	--	--	--	--	--	--	16.5	
	07/20/06	8.4	4	<0.67	2.2	14.6	--	--	--	--	--	--	--	--	--	14.6	
	04/25/07	13	--	--	--	13	--	--	--	--	--	--	--	--	--	13	
	04/07/08	2.8	--	--	--	2.8	--	--	--	--	--	23.8	--	--	--	26.6	
	04/20/09	1.2	--	--	--	1.2	--	--	--	--	--	12.6	--	--	--	13.8	
	04/06/10	0.85	<0.54	<0.67	<1.8	0.85	--	--	--	--	--	5.3	--	--	--	6.15	
	04/12/11	<0.41	--	--	--	<0.41	--	--	--	--	--	2.4	--	--	--	2.4	
	04/23/12	0.47	--	--	--	0.47	--	--	--	--	--	1.4	--	--	--	1.87	
	04/23/13	0.51	--	--	--	0.51	--	--	--	--	--	5.3	--	--	--	5.81	
	04/29/14	0.84	--	--	--	0.84	--	--	--	--	--	16	--	--	--	16.84	
	04/21/15	<0.50	--	--	--	<0.5	--	--	--	--	--	11.4	--	--	--	11.4	
	04/21/16	<0.5	--	--	--	<0.5	--	--	--	--	--	15.9	--	--	--	15.9	
	04/19/17	0.640	--	--	--	0.640	--	--	--	--	--	11.40	--	--	--	12	
04/10/18	0.70	--	--	--	0.70	--	--	--	--	--	19.7	--	--	--	20.4		
04/23/19	0.73	--	--	--	0.73	--	--	--	--	--	20.0	--	--	--	20.73		
10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/21/20	<0.25	--	--	--	<0.25	--	--	--	--	--	<1.2	--	--	--	<1.45		
04/27/21	0.7	--	--	--	0.70	--	--	--	--	--	9.4	--	--	--	10.1		

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Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)															
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
PZ-21B	<i>Dup (QC-1)</i>	10/20/04	38	10	1.7	12	61.7	<2.3	<0.66	<0.41	<0.37	0.42	--	<0.86	<0.48	<0.18	62.12
		10/20/04	39	9.8	1.7	12	62.5	<2.3	<0.66	<0.41	<0.37	0.73	--	<0.86	<0.48	<0.18	63.23
		12/02/04	32	10	1.7	13	56.7	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	56.7
	01/12/05	24	12	1.6	13	50.6	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	50.6	
	02/09/05	15	7.2	1.1	7.8	31.1	<2.3	--	--	<0.37	<0.24	--	--	--	--	31.1	
	03/09/05	13	7	0.84	7.4	28.24	--	--	--	--	--	--	--	--	--	--	28.24
	<i>Dup (QC-1)</i>	04/19/05	9.7	4.1	<0.67	4.2	18	--	--	--	--	--	--	--	--	--	18
		04/19/05	9.8	4.3	<0.67	2.2	16.3	--	--	--	--	--	--	--	--	--	16.3
		07/06/05	6.4	3.4	<0.67	1.9	11.7	--	--	--	--	--	--	--	--	--	11.7
	<i>Dup (QC-1)</i>	10/18/05	5.3	2.2	<0.67	1.4	8.9	--	--	--	--	--	--	--	--	--	8.9
		01/10/06	6.2	2.3	<0.67	3.5	12	--	--	--	--	--	--	--	--	--	12
		01/11/06	6.5	2.4	<0.67	1.7	10.6	--	--	--	--	--	--	--	--	--	10.6
	<i>Dup (QC-1)</i>	04/20/06	2.2	1.2	<0.67	0.9	4.3	--	--	--	--	--	--	--	--	--	4.3
		04/20/06	2.2	1.2	<0.67	0.94	4.34	--	--	--	--	--	--	--	--	--	4.34
	<i>Dup (QC-1)</i>	07/19/06	1.5	1.2	<0.67	<1.8	2.7	--	--	--	--	--	--	--	--	--	2.7
		07/19/06	1.6	1.2	<0.67	<1.8	2.8	--	--	--	--	--	--	--	--	--	2.8
	<i>Dup (QC-1)</i>	04/26/07	2.3	--	--	--	2.3	--	--	--	--	--	--	--	--	--	2.3
		04/09/08	1.3	1.6	<0.67	0.9	3.8	--	--	--	--	--	52.1	--	--	--	55.9
		04/20/09	0.5	--	--	--	0.5	--	--	--	--	--	22.6	--	--	--	23.1
		04/06/10	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	24	--	--	--	24
		04/12/11	<0.41	--	--	--	<0.41	--	--	--	--	--	15.3	--	--	--	15.3
		04/24/12	<0.41	--	--	--	<0.41	--	--	--	--	--	5.6	--	--	--	5.6
		04/23/13	<0.50	--	--	--	<0.5	--	--	--	--	--	4.5	--	--	--	4.5
		04/29/14	<0.50	--	--	--	<0.5	--	--	--	--	--	22.6	--	--	--	22.6
		04/21/15	<0.50	--	--	--	<0.5	--	--	--	--	--	10.9	--	--	--	10.9
		04/21/16	<0.5	--	--	--	<0.5	--	--	--	--	--	23.6	--	--	--	23.6
		04/19/17	<0.50	--	--	--	<0.5	--	--	--	--	--	4.40	--	--	--	4.40
		04/10/18	<0.50	--	--	--	<0.50	--	--	--	--	--	64.7	--	--	--	64.7
04/23/19	<0.25	--	--	--	<0.25	--	--	--	--	--	32.9	--	--	--	32.9		
10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/21/20	0.4	--	--	--	0.4	--	--	--	--	--	48.4	--	--	--	48.8		
04/27/21	0.35	--	--	--	0.35	--	--	--	--	--	52.2	--	--	--	52.55		
PZ-22B	10/18/04	25	19	2.6	19	65.6	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	65.6	
	12/01/04	35	23	3.1	22	83.1	<2.3	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	83.1	
	01/11/05	55	26	3.5	25	109.5	3.8	<0.66	<0.41	<0.37	<0.24	--	<0.86	<0.48	<0.18	113.3	
	02/08/05	48	23	<6.7	12	83	<2.3	--	--	<3.7	<2.4	--	--	--	--	83	
	<i>Dup (QC-1)</i>	03/09/05	59	27	4.3	28	118.3	--	--	--	--	--	--	--	--	--	118.3
		03/09/05	53	26	3.9	26	108.9	--	--	--	--	--	--	--	--	--	108.9
		04/19/05	41	14	<6.7	<18	55	--	--	--	--	--	--	--	--	--	55
	<i>Dup (QC-1)</i>	07/06/05	61	15	<6.7	<18	76	--	--	--	--	--	--	--	--	--	76
		10/18/05	38	12	<3.4	5.5	55.5	--	--	--	--	--	--	--	--	--	55.5
		10/18/05	37	12	<3.4	5.4	54.4	--	--	--	--	--	--	--	--	--	54.4
	<i>Dup (QC-1)</i>	01/10/06	34	10	<3.4	4.8	48.8	--	--	--	--	--	--	--	--	--	48.8
		04/19/06	36	24	<6.7	9.2	69.2	--	--	--	--	--	--	--	--	--	69.2
		07/19/06	22	6.9	<3.4	<9.0	28.9	--	--	--	--	--	--	--	--	--	28.9
		04/25/07	20	--	--	--	20	--	--	--	--	--	--	--	--	--	20
		04/09/08	10.9	7.9	<3.4	<9	18.8	--	--	--	--	--	314	--	--	--	332.8
		04/20/09	7.4	--	--	--	7.4	--	--	--	--	--	530	--	--	--	537.4
		04/06/10	6.7	12.1	<3.4	5.2	24	--	--	--	--	--	--	--	--	--	24
		04/12/11	6.1	--	--	--	6.1	--	--	--	--	--	816	--	--	--	822.1
		04/23/12	2.9	--	--	--	2.9	--	--	--	--	--	364	--	--	--	366.9
		04/23/13	2.8	--	--	--	2.8	--	--	--	--	--	420	--	--	--	422.8
		04/30/14	5.1	--	--	--	5.1	--	--	--	--	--	530	--	--	--	535.1
		04/21/15	3.2	--	--	--	3.2	--	--	--	--	--	493	--	--	--	496.2
	04/21/16	4	--	--	--	4	--	--	--	--	--	481	--	--	--	485	
	04/19/17	4.8	--	--	--	4.8	--	--	--	--	--	678	--	--	--	682.8	
	04/10/18	3.7	--	--	--	3.7	--	--	--	--	--	699	--	--	--	699	
	04/23/19	3.1	--	--	--	3.1	--	--	--	--	--	669	--	--	--	672.1	
	10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/21/20	3.5	--	--	--	3.5	--	--	--	--	--	623	--	--	--	626.5	
04/27/21	2.9	--	--	--	2.9	--	--	--	--	--	879	--	--	--	881.9		

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)															
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
PZ-23 Well Installed 10/5/2009	10/08/09	189	22	<3.4	33.8	244.8	--	--	<2.0	<6.5	<1.2	537	<4.3	<2.4	<0.90	781.8	
	11/12/09	292	28.6	4.3	38	362.9	--	--	<2.0	<6.5	<1.2	672	<4.3	<2.4	<0.90	1034.9	
	04/07/10	551	45.3	11.6	49.3	657.2	--	--	--	--	--	895	--	--	--	1552.2	
	10/05/10	1090	63	<6.7	36.1	1189.1	--	--	--	--	--	1260	--	--	--	2449.1	
	01/18/11	655	60.5	<6.7	13	728.5	--	--	--	--	--	962	--	--	--	1690.5	
	04/12/11	1030	88.2	26.7	48.4	1193.3	--	--	--	--	--	1190	--	--	--	2383.3	
	07/13/11	1160	86.4	<6.7	12.1	1258.5	--	--	--	--	--	1600	--	--	--	2858.5	
	10/04/11	537	52.1	<6.7	9.2	598.3	--	--	--	--	--	899	--	--	--	1497.3	
	01/04/12	1160	83.3	18.6	20.6	1282.5	--	--	--	--	--	944	--	--	--	2226.5	
	04/24/12	1200	90.3	<6.7	21.8	1312.1	--	--	--	--	--	1070	--	--	--	2382.1	
	06/26/12	1110	69.2	<6.7	11.3	1190.5	--	--	--	--	--	886	--	--	--	2076.5	
	09/12/12	934	71.7	<6.7	16	1021.7	--	--	--	--	--	957	--	--	--	1978.7	
	01/29/13	889	52.8	8.2	13.3	963.3	--	--	--	--	--	854	--	--	--	1817.3	
	04/24/13	1050	85.5	26.3	46.8	1208.6	--	--	--	--	--	1160	--	--	--	2368.6	
	07/16/13	971	81.3	5	39.1	1096.4	--	--	--	--	--	1180	--	--	--	2276.4	
	10/16/13	806	70.1	<4.4	34.5	910.6	--	--	--	--	--	1030	--	--	--	1940.6	
	04/30/14	893	73.7	18.2	33.3	1018.2	--	--	--	--	--	1000	--	--	--	2018.2	
	07/21/14	952	82.2	5.6	35.6	1075.4	--	--	--	--	--	1160	--	--	--	2235.4	
	10/13/14	931	62.1	<5.0	<15.0	993.1	--	--	--	--	--	1210	--	--	--	2203.1	
	Dup (QC-1)	04/22/15	512	55.9	5.3	23.6	596.8	--	--	--	--	--	619	--	--	--	1215.8
		04/22/15	452	50.3	5.5	11.1	518.9	--	--	--	--	--	508	--	--	--	1026.9
		07/14/15	567	48.4	<5.0	10.6	626	--	--	--	--	--	488	--	--	--	1114
		10/20/15	542	55.4	<5.0	10.7	608.1	--	--	--	--	--	838	--	--	--	1446.1
		01/07/16	840	74.5	8.8	15.8	939.1	--	--	--	--	--	721	--	--	--	1660.1
		04/21/16	728	59.1	6.4	10.9	804.4	--	--	--	--	--	488	--	--	--	1292.4
		07/14/16	783	75.8	<5	14.3	873.1	--	--	--	--	--	831	--	--	--	1704.1
		10/04/16	693	61.2	<5	10.1	764.3	--	--	--	--	--	854	--	--	--	1618.3
		01/18/17	694	58.5	2.4	9.5	764.4	--	--	--	--	--	669	--	--	--	1433.4
		04/20/17	819	55.4	<5.0	10.9	885.3	--	--	--	--	--	507	--	--	--	1392.3
	Dup (QC-2)	07/12/17	702	69.4	<5.0	23.8	795.2	--	--	--	--	--	720	--	--	--	1515.2
		10/23/17	498	36.5	<5.0	8.1	542.6	--	--	--	--	--	669	--	--	--	1211.6
		01/22/18	396	34.1	<5.0	8.2	438.3	--	--	--	--	--	572	--	--	--	1010.3
		04/12/18	519	38.5	<5.0	6.2	563.7	--	--	--	--	--	525	--	--	--	1088.7
04/12/18		524	38.7	2.8	13.3	578.8	--	--	--	--	--	654	--	--	--	1232.8	
07/26/18		763	56.6	1.8	21.1	842.5	--	--	--	--	--	863	--	--	--	1705.5	
10/24/18		505	37.9	2.1	15.7	560.7	--	--	--	--	--	514	--	--	--	1074.7	
10/24/18		492	34.1	1.8	7.9	535.8	--	--	--	--	--	524	--	--	--	1059.8	
04/22/19		459	41.4	2.3	13.7	516.4	--	--	--	--	--	432	--	--	--	948.4	
04/22/19		521	47.7	2.5	15.8	587	--	--	--	--	--	529	--	--	--	1116	
Dup (QC-1)	10/30/19	563	39.8	<1.7	12.4	615.2	--	--	--	--	--	631	--	--	--	1246.2	
	10/30/19	510	37	1.2	9.2	557.4	--	--	--	--	--	644	--	--	--	1201.4	
Dup (QC-1)	04/20/20	461	36.1	<2.7	7.3	504.4	--	--	--	--	--	254	--	--	--	758.4	
	04/20/20	563	44.3	2.8	14.6	624.7	--	--	--	--	--	363	--	--	--	987.7	
Dup (QC-1)	04/26/21	290	21.1	<2.9	5.3	316.4	--	--	--	--	--	425	--	--	--	741.4	
	04/26/21	261	18.7	1.4	7.4	288.5	--	--	--	--	--	266	--	--	--	554.5	
PZ-26 Well Installed 04/15/2014	04/30/14	6890	814	1020	1032	9756	--	--	<50.0	<250	<50.0	6480	<15.3	<33.1	<17.6	16236	
	05/12/14	14700	1150	2440	1493	19783	--	--	<50.0	<250	<50.0	7630	<15.3	<33.1	<17.6	27413	
	10/13/14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/21/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	07/14/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/19/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/23/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)															
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}	
<i>Preventive Action Limit:</i>		0.5	140	160	400	NS	1800	200	NS	0.6	3	10	10	0.5	0.02	NS	
<i>Enforcement Standard:</i>		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS	
PZ-27	Dup (QC-1)	04/22/15	259	40.4	3.4	19	321.8	--	--	--	--	527	--	--	--	848.8	
		07/14/15	439	46.5	2.2	17.9	505.6	--	--	<2.0	<10.0	<2.0	543	<2.0	<1.3	<0.70	1048.6
		10/20/15	381	48.2	2.1	20.3	451.6	--	--	<2.0	<10.0	<2.0	812	<2.0	<1.3	<0.70	1263.6
		10/20/15	425	39.7	<5.0	9.1	473.8	--	--	<5.0	<25.0	<5.0	700	<5.0	<3.3	<1.8	1173.8
		01/07/16	455	49.1	<5	12.2	516.3	--	--	--	--	--	598	--	--	--	1114.3
		04/22/16	512	47.5	6.3	9.9	575.7	--	--	--	--	--	401	--	--	--	976.7
		07/14/16	537	52.5	<5	17.3	606.8	--	--	--	--	--	547	--	--	--	1153.8
		10/05/16	487	53	<5	11.3	551.3	--	--	--	--	--	687	--	--	--	1238.3
		01/18/17	252	23	1.4	14.1	290.5	--	--	--	--	--	227	--	--	--	517.5
		04/20/17	506	45.7	<5.0	11.5	563.2	--	--	--	--	--	438	--	--	--	1001.2
	Dup (QC-1)	07/12/17	398	48.5	<5.0	12.9	459.4	--	--	--	--	--	485	--	--	--	944.4
		07/12/17	394	46	<5.0	11	451	--	--	--	--	--	473	--	--	--	924
		10/23/17	469	34	<5.0	7.4	510.4	--	--	--	--	--	398	--	--	--	908.4
		01/22/18	209	27.8	2.7	17.6	257.1	--	--	--	--	--	367	--	--	--	624.4
		04/12/18	334	28.8	<2.5	15.2	378	--	--	--	--	--	495	--	--	--	873
		07/26/18	406	37.6	1.7	19.3	464.6	--	--	--	--	--	535	--	--	--	999.6
		10/24/18	334	34.3	1.7	16.9	386.9	--	--	--	--	--	536	--	--	--	922.9
		04/22/19	315	33.6	2.2	15	365.8	--	--	--	--	--	435	--	--	--	800.8
		10/30/19	328	33.3	1.4	16.2	378.9	--	--	--	--	--	521	--	--	--	899.9
		04/20/20	298	30.3	2	13.5	343.8	--	--	--	--	--	276	--	--	--	619.8
04/26/21	154	19.5	1.8	14.7	190	--	--	--	--	--	233	--	--	--	423		
PZ-28	Product in well, not sampled	04/22/15	4880	748	721	1025	7374	--	--	--	--	3720	--	--	--	11094	
		07/14/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		10/19/15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		04/23/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		10/30/19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		04/20/20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/21	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
QCFB	02/20/02	<0.44	<0.5	<0.4	<1.2	<2.54	<3.1	<0.4	<0.43	<0.41	--	--	<0.37	<0.49	<0.17	<7.91	
	05/13/02	<0.44	<0.5	<0.4	<1.2	<2.54	6.5	<0.4	<0.43	<0.41	--	--	<0.37	<0.49	<0.17	6.5	
	08/20/02	<0.44	<0.5	<0.4	<1.2	<2.54	3.8	<0.4	<0.43	<0.41	--	--	<0.37	<0.49	<0.17	3.8	
	11/14/02	<0.25	<0.53	<0.84	<1.9	<3.52	<3.3	<0.5	<0.58	<0.45	--	--	<0.62	<0.39	<0.11	<9.47	
	02/20/03	<0.25	<0.53	<0.84	<1.9	<3.52	<3.3	<0.5	<0.58	<0.45	--	--	<0.62	<0.39	<0.11	<9.47	
	10/19/04	<0.41	<0.54	<0.67	<2.6	<4.22	4.3	<0.66	<0.41	<0.37	<0.24	--	--	<0.86	<0.48	<0.18	4.3
	12/02/04	<0.41	<0.54	<0.67	<2.6	<4.22	3.1	<0.66	<0.41	<0.37	<0.24	--	--	<0.86	<0.48	<0.18	3.1
	01/13/05	<0.41	<0.54	<0.67	<2.6	<4.22	3.4	<0.66	<0.41	<0.37	<0.24	--	--	<0.86	<0.48	<0.18	3.4
	02/10/05	<0.41	<0.54	<0.67	<1.8	<3.42	<2.3	--	--	<0.37	<0.24	--	--	--	--	--	<6.33
	03/10/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	04/20/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	07/07/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	10/19/05	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	01/12/06	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	04/19/06	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	07/20/06	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	10/24/06	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	04/26/07	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	10/09/07	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<3.42
	04/09/08	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	--	--	--	<4.16
	10/21/08	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	<0.89	--	--	<4.31
	04/21/09	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	--	--	<0.89	--	--	<4.31
	10/08/09	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	<0.41	<1.3	<0.24	<0.89	<0.86	<0.45	<0.18	<7.75	
	04/07/10	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31	
	10/05/10	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31	
	01/18/11	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31	
	04/12/11	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31	
	07/13/11	<0.41	<0.54	<0.67	<1.9	<3.52	--	--	--	--	--	<0.89	--	--	--	<4.41	
	10/03/11	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31	
	01/04/12	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31	
	04/24/12	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31	
	06/26/12	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31	
09/13/12	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	--	--	--	<0.89	--	--	--	<4.31		
01/29/13	<0.41	<0.54	<0.67	<1.8	<3.42	--	--	<0.41	<1.3	<0.24	<0.89	<0.86	<0.48	<0.18	<7.78		
04/23/13	<0.50	<0.50	<0.44	<0.50	<1.94	--	--	<0.36	<0.69	<0.39	<2.5	<0.35	<0.43	<0.18	<6.84		
07/16/13	<0.50	<0.50	<0.44	<0.82	<2.26	--	--	--	--	--	<2.5	--	--	--	<4.76		
10/15/13	<0.50	<0.50	<0.44	<0.82	<2.26	--	--	--	--	--	<2.5	--	--	--	<4.76		
04/30/14	<0.50	<0.50	<0.50	<1	<2.5	--	--	<0.50	<2.5	<0.50	--	<0.15	<0.33	<0.18	<6.66		
10/14/14	<0.50	<0.50	<0.50	<1.5	<3	--	--	<0.50	<2.5	<0.50	<2.5	<0.05	<0.33	<0.18	<9.56		
04/21/15	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5		
07/14/15	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	<0.50	<2.5	<0.50	<2.5	<0.50	<0.33	<0.18	<9.51		

TABLE 2. GROUNDWATER ANALYTICAL RESULTS - VOCs

2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Sample Location	Sample Date	Volatile Organic Compounds (VOCs-µg/L)														
		Benzene	Ethylbenzene	Toluene	Xylenes, Total ³	Total BTEX ^{1,4}	Acetone	Carbondisulfide	Chlorobenzene	Chloroform	Chloromethane	Naphthalene ²	Styrene	Trichloroethene	Vinyl Chloride	Total VOCs ^{1,5}
<i>Preventive Action Limit:</i>		<i>0.5</i>	<i>140</i>	<i>160</i>	<i>400</i>	<i>NS</i>	<i>1800</i>	<i>200</i>	<i>NS</i>	<i>0.6</i>	<i>3</i>	<i>10</i>	<i>10</i>	<i>0.5</i>	<i>0.02</i>	<i>NS</i>
Enforcement Standard:		5	700	800	2000	NS	9000	1000	NS	6	30	100	100	5	0.2	NS
QCFB, continued	10/19/15	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	<0.50	<2.5	<0.50	<2.5	<0.50	<0.33	<0.18	<9.51
	01/07/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	04/21/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	07/14/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/04/16	<0.5	<0.5	<0.5	<1	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	01/18/17	<i>1.2</i>	<0.50	<0.50	<1.0	<i>1.2</i>	--	--	--	--	--	<2.5	--	--	--	<i>1.2</i>
	07/12/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/23/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	10/24/17	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5
	01/22/18	<0.50	<0.50	<0.50	<1.0	<2.5	--	--	--	--	--	<2.5	--	--	--	<5.0
	07/26/18	<0.25	<0.22	<0.17	<0.73	<1.4	--	--	--	--	--	<1.2	--	--	--	<3.97
	10/24/18	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	10/25/18	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	04/22/19	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	04/23/19	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	10/30/19	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	10/31/19	<0.25	<0.22	<0.17	<0.73	<1.37	--	--	--	--	--	<1.2	--	--	--	<2.57
	04/21/20	<0.25	<0.32	<0.27	<0.73	<1.57	--	--	--	--	--	<1.2	--	--	--	<2.77
	04/27/21	<0.30	--	--	--	<0.30	--	--	--	--	--	<1.1	--	--	--	<1.40

JTB/RH 5/05; PAR/JTB 11/05; PAR/JTB 9/06; RJG/JTB 10/07; BGH/RMW 6/08; RMW/KRM 1/09; BGH/RJG 3/09; RMW/BGH 5/10; AMM/KJB 2/11; KJB/RJG 5/11; ndK/BGH 8/11; CJM/AMM 1/12; AMM/JJW 5/12; AMM/ANS 7/12; AMM/RJG 10/12; ETE/RJG 3/13; ETO/RJG 5/13; EPK/ndK 9/13; ETE/ndK 10/13; U-ECK 6/14; U-KLT 1/30/2015; C-PMH 2/15; U-AJS 12/10/15; C-PMH 12/14/15; Format:ECK 4/11/16; U-ECK 1/30/17; C-SGW 1/31/17 U-KJS 2/7/17; U-KLT 1/29/17; C-TWL 12/15/17; U-JOW 3/20/19; C-KLT 3/21/19; U-KLT 3/21/19; C-JOW 3/21/19; C-ASM 3/27/2019; U-KLT 4/16/20; C-MIK 4/17/20; U-CMD 6/24/21; C-KJS 8/23/21

Notes:

- Italic Constituent concentrations that attain or exceed a preventive action limit (PAL) are italicized.*
- BOLD** Constituent concentrations that attain or exceed an enforcement standard (ES) are bold.
- < : Constituent was not identified above the limit of detection shown.
- : Analysis was not performed.

Dup (QA/QC): Field Duplicate sample, field identification indicated in parentheses.
 µg/L : Micrograms per liter.
 VOC: Volatile Organic Compound

*: Laboratory data for wells MW-8, MW-9, and MW-10 were originally presented in the March 25, 2002 URS SI report

nd : all components of total calculation were non-detects
 NS : NR 140 groundwater quality standard has not been established.

- Non-detects were not included in the calculated sums.
- Naphthalene data 2007 and earlier were analyzed as a SVOC and appear on the SVOCs table in previous reports.
- When not calculated by the lab, Total Xylenes were calculated by Ramboll as follows:
 - Where no detections were observed, the sum of the reporting limits is presented.
 - Where detections were observed, the detected results were added together for the total summation.
 - The list of analytes used for the calculation are: Xylene-o and Xylenes-m+p.
- Total BTEX were calculated by Ramboll as follows:
 - Where no detections were observed, the sum of the reporting limits is presented.
 - Where detections were observed, the detected results were added together for the total summation.
 - The list of analytes used for the calculation are: Benzene, Toluene, Ethylbenzene and Total Xylene.
- Total VOCs were calculated by Ramboll as follows:
 - Where no detections were observed, the sum of the reporting limits is presented.
 - Where detections were observed, the detected results were added together for the total summation.
 - Analytes as shown on this VOC table were used for the calculations.

Nitrite + Nitrate, Total was analyzed 2009 to 2016 as "Nitrate as N" (analytic method EPA 300.0)

See lab reports for data qualifiers.

NR 140 groundwater quality standards revised effective January 2020. Data prior to this date are also compared to revised 2020 standards.

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
<i>Preventive Action Limit:</i>		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
<i>Enforcement Standard:</i>		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
MW-02R	10/19/2004	<0.0035	0.57	<0.00030	--	0.00075	--	--	0.071	--	0.68	<0.0011	<0.00028	<0.0048	<0.00076
	11/30/2004	--	--	--	--	--	--	--	0.082	--	0.47	--	--	--	--
	01/11/2005	--	--	--	--	--	0.6	0.018	0.055	0.013	0.6	--	--	--	--
	02/08/2005	<0.0035	0.56	--	--	--	0.54	<0.0053	0.18	0.0065	0.64	--	--	--	--
	03/08/2005	--	--	--	--	--	--	--	--	0.013	0.69	--	--	--	--
	04/18/2005	<0.0035	0.64	--	--	--	0.51	--	--	0.011	0.78	--	--	--	--
	07/05/2005	--	--	--	--	--	0.6	--	--	0.017	--	--	--	--	--
	10/17/2005	0.00084	0.92	--	--	--	0.62	--	--	0.0079	1	--	--	--	--
	01/10/2006	--	--	--	--	--	0.53	--	--	<0.0050	--	--	--	--	--
	04/19/2006	0.0013	0.84	--	--	--	0.92	--	--	0.0054	1.2	--	--	--	--
	07/19/2006	--	--	--	--	--	0.8	--	--	0.0136	--	--	--	--	--
	10/24/2006	0.00096	0.96	--	--	--	0.87	--	--	<0.0050	--	--	--	--	--
	04/25/2007	0.0019	0.9	--	--	--	1.2	--	--	0.00776	--	--	--	--	--
	10/08/2007	--	--	--	--	--	1.3	--	--	0.0085	--	--	--	--	--
	04/07/2008	0.0077	1.12	--	--	--	1.6	--	--	1.2	--	--	--	--	--
	10/20/2008	0.0048	0.895	--	--	--	1	--	--	--	0.89	--	--	--	--
	04/20/2009	0.0082	0.86	--	--	--	1.4	--	--	<0.002	1.03	--	--	--	--
	10/07/2009	0.006	0.848	--	--	--	1.7	--	--	<0.002	--	--	--	--	--
	04/06/2010	0.0073	0.812	--	--	--	1.8	--	--	0.003	--	--	--	--	--
	10/04/2010	0.0105	0.588	--	--	--	1.7	--	--	0.0053	--	--	--	--	--
	04/11/2011	0.0089	0.59	--	--	--	0.31	--	--	<0.002	--	--	--	--	--
	10/03/2011	0.0084	0.415	--	--	--	1.8	--	--	<0.00030	--	--	--	--	--
	04/23/2012	0.0046	0.462	--	--	--	1.5	--	--	32	--	--	--	--	--
<i>Dup (QC-1)</i>	04/23/2012	0.0044	0.448	--	--	--	1.5	--	--	38	--	--	--	--	--
	06/26/2012	--	--	--	--	--	0.38	--	--	11	--	--	--	--	--
<i>Dup (QC-1)</i>	06/26/2012	--	--	--	--	--	1.6	--	--	2.9	--	--	--	--	--
	09/12/2012	0.0039	0.208	--	--	--	1.8	--	--	0.03	--	--	--	--	--
<i>Dup (QC-1)</i>	09/12/2012	0.0038	0.204	--	--	--	1.6	--	--	0.14	--	--	--	--	--
	04/23/2013	0.0063	--	--	--	--	1.7	--	--	0.002	--	--	--	--	--
	10/15/2013	--	--	--	--	--	1.4	--	--	0.0038	--	--	--	--	--
	04/29/2014	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2015	0.0084	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2016	0.003	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/19/2017	0.002	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/19/2017	0.002	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/10/2018	0.0012	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/22/2019	0.0013	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/31/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2020	0.0015	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/27/2021	0.0011	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
Preventive Action Limit:		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
Enforcement Standard:		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
MW-08	10/31/2001	--	--	--	29	--	0.018	<0.0022	--	--	--	--	--	--	--
	02/20/2002	--	--	--	21	--	0.11	<0.0022	--	--	--	--	--	--	--
	05/13/2002	--	--	--	22	--	0.14	<0.0022	--	--	--	--	--	--	--
	08/20/2002	--	--	--	21	--	0.82	<0.0084	--	--	--	--	--	--	--
	11/14/2002	--	--	--	18	--	0.066	0.006	--	--	--	--	--	--	--
	02/19/2003	--	--	--	19	--	0.072	0.012	--	--	--	--	--	--	--
	05/22/2003	--	--	--	--	--	0.098	<0.002	--	--	--	--	--	--	--
	08/01/2003	--	--	--	--	--	0.044	<0.002	--	--	--	--	--	--	--
	10/18/2004	--	--	--	--	--	--	--	0.56	--	--	--	--	--	--
	02/10/2005	--	--	--	--	--	0.086	<0.0053	0.53	<0.0053	--	--	--	--	--
	04/19/2005	--	--	--	--	--	0.066	--	--	<0.0050	--	--	--	--	--
	07/07/2005	--	--	--	--	--	0.071	--	--	<0.0050	--	--	--	--	--
	10/19/2005	--	--	--	--	--	--	--	--	<0.0050	--	--	--	--	--
	01/11/2006	--	--	--	--	--	0.041	--	--	<0.0050	--	--	--	--	--
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/20/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-09	10/31/2001	--	--	--	457	--	0.01	<0.0022	--	--	--	--	--	--	--
	02/20/2002	--	--	--	486	--	0.0064	<0.0022	--	--	--	--	--	--	--
	05/13/2002	--	--	--	348	--	0.0047	<0.0022	--	--	--	--	--	--	--
	08/20/2002	--	--	--	331	--	0.01	<0.0084	--	--	--	--	--	--	--
	11/14/2002	--	--	--	295	--	0.009	<0.0027	--	--	--	--	--	--	--
	02/19/2003	--	--	--	273	--	0.0083	0.0075	--	--	--	--	--	--	--
	05/22/2003	--	--	--	--	--	0.008	<0.002	--	--	--	--	--	--	--
	08/01/2003	--	--	--	--	--	0.005	<0.002	--	--	--	--	--	--	--
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/26/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	10/31/2001	--	--	--	20	--	0.011	<0.0022	--	--	--	--	--	--	--
	02/20/2002	--	--	--	20	--	0.0086	0.0023	--	--	--	--	--	--	--
	05/13/2002	--	--	--	22	--	0.0078	<0.0022	--	--	--	--	--	--	--
	08/20/2002	--	--	--	20	--	<0.0023	<0.0084	--	--	--	--	--	--	--
	11/14/2002	--	--	--	18	--	0.003	<0.0027	--	--	--	--	--	--	--
	02/19/2003	--	--	--	21	--	0.01	0.0046	--	--	--	--	--	--	--
	05/22/2003	--	--	--	--	--	0.005	0.002	--	--	--	--	--	--	--
	08/01/2003	--	--	--	--	--	0.003	<0.002	--	--	--	--	--	--	--
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/26/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Well Abandoned	07/16/2021	0.00067	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
Preventive Action Limit:		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
Enforcement Standard:		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
MW-13R	10/20/2004	0.017	--	<0.00030	--	0.0023	--	--	1.1	--	0.55	<0.0011	--	0.0024	<0.00076
	12/02/2004	--	--	--	--	--	--	--	6.2	--	0.51	--	--	--	--
	01/12/2005	--	--	--	--	--	0.99	0.029	1.1	0.32	0.48	--	--	--	--
	02/09/2005	0.0084	--	--	--	--	0.9	0.022	4.6	0.012	0.43	--	--	--	--
	03/10/2005	--	--	--	--	--	--	--	--	2.1	0.4	--	--	--	--
	04/19/2005	0.012	--	--	--	--	0.58	--	--	0.31	0.42	--	--	--	--
	07/06/2005	--	--	--	--	--	0.78N	--	--	0.0052	--	--	--	--	--
	10/19/2005	0.0031	--	--	--	--	0.81	--	--	<0.050	0.46	--	--	--	--
	01/10/2006	--	--	--	--	--	0.83	--	--	0.061	--	--	--	--	--
	04/19/2006	0.028	--	--	--	--	0.61	--	--	0.4	0.54	--	--	--	--
	07/19/2006	--	--	--	--	--	0.85	--	--	<0.100	--	--	--	--	--
	10/24/2006	0.012	--	--	--	--	0.91	--	--	0.734	--	--	--	--	--
	04/25/2007	0.032	--	--	--	--	0.68	--	--	0.00663	--	--	--	--	--
Dup (QC-1)	04/25/2007	0.033	--	--	--	--	0.49	--	--	<0.00500	0.49	--	--	--	--
	10/08/2007	--	--	--	--	--	0.93	--	--	<0.0020	--	--	--	--	--
	04/08/2008	0.0406	--	--	--	--	0.96	--	--	0.0059	--	--	--	--	--
	10/20/2008	0.0095	--	--	--	--	0.76	--	--	--	0.497	--	--	--	--
	04/21/2009	0.057	--	--	--	--	1	--	--	0.0024	0.587	--	--	--	--
	10/07/2009	0.0211	--	--	--	--	1.2	--	--	<0.002	0.644	--	--	--	--
	04/06/2010	0.0413	--	--	--	--	0.051	--	--	0.0027	--	--	--	--	--
Dup (QC-1)	10/04/2010	0.0557	--	--	--	--	0.032	--	--	0.044	--	--	--	--	--
	01/18/2011	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/2011	0.0496	--	--	--	--	0.027	--	--	0.0038	--	--	--	--	--
	10/03/2011	0.0521	--	--	--	--	0.032	--	--	0.004	--	--	--	--	--
	04/23/2012	0.0679	--	--	--	--	0.14	--	--	70	--	--	--	--	--
	06/26/2012	--	--	--	--	--	0.016	--	--	28	--	--	--	--	--
	09/12/2012	0.0235	--	--	--	--	1	--	--	0.037	--	--	--	--	--
Dup (QC 1)	04/23/2013	0.055	--	--	--	--	1.8	--	--	0.007	--	--	--	--	--
	04/23/2013	0.0523	--	--	--	--	0.3	--	--	0.004	--	--	--	--	--
	10/15/2013	--	--	--	--	--	1.2	--	--	0.0062	--	--	--	--	--
	04/29/2014	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-1)	04/29/2014	0.0501	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/13/2014	0.0289	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2015	0.0408	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2016	0.0486	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/19/2017	0.056	--	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-1)	04/10/2018	0.0251	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/10/2018	0.0242	--	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-2)	04/23/2019	0.0708	--	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-2)	04/23/2019	0.0697	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/31/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-2)	04/20/2020	0.0743	--	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-2)	04/20/2020	0.0815	--	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-2)	04/26/2021	0.149	--	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-2)	04/26/2021	0.158	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
Preventive Action Limit:		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
Enforcement Standard:		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
MW-19 Dup (QC-1) well damaged, scheduled for repair or abandonment	10/19/2004	<0.0035	--	<0.00030	--	<0.00065	--	--	0.33	--	0.72	<0.0011	<0.000028	<0.0048	<0.00076
	12/01/2004	--	--	--	--	--	--	--	0.37	--	0.73	--	--	--	--
	12/01/2004	--	--	--	--	--	--	--	0.23	--	0.69	--	--	--	--
	01/12/2005	--	--	--	--	--	0.73	0.018	1.2	0.027	0.47	--	--	--	--
	02/09/2005	--	--	--	--	--	0.57	0.018	3.3	0.0051	0.42	--	--	--	--
	03/10/2005	--	--	--	--	--	--	--	--	0.011	0.44	--	--	--	--
	04/20/2005	--	--	--	--	--	0.63	--	--	<0.0050	0.45	--	--	--	--
	07/06/2005	--	--	--	--	--	0.53	--	--	<0.0050	--	--	--	--	--
	10/17/2005	--	--	--	--	--	0.46	--	--	0.0057	0.52	--	--	--	--
	01/11/2006	--	--	--	--	--	0.49	--	--	<0.0050	--	--	--	--	--
	07/20/2006	--	--	--	--	--	0.6	--	--	<0.00500	--	--	--	--	--
	10/23/2006	0.00074	--	--	--	--	0.56	--	--	<0.00500	--	--	--	--	--
	04/26/2007	--	--	--	--	--	--	--	--	--	0.68	--	--	--	--
	04/08/2008	0.0017	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/21/2008	--	--	--	--	--	--	--	--	--	1.36	--	--	--	--
	04/20/2009	--	--	--	--	--	--	--	--	--	0.833	--	--	--	--
	10/08/2009	--	--	--	--	--	--	--	--	--	1.02	--	--	--	--
	09/12/2012	0.0016	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/23/2013	<0.0044	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/29/2014	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2015	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--
04/21/2016	0.0013	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/19/2017	0.0016	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/10/2018	0.00052	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/22/2019	0.0012	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/20/2020	0.0015	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/2021	0.0008	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-19S well damaged, scheduled for repair or abandonment	10/19/2004	<0.0035	--	<0.00030	--	0.0077	--	--	<0.0050	--	5.9	<0.0011	<0.000028	<0.0048	<0.00076
	12/01/2004	--	--	--	--	--	--	--	<0.0050	--	9.2	--	--	--	--
	01/12/2005	--	--	--	--	--	0.033	<0.0053	<0.010	<0.0050	5.8	--	--	--	--
	02/09/2005	--	--	--	--	--	0.027	<0.0053	<0.0050	<0.0050	2.6	--	--	--	--
	03/10/2005	--	--	--	--	--	--	--	--	<0.0050	2	--	--	--	--
	04/20/2005	--	--	--	--	--	0.016	--	--	<0.0050	2.6	--	--	--	--
	07/06/2005	--	--	--	--	--	0.0095	--	--	<0.0050	--	--	--	--	--
	10/17/2005	--	--	--	--	--	0.01	--	--	0.018	2.6	--	--	--	--
	01/11/2006	--	--	--	--	--	0.015	--	--	<0.0050	--	--	--	--	--
	04/26/2007	--	--	--	--	--	<0.006	--	--	<0.00500	0.28	--	--	--	--
	10/09/2007	--	--	--	--	--	<0.006	--	--	0.0032	--	--	--	--	--
	04/08/2008	0.0005	--	--	--	--	0.019	--	--	<0.002	--	--	--	--	--
	10/21/2008	--	--	--	--	--	0.0096	--	--	--	0.0141	--	--	--	--
	04/21/2009	--	--	--	--	--	0.011	--	--	<0.002	0.068	--	--	--	--
	10/08/2009	--	--	--	--	--	<0.008	--	--	<0.002	0.0184	--	--	--	--
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/20/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

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APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
Preventive Action Limit:		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
Enforcement Standard:		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
MW-20	10/20/2004	0.013	--	<0.00030	--	0.0012	--	--	1.6	--	0.11	<0.0011	<0.000028	0.00081	<0.00076
	11/30/2004	--	--	--	--	--	--	--	3.9	--	0.18	--	--	--	--
	01/11/2005	--	--	--	--	--	0.088	0.011	6.1	0.014	0.16	--	--	--	--
	02/08/2005	0.1	--	--	--	--	0.12	<0.0053	3.7	0.012	0.12	--	--	--	--
	03/09/2005	--	--	--	--	--	--	--	--	2.9	0.14	--	--	--	--
	04/18/2005	0.17	--	--	--	--	0.17	--	--	<0.050	0.14	--	--	--	--
	07/05/2005	--	--	--	--	--	0.044	--	--	<0.0050	--	--	--	--	--
	10/17/2005	0.06	--	--	--	--	0.064	--	--	<0.050	0.17	--	--	--	--
	01/10/2006	--	--	--	--	--	0.27	--	--	0.013	--	--	--	--	--
	04/19/2006	0.091	--	--	--	--	0.28	--	--	0.35	0.28	--	--	--	--
	07/20/2006	--	--	--	--	--	0.24	--	--	<0.100	--	--	--	--	--
	10/24/2006	0.13	--	--	--	--	0.22	--	--	0.842	--	--	--	--	--
Dup (QC-1)	10/24/2006	0.11	--	--	--	--	0.24	--	--	<0.50	--	--	--	--	--
	04/25/2007	0.17	--	--	--	--	0.26	--	--	0.00642	--	--	--	--	--
	10/08/2007	--	--	--	--	--	0.23	--	--	0.093	--	--	--	--	--
	04/07/2008	0.136	--	--	--	--	0.27	--	--	0.031	--	--	--	--	--
	10/21/2008	0.152	--	--	--	--	0.19	--	--	--	0.169	--	--	--	--
	04/20/2009	0.119	--	--	--	--	0.26	--	--	0.04	0.157	--	--	--	--
Dup (QC-1)	04/20/2009	0.121	--	--	--	--	0.12	--	--	0.19	0.164	--	--	--	--
	10/07/2009	0.0939	--	--	--	--	0.24	--	--	<0.002	0.147	--	--	--	--
	04/06/2010	0.0915	--	--	--	--	0.35	--	--	0.0079	--	--	--	--	--
Dup (QC-1)	04/06/2010	0.101	--	--	--	--	0.34	--	--	0.0042	--	--	--	--	--
	10/04/2010	0.0287	--	--	--	--	0.34	--	--	0.065	--	--	--	--	--
Dup (QC-1)	10/04/2010	0.0437	--	--	--	--	0.34	--	--	0.0047	--	--	--	--	--
	04/11/2011	0.103	--	--	--	--	0.28	--	--	0.0064	--	--	--	--	--
	10/03/2011	0.138	--	--	--	--	0.29	--	--	0.002	--	--	--	--	--
Dup (QC-1)	10/03/2011	0.136	--	--	--	--	0.28	--	--	0.002	--	--	--	--	--
	04/23/2012	--	--	--	--	--	0.24	--	--	6.8	--	--	--	--	--
	06/26/2012	--	--	--	--	--	0.21	--	--	0.0034	--	--	--	--	--
	09/12/2012	0.12	--	--	--	--	0.23	--	--	0.045	--	--	--	--	--
	04/23/2013	0.358	--	--	--	--	0.27	--	--	0.002	--	--	--	--	--
	10/15/2013	--	--	--	--	--	0.190	0.0022	--	0.002	--	--	--	--	--
	04/29/2014	0.331	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/13/2014	0.261	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2015	0.177	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2016	0.16	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/19/2017	0.139	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/10/2018	0.0788	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/23/2019	0.108	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/31/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2020	0.0973	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/27/2021	0.0957	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

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APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
Preventive Action Limit:		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
Enforcement Standard:		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
MW-21	10/20/2004	0.51	--	<0.00030	--	0.0012	--	--	4.3	--	0.2	<0.0011	<0.000028	0.002	<0.00076
	12/02/2004	--	--	--	--	--	--	--	9.4	--	0.32	--	--	--	--
	01/12/2005	--	--	--	--	--	0.6	0.022	17	0.84	0.39	--	--	--	--
	02/09/2005	0.67	--	--	--	--	0.46	0.053	14	0.63	0.38	--	--	--	--
	03/09/2005	--	--	--	--	--	--	--	--	3.3	0.35	--	--	--	--
	04/19/2005	0.51	--	--	--	--	0.33	--	--	1	0.38	--	--	--	--
	07/06/2005	--	--	--	--	--	0.23	--	--	0.095	--	--	--	--	--
	10/18/2005	0.4	--	--	--	--	0.22	--	--	0.15	0.77	--	--	--	--
	01/11/2006	--	--	--	--	--	0.31	--	--	0.012	--	--	--	--	--
	04/20/2006	0.48	--	--	--	--	0.29	--	--	0.012	0.7	--	--	--	--
	07/19/2006	--	--	--	--	--	0.31	--	--	0.0212	--	--	--	--	--
	10/24/2006	0.37	--	--	--	--	0.32	--	--	0.00882	--	--	--	--	--
	04/26/2007	0.31	--	--	--	--	0.39	--	--	0.0138	--	--	--	--	--
	10/09/2007	--	--	--	--	--	0.22	--	--	0.01	--	--	--	--	--
	04/09/2008	0.238	--	--	--	--	0.36	--	--	0.042	--	--	--	--	--
	10/21/2008	0.392	--	--	--	--	0.18	--	--	--	0.455	--	--	--	--
	04/20/2009	0.204	--	--	--	--	0.31	--	--	0.015	0.296	--	--	--	--
	10/07/2009	0.211	--	--	--	--	0.26	--	--	<0.002	0.387	--	--	--	--
	04/06/2010	0.237	--	--	--	--	0.43	--	--	0.0044	--	--	--	--	--
	10/04/2010	0.231	--	--	--	--	0.29	--	--	0.006	--	--	--	--	--
	04/11/2011	0.156	--	--	--	--	0.36	--	--	0.024	--	--	--	--	--
	10/03/2011	0.271	--	--	--	--	0.26	--	--	0.002	--	--	--	--	--
	04/24/2012	0.181	--	--	--	--	0.23	--	--	0.038	--	--	--	--	--
	06/26/2012	--	--	--	--	--	0.25	--	--	0.005	--	--	--	--	--
	09/12/2012	0.239	--	--	--	--	0.28	--	--	0.011	--	--	--	--	--
	04/23/2013	0.129	--	--	--	--	0.27	--	--	<0.002	--	--	--	--	--
	10/15/2013	--	--	--	--	--	0.23	--	--	<0.002	--	--	--	--	--
	10/15/2013	--	--	--	--	--	0.21	<0.002	--	--	--	--	--	--	--
	04/29/2014	0.128	--	--	--	--	0.23	--	--	--	--	--	--	--	--
	10/13/2014	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--
04/21/2015	0.166	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/21/2016	0.139	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/19/2017	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/10/2018	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/23/2019	0.118	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/31/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/21/2020	0.0855	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/27/2021	0.117	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
<i>Preventive Action Limit:</i>		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
<i>Enforcement Standard:</i>		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
MW-22	10/18/2004	0.0044	--	<0.00030	--	<0.00065	--	--	0.76	--	0.49	<0.0011	<0.000028	<0.0048	<0.00076
	12/01/2004	--	--	--	--	--	--	--	0.92	--	0.39	--	--	--	--
	01/11/2005	--	--	--	--	--	0.074	0.012	0.29	<0.0050	0.43	--	--	--	--
	02/08/2005	0.0072	--	--	--	--	0.094	0.01	0.22	<0.0050	0.41	--	--	--	--
	03/09/2005	--	--	--	--	--	--	--	--	<0.0050	0.43	--	--	--	--
	04/19/2005	0.0042	--	--	--	--	0.099N	--	--	<0.0050	0.51	--	--	--	--
	07/06/2005	--	--	--	--	--	0.099	--	--	<0.0050	--	--	--	--	--
	10/18/2005	0.0053	--	--	--	--	0.1	--	--	<0.0050	0.64	--	--	--	--
	01/10/2006	--	--	--	--	--	0.11	--	--	<0.0050	--	--	--	--	--
	04/19/2006	0.0077	--	--	--	--	0.1	--	--	<0.0050	0.52	--	--	--	--
	07/19/2006	--	--	--	--	--	<0.0094	--	--	0.036	--	--	--	--	--
	10/24/2006	0.012	--	--	--	--	0.097	--	--	<0.00500	--	--	--	--	--
	04/25/2007	0.011	--	--	--	--	0.1	--	--	<0.00500	--	--	--	--	--
	10/09/2007	--	--	--	--	--	0.07	--	--	0.0032	--	--	--	--	--
	Dup (QC-1)	10/09/2007	--	--	--	--	0.08	--	--	0.0033	--	--	--	--	--
	Dup (QC-1)	04/09/2008	0.0086	--	--	--	0.04	--	--	0.0081	--	--	--	--	--
	Dup (QC-1)	04/09/2008	0.0084	--	--	--	0.04	--	--	<0.002	--	--	--	--	--
	Dup (QC-1)	10/21/2008	0.0086	--	--	--	0.051	--	--	--	0.515	--	--	--	--
	Dup (QC-1)	10/21/2008	0.0088	--	--	--	0.047	--	--	--	0.519	--	--	--	--
	Dup (QC-1)	04/20/2009	0.0067	--	--	--	0.024	--	--	0.0025	0.451	--	--	--	--
	Dup (QC-1)	10/07/2009	0.0076	--	--	--	--	--	--	--	0.532	--	--	--	--
	Dup (QC-1)	04/06/2010	--	--	--	--	0.037	--	--	<0.002	--	--	--	--	--
	Dup (QC-1)	10/04/2010	0.0111	--	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/11/2011	0.0071	--	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/11/2011	0.0071	--	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	10/03/2011	0.0118	--	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/23/2012	0.005	--	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	09/13/2012	0.0056	--	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/24/2013	0.0078	--	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/30/2014	0.0085	--	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-1)	04/21/2015	0.0098	--	--	--	--	--	--	--	--	--	--	--	--	
Dup (QC-1)	04/21/2016	0.0039	--	--	--	--	--	--	--	--	--	--	--	--	
Dup (QC-1)	04/21/2016	0.0037	--	--	--	--	--	--	--	--	--	--	--	--	
Dup (QC-1)	04/19/2017	0.0057	--	--	--	--	--	--	--	--	--	--	--	--	
Dup (QC-1)	04/10/2018	0.0052	--	--	--	--	--	--	--	--	--	--	--	--	
Dup (QC-1)	04/23/2019	0.0052	--	--	--	--	--	--	--	--	--	--	--	--	
Dup (QC-1)	10/31/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	
Dup (QC-1)	04/21/2020	0.0045	--	--	--	--	--	--	--	--	--	--	--	--	
Dup (QC-1)	04/27/2021	0.006	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)														
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total	
<i>Preventive Action Limit:</i>		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01	
<i>Enforcement Standard:</i>		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05	
MW-23 (Well Installed 9/15/2008) Dup (OC-1)	10/21/2008	--	--	--	--	--	<0.0060	--	--	--	1.53	--	--	--	--	
	02/19/2009	0.0045	--	--	--	--	<0.0060	--	--	--	1.58	--	--	--	--	
	04/21/2009	0.0043	--	--	--	--	<0.0060	--	--	<0.002	1.33	--	--	--	--	
	10/08/2009	0.0056	--	--	--	--	<0.0080	--	--	0.0057	1.36	--	--	--	--	
	10/08/2009	0.0055	--	--	--	--	<0.0080	--	--	<0.002	1.39	--	--	--	--	
	11/12/2009	0.0038	--	--	--	--	<0.0080	--	--	<0.002	--	--	--	--	--	
	04/07/2010	0.0039	--	--	--	--	<0.0061	--	--	<0.002	--	--	--	--	--	
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/26/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-24 (Well installed 1/14/2013)	04/24/2013	<0.0044	--	--	--	--	<0.0038	<0.002	--	--	--	--	--	--	--	
	04/30/2014	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/22/2015	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/22/2016	<0.00073	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/2017	0.00046	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/11/2018	<0.00028	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/22/2019	<0.00028	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	<0.00028	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/26/2021	0.00056	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-25 (Well installed 1/15/2013)	04/24/2013	<0.0044	--	--	--	--	0.091	--	--	0.003	--	--	--	--	--	
	04/30/2014	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/21/2015	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/21/2016	0.0021	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/04/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/2017	0.0027	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/10/2018	0.0044	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/22/2019	0.0011	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/31/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	0.0028	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/26/2021	0.0034	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-26	04/22/2015	0.0672	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/22/2016	0.0781	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/2017	0.0859	--	--	--	--	--	--	--	--	--	--	--	--	--	
	07/12/2017	0.0939	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/11/2018	0.0355	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/22/2019	0.0861	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/2020	0.105	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/2021	0.0562	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
<i>Preventive Action Limit:</i>		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
<i>Enforcement Standard:</i>		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
MW-27	04/22/2015	0.0077	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/22/2016	0.0068	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2017	0.0069	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/12/2017	0.0103	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/2018	0.005	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/22/2019	0.0041	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	68.6	--	--	--	--	--	--	--	--	--	--
	04/20/2020	0.0053	--	--	--	--	--	--	--	--	--	--	--	--	--
04/26/2021	0.0054	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-28	04/22/2015	0.0345	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/22/2016	0.0238	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2017	0.0323	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/12/2017	0.0413	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/2018	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/22/2019	0.0128	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--
04/26/2021	0.0253	--	--	--	--	--	--	--	--	--	--	--	--	--	
PZ-12B	10/21/2004	<0.0035	--	<0.00030	--	0.0012	--	--	<0.0050	--	0.026	<0.0011	<0.000028	0.0014	<0.00076
	11/30/2004	--	--	--	--	--	--	--	0.032	--	0.035	--	--	--	--
	01/13/2005	--	--	--	--	--	0.0058	<0.0053	<0.025	<0.0050	0.037	--	--	--	--
	02/10/2005	--	--	--	--	--	0.0052	<0.0053	<0.0050	<0.0050	0.043	--	--	--	--
	02/10/2005	--	--	--	--	--	0.0049	<0.0053N*	0.037	<0.0050	0.044	--	--	--	--
	03/08/2005	--	--	--	--	--	--	--	--	<0.0050	0.031	--	--	--	--
	04/20/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	0.026	--	--	--	--
	07/07/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
	07/07/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
	10/19/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	0.098	--	--	--	--
	01/12/2006	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
	04/20/2006	--	--	--	--	--	<0.0094	--	--	<0.0050	<0.05	--	--	--	--
	07/20/2006	--	--	--	--	--	<0.0094	--	--	0.0058	--	--	--	--	--
	04/26/2007	--	--	--	--	--	--	--	--	--	0.065	--	--	--	--
	04/08/2008	0.00051	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2009	--	--	--	--	--	--	--	--	--	0.0086	--	--	--	--
	04/22/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/20/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/26/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)														
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total	
<i>Preventive Action Limit:</i>		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01	
<i>Enforcement Standard:</i>		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05	
PZ-20B	10/20/2004	<0.0035	--	<0.00030	--	0.00092	--	--	1.4	--	0.062	<0.0011	<0.000028	<0.00047	<0.00076	
	11/30/2004	--	--	--	--	--	--	--	2.5	--	0.026	--	--	--	--	
	01/11/2005	--	--	--	--	--	<0.0037	<0.0053	1.1	<0.0050	<0.018	--	--	--	--	
	02/08/2005	--	--	--	--	--	<0.0037	<0.0053	2.5	<0.006	<0.018	--	--	--	--	
	03/09/2005	--	--	--	--	--	--	--	--	<0.0050	<0.018	--	--	--	--	
	04/18/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	<0.018	--	--	--	--	
	07/05/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--	
	10/17/2005	--	--	--	--	--	0.0054	--	--	<0.0050	0.1	--	--	--	--	
	01/10/2006	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--	
	04/19/2006	--	--	--	--	--	<0.0094	--	--	<0.0050	<0.05	--	--	--	--	
	07/20/2006	--	--	--	--	--	<0.0094	--	--	<0.00500	--	--	--	--	--	
	04/07/2008	0.00034	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/2009	--	--	--	--	--	--	--	--	--	0.0113	--	--	--	--	
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/21/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/27/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
PZ-21B	<i>Dup (QC-1)</i>	10/20/2004	<0.0035	--	<0.00030	--	0.0013	--	--	1.4	--	0.062	<0.0011	<0.000028	0.00099	0.00097
		10/20/2004	<0.0035	--	<0.00030	--	0.0013	--	--	1.6	--	0.065	<0.0011	<0.000028	<0.00047	<0.00076
		12/02/2004	--	--	--	--	--	--	--	3.2	--	0.021	--	--	--	--
		01/12/2005	--	--	--	--	--	0.0041	<0.0053	0.79	<0.0050	<0.018	--	--	--	--
		02/09/2005	--	--	--	--	--	<0.0037	<0.0053	0.86	0.013	<0.018	--	--	--	--
	<i>Dup (QC-1)</i>	03/09/2005	--	--	--	--	--	--	--	--	<0.0050	<0.018	--	--	--	--
		04/19/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	<0.018	--	--	--	--
		04/19/2005	--	--	--	--	--	<0.0037	--	--	0.0076	<0.018	--	--	--	--
		07/06/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
		10/18/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	0.082	--	--	--	--
	<i>Dup (QC-1)</i>	01/10/2006	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
		01/11/2006	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
		04/20/2006	--	--	--	--	--	<0.0094	--	--	<0.0050	--	--	--	--	--
		04/20/2006	--	--	--	--	--	<0.0094	--	--	<0.0050	--	--	--	--	--
		07/19/2006	--	--	--	--	--	<0.0094	--	--	<0.00500	--	--	--	--	--
	<i>Dup (QC-1)</i>	07/19/2006	--	--	--	--	--	<0.0094	--	--	0.0092	--	--	--	--	--
		04/26/2007	--	--	--	--	--	--	--	--	--	<0.050	--	--	--	--
		04/09/2008	0.00022	--	--	--	--	--	--	--	--	--	--	--	--	--
		04/20/2009	--	--	--	--	--	--	--	--	--	<0.005	--	--	--	--
		04/12/2011	<0.0013	--	--	--	--	--	--	--	--	--	--	--	--	--
04/23/2019		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/21/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
04/27/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)														
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total	
<i>Preventive Action Limit:</i>		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01	
<i>Enforcement Standard:</i>		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05	
PZ-22B	10/18/2004	<0.0035	--	<0.00030	--	<0.00065	--	--	1.2	--	0.057	<0.0011	<0.000028	<0.0048	<0.00076	
	12/01/2004	--	--	--	--	--	--	--	1.8	--	0.042	--	--	--	--	
	<i>Dup (QC-1)</i>	01/11/2005	--	--	--	--	--	0.0061	<0.0053	1.1	<0.0050	<0.018	--	--	--	--
		02/08/2005	--	--	--	--	--	0.0056	<0.0053	3.6	<0.0050	<0.018	--	--	--	--
		03/09/2005	--	--	--	--	--	--	--	--	<0.0050	<0.018	--	--	--	--
		03/09/2005	--	--	--	--	--	--	--	--	0.01	<0.018	--	--	--	--
		04/19/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	<0.018	--	--	--	--
		07/06/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
	<i>Dup (QC-1)</i>	10/18/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	0.08	--	--	--	--
		10/18/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	<0.04	--	--	--	--
	PZ-23 (Well installed 10/5/09)	01/10/2006	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
		04/19/2006	--	--	--	--	--	<0.0094	--	--	<0.0050	<0.05	--	--	--	--
		07/19/2006	--	--	--	--	--	<0.0094	--	--	0.0208	--	--	--	--	--
		04/25/2007	0.00019	--	--	--	--	<0.0060	--	--	<0.0050	--	--	--	--	--
		04/09/2008	0.00026	--	--	--	--	--	--	--	--	--	--	--	--	--
		04/20/2009	--	--	--	--	--	<0.0060	--	--	<0.002	<0.005	--	--	--	--
		04/12/2011	<0.0013	--	--	--	--	--	--	--	--	--	--	--	--	--
		04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		04/21/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/27/2021		--	--	--	--	--	--	--	--	--	--	--	--	--	--	
<i>Dup (QC-1)</i>		10/08/2009	0.009	--	--	--	--	0.016	--	--	<0.002	0.0307	--	--	--	--
		11/12/2009	--	--	--	--	--	0.021	--	--	<0.002	--	--	--	--	--
		04/07/2010	0.0038	--	--	--	--	0.03	--	--	<0.002	--	--	--	--	--
	01/18/2011	0.0087	--	--	--	--	--	--	--	--	--	--	--	--	--	
	07/13/2011	0.015	--	--	--	--	--	--	--	--	--	--	--	--	--	
	09/12/2012	0.0114	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/24/2013	0.0057	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/30/2014	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/22/2015	0.0137	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/22/2015	0.0097	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/21/2016	0.0075	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/20/2017	0.0068	--	--	--	--	--	--	--	--	--	--	--	--	--	
	07/12/2017	0.0088	--	--	--	--	--	--	--	--	--	--	--	--	--	
	<i>Dup (QC-2)</i>	04/11/2018	0.0045	--	--	--	--	--	--	--	--	--	--	--	--	--
		04/11/2018	0.0047	--	--	--	--	--	--	--	--	--	--	--	--	--
	<i>Dup (QC-1)</i>	04/22/2019	0.0049	--	--	--	--	--	--	--	--	--	--	--	--	--
		04/22/2019	0.0052	--	--	--	--	--	--	--	--	--	--	--	--	--
	<i>Dup (QC-1)</i>	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	<i>Dup (QC-1)</i>	04/20/2020	0.0051	--	--	--	--	--	--	--	--	--	--	--	--	--
04/20/2020		0.0053	--	--	--	--	--	--	--	--	--	--	--	--	--	
<i>Dup (QC-1)</i>	04/26/2021	0.004	--	--	--	--	--	--	--	--	--	--	--	--	--	
	04/26/2021	0.004	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
Preventive Action Limit:		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
Enforcement Standard:		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
PZ-26 (Well installed 04/15/14) Product in well, not sampled	04/30/2014	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/26/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PZ-27 Dup (QC-1)	04/22/2015	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/22/2016	0.0044	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2017	0.0035	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/12/2017	0.0044	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/12/2017	0.0046	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/2018	0.0022	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/22/2019	0.0027	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	0.0024	--	--	--	--	--	--	--	--	--	--	--	--	--
04/26/2021	0.0018	--	--	--	--	--	--	--	--	--	--	--	--	--	
PZ-28 Product in well, not sampled	04/22/2015	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/26/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--
QCFB	02/20/2002	0.0009	--	<0.00012	--	<0.0018	<0.0021	<0.0022	--	--	0.0028	0.0014	<0.00018	<0.0011	<0.0001
	05/13/2002	0.0008	--	<0.00012	--	<0.0011	0.0025	<0.0022	--	--	<0.0012	<0.0007	<0.00019	<0.0055	<0.0001
	08/20/2002	<0.0008	--	<0.00012	--	<0.00021	0.0076	<0.0084	--	--	0.002	<0.0007	<0.00019	<0.0011	<0.0001
	11/14/2002	<0.0008	--	<0.00012	--	0.00027	<0.0027	<0.0027	--	--	0.0029	<0.0007	<0.00019	<0.0015	<0.0001
	02/20/2003	<0.0012	--	<0.00004	--	0.00074	<0.0014	0.0029	--	--	0.012	<0.00083	<0.00019	<0.0015	<0.00004
	10/19/2004	<0.0035	--	<0.00030	--	<0.00065	--	--	<0.0050	--	0.057	<0.0011	<0.000028	<0.0048	<0.00076
	12/02/2004	--	--	--	--	--	--	--	<0.0050	--	<0.018	--	--	--	--
	01/13/2005	--	--	--	--	--	<0.0037	<0.0053	<0.0050	<0.0050	<0.018	--	--	--	--
	02/10/2005	<0.0035	--	--	--	--	<0.0037	0.0079	<0.0050	<0.0050	<0.018	--	--	--	--
	03/10/2005	--	--	--	--	--	--	--	--	<0.0050	<0.018	--	--	--	--
	04/20/2005	<0.0035	--	--	--	--	<0.0037	--	--	<0.0050	<0.018	--	--	--	--
	07/07/2005	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
	10/19/2005	<0.00040	--	--	--	--	<0.0037	--	--	<0.0050	0.22	--	--	--	--
	01/12/2006	--	--	--	--	--	<0.0037	--	--	<0.0050	--	--	--	--	--
	04/19/2006	<0.00040	--	--	--	--	<0.0094	--	--	<0.0050	<0.05	--	--	--	--
	07/20/2006	--	--	--	--	--	<0.0094	--	--	<0.00500	--	--	--	--	--
	10/24/2006	0.32	--	--	--	--	<0.0094	--	--	<0.00500	--	--	--	--	--
	04/26/2007	0.0004	--	--	--	--	<0.006	--	--	<0.00500	<0.05	--	--	--	--
	10/09/2007	--	--	--	--	--	<0.006	--	--	<0.002	--	--	--	--	--
	04/09/2008	0.00024	--	--	--	--	<0.006	--	--	<0.002	--	--	--	--	--

TABLE 3. GROUNDWATER ANALYTICAL RESULTS - INORGANICS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Inorganic Compounds (mg/L)													
		Arsenic ¹	Barium ¹	Cadmium, total	Chloride, total	Chromium, total	Cyanide, total	Cyanide, weak acid dissociable	Cyanide, available (Untreated)	Cyanide, available (PbCO3 Treated)	Iron, total	Lead, total	Mercury	Selenium, total	Silver, total
<i>Preventive Action Limit:</i>		0.001	0.4	0.0005	125	0.01	0.04	NS	0.04	0.04	0.15	0.0015	0.0002	0.01	0.01
Enforcement Standard:		0.01	2	0.005	250	0.1	0.2	NS	0.2	0.2	0.3	0.015	0.002	0.05	0.05
QCFB Continued	10/21/2008	<0.00017	--	--	--	--	<0.006	--	--	--	0.007	--	--	--	--
	04/21/2009	<0.00017	--	--	--	--	<0.0060	--	--	<0.002	<0.005	--	--	--	--
	10/08/2009	0.00038	--	--	--	--	<0.0080	--	--	0.0032	<0.004	--	--	--	--
	04/07/2010	<0.0019	--	--	--	--	<0.0061	--	--	--	--	--	--	--	--
	10/05/2010	<0.0013	--	--	--	--	<0.0061	--	--	<0.002	--	--	--	--	--
	01/18/2011	<0.0013	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/12/2011	<0.0013	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/13/2011	<0.002	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/03/2011	<0.002	--	--	--	--	<0.0061	--	--	<0.0003	--	--	--	--	--
	04/24/2012	<0.00019	--	--	--	--	<0.0061	--	--	0.002	--	--	--	--	--
	06/26/2012	--	--	--	--	--	0.007	--	--	0.0037	--	--	--	--	--
	09/13/2012	<0.00019	--	--	--	--	<0.0043	--	--	0.002	--	--	--	--	--
	04/24/2013	<0.0044	--	--	--	--	<0.0038	--	--	<0.002	--	--	--	--	--
	10/15/2013	--	--	--	--	--	0.0056	--	--	<0.002	--	--	--	--	--
	10/14/2014	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2015	<0.0072	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/21/2016	<0.00073	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/20/2017	<0.000099	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/12/2017	<0.00028	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/10/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/11/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/31/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[O-PAH/MJR 4/03; U-PAR/JTB 12/04; JTB/EPK 01/05; JTB/PAR 3/05; JTB/PAR 4/05; JTB/RH 5/05; PAR/JTB 11/05; PAR/JTB 9/06; RJG/JTB 10/07; BGH/RMW 6/08; RMW/KRM 1/09; BGH/RJG 3/09; RMN/BGH 5/10; AMM/KJB 2/11; KJB/RJG 5/11; CJM/AMM 01/12; AMM/ANS 7/12; CAR 9/12; AMM/RJG 10/12; CAR 12/12 cyanide updates; ETO/RJG 5/13; ETE/NDK 10/13; U-ECK 06/14; U-KLT 1/30/15, C-PMH 2/15; U-AJS 12/10/15, C-PMH 12/14/15; Format ECK 4/11/16; U-ECK 2/1/17, C-SGW 2/2/17; C-KJS 2/7/17; U-KLT 11/29/17, C-TWL 11/29/17; U-KLT 3/20/18, C-ASM 3/20/19; U-KLT 4/16/20, C-MIK 4/17/20; U-CMD 6/24/21, C-KJS 8/23/21]

Notes:

Italic Constituent concentrations that attain or exceed a preventive action limit (PAL) are italicized.
BOLD Constituent concentrations that attain or exceed an enforcement standard (ES) are bold.

< : Constituent was not identified above the limit of detection shown.

-- : Analysis was not performed.

Dup (QA/QC): Field Duplicate sample, field identification indicated in parentheses.

mg/L : milligrams per liter

*: Laboratory data for wells MW-8, MW-9, and MW-10 were originally presented in the March 25, 2002 URS SI report

nd : all components of total calculation were non-detects

NS : NR 140 groundwater quality standard has not been established.

Red Shading Results within a red shaded cell indicate the result was not valid, and was assigned an "R-flag". Available cyanide reported at concentration greater than total cyanide, which is not valid by definition. The highest detected result selected for reporting September 2012 cyanide and available cyanide results.

1) Arsenic and Barium were initially analyzed for Total concentration. Starting in 2007, Arsenic and Barium were analyzed for Dissolved concentration.

 See lab reports for data qualifiers

NR 140 groundwater quality standards revised effective January 2020. Data prior to this date are also compared to revised 2020 standards.

TABLE 4. GROUNDWATER ANALYTICAL RESULTS - NA PARAMETERS
 2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Sample Location	Sample Date	Laboratory Parameters (mg/L)						Field Parameters					
		Alkalinity, total	Iron, dissolved	Manganese, dissolved	Nitrite + Nitrate, total	Sulfate, total	Methane	pH (standard units)	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation / Reduction Potential (mV)	
Preventive Action Limit:		NS	0.15	0.06	2	125	NS	NS	NS	NS	NS	NS	
Enforcement Standard:		NS	0.3	0.3	10	250	NS	NS	NS	NS	NS	NS	
MW-02R	10/19/2004	690	0.47	0.19	<0.031	52	2.1	7.7	16.8	1364	0.56	135	
	11/30/2004	690	0.43	--	<0.031	30	1.9	7.5	--	1249	0.51	56	
	01/11/2005	650	0.53	0.17	0.096	24	1.5	7.6	12.5	1261	0.46	87	
	02/08/2005	640	0.62	0.2	<0.031	12	2.2	7.5	12.9	1314	0.79	87	
	03/08/2005	600	0.67	0.17	<0.031	5	1.6	7.5	13.5	1329	0.65	247	
	04/18/2005	610	0.69	0.17	<0.078	3.3	1.6	7.6	19.0	992	0.51	297	
	07/05/2005	--	--	--	--	--	--	7.4	18.7	1376	0.57	218	
	10/17/2005	720	1.1	0.056	<0.078	6.4	2.4	7.8	17.4	1397	0.63	337	
	01/10/2006	--	--	--	--	--	--	7.1	11.3	1433	0.76	9	
	04/19/2006	640	1.1	0.082	<0.088	3.8	2.8	7.5	13.7	1430	0.62	-22	
	07/19/2006	--	--	--	--	--	--	7.5	19.2	1530	0.82	73	
	10/24/2006	710	1.1	0.043	<0.20	4.4	2.3	7.4	13.7	1540	0.43	155	
	04/25/2007	630	1.1	0.063	<0.085	6.6	1.8	7.4	13.4	1484	0.31	21	
	10/08/2007	740	<0.026	--	<0.085	6.4	2.1	7.7	17.4	1600	0.29	37	
	04/07/2008	574	1.36	0.0646	<0.085	<0.51	2.49	7.4	12.3	1690	0.43	-136	
	10/20/2008	594	0.59	0.0608	<0.085	39.6	2.39	7.8	14.1	1960	0.44	-46	
	04/20/2009	609	0.91	0.0616	0.69	104	1.87	8.8	11.7	2150	0.54	-181	
	10/07/2009	675	0.826	0.0392	<0.2	41.7	--	7.5	14.3	2020	0.51	-9	
	04/06/2010	568	1.07	0.085	0.20	127	2.53	7.8	11.9	2030	0.56	-71	
	10/04/2010	486	0.812	0.0378	0.21	182	2.76	6.4	14.8	2030	1.14	-63	
	01/18/2011	--	--	--	--	--	--	7.6	11.9	1930	2.57	-16	
	04/11/2011	427	0.832	0.0275	<0.20	232	1.75	7.6	13.9	1810	3.99	-100	
	07/13/2011	--	--	--	--	--	--	7.6	14.4	1980	2.81	-145	
	10/03/2011	551	0.746	0.0317	<0.20	192	2.49	7.6	14	2010	2.49	-46	
	01/04/2012	--	--	--	--	--	--	7.8	12.3	2000	3.4	-10	
	Dup (QC-1)	04/23/2012	504	0.837	0.0507	<0.20	250	1.47	7.6	15.4	1880	0.36	-139
	Dup (QC-1)	04/23/2012	513	0.879	0.0517	<1.0	251	1.24	7.6	15.4	1880	0.36	-139
		06/26/2012	--	--	--	--	--	7.4	16.1	2030	0.31	-105	
		06/26/2012	--	--	--	--	--	7.4	16.1	2030	0.31	-105	
		09/12/2012	525	0.603	0.0118	0.44	165	2.26	7.7	16.2	2140	0.3	-110
	Dup (QC-1)	09/12/2012	531	0.628	0.0137	<1.0	175	2.16	7.7	16.2	2140	0.3	-110
		01/28/2013	--	--	--	--	--	7.7	12.6	1910	0.64	9	
		04/13/2013	481	0.614	0.0331	<1.5	258	1.49	7.7	12.3	--	0.67	-99
		07/16/2013	--	--	--	--	--	7.6	19.6	2010	0.51	-73	
		10/15/2013	--	--	--	--	--	7.6	12.9	2270	1.11	-48	
		04/29/2014	455	0.5	0.0154	<0.30	329	1.89	7.6	11.2	1900	0.54	-199
		10/13/2014	--	--	--	--	--	7.8	12.6	1900	3.3	-282	
		04/21/2015	536	0.534	0.0031	<0.75	188	0.708	7.7	11.0	2310	1.15	-250
		10/19/2015	--	--	--	--	--	8.3	13.4	1930	0.53	-346	
		04/21/2016	475	0.619	0.0089	<0.15	287	1.01	7.5	12.7	17	0.24	--
		10/04/2016	--	--	--	--	--	7.7	13.6	1530	2.56	-30	
		04/19/2017	461	0.54	0.01	<0.075	234	0.371	7.65	12.8	1950	0.13	-330
	Dup (QC-1)	04/19/2017	366	0.54	0.0098	<0.075	265	0.859	7.7	12.7	1670	0.44	-309
		10/24/2017	--	--	--	--	--	7.7	12.7	1670	0.44	-309	
		04/10/2018	367	0.425	0.0388	11.3	110	0.126	7.23	11.61	1438	0.22	-102.5
		10/25/2018	420	0.506	0.0068	<0.12	318	0.622	7.6	13.3	1764	0.13	-326
		04/22/2019	484	0.52	0.0123	<0.095	279	0.844	7.72	13.02	1600.9	0.16	-322.9
		10/31/2019	--	--	--	--	--	8.75	9.57	1416.1	2.18	-48.6	
	04/21/2020	382	0.527	0.0098	<0.059	419	0.759	7.77	11.04	1571.7	0.07	-206	
	04/27/2021	447	0.479	0.0061	<0.059	372	0.234	7.67	12.65	2142.4	0.15	-305.3	
MW-08	10/31/2001	--	--	--	--	45	--	--	--	--	--	--	
	02/20/2002	--	--	--	--	109	--	--	--	--	--	--	
	05/13/2002	--	--	--	--	171	--	--	--	--	--	--	
	08/20/2002	--	--	--	--	99	--	--	--	--	--	--	
	11/14/2002	--	--	--	--	45	--	7.2	12.4	442	0.5	44	
	02/19/2003	--	--	--	--	26	--	7	5.6	733	0.3	118	
	05/22/2003	--	--	--	--	74	--	8	10.9	593	0.5	24	
	08/01/2003	--	--	--	--	100	--	9	15.3	494	0.3	-10	
	10/18/2004	--	--	--	--	--	--	7.2	15.1	657	0.28	28	
	02/08/2005	--	--	--	--	--	--	7.2	6.6	433	0.46	41	
	04/19/2005	--	--	--	--	--	--	7.2	11.5	693	0.5	-33	
	07/07/2005	--	--	--	--	--	--	7.2	15.8	678	0.45	133	
	10/17/2005	--	--	--	--	--	--	10.1	16	750	0.43	87	
	01/11/2006	--	--	--	--	--	--	7	8.9	912	0.52	-23	
	10/05/2010	405	0.442	0.217	<0.20	76.2	0.0836	5.8	15.6	872	1.21	216	
	01/18/2011	--	--	--	--	--	--	7	7.1	976	2.2	157	
	04/12/2011	--	0.157	0.194	--	--	0.247	7.2	7.7	776	5.09	87	
	07/13/2011	--	--	--	--	--	--	7.1	14.3	721	2.72	60	
	10/03/2011	300	0.0985	0.177	<0.20	58.3	0.123	7.3	16.5	694	1.68	106	
	01/04/2012	--	--	--	--	--	--	7.9	6.9	809	3.8	45	
	04/21/2016	--	--	--	--	--	--	--	--	--	--	--	
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	
04/20/2020	--	--	--	--	--	--	--	--	--	--	--		
04/26/2021	--	--	--	--	--	--	--	--	--	--	--		
MW-09	10/31/2001	--	--	--	--	170	--	--	--	--	--	--	
	02/20/2002	--	--	--	--	190	--	--	--	--	--	--	
	05/13/2002	--	--	--	--	168	--	--	--	--	--	--	
	08/20/2002	--	--	--	--	215	--	--	--	--	--	--	
	11/14/2002	--	--	--	--	225	--	7.1	12.7	598	0.3	128	
	02/19/2003	--	--	--	--	241	--	6.9	8.9	1970	0.3	138	
	05/22/2003	--	--	--	--	226	--	7.5	10.7	761	0.4	130	
	08/01/2003	--	--	--	--	222	--	7.7	13.5	600	0.4	186	
	10/18/2004	--	--	--	--	--	--	--	--	--	--	--	
	04/21/2016	--	--	--	--	--	--	--	--	--	--	--	
	04/23/2019	--	--	--	--	--	--	--	--	--	--	--	
	10/30/2019	--	--	--	--	--	--	--	--	--	--	--	
	04/20/2020	--	--	--	--	--	--	--	--	--	--	--	
	04/26/2021	--	--	--	--	--	--	--	--	--	--	--	
	MW-10	10/31/2001	--	--	--	--	54	--	--	--	--	--	--
		02/20/2002	--	--	--	--	50	--	--	--	--	--	--
05/13/2002		--	--	--	--	32	--	--	--	--	--	--	
08/20/2002		--	--	--	--	29	--	--	--	--	--	--	
11/14/2002		--	--	--	--	27	--	8.2	11.1	371	0.4	30	
02/19/2003		--	--	--	--	32	--	7.3	3.6	351	0.5	122	
05/22/2003		--	--	--	--	62	--	8.1	12.1	483	0.4	94	
08/01/2003		--	--	--	--	45	--	7.8	14.2	432	0.3	173	
04/21/2016		--	--	--	--	--	--	--	--	--	--	--	
04/23/2019		--	--	--	--	--	--	--	--	--	--	--	
10/30/2019		--	--	--	--	--	--	--	--	--	--	--	
04/20/2020		--	--	--	--	--	--	--	--	--	--	--	
04/26/2021		--	--	--	--	--	--	--	--	--	--	--	
Well Abandoned	07/16/2021	--	--	--	--	--	6.84	19.13	1969.8	0.1	33.3		

TABLE 4. GROUNDWATER ANALYTICAL RESULTS - NA PARAMETERS

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WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Laboratory Parameters (mg/L)						Field Parameters				
		Alkalinity, total	Iron, dissolved	Manganese, dissolved	Nitrite + Nitrate, total	Sulfate, total	Methane	pH (standard units)	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation / Reduction Potential (mV)
<i>Preventive Action Limit:</i>		NS	0.15	0.06	2	125	NS	NS	NS	NS	NS	NS
<i>Enforcement Standard:</i>		NS	0.3	0.3	10	250	NS	NS	NS	NS	NS	NS
MW-12R	10/21/2004	170	0.13	0.065	0.15	42	0.27	9.2	15.6	365	0.45	-15
	11/30/2004	190	0.14	--	<0.031	44	0.48	8.8	11.5	592	0.48	--
	01/13/2005	180	0.17	0.049	<0.087	71	0.63	8.9	9.9	533	0.56	-34
	02/10/2005	170	0.15	0.048	<0.031	76	0.56	8.8	8.7	480	0.39	-11
	03/08/2005	140	0.14	0.038	<0.031	74	0.49	8.9	8.1	819	0.96	8
	04/20/2005	130	0.16	0.035	0.17	70	0.43	9.1	10.6	554	0.39	8
	07/07/2005	--	--	--	--	--	--	8.9	14.6	501	0.43	48
	10/19/2005	180	0.18	0.035	<0.078	26	1.2	12.9	14.1	463	0.37	-91
	01/12/2006	--	--	--	--	--	--	8.5	9.5	696	0.57	-90
	04/20/2006	160	0.28	0.043	<0.088	140	0.38	8.5	12.8	798	0.48	-74
	07/20/2006	--	--	--	--	--	--	8.7	17	1016	0.32	-48
	10/23/2006	200	0.078	0.039	<0.20	69	1.9	8.6	13.4	638	0.33	-18
	04/26/2007	180	--	0.057	<0.085	190	1.3	8.7	9.3	903	0.43	-26
	10/09/2007	180	<0.026	--	<0.085	260	1.2	8.6	14	1054	0.33	-94
	04/08/2008	279	0.386	0.0836	<0.085	112	1.04	7.9	9.2	935	0.3	-50
	10/20/2008	253	0.118	0.069	4.1	251	1.23	8.6	14	1210	0.36	-48
	04/21/2009	335	0.175	0.0833	<0.085	90.7	1.65	9.3	7.5	1080	0.35	-88
	10/08/2009	286	0.115	0.0839	0.25	305	--	8.1	13.5	1298	0.34	-5
	04/07/2010	376	0.199	0.102	<0.20	190	2.03	8.4	11.2	1354	0.27	8
	10/04/2010	428	0.14	0.113	<0.20	226	2.55	6.7	14.7	1610	0.37	-54
	01/18/2011	--	--	--	--	--	--	7.9	9.7	1500	0.32	61
	04/12/2011	195	0.3	0.0939	<0.20	86.4	2	7.8	10.2	1215	4.4	32
	07/13/2011	--	--	--	--	--	--	7.9	12.7	1475	3.03	-112
	10/03/2011	351	0.234	0.0859	<0.20	202	2.75	8	15.1	1372	1.58	-15
	01/04/2012	--	--	--	--	--	--	8.4	7.7	1560	3.25	41
	04/24/2012	448	0.24	0.0854	<0.20	128	2.26	8	10.1	1470	0.32	-94
	09/12/2012	270	0.156	0.0348	<0.20	35.4	1.94	8.5	16.5	877	0.32	20
	01/28/2013	--	--	--	--	--	--	9	10	1000	0.55	31
	04/24/2013	384	0.236	0.0524	<0.75	21	2.33	8.3	9.7	1081	0.47	61
	07/16/2013	--	--	--	--	--	--	8.6	17.2	1183	0.52	-15
	10/15/2013	--	--	--	--	--	--	9.2	14.1	780	0.94	45
	04/29/2014	285	0.23	0.0083	<0.15	107	5.91	8.9	9.1	990	0.44	-161
	10/13/2014	--	--	--	--	--	--	10	13.5	801	0.74	-228
	04/21/2015	222	0.534	0.0025	<1.5	85.7	4.41	10.2	8.9	1098	1.08	-162
10/20/2015	--	--	--	--	--	--	11.2	13.2	748	0.38	-223	
04/21/2016	285	0.273	0.0082	<0.15	118	4.32	8.7	11.5	1160	0.22	--	
10/04/2016	--	--	--	--	--	--	10.6	14.8	1007	0.12	-294	
04/19/2017	272	0.26	0.003	<0.075	105	4.11	9.8	10.2	1119	0.22	-311	
10/24/2017	--	--	--	--	--	--	10.53	12.4	974	0.08	-274	
10/24/2017	--	--	--	--	--	--	10.53	12.4	974	0.08	-274	
04/10/2018	203	0.117	<0.0027	<0.095	21.5	1.930	10.10	8.41	609	0.23	-299.8	
10/24/2018	280	0.234	0.0032	0.12	72.3	5.25	9.03	13.5	1068	0.11	-309	
04/22/2019	247	0.191	<0.0027	<0.095	119	4.84	9.85	9.44	1147.9	0.08	-372.6	
10/31/2019	--	--	--	--	--	--	6.38	10.08	1254.9	0.15	-144.4	
04/20/2020	351	0.176	0.0101	<0.059	69	2.36	8.44	9.44	1347.5	0.09	-236.1	
04/26/2021	372	0.197	0.0076	<0.059	125	1.95	8.63	9.68	1475.2	0.02	-262.5	
MW-13R	10/20/2004	450	0.5	0.65	<0.031	210	4.6	7.9	17.1	1112	0.28	-109
	12/02/2004	470	0.5	0.49	<0.031	200	4.3	7.6	12.5	1594	0.35	-81
	01/12/2005	490	0.42	0.31	0.25	220	5.8	7.7	11.7	1730	0.26	-94
	02/09/2005	480	0.4	0.31	<0.031	180	3.7	7.7	10.6	1234	0.38	-79
	03/10/2005	440	0.41	0.25	<0.031	160	2.6	7.8	7.5	671	0.4	-71
	04/19/2005	400	0.4	0.19	0.31	140	2.3	7.8	12.4	1121	0.34	-104
	07/06/2005	--	--	--	--	--	--	7.9	14.7	1457	0.3	0
	10/19/2005	410	0.52	0.13	<0.078	53	2	12.1	15.3	835	0.37	-104
	01/10/2006	--	--	--	--	--	--	7.6	10.7	1510	0.48	-152
	04/19/2006	560	0.53	0.13	<0.088	270	7	7.5	11.5	2380	0.34	-167
	07/19/2006	--	--	--	--	--	--	7.6	14.9	2420	0.27	-170
	10/24/2006	350	0.66	0.077	<0.20	130	3.7	7.7	14.4	1770	0.26	-86
	04/25/2007	500	0.52	0.085	<0.085	350	5.5	7.5	10.5	25	0.16	-139
	04/25/2007	500	0.49	0.087	<0.085	350	6	7.5	10.5	25	0.16	-139
	10/08/2007	430	0.12	--	<0.085	350	4.4	8	16.9	2340	0.17	-180
	04/08/2008	206	1.24	0.112	<4.2	1030	3.26	7.5	10.1	3380	0.66	-161
	10/20/2008	427	0.461	0.0751	14	378	4.66	7.7	15.1	2510	0.31	-98
	04/21/2009	317	0.55	0.0779	<0.085	1090	3	8.9	9.4	3590	0.4	-185
	10/07/2009	586	0.641	0.0719	<0.20	654	--	7.6	14.2	3020	0.34	-99
	04/06/2010	395	0.604	0.075	<0.20	917	3.06	8	11.2	3180	0.37	-86
	10/04/2010	423	0.746	0.0629	0.22	902	4.14	6.5	15.1	3270	0.22	-87
	01/18/2011	--	--	--	--	--	--	7.7	9.6	3020	2.04	-69
	04/11/2011	180	0.626	0.0701	<4.0	1180	1.47	7.9	16.7	2710	3.36	-94
	07/13/2011	--	--	--	--	--	--	7.6	12.8	3040	2.29	-153
	10/03/2011	315	0.674	0.0616	<0.20	872	2.32	7.6	16.4	2840	1.6	-126
	01/04/2012	--	--	--	--	--	--	8.2	11.1	2640	3.19	-58
	01/04/2012	--	--	--	--	--	--	8.2	11.1	2640	3.19	-58
	04/23/2012	291	0.582	0.0515	<2.0	874	2.58	7.8	11.5	2610	0.15	-154
	06/26/2012	--	--	--	--	--	--	7.5	14.6	2710	0.21	-113
	09/12/2012	277	0.373	0.0457	<0.20	519	2.04	7.8	14.6	2070	0.42	-58
	01/28/2013	--	--	--	--	--	--	7.9	10.6	2630	0.43	-83
	04/23/2013	163	0.718	0.066	<1.5	1080	1.65	8.1	8.5	2730	0.48	-122
	04/23/2013	173	0.704	0.0669	<1.5	1070	0.654	8.1	8.5	2730	0.48	-122
	07/16/2013	--	--	--	--	--	--	7.8	14.7	2710	0.67	-111
10/15/2013	--	--	--	--	--	--	7.8	14.1	2490	1.03	-85	
04/29/2014	176	0.518	0.0488	<0.30	2270	1.38	8.1	8.6	2490	0.55	-262	
04/29/2014	190	0.523	0.0499	<1.5	1050	1.05	8.1	8.6	2490	0.55	-262	
10/13/2014	--	--	--	--	--	--	7.9	13.8	2280	4.58	-303	
04/21/2015	216	0.522	0.0477	<1.5	961	0.548	8.2	8.4	2800	1.80	-287	
10/20/2015	--	--	--	--	--	--	8.6	13.8	2230	0.48	-345	
04/21/2016	136	0.764	0.052	<0.15	1080	1.1	7.6	10.7	2350	0.20	--	
10/04/2016	--	--	--	--	--	--	8.0	14.7	2540	0.21	-327	
04/19/2017	209	0.61	0.0492	<1.5	1030	0.536	8.2	9.5	2320	0.19	-338	
10/24/2017	--	--	--	--	--	--	7.94	13.0	2572	0.09	-343	
04/10/2018	184	0.646	0.0352	<0.095	1030	0.469	7.71	7.88	2402	0.16	-318.8	
04/10/2018	175	0.612	0.033	<0.095	1280	0.484	7.71	7.88	2402	0.16	-318.8	
10/24/2018	206	0.769	0.0458	<0.12	1140	1.5	7.89	13.5	2616	0.31	-355	
10/24/2018	244	0.759	0.0457	<0.12	1150	2.01	7.89	13.5	2616	0.31	-355	
04/23/2019	201	0.602	0.036	<0.095	1060	1.34	8.07	8.3	2494.7	0.1	-319.8	
04												

TABLE 4. GROUNDWATER ANALYTICAL RESULTS - NA PARAMETERS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Laboratory Parameters (mg/L)						Field Parameters					
		Alkalinity, total	Iron, dissolved	Manganese, dissolved	Nitrite + Nitrate, total	Sulfate, total	Methane	pH (standard units)	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation / Reduction Potential (mV)	
<i>Preventive Action Limit:</i>		NS	0.15	0.06	2	125	NS	NS	NS	NS	NS	NS	
<i>Enforcement Standard:</i>		NS	0.3	0.3	10	250	NS	NS	NS	NS	NS	NS	
MW-20	10/20/2004	230	0.065	0.21	<0.031	2.2	2.2	7.9	20.1	872	0.36	12	
	11/30/2004	320	0.14	--	<0.031	58	2.2	8.3	16.7	966	0.46	-23	
	01/11/2005	290	0.12	0.097	0.12	140	1.7	9.3	16.8	1323	0.29	-69	
	02/08/2005	280	0.11	0.12	0.21	110	1.4	9.2	14.8	1203	0.4	-83	
	03/09/2005	280	0.11	0.086	0.31	140	1.6	9.5	14.7	1376	0.3	-103	
	04/18/2005	340	0.12	0.09	0.19	170	2.1	9.3	19	1710	0.24	-98	
	07/05/2005	--	--	--	--	--	--	8.6	19.7	841	0.37	-55	
	10/17/2005	240	0.17	0.11	<0.078	69	2.5	12.4	17.9	1293	0.33	-99	
	01/10/2006	--	--	--	--	--	--	9.5	12.1	2800	0.4	-180	
	04/19/2006	210	0.25	0.0093	0.23	420	0.87	9.8	14	3220	0.41	-223	
	07/20/2006	--	--	--	--	--	--	10	18.1	2730	0.63	-97	
	10/24/2006	250	0.22	0.034	<0.20	240	1.7	8.7	13.1	2660	0.29	-106	
	Dup (QC-1)	10/24/2006	250	0.21	0.034	<0.20	250	1.9	8.7	13.1	2660	0.29	-106
		04/25/2007	200	0.2	0.023	<0.085	460	0.81	9.4	13.7	2940	0.12	-161
		10/08/2007	210	<0.026	--	<0.085	370	0.61	9.6	16.1	3080	0.15	-191
		04/07/2008	135	0.575	0.0067	<0.085	655	1.27	9.6	10.3	2910	0.3	-164
	10/20/2008	140	0.152	0.0069	0.88	580	1.67	9.4	13.3	2880	0.32	-106	
	04/20/2009	158	0.156	0.0097	<0.085	624	2.56	10.6	11.8	3160	0.27	-168	
	Dup (QC-1)	04/20/2009	150	0.158	0.0168	<0.085	617	2.19	10.6	11.8	3160	0.27	-168
		10/07/2009	140	0.141	0.0079	<0.20	623	--	9.2	13.9	2700	0.58	71
	04/06/2010	123	0.164	0.0078	<0.20	699	2.51	9.8	12.2	3080	0.29	11	
	Dup (QC-1)	04/06/2010	132	0.169	0.0078	<0.20	703	2.56	9.8	12.2	3080	0.29	11
		10/04/2010	149	0.15	0.0071	<0.20	678	0.162	8.3	15.8	2650	0.4	-76
	Dup (QC-1)	10/04/2010	140	0.0983	0.0062	<0.20	679	2.99	8.3	15.8	2650	0.4	-76
		04/11/2011	96.1	0.14	0.0052	<2.0	668	1.67	9.3	15.3	2250	2.9	-26
	Dup (QC-1)	10/03/2011	145	0.123	0.0087	<0.20	501	2.94	8.9	14.7	2240	1.87	5
		10/03/2011	129	0.122	0.0086	<0.20	503	3.82	8.9	14.7	2240	1.87	5
		04/23/2012	153	0.131	0.0033	<0.20	576	2.57	9.6	14.2	2100	0.24	-87
		06/26/2012	--	--	--	--	--	--	9.4	16.3	2112	0.24	8
		09/12/2012	200	0.112	0.0105	<0.20	323	5.27	9.1	15.2	1850	0.36	-21
		01/28/2013	--	--	--	--	--	--	9.5	10.9	2090	0.47	89
		04/23/2013	106	0.238	0.0034	0.55	560	1.23	10.1	11.5	2140	0.6	115
		07/16/2013	--	--	--	--	--	--	9.4	17.9	2220	0.7	98
		10/15/2013	--	--	--	--	--	--	9.3	12.9	2030	0.91	69
		04/29/2014	84.6	0.309	0.0039	0.26	588	1.95	9.2	11.5	2200	0.46	-122
	10/13/2014	--	--	--	--	--	--	8.9	13.1	2030	0.9	-248	
	04/21/2015	90.7	0.152	0.0024	<0.15	511	1.24	9.6	11.5	2480	0.86	-173	
	10/19/2015	--	--	--	--	--	--	10.1	12.7	1980	5.98	-299	
	04/21/2016	95.9	0.135	0.0012	<0.15	468	0.272	9.8	12.7	1730	0.27	--	
	10/04/2016	--	--	--	--	--	--	10.0	13.6	1910	0.31	-143	
	04/19/2017	135	0.17	0.0014	<0.075	510	0.319	10.6	12.4	1680	0.37	-246	
	10/24/2017	--	--	--	--	--	--	9.69	12.8	1480	0.14	-222	
	04/10/2018	53.2	<0.111	<0.0027	<0.095	493	0.793	8.74	11.80	1744	0.09	-293.4	
	10/25/2018	104	<0.111	<0.0027	<0.12	483	0.776	9.48	12.4	1714	0.07	-233	
	04/23/2019	167	0.144	<0.0027	<0.095	462	1.32	10.05	12.13	1766.8	0.12	-212.1	
	10/31/2019	--	--	--	--	--	--	9.79	9.68	1601.3	2.65	-84.8	
	04/21/2020	354	0.134	<0.0012	0.084	394	0.238	10.44	10.54	1569.5	1.55	-78	
04/27/2021	390	0.131	0.0024	0.12	370	0.0597	10.23	11.39	2140.9	1.95	-93.7		
MW-21	10/20/2004	190	0.14	0.027	<0.031	75	2.3	8.6	18.1	1067	0.25	-75	
	12/02/2004	490	0.28	0.011	0.96	300	1.3	9.9	14	2530	0.53	-124	
	01/12/2005	700	0.33	0.0022	3.9	99	0.37	10.5	13.4	3040	0.21	-121	
	02/09/2005	730	0.33	0.0011	2.2	450	0.78	10.6	11.5	3020	0.19	-168	
	03/09/2005	920	0.3	0.0013	3.9	410	0.46	10.9	10.1	2980	0.15	-181	
	04/19/2005	620	0.29	0.002	0.76	460	0.41	10.9	13.2	3520	0.17	-138	
	07/06/2005	--	--	--	--	--	--	10.7	15.9	3870	0.21	-50	
	10/18/2005	460	<0.04	0.00052	0.16	320	0.23	13.7	16.8	4050	0.22	-129	
	01/11/2006	--	--	--	--	--	--	10.7	12.5	3450	0.6	-134	
	04/20/2006	600	0.72	0.017	0.77	520	0.045	11.1	12.6	3350	0.33	-159	
	07/19/2006	--	--	--	--	--	--	11	15.6	3250	0.08	-47	
	10/24/2006	500	0.38	0.00047	<0.20	340	0.27	10.6	14.8	3480	0.18	1	
	04/26/2007	--	--	--	--	--	--	11.4	9.7	3200	0.13	-121	
	10/09/2007	560	0.2	--	<0.085	330	0.099	11	14.8	3330	0.23	-87	
	04/09/2008	368	1.25	0.0058	<4.2	979	0.0411	10.9	8.9	3240	0.35	-64	
	10/21/2008	375	0.41	<0.00024	<0.085	561	0.213	10.9	14	2960	0.24	-89	
	04/20/2009	294	0.331	0.0071	0.16	894	0.084	12.1	10.9	3170	0.24	-112	
	10/07/2009	290	0.427	0.0028	<0.20	648	--	10.5	13.2	3030	0.3	-23	
	04/06/2010	262	0.365	0.00015	<0.20	946	0.115	11.2	11	3270	0.26	12	
	10/04/2010	310	0.505	<0.00014	<0.20	653	0.162	9.7	15.6	2360	0.36	100	
	04/11/2011	143	0.203	0.0012	<2.0	891	0.0392	10.9	10.9	2370	2.94	39	
	10/03/2011	156	0.418	<0.000098	<0.20	675	0.144	10.5	15.6	2370	1.58	44	
	04/24/2012	164	0.293	0.0018	<0.203	646	0.122	11	11.6	1970	0.26	-21	
	06/26/2012	--	--	--	--	--	--	10.7	15.6	2170	0.17	28	
	09/12/2012	169	0.436	0.0027	<0.20	585	0.135	10.7	14.3	2470	0.42	51	
	01/28/2013	--	--	--	--	--	--	11.6	11.1	2180	0.45	79	
	04/23/2013	102	0.193	0.0013	9.1	662	0.0576	11.4	9.2	2270	0.42	104	
	07/16/2013	--	--	--	--	--	--	10.6	16.9	1860	0.69	29	
	10/15/2013	--	--	--	--	--	--	10.5	13.9	2230	0.85	-4	
	10/15/2013	--	--	--	--	--	--	10.5	13.9	2230	0.85	-4	
	04/29/2014	126	0.248	<0.0014	2.2	715	0.0586	10.6	8.6	2360	0.76	-109	
	10/13/2014	--	--	--	--	--	--	10.4	13.9	1870	0.82	-248	
	04/21/2015	113	0.33	<0.0014	<0.15	682	0.0742	11.2	9.1	2400	0.58	-227	
	10/19/2015	--	--	--	--	--	--	11.5	14.0	1800	5.07	-242	
	04/21/2016	97.6	0.22	<0.098	<0.15	500	0.0515	10.9	11.0	1470	0.33	--	
	10/04/2016	--	--	--	--	--	--	11.1	14.9	1580	0.16	-266	
	04/19/2017	130	0.25	0.00062	<1.5	549	0.031	11.9	10.1	1510	0.23	-253	
	10/24/2017	--	--	--	--	--	--	10.54	13.6	1408	2.39	-282	
	04/10/2018	117	0.486	<0.0027	<0.095	426	0.0717	10.17	9.03	1736	0.00	-333.9	
	10/25/2018	141	0.235	<0.0027	<0.12	520	0.0427	10.8	13.0	1513	0.27	-253	
	04/23/2019	137	0.191	<0.0027	2	484	0.018	10.87	11.63	1522.9	0.31	-234.5	
	10/31/2019	--	--	--	--	--	--	8.18	7.53	1382.6	0.21	-147.9	
	04/21/2020	96.6	0.123	<0.0012	1.9	392	0.0301	10.91	7.91	1291.6	0.09	-187.4	
	04/27/2021	137	0.228	0.0024	1.6	397	0.0232	10.93	9.15	1636.8	0	-281.8	

TABLE 4. GROUNDWATER ANALYTICAL RESULTS - NA PARAMETERS
 2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Sample Location	Sample Date	Laboratory Parameters (mg/L)					Field Parameters						
		Alkalinity, total	Iron, dissolved	Manganese, dissolved	Nitrite + Nitrate, total	Sulfate, total	Methane	pH (standard units)	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation / Reduction Potential (mV)	
	Preventive Action Limit:	NS	0.15	0.06	2	125	NS	NS	NS	NS	NS	NS	
	Enforcement Standard:	NS	0.3	0.3	10	250	NS	NS	NS	NS	NS	NS	
MW-22	10/18/2004	420	0.29	0.21	<0.031	5.7	1.9	7.3	16.9	1870	0.81	50	
	12/01/2004	500	0.37	--	<0.031	17	3.8	7.4	19.8	1110	0.35	12	
	01/11/2005	500	0.39	0.14	0.16	14	3.6	7.5	12.5	2130	0.37	9	
	02/08/2005	470	0.36	0.12	0.38	20	5.5	7.4	11.8	1870	0.44	-13	
	03/09/2005	420	0.4	0.1	0.2	12	3.4	7.1	10.4	1254	0.35	-18	
	04/19/2005	440	0.46	0.11	<0.078	9.5	4.9	7.6	14.9	740	0.37	37	
	07/06/2005	--	--	--	--	--	--	7.5	15.5	2020	0.38	53	
	10/18/2005	410	0.66	0.063	<0.078	4.1	4.5	11.1	15.8	1044	0.24	-5	
	01/10/2006	--	--	--	--	--	--	7.3	9.8	1870	0.6	-84	
	04/19/2006	430	0.42	0.051	<0.088	6	6.4	7.5	13.2	1990	0.38	-90	
	07/19/2006	--	--	--	--	--	--	7.5	19.2	1530	0.82	73	
	10/24/2006	420	0.53	0.061	<0.20	3	5	7.5	13.2	1980	0.29	16	
	04/25/2007	420	0.33	0.056	<0.085	8	4.6	7.4	12.6	2150	0.21	-37	
	10/09/2007	440	<0.026	--	<0.085	4.3	4	7.8	14.5	2210	0.34	-40	
	Dup (QC-1)	10/09/2007	430	<0.026	--	<0.085	4.2	3.1	7.8	14.5	2210	0.34	-40
	Dup (QC-1)	04/09/2008	438	0.822	0.0607	0.98	4.8	2.89	7.2	10.2	2740	0.32	-52
	Dup (QC-1)	04/09/2008	443	0.78	0.05	7.5	4.5	3.4	7.2	10.2	2740	0.32	-52
	Dup (QC-1)	10/21/2008	428	0.469	0.0663	<0.085	4.2	4.14	7.5	12.1	2780	0.5	-7
	Dup (QC-1)	10/21/2008	427	0.466	0.0655	<0.085	3.9	4.4	7.5	12.1	2780	0.5	-7
	Dup (QC-1)	04/20/2009	450	0.462	0.0526	<0.085	4.6	3.9	8.6	10.6	2950	0.29	-82
	Dup (QC-1)	10/07/2009	450	0.551	0.0545	<0.20	3.2	--	7.3	13	2790	0.39	72
	Dup (QC-1)	04/06/2010	458	0.541	0.0536	<0.20	3.9	3.33	7.6	12.1	2790	0.25	59
	Dup (QC-1)	10/04/2010	443	0.455	0.0449	<0.20	3.7	3.75	6.2	14.9	2770	0.53	99
	Dup (QC-1)	04/11/2011	353	0.36	0.0472	<0.20	5.2	2.33	7.4	12.7	2520	3.07	43
	Dup (QC-1)	04/11/2011	358	0.363	0.0469	<0.20	5.2	2.22	--	--	--	--	--
	Dup (QC-1)	10/03/2011	445	0.329	0.0519	<0.20	3.5	3.08	7.3	15	2670	2.13	84
	Dup (QC-1)	04/23/2012	439	0.256	0.0412	<0.20	31.8	2.47	7.3	12.9	2640	0.7	-20
	Dup (QC-1)	06/26/2012	--	--	--	--	--	--	7.1	16.2	2550	0.55	-21
	Dup (QC-1)	09/13/2012	391	0.246	0.0503	0.51	2.7	4.13	7.5	12.9	2670	0.48	112
	Dup (QC-1)	01/28/2013	--	--	--	--	--	--	7.4	11.4	2420	0.47	105
	Dup (QC-1)	04/23/2013	443	0.261	0.0421	<1.5	3.6	4.62	7.4	10.3	2430	0.51	97
	Dup (QC-1)	07/16/2013	--	--	--	--	--	--	7.3	16.5	2640	0.91	60
	Dup (QC-1)	10/15/2013	--	--	--	--	--	--	7.4	13.5	2500	0.94	82
	Dup (QC-1)	04/29/2014	463	0.291	0.0366	0.34	23.5	5.33	7.3	10.6	2550	1.07	-123
	Dup (QC-1)	10/13/2014	--	--	--	--	--	--	7.3	15.7	2480	0.56	-152
	Dup (QC-1)	04/21/2015	434	0.413	0.0424	<0.15	3.3	2.3	7.6	10.0	510	0.51	-184
	Dup (QC-1)	10/19/2015	--	--	--	--	--	--	7.7	13.2	2740	6.01	-220
	Dup (QC-1)	04/21/2016	446	0.398	0.0422	<0.15	3.1	1.4	7.0	12.0	2810	0.30	--
	Dup (QC-1)	04/21/2016	477	0.376	0.04	<0.15	3.1	2	7.0	12.0	2810	0.30	--
	Dup (QC-1)	10/04/2016	--	--	--	--	--	--	7.3	14.0	3040	0.20	-213
	Dup (QC-1)	04/19/2017	410	0.25	0.0403	<0.075	4.5	2.26	7.3	11.3	2710	0.21	-203
	Dup (QC-1)	10/24/2017	--	--	--	--	--	--	7.34	12.7	1354	0.18	-260
Dup (QC-1)	04/10/2018	431	0.161	0.0361	<0.095	5.6	1.310	7.06	10.39	2268	0.21	-256.1	
Dup (QC-1)	10/25/2018	428	0.122	0.0345	1.2	5.0	2.55	7.36	13.6	2264	0.10	-220	
Dup (QC-1)	04/23/2019	416	0.131	0.0331	<0.095	12.5	1.94	7.3	15.3	2424.4	0.06	-235.5	
Dup (QC-1)	10/31/2019	--	--	--	--	--	--	4.64	9.56	2495.8	0.11	-128.1	
Dup (QC-1)	04/21/2020	389	0.0864	0.0448	<0.059	10.9	2.14	7.54	7.44	1967.8	0.11	-95.2	
Dup (QC-1)	04/27/2021	409	0.152	0.0488	<0.059	9.7	1.8	7.33	9.58	2877.9	0.03	-194.5	
MW-23	Well Installed 9/15/2008	10/21/2008	238	1.45	0.385	<0.085	<0.51	7.21	7.5	16.7	569	0.35	28
	Dup (QC-1)	02/19/2009	9080	1.48	0.408	<0.085	4.7	4.65	8.1	5.2	579	0.58	49
	Dup (QC-1)	04/21/2009	247	1.32	0.439	<0.085	4.4	4.08	8.6	6	548	0.33	36
	Dup (QC-1)	10/08/2009	279	1.42	0.48	<0.20	2.8	--	7.1	17.3	563	0.52	103
	Dup (QC-1)	10/08/2009	278	1.48	0.49	<0.20	2.8	--	7.1	17.3	563	0.52	103
	Dup (QC-1)	11/12/2009	241	1.27	0.461	<0.20	2.8	--	7.2	14	500	0.36	96
	Dup (QC-1)	04/07/2010	250	1.29	0.529	<0.20	4.2	4.03	7.8	7.5	531	0.39	99
	Dup (QC-1)	04/12/2011	230	1.03	0.48	<0.20	4.5	2.56	7.5	6.5	448	4.2	89
	Dup (QC-1)	04/24/2012	237	1.58	0.493	<0.20	11.9	2.96	7.5	8.5	539	0.39	58
	Dup (QC-1)	01/07/2016	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/21/2016	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	07/14/2016	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	10/24/2018	220	1.92	0.401	<0.12	<1.0	27.4	7.24	15.8	543	0.17	-153
	Dup (QC-1)	04/23/2019	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	10/30/2019	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/20/2020	--	--	--	--	--	--	--	--	--	--	--
Dup (QC-1)	04/26/2021	--	--	--	--	--	--	--	--	--	--	--	
MW-24	01/29/2013	487	3.47	0.519	<0.20	107	0.0635	7.2	11	3220	0.68	115	
	04/24/2013	454	4.25	0.628	<0.15	106	0.139	7.1	11.7	3230	0.86	135	
	07/17/2013	542	6.85	0.353	<0.75	119	0.151	7	17.4	3650	0.84	108	
	10/15/2013	512	6.4	0.27	<0.15	117	0.131	7	12.7	4220	0.87	111	
	04/29/2014	530	3.38	0.253	<0.15	122	0.0808	7	11.6	2950	0.66	-58	
	10/14/2014	--	--	--	--	--	--	6.9	12.9	3090	1.18	-79	
	04/22/2015	465	2.81	0.128	<0.15	112	0.0439	7.0	10.0	3880	1.11	-24	
	10/20/2015	504	2.08	0.108	<0.15	95.1	0.0246	7.2	13.6	2090	2.00	-96	
	04/22/2016	442	0.708	0.117	<0.15	85.4	0.0194	7.0	11.0	1560	0.82	--	
	10/05/2016	473	0.738	0.0938	<0.15	88.3	<1.4	7.2	14.7	1399	1.93	56	
	04/20/2017	436	0.89	0.0935	0.44	96.3	0.0153	7.3	10.5	1352	1.66	-51	
	10/23/2017	431	3	0.167	<0.38	88.9	0.0131	7.15	13.4	1447	0.45	-69	
	04/11/2018	416	0.846	0.0796	<0.095	101	3.7	7.12	11.20	1495	0.45	-41.4	
	10/24/2018	409	1.1	0.127	<0.12	102	<0.0014	7.11	12.7	1295	0.16	-114	
	04/22/2019	437	0.425	0.0645	<0.095	97.8	0.0057	7.29	13.76	1272.3	0.53	-15.4	
	10/30/2019	--	--	--	--	--	--	7.07	10.77	1674.6	0.28	-30.2	
	04/20/2020	449	<0.058	0.0181	<0.059	114	<0.00066	7.12	12.59	1637.7	0.94	70	
	04/26/2021	471	0.354	0.0647	<0.059	123	0.0023	7.12	11.34	2065.2	1.49	27.6	

TABLE 4. GROUNDWATER ANALYTICAL RESULTS - NA PARAMETERS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Laboratory Parameters (mg/L)						Field Parameters				
		Alkalinity, total	Iron, dissolved	Manganese, dissolved	Nitrite + Nitrate, total	Sulfate, total	Methane	pH (standard units)	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation / Reduction Potential (mV)
Preventive Action Limit:		NS	0.15	0.06	2	125	NS	NS	NS	NS	NS	NS
Enforcement Standard:		NS	0.3	0.3	10	250	NS	NS	NS	NS	NS	NS
MW-25 Dup (QC-1)	01/28/2013	252	0.0609	0.0386	<0.20	26.7	0.585	8.5	10.8	1191	0.47	98
	04/24/2013	222	0.107	0.0624	<0.15	25	0.541	9.4	9.5	1129	0.51	164
	07/16/2013	247	0.0959	0.0444	<0.15	16.6	0.296	8	17.2	1174	0.62	39
	10/15/2013	248	0.17	0.044	<0.15	23	1.13	8	14	1208	0.69	49
	04/29/2014	294	0.085	0.0044	<0.15	25.7	0.665	10.2	9.2	1202	1.4	-120
	10/13/2014	--	--	--	--	--	--	10.1	13.6	1006	0.46	-184
	04/21/2015	239	0.113	<0.0014	<0.15	42.9	1.36	11.3	9.1	1424	1.25	-151
	10/20/2015	316	0.134	0.0011	<0.15	45.3	1.52	12.6	12.5	1341	1.77	-158
	04/21/2016	385	0.0763	0.00017	1	59.9	0.876	11.9	12.2	2500	0.27	--
	10/04/2016	425	0.187	0.00024	<0.15	42.7	0.899	12.6	15.1	3190	0.16	-321
	10/04/2016	417	0.198	0.0002	<0.15	42.8	1.62	12.6	15.1	3190	0.16	-321
	04/20/2017	497	0.086	0.00027	<0.75	52.5	--	13.8	9.4	3520	0.32	-245
	10/24/2017	277	<0.11	<0.0027	<0.38	88.2	2.01	11.91	12.8	1979	0.13	-241
	04/10/2018	375	<0.111	<0.0027	<0.095	51.1	1.300	11.84	9.17	2608	0.13	-327.9
	10/24/2018	380	0.111	<0.0027	<0.12	38.2	1.99	12	13.4	2206	0.11	-319
	04/22/2019	175	<0.111	<0.0027	<0.095	141	0.578	10.68	10.16	1267.3	0.25	-335.3
	10/31/2019	--	--	--	--	--	--	7.19	10.82	1141	0.12	-93
	04/20/2020	271	0.0662	<0.0012	<0.059	59.1	0.924	11.57	9.4	1272.8	0.38	-227.6
04/26/2021	175	0.117	0.0025	2.5	99	0.315	9.17	10.2	1082.4	0.02	-178.9	
MW-26	04/22/2015	252	0.0665	0.379	<0.15	41.4	2.92	7.5	8.1	1263	0.42	-50
	07/14/2015	284	0.378	0.317	<0.15	21.4	2	7.7	15.8	1046	0.77	-127
	10/19/2015	284	0.723	0.265	<0.15	6.7	3.29	7.7	18.0	733	0.33	-205
	01/07/2016	319	1.14	0.293	<0.15	15.4	7.95	8.9	12.2	1034	1.22	-154
	04/22/2016	390	1.3	0.269	<0.15	72.8	1.44	7.0	9.5	2200	0.36	--
	07/14/2016	341	0.942	0.165	<0.15	28.9	3.58	7.4	15.9	1397	0.31	--
	10/05/2016	311	1.09	0.201	<0.15	13.7	3.09	7.6	18.6	1139	0.20	-195
	01/18/2017	345	1.6	0.242	<0.075	29.8	4.46	7.66	12.0	1519	0.09	-89
	04/20/2017	387	2.6	0.282	<0.075	43.7	5.98	7.5	10.0	2010	0.21	-155
	07/12/2017	370	1.6	0.183	<0.075	34.2	3.43	7.5	18.7	1550	0.41	--
	10/23/2017	278	1.65	0.233	<0.075	5.7	2.89	7.49	17.0	903	0.21	-110
	01/22/2018	266	1.73	0.241	<0.075	2.7	--	7.55	14.24	836.20	0.30	-145.6
	04/11/2018	423	3.34	0.319	<0.095	47	3.71	7.29	9.91	2414	0.30	-143.8
	07/26/2018	315	0.898	0.151	<0.12	12.7	3.32	7.51	16.80	1329	0.15	-215.4
	10/24/2018	332	1.04	0.202	<0.12	6.1	7.45	7.39	15.6	1195	0.40	-128
	04/22/2019	362	1.92	0.254	<0.095	13.4	6.42	7.45	10.57	1555.3	0.08	-132.5
	10/30/2019	323	0.969	0.214	<0.095	5.2	3.4	7.48	15.5	1357.7	0.16	-123.2
	04/20/2020	398	1.97	0.3	<0.059	30.8	4.36	7.42	11.2	1993.4	0.09	-140.8
04/26/2021	554	2.27	0.37	<0.059	26.3	1.39	7.3	10.82	3080	0.02	-142.8	
MW-27 Dup (QC-1) Dup (QC-1) Dup (QC-1)	04/22/2015	222	0.511	0.105	<0.15	7	2.03	7.6	7.4	800	0.51	-107
	07/14/2015	253	0.829	0.124	<0.15	2.6	3.13	7.6	17.5	821	0.60	-153
	07/14/2015	253	0.803	0.122	<0.15	2.6	3.84	7.6	17.5	821	0.60	-153
	10/20/2015	253	0.978	0.131	<0.15	<2.0	--	7.6	17.0	617	0.44	-185
	01/07/2016	248	0.837	0.12	<0.15	4.3	4.28	8.5	10.0	798	1.32	-134
	04/22/2016	227	0.704	0.116	<0.15	9.2	1.64	7.2	8.2	782	0.58	--
	07/14/2016	252	0.675	0.108	<0.15	<2	2.09	7.3	17.2	767	0.40	--
	07/14/2016	251	0.657	0.108	<0.15	<2	3.18	7.3	17.2	767	0.40	--
	10/05/2016	239	0.75	0.114	<0.15	<2	2.75	7.2	18.2	780	0.27	-211
	01/18/2017	236	0.73	0.115	<0.075	<1.0	1.65	7.71	7.8	811	0.93	-74
	04/20/2017	225	1.0	0.0974	<0.075	6.2	2.12	7.6	8.6	679	0.47	-158
	07/12/2017	236	0.66	0.106	<0.075	1.5	2.01	7.4	17.3	676	0.42	--
	10/23/2017	238	0.857	0.123	<0.075	<1.0	2.58	7.36	16.5	680	0.14	-133
	01/22/2018	260	0.766	0.109	<0.075	<1.0	--	7.48	10.52	682.03	0.16	-161.1
	04/11/2018	208	0.545	0.095	<0.095	6.9	3.01	7.38	8.07	674	0.64	-148.6
	07/26/2018	220	0.776	0.105	<0.12	<1.0	2.650	7.29	19.47	598	0.06	-226.6
	07/26/2018	223	0.799	0.106	<0.12	<1.0	2.670	7.29	19.47	598	0.06	-226.6
	10/24/2018	237	0.773	0.113	0.15	<1.0	6.28	7.37	14.7	617	0.24	-96
04/22/2019	211	0.251	0.0789	0.17	7.4	3.28	7.63	10.22	558.2	1.28	-79.7	
10/30/2019	225	0.674	0.107	<0.095	1.2	2.6	7.34	14.11	636.2	0.24	-145.3	
04/20/2020	209	0.391	0.0911	0.068	6.2	0.977	7.4	9.29	618.6	0.54	-99.8	
04/26/2021	229	0.578	0.0951	<0.059	5.7	1.19	7.47	9.18	666.1	0	-147.4	
MW-28 Dup (QC-1) Dup (QC-1) Dup (QC-1) Dup (QC-1)	04/22/2015	188	0.0646	0.149	<0.15	12	2.47	8.3	6.4	2430	0.82	-99
	07/14/2015	210	0.224	0.15	<0.15	5.3	1.09	8.2	16.7	1640	0.54	-190
	10/20/2015	233	0.322	0.125	<0.15	3.7	3.31	8.3	17.9	1193	0.45	-206
	01/07/2016	212	0.335	0.124	<0.15	5.4	3.66	9.0	12.1	1213	2.41	-182
	01/07/2016	217	0.336	0.123	<0.15	5.1	4.48	9.0	12.1	1213	2.41	-182
	04/22/2016	174	0.197	0.214	<0.15	19.8	1.92	7.5	8.9	3240	0.34	--
	07/14/2016	210	0.566	0.19	<0.15	4.8	1.57	7.8	16.1	1900	0.34	--
	10/04/2016	219	0.556	0.174	<0.15	3.9	2.65	7.9	18.9	1840	0.18	-200
	01/18/2017	208	0.68	0.208	<0.075	3	2.07	7.73	10.4	1729	0.08	-98
	01/18/2017	207	0.66	0.202	<0.075	2.7	4.37	7.73	10.4	1729	0.08	-98
	04/20/2017	198	1.4	0.465	<0.075	12.8	2.4	8.0	9.1	3980	0.22	-182
	07/12/2017	218	1.0	0.312	<0.075	6.2	1.92	7.8	18.1	784	0.38	--
	10/23/2017	209	0.851	0.254	<0.075	4.9	3.58	7.84	17.6	2837	0.15	-136
	10/23/2017	237	0.815	0.246	<0.075	4.6	3.21	7.84	17.6	2837	0.15	-136
	01/22/2018	206	0.994	0.251	<0.075	2.9	--	7.94	10.29	2353.2	0.06	-139.3
	01/22/2018	203	0.987	0.249	<0.075	2.6	--	7.94	10.29	2353.2	0.06	-139.3
	04/11/2018	214	0.228	0.242	0.12	20.5	4.26	7.47	8.69	4451	0.11	-80.3
	07/26/2018	202	1.150	0.29	0.58	4.3	2.500	7.59	17.38	2589	0.08	-184.9
10/24/2018	226	1.020	0.276	<0.12	12.7	6.52	7.67	16.0	3.2	0.12	-145	
04/22/2019	244	0.118	0.324	0.4	36.7	3.79	7.45	8.56	5746.5	0.15	-17.4	
10/30/2019	253	1.71	0.297	<0.095	34.2	4.5	7.55	14.82	5014	0.24	-47	
04/20/2020	245	1.27	0.576	<0.059	48.1	3.35	7.55	9.8	5835.9	0.03	-95.1	
04/26/2021	252	1.52	0.58	<0.059	63.9	1.6	7.42	9.95	8113.2	0	-131.5	
PZ-12B Dup (QC-1) Dup (QC-1)	10/21/2004	250	0.023	0.12	<0.031	30	0.45	7.8	14	669	0.61	219
	11/30/2004	250	0.036	--	<0.031	22	0.85	7.5	11.3	827	4.5	195
	01/13/2005	220	0.036	0.17	<0.087	10	0.62	7.7	10.8	687	0.61	262
	02/10/2005	220	0.034	0.14	<0.031	9.6	0.21	7.7	9.5	461	0.62	255
	02/											

TABLE 4. GROUNDWATER ANALYTICAL RESULTS - NA PARAMETERS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Laboratory Parameters (mg/L)					Field Parameters						
		Alkalinity, total	Iron, dissolved	Manganese, dissolved	Nitrite + Nitrate, total	Sulfate, total	Methane	pH (standard units)	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation / Reduction Potential (mV)	
Preventive Action Limit:		NS	0.15	0.06	2	125	NS	NS	NS	NS	NS	NS	
Enforcement Standard:		NS	0.3	0.3	10	250	NS	NS	NS	NS	NS	NS	
PZ-20B	10/20/2004	200	0.04	0.081	<0.031	1.1	0.59	8	13	390	0.51	31	
	11/30/2004	220	0.021	--	<0.031	1.7	1.1	7.7	12.3	389	0.76	128	
	01/11/2005	220	<0.018	0.08	<0.087	2.3	0.8	7.9	12.7	386	0.65	95	
	02/08/2005	200	<0.018	0.095	<0.031	9.3	0.25	7.6	11.8	411	0.75	70	
	03/09/2005	190	<0.018	0.09	0.18	14	0.14	7.7	13	411	0.75	71	
	04/18/2005	450	<0.018	0.1	<0.078	17	0.067	7.9	19.9	415	0.78	100	
	07/05/2005	--	--	--	--	--	--	7.8	19.5	399	0.77	101	
	10/17/2005	190	0.11	0.097	<0.078	1.7	1.5	10	17.6	400	0.64	72	
	01/10/2006	--	--	--	--	--	--	7.6	11.4	427	0.83	-83	
	04/19/2006	170	<0.05	0.11	<0.088	23	0.04	7.5	14.1	421	0.84	-18	
	07/20/2006	--	--	--	--	--	--	7.8	18.9	460	0.64	-17	
	04/25/2007	210	--	0.11	<0.085	5.1	0.46	7.8	13.3	435	0.49	-18	
	04/07/2008	205	0.134	0.136	<0.085	5.2	0.628	7.7	9.4	429	0.67	-89	
	04/20/2009	208	<0.005	0.15	<0.085	13.5	0.127	8.9	12	478	0.48	-106	
	04/06/2010	209	0.0086	0.159	<0.20	9.9	0.346	7.8	12.4	466	0.53	76	
	04/12/2011	--	--	--	--	--	--	7.6	13.85	404	3.52	50	
	04/23/2012	204	0.0285	0.128	<0.20	4.7	0.135	7.7	14.8	460	0.52	-26	
	04/23/2013	208	<0.014	0.15	<0.15	2.4	0.746	7.7	11.8	434	0.74	98	
	04/29/2014	--	--	--	--	--	--	7.6	11.2	1900	0.54	-199	
	04/21/2015	194	<0.0129	0.131	<0.15	3.3	--	7.5	10.2	509	1.70	-147	
	04/21/2016	--	--	--	--	--	--	7.4	12.9	413	0.38	--	
	10/04/2016	--	--	--	--	--	--	--	--	--	--	--	
	04/19/2017	--	--	--	--	--	--	7.8	12.4	406	0.27	-208	
04/10/2018	--	--	--	--	--	--	7.41	11.82	451	0.09	-274.6		
04/23/2019	--	--	--	--	--	--	7.67	11.71	474.8	0.34	-255		
10/30/2019	--	--	--	--	--	--	--	--	--	--	--		
04/21/2020	--	--	--	--	--	--	8.05	10.59	375	7.94	92.9		
04/27/2021	--	--	--	--	--	--	7.72	12.03	535.6	0.11	-219.8		
PZ-21B	Dup (QC-1)	10/20/2004	200	0.037	0.085	<0.031	1	1	8	16.9	376	0.57	20
		10/20/2004	380	0.038	0.085	0.14	1	0.96	--	--	--	--	--
		12/02/2004	220	0.041	0.091	0.19	1.9	1.2	7.6	10.7	365	0.72	58
	Dup (QC-1)	01/12/2005	210	<0.018	0.092	<0.087	4.3	0.8	7.9	12	278	0.42	32
		02/09/2005	210	<0.018	0.11	<0.031	4.3	0.62	7.7	10.9	402	0.64	26
		03/09/2005	180	<0.018	0.11	<0.031	18	0.16	7.7	10.6	404	0.51	9
	Dup (QC-1)	04/19/2005	190	<0.018	0.13	0.44	18	0.21	7.9	14.9	421	0.62	59
		04/19/2005	190	<0.018	0.13	0.31	17	0.17	7.9	14.9	421	0.62	59
		07/06/2005	--	--	--	--	--	--	7.8	16.1	411	0.53	86
	Dup (QC-1)	10/18/2005	200	0.09	0.13	<0.078	1.9	2.1	10.7	15	394	0.53	41
		01/10/2006	--	--	--	--	--	--	7.6	12	426	0.55	-66
		01/10/2006	--	--	--	--	--	--	7.6	12	426	0.55	-66
	Dup (QC-1)	04/20/2006	170	<0.05	0.13	<0.088	22	0.029	7.4	13.7	412	0.68	-16
		04/20/2006	170	<0.05	0.14	<0.088	22	0.017	7.4	13.7	412	0.68	-16
		07/19/2006	--	--	--	--	--	--	7.8	16.5	415	0.58	19
	Dup (QC-1)	07/19/2006	--	--	--	--	--	--	7.8	16.5	415	0.58	19
		04/26/2007	200	--	0.15	<0.085	5.7	0.59	8	11.4	442	0.39	-47
		04/09/2008	202	0.0994	0.1	1.1	5.4	0.362	7.5	10	448	0.5	-37
	Dup (QC-1)	04/20/2009	211	<0.005	0.164	<0.085	15.1	0.236	8.9	11.4	483	0.38	-73
		04/06/2010	209	0.0101	0.167	<0.20	11.2	0.119	7.9	13.5	475	0.43	62
		04/12/2011	190	<0.0083	0.143	0.28	17.2	0.0512	7.6	13.7	388	3.85	105
	Dup (QC-1)	04/24/2012	197	0.0133	0.135	<0.20	2.9	0.135	7.8	12.5	425	0.37	51
		04/23/2013	205	0.0159	0.161	<0.15	2.4	0.711	7.8	10.6	434	0.53	136
		04/29/2014	--	--	--	--	--	--	7.6	10.1	426	0.61	-101
	Dup (QC-1)	04/21/2015	190	<0.0129	0.139	<0.15	4.8	--	7.6	10.9	473	0.48	-153
		04/21/2016	--	--	--	--	--	--	7.3	12.4	415	0.32	--
		10/04/2016	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/19/2017	--	--	--	--	--	--	7.8	11.0	408	0.25	-202
		04/10/2018	--	--	--	--	--	--	7.43	10.78	453	0.23	-273.8
		04/23/2019	--	--	--	--	--	--	7.64	11.9	471.9	0.17	-225.7
	Dup (QC-1)	10/30/2019	--	--	--	--	--	--	--	--	--	--	--
04/21/2020		--	--	--	--	--	--	7.79	9.26	423	0.07	-185.3	
04/27/2021		--	--	--	--	--	--	7.69	10.33	539	0.15	-213.3	
PZ-22B	Dup (QC-1)	10/18/2004	220	0.024	0.073	<0.031	1.3	0.35	7.8	14.3	394	0.34	-29
		12/01/2004	220	0.028	--	<0.031	1.4	1.6	7.7	12.6	385	0.76	48
		01/11/2005	200	<0.018	0.072	<0.087	2	1.1	7.9	12.4	400	0.49	25
	Dup (QC-1)	02/08/2005	210	<0.018	0.077	<0.031	1.9	0.89	7.7	11.1	410	0.66	2
		03/09/2005	190	<0.018	0.073	<0.031	5.9	0.35	7.7	11	421	0.51	-14
		03/09/2005	190	<0.018	0.075	0.65	5.7	0.39	7.7	11	421	0.51	-14
	Dup (QC-1)	04/19/2005	190	<0.018	0.086	0.26	9	0.24	7.9	13.9	419	0.61	62
		07/06/2005	--	--	--	--	--	--	7.8	15	411	0.56	66
		10/18/2005	190	0.097	0.084	<0.078	1.5	1.5	10.5	14.7	395	0.49	75
	Dup (QC-1)	10/18/2005	200	0.096	<0.00040	<0.078	1.4	1.1	--	--	--	--	--
		01/10/2006	--	--	--	--	--	--	7.6	10	421	0.48	-112
		04/19/2006	190	<0.05	0.086	<0.088	19	0.16	7.5	13.1	445	0.6	-66
	Dup (QC-1)	07/19/2006	--	--	--	--	--	--	7.8	15.3	419	0.51	19
		04/25/2007	200	<0.050	0.094	<0.085	5.3	0.59	8	12.3	438	0.37	-55
		04/09/2008	189	0.127	0.154	<0.085	6.3	0.469	7.5	11.2	309	0.5	-43
	Dup (QC-1)	04/20/2009	211	<0.005	0.1	0.17	11.7	0.36	8.8	11.7	476	0.38	-87
		04/06/2010	214	0.0046	0.104	<0.20	5.2	0.211	7.8	12.6	459	0.38	75
		04/12/2011	193	<0.0083	0.101	<0.20	12	0.14	7.5	13.1	390	3.36	29
	Dup (QC-1)	04/23/2012	186	0.0259	0.102	<0.20	6.8	0.147	7.6	12.9	416	0.43	-51
		04/23/2013	228	<0.014	0.11	<0.15	5.6	0.376	7.7	11.2	436	0.53	82
		04/29/2014	--	--	--	--	--	--	7.6	11.7	449	1.41	-263
	Dup (QC-1)	04/21/2015	193	<0.0129	0.096	<0.15	4.7	--	7.6	10.7	510	0.51	-184
		04/21/2016	--	--	--	--	--	--	7.3	12.4	429	0.35	--
		10/04/2016	--	--	--	--	--	--	--	--	--	--	--
	Dup (QC-1)	04/19/2017	--	--	--	--	--	--	7.8	11.7	406	0.23	-228
		04/10/2018	--	--	--	--	--	--	7.38	10.61	432.94	0.22	-271.4
		04/23/2019	--	--	--	--	--	--	7.58	15.85	434.3	0.12	-241
	Dup (QC-1)	10/30/2019	--	--	--	--	--	--	--	--	--	--	--
		04/21/2020	--	--	--	--	--	--	7.79	8.48	386.9	0.09	-155.8
		04/27/2021	--	--	--	--	--	--	7.65	9.99	508.7	0.09	-227.3

TABLE 4. GROUNDWATER ANALYTICAL RESULTS - NA PARAMETERS

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WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Laboratory Parameters (mg/L)						Field Parameters					
		Alkalinity, total	Iron, dissolved	Manganese, dissolved	Nitrite + Nitrate, total	Sulfate, total	Methane	pH (standard units)	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation / Reduction Potential (mV)	
<i>Preventive Action Limit:</i>		NS	0.15	0.06	2	125	NS	NS	NS	NS	NS	NS	
<i>Enforcement Standard:</i>		NS	0.3	0.3	10	250	NS	NS	NS	NS	NS	NS	
PZ-23	Well Installed 10/5/2009	10/08/2009	238	0.0139	0.25	<0.20	3	--	7.3	16.4	521	0.39	1
		11/12/2009	240	0.855	0.0921	<0.20	2.1	--	7.4	14.6	533	0.34	169
		04/07/2010	231	1.18	0.0765	<0.20	3	5.52	7.8	8.4	580	0.45	105
		10/05/2010	242	0.704	0.066	<0.20	3.3	6.57	6.1	17.4	613	0.67	167
		01/18/2011	230	0.758	0.0643	<0.20	3.5	--	7.5	7.6	591	2.12	115
		04/12/2011	215	0.77	0.0646	<0.20	12.6	4.1	7.5	7.9	607	3.66	101
		07/13/2011	232	0.603	0.0666	<0.20	7.5	2.02	7.3	13.8	633	3	82
		10/04/2011	214	0.749	0.0685	<0.20	<2.0	4.22	7.6	17	538	2.27	119
		01/04/2012	228	0.657	0.0705	<0.20	9.8	5.4	8	10.4	784	3.03	106
		04/24/2012	221	0.52	0.061	<0.20	10.9	3.98	7.6	9	714	0.44	73
		06/26/2012	200	0.401	0.0598	<0.20	3.7	6.14	7	16.8	633	0.48	135
		09/12/2012	229	0.688	0.0645	<0.20	<2.0	3.61	7.5	21.2	626	0.47	5
		01/28/2013	--	--	--	--	--	--	7.5	9.62	627	0.57	95
		04/24/2013	233	0.568	0.0598	<0.15	7.7	3.67	7.6	8.2	683	0.47	119
		07/17/2013	--	--	--	--	--	--	7.4	16.4	635	0.85	90
		10/15/2013	--	--	--	--	--	--	7.4	16.3	579	1.02	87
		04/30/2014	231	0.522	0.0626	<0.15	6.8	3.28	7.5	7.4	638	2.78	96
		07/21/2014	221	0.518	0.0662	<0.15	4.8	4.53	7.4	15.5	639	0.72	-98
		10/14/2014	231	0.494	0.0635	0.15	2.2	6.57	7.4	15.7	577	0.45	-151
		04/22/2015	222	0.646	0.107	<0.15	5.3	2.94	7.6	7.0	693	0.49	-125
		04/22/2015	208	0.644	0.105	<0.15	5.1	2.46	7.6	7.0	693	0.49	-125
		07/14/2015	235	0.599	0.111	<0.15	2.8	2.95	7.7	15.0	412	1.00	-184
		10/20/2015	243	0.712	0.101	<0.15	<2.0	--	7.7	16.8	511	0.53	-214
		01/07/2016	227	0.462	0.0827	<0.15	6.6	3.82	8.7	11.4	667	3.42	-152
		04/21/2016	217	0.427	0.099	<0.15	13	2.91	7.1	9.9	606	0.34	--
		07/14/2016	243	0.362	0.0876	<0.15	4	2.21	7.2	15.3	601	0.45	--
		10/04/2016	234	0.481	0.0932	<0.15	<2	3.03	7.4	17.5	615	0.16	-195
		01/18/2017	217	0.39	0.0863	<0.075	<1.0	3.88	7.78	9.4	690	0.11	-75
		04/20/2017	213	0.34	0.0756	<0.075	6.6	--	7.7	8.7	595	0.32	-195
		07/12/2017	229	0.41	0.0958	<0.075	<1.0	1.73	7.4	14.7	588	0.62	--
		10/23/2017	224	0.539	0.0894	<0.075	<1.0	2.7	7.45	16.3	583	0.19	-154
		01/22/2018	214	0.485	0.0627	<0.075	<1.0	--	7.59	10.13	562.25	0.16	-148.3
		04/11/2018	205	0.530	0.0768	<0.095	<1.0	3.46	7.40	8.00	546	0.15	-164.5
		04/11/2018	212	0.540	0.0789	<0.095	<1.0	3.41	7.40	8.00	546	0.15	-164.5
		07/26/2018	218	0.615	0.0926	<0.12	<1.0	3.330	6.89	15.31	531	0.10	-202.8
		10/24/2018	230	0.524	0.0874	<0.12	<1.0	4.39	7.41	16.1	567	0.18	-160
		10/24/2018	224	0.546	0.0919	0.15	1.0	3.67	7.41	16.1	567	0.18	-160
		04/22/2019	230	0.297	0.0635	<0.095	1.4	2.12	7.62	9.53	560.9	0.06	-134.1
		04/22/2019	224	0.322	0.0665	<0.095	1.8	5.67	7.62	9.53	560.9	0.06	-134.1
		10/30/2019	229	0.391	0.0639	<0.095	1.2	3.05	7.4	14.8	570.8	0.2	-146.5
		10/30/2019	230	0.41	0.0666	<0.095	1.4	4.89	7.4	14.8	570.8	0.2	-146.5
		04/20/2020	215	0.309	0.0557	<0.059	3.9	4.32	7.41	8.81	563.5	0.07	-116.2
		04/20/2020	210	0.247	0.0568	<0.059	4	5.52	7.41	8.81	563.5	0.07	-116.2
		04/26/2021	228	0.334	0.0576	<0.059	1.5	1.88	7.5	8.67	563.9	0.01	-149.5
		04/26/2021	228	0.377	0.0572	<0.059	1.5	2.71	7.5	8.67	563.9	0.01	-149.5
PZ-26	Product in well, not sampled	04/30/2014	278	0.018	0.188	<0.15	6.5	14.9	7.1	9.5	764	1.16	50
		10/14/2014	--	--	--	--	--	--	--	--	--	--	--
		04/21/2015	--	--	--	--	--	--	--	--	--	--	--
		04/22/2015	--	--	--	--	--	--	--	--	--	--	--
		10/19/2015	--	--	--	--	--	--	--	--	--	--	--
		01/07/2016	--	--	--	--	--	--	--	--	--	--	--
		04/21/2016	--	--	--	--	--	--	--	--	--	--	--
		07/14/2016	--	--	--	--	--	--	--	--	--	--	--
		10/05/2016	--	--	--	--	--	--	--	--	--	--	--
		01/22/2018	--	--	--	--	--	--	--	--	--	--	--
		04/10/2018	--	--	--	--	--	--	--	--	--	--	--
		07/26/2018	--	--	--	--	--	--	--	--	--	--	--
		10/24/2018	--	--	--	--	--	--	--	--	--	--	--
		04/23/2019	--	--	--	--	--	--	--	--	--	--	--
		10/30/2019	--	--	--	--	--	--	--	--	--	--	--
		04/20/2020	--	--	--	--	--	--	--	--	--	--	--
04/26/2021	--	--	--	--	--	--	--	--	--	--	--		
PZ-27	Dup (QC-1)	04/22/2015	229	0.152	0.16	<0.15	3.1	2.82	7.4	8.4	743	0.50	-58
		07/14/2015	233	0.681	0.165	<0.15	2.4	3.38	7.5	16.2	738	0.50	-141
		10/20/2015	252	1.08	0.144	<0.15	<2.0	--	7.6	16.0	570	0.36	-168
		10/20/2015	253	1.01	0.139	<0.15	<2.0	--	7.6	16.0	570	0.36	-168
		01/07/2016	241	0.935	0.123	<0.15	3.9	3.94	8.7	10.2	656	2.35	-143
		04/22/2016	220	0.831	0.118	<0.15	8.8	3.2	7.2	8.9	641	0.31	--
		07/14/2016	239	0.785	0.0982	<0.15	2.4	2.98	7.2	15.5	627	0.44	--
	Dup (QC-1)	10/05/2016	233	0.887	0.106	<0.15	<2	3.53	7.3	17.0	653	0.28	-203
		01/18/2017	188	1.5	0.296	<0.075	35.9	2.48	7.51	8.1	10037	0.11	-70
		04/20/2017	224	0.84	0.109	<0.075	2.9	2.15	7.6	8.6	614	0.31	-149
		07/12/2017	236	0.82	0.105	<0.075	<1.0	3.73	7.4	16.3	541	0.49	--
		07/12/2017	235	0.83	0.106	<0.075	<1.0	3.12	7.4	16.3	541	0.49	--
		10/23/2017	233	1.19	0.121	<0.075	<1.0	3.1	7.37	15.7	564	0.16	-129
		01/22/2018	222	1.04	0.113	<0.075	<1.0	--	7.38	10.33	608.98	0.10	-123.0
		04/11/2018	223	1.09	0.11	<0.095	<1.0	4.41	7.29	8.46	582	0.32	-138.0
		07/26/2018	224	1.060	0.105	<0.12	<1.0	2.730	7.22	17.70	556	0.08	-214.0
		10/24/2018	218	1.020	0.107	0.14	<1.0	6.61	7.35	15.1	0.6	0.13	-152
04/22/2019	221	0.898	0.0939	<0.095	1	4.67	7.68	11.66	582.2	0.72	-104.1		
10/30/2019	217	0.671	0.0846	<0.095	0.78	1.27	7.44	13.56	526.3	0.2	-114.8		
04/20/2020	207	0.84	0.0953	<0.059	1.2	2.53	7.5	11.15	527.2	0.13	-116.2		
04/26/2021	224	1.33	0.113	<0.059	0.59	1.45	7.52	9.8	568.7	0.01	-124.9		
PZ-28	Product in well, not sampled	04/22/2015	302	0.224	0.059	<0.15	4.8	5.48	7.8	7.9	900	0.42	-116
		07/14/2015	--	--	--	--	--	--	--	--	--	--	--
		10/19/2015	--	--	--	--	--	--	--	--	--	--	--
		01/07/2016	--	--	--	--	--	--	--	--	--	--	--
		04/21/2016	--	--	--	--	--	--	--	--	--	--	--
		07/14/2016	--	--	--	--	--	--	--	--	--	--	--
		10/05/2016	--	--	--	--	--	--	--	--	--	--	--
		01/22/2018	--	--	--	--	--	--	--	--	--	--	--
		04/10/2018	--	--	--	--	--	--	--	--	--	--	--
		07/26/2018	--	--	--	--	--	--	--	--	--	--	--
		10/24/2018	--	--	--	--	--	--	--	--	--	--	--
04/23/2019	--	--	--	--	--	--	--	--	--	--	--		
10/30/2019	--	--	--										

TABLE 4. GROUNDWATER ANALYTICAL RESULTS - NA PARAMETERS

2020-2021 ANNUAL REPORT

WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Sample Location	Sample Date	Laboratory Parameters (mg/L)						Field Parameters				
		Alkalinity, total	Iron, dissolved	Manganese, dissolved	Nitrite + Nitrate, total	Sulfate, total	Methane	pH (standard units)	Temperature (°C)	Specific Conductance (µmhos/cm)	Dissolved Oxygen (mg/L)	Oxidation / Reduction Potential (mV)
<i>Preventive Action Limit:</i>		NS	0.15	0.06	2	125	NS	NS	NS	NS	NS	NS
<i>Enforcement Standard:</i>		NS	0.3	0.3	10	250	NS	NS	NS	NS	NS	NS
QCFB	02/20/2002	--	--	<0.00042	0.44	--	--	--	--	--	--	--
	05/13/2002	--	--	<0.00035	0.1	--	--	--	--	--	--	--
	08/20/2002	--	--	<0.00035	0.31	--	--	--	--	--	--	--
	11/14/2002	--	--	<0.00035	0.27	--	--	--	--	--	--	--
	02/20/2003	--	--	<0.00045	<0.135	--	--	--	--	--	--	--
	10/19/2004	<8.3	<0.018	0.0013	<0.031	<0.36	<0.01	--	--	--	--	--
	12/01/2004	--	--	--	--	--	--	8.7	3.4	1.0	9.1	26
	12/02/2004	<8.3	<0.018	0.0012	<0.031	<0.36	<0.010	--	--	--	--	--
	01/13/2005	<8.3	<0.018	<0.00028	<0.087	<0.4	<0.010	9.3	4.8	3.0	9.62	82
	02/10/2005	<8.3	<0.018	<0.00028	<0.031	<0.36	<0.01	8.7	4	2.0	12.7	137
	03/10/2005	<8.3	<0.018	<0.00028	<0.031	<0.36	<0.010	8.4	24.7	3.0	8.74	62
	04/20/2005	<6.3	<0.018	<0.00028	0.18	<0.83	<0.010	8.7	19.3	2.0	8.4	176
	07/07/2005	--	--	--	--	--	--	8.1	23.8	2.0	6.1	73
	10/19/2005	<6.3	<0.04	0.00097	<0.078	<0.83	<0.01	11.2	16.6	1.0	6.33	40
	01/12/2006	--	--	--	--	--	--	9	6.8	1.0	8.17	70
	04/19/2006	<9.7	<0.05	<0.00022	<0.088	<0.77	<0.01	5.9	17.2	1.0	7.6	211
	07/20/2006	--	--	--	--	--	--	8.1	26.9	2.0	6.35	25
	10/24/2006	<9.7	<50	<0.22	<0.20	<0.77	<10	9.1	11.4	1.0	6.23	132
	04/26/2007	--	--	--	--	--	--	9.3	12.8	1.0	7.14	125
	10/09/2007	<0	<0.026	--	<0.085	<0.51	<10	9.7	28.6	2.0	5.36	124
	04/09/2008	<0	0.009	0.00055	<0.085	<0.51	<2	8.1	11.4	3.0	8.23	107
	10/21/2008	<10	0.0076	0.00035	<0.085	<0.51	<0.002	8.7	16.5	1.0	8.7	42
	04/21/2009	<10	<0.005	<0.00024	<0.085	<0.51	<0.002	9.5	11.7	2.0	7.35	-52
	10/08/2009	<10	<0.0062	<0.000074	<0.20	2	--	7.5	15.3	1.0	7.81	159
	04/07/2010	<10	0.0042	0.00012	<0.20	<2.0	--	7.6	13.7	1.0	8.6	141
	10/05/2010	<10	<0.0083	<0.00014	<0.20	<2.0	<0.00093	6.2	17	2.0	8.05	250
	01/18/2011	<10	<0.0083	<0.00014	<0.20	<2.0	--	7.5	11.2	4.0	9.94	157
	04/12/2011	6360	<0.0083	<0.00014	<0.20	<2.0	<0.00093	7.8	6.2	2.0	11.05	136
	07/13/2011	<10	<0.0033	<0.000098	<0.20	<2.0	<0.00093	8.6	25	2.0	7.58	-54
	10/03/2011	<10	<0.0033	<0.000098	<0.20	<2.0	<0.00064	7.8	29.1	2.0	6.1	149
	01/04/2012	<10	<0.0033	<0.000098	<0.20	<2.0	<0.00064	9.3	16.1	0.5	8.02	112
	04/24/2012	<10	0.0197	<0.00032	<0.20	<2.0	<0.00064	7.4	17.9	4.0	6.8	105
	06/26/2012	<10	<0.0226	<0.00014	<0.20	<2.0	<0.00064	--	--	--	--	--
	09/13/2012	<10	0.0142	0.00063	<0.20	<2.0	<0.00064	5.5	21.5	7.0	8.01	202
	01/29/2013	<8.6	<0.0226	0.0002	<0.20	<2.0	<0.00064	6.1	6.2	3.0	9	116
	04/24/2013	8.7	<0.014	<0.0006	<0.15	<2.0	<0.00064	7.7	13.2	4.0	7.6	161
	07/16/2013	<8.6	<0.014	0.0016	<0.15	<2.0	<0.00064	7.2	27.4	3.0	7.6	150
	10/15/2013	<8.6	0.00078	<0.00011	<0.15	<2.0	<0.00064	7.2	19.4	3.0	7.9	148
	04/30/2014	<7.5	<0.0129	<0.0014	<0.15	<2.0	<0.0014	7.3	13.4	4.0	5.68	74
	04/21/2015	<7.5	<0.0129	<0.0014	<0.15	<2.0	<0.0014	7.1	24.5	5.0	3.45	-150
	07/14/2015	<7.5	<0.010	<0.00018	<0.15	<2.0	<0.0014	8.6	18.0	5.0	9.80	--
	10/19/2015	<7.5	<0.0137	<0.00024	<0.15	<2.0	<0.0014	7.9	19.5	5.0	15.25	-95
	01/07/2016	<7.5	<0.0137	<0.00024	<0.15	<2	<0.0014	8.5	6.1	3.0	2.66	--
04/21/2016	<7	<0.0066	<0.00011	<0.15	<2	<0.0014	7.7	18.7	16.0	6.74	--	
07/14/2016	<7	<0.01	<0.00018	<0.15	<2	<0.0014	7.9	27.5	32.0	7.21	--	
10/04/2016	<7	0.018	0.00019	<0.15	<2	<0.0014	9.5	21.1	2.0	5.71	-117	
01/18/2017	9.1	0.061	0.00087	<0.075	<1.0	<0.0014	--	--	--	--	--	
04/20/2017	7.4	0.027	0.00035	<0.075	<1.0	--	9.4	10.6	3.0	8.34	-144	
07/12/2017	<7.0	<0.11	<0.0027	<0.075	<1.0	0.0023	--	--	--	--	--	
10/23/2017	--	--	--	--	--	--	--	--	--	--	--	
10/24/2017	--	--	--	--	--	--	--	--	--	--	--	
not measured	01/22/2018	<7.0	<0.111	<0.0027	<0.075	<1.0	--	--	--	--	--	
	04/10/2018	--	--	--	--	--	--	--	--	--	--	
	04/11/2018	--	--	--	--	--	--	--	--	--	--	
	07/26/2018	--	--	--	--	--	--	--	--	--	--	
	10/24/2018	--	--	--	--	--	--	--	--	--	--	
	10/25/2018	--	--	--	--	--	--	--	--	--	--	
	10/31/2019	--	--	--	--	--	--	--	--	--	--	

[PAR/JTB 11/05; PAR/JTB 9/06; RJG/JTB 10/07; RMW/BGH 6/08; RJG/RMW 1/09; BGH/RJG 3/09; RMW/BGH 5/10; AMM/KJB 2/11; KJB/RJG 5/11; BGH/BGH 8/11; CJM/AMM 01/12; AMM/JJW 5/12; AMM/ANS 7/12; AMM/RJG 10/12; ETE/RJG 3/13; ETO/RJG 5/13; PMH/NDK 9/13; ETE/NDK 10/13; U-ECK 6/14; U-KLT 1/30/15; C-PMH 2/15] [U-AJS, C-PMH12/14/15; Format ECK 4/11/16; U-ECK 2/2/17, C-SGW 2/2/17, C-KJS 2/7/17; U-KLT 11/29/17, C-TWL 11/29/17; U-KLT 3/19&20/19, C-JQW 3/20/19] [U-ASM 3/25/19, C-KLT 3/25/19; U-KLT 3/27/18, C-ASM 3/27/2019; U-KLT 4/16/20, C-MIK 4/17/20; U-CMD 6/24/21, C-KJS 8/23/21]

Notes:

- Italic* Constituent concentrations that attain or exceed a preventive action limit (PAL) are italicized.
 - BOLD** Constituent concentrations that attain or exceed an enforcement standard (ES) are bold.
 - : Analysis was not performed.
 - *: Laboratory data for wells MW-8, MW-9, and MW-10 were originally presented in the March 25, 2002 URS SI report
 - < : Constituent was not identified above the limit of detection shown.
 - °C : Degrees Celsius
 - µmhos/cm : micromhos per centimeter
 - Dup (QA/QC): Field Duplicate sample, field identification indicated in parentheses.
 - mg/L : milligrams per liter
 - mV : millivolts
 - NA : natural attenuation
 - NS : NR 140 groundwater quality standard has not been established.
-
- Nitrite + Nitrate, Total was analyzed 2009 to 2016, and October 2018 as "Nitrate as N" (analytic method EPA 300.0)
 See lab reports for data qualifiers
 NR 140 groundwater quality standards revised effective January 2020. Data prior to this date are also compared to revised 2020 standards.

TABLE 5. NAPL OBSERVATIONS

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WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Location	Date	NAPL Thickness ¹ (ft)	NAPL Recovered After Measurement (gal.)	Method of NAPL Observation				
				Visual inspection of purge water and groundwater sample	Visual inspection of tubing used for sample collection	Oil / Water Interface Probe (surface reading)	Oil / Water Interface Probe (bottom reading)	Bailer sent to bottom of well
MW-02R	04/23/2012	0.00	--	--	--	--	--	--
	04/23/2013	0.00	--	--	--	--	--	--
	04/29/2014	0.00	--	--	--	--	--	--
	04/21/2015	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	04/10/2018	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/31/2019	0.00	--	--	--	--	--	--
04/21/2020	0.00	--	--	--	--	--	--	--
04/27/2021	0.00	--	--	--	--	--	--	--
MW-12R	10/14/2011	--	--	--	--	ND,N	ND,N	--
	04/23/2012	0.00	--	--	--	--	--	--
	04/24/2013	0.00	--	--	--	--	--	--
	04/29/2014	0.00	--	--	--	--	--	--
	04/21/2015	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	04/10/2018	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/31/2019	0.00	--	--	--	--	--	--
04/20/2020	0.00	--	--	--	--	--	--	--
04/26/2021	0.00	--	--	--	--	--	--	--
PZ-12B	10/14/2011	--	--	--	--	ND,N	ND,N	--
	04/21/2016	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
	04/20/2020	0.00	--	--	--	--	--	--
04/26/2021	0.00	--	--	--	--	--	--	--
MW-13R	04/23/2012	0.00	--	--	--	--	--	--
	04/23/2013	0.00	--	--	--	--	--	--
	04/29/2014	0.00	--	--	--	--	--	--
	04/21/2015	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	04/10/2018	0.00	--	--	--	--	--	--
	04/23/2019	0.00	--	--	--	--	--	--
	10/31/2019	0.00	--	--	--	--	--	--
04/20/2020	0.00	--	--	--	--	--	--	--
04/26/2021	0.00	--	--	--	--	--	--	--
MW-19	04/23/2012	0.00	--	--	--	--	--	--
	04/23/2013	0.00	--	--	--	--	--	--
	04/29/2014	0.00	--	--	--	--	--	--
	04/21/2015	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	04/10/2018	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
04/20/2020	0.00	--	--	--	--	--	--	--
04/26/2021	0.00	--	--	--	--	--	--	--
MW-20	10/14/2011	--	--	--	--	ND,N	ND,N	--
	04/23/2012	0.20	--	--	--	--	--	--
	06/26/2012	0.20	--	--	--	--	--	--
	09/12/2012	0.10	--	--	--	--	--	--
	01/28/2013	0.20	--	--	--	--	--	--
	04/23/2013	0.10	--	--	--	--	--	--
	07/16/2013	0.10	--	--	--	--	--	--
	10/15/2013	0.05	--	--	--	--	--	--
	04/29/2014	0.10	--	--	--	--	--	--
	04/29/2014	0.00	--	--	--	--	--	--
	04/21/2015	0.00	--	--	--	--	--	--
	10/19/2015	0.15	--	--	--	--	--	--
	04/21/2016	0.20	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	04/19/2017	0.25	--	--	--	oil/tar present	--	--
	10/23/2017	0.01	--	--	--	--	--	--
	04/10/2018	0.00	--	trace NAPL	--	--	--	--
	10/25/2018	0.00	--	--	--	--	--	--
04/23/2019	0.00	--	--	--	--	--	--	
10/31/2019	0.00	--	--	--	--	--	--	
04/21/2020	0.00	--	--	--	--	--	--	
04/27/2021	0.00	--	--	--	--	--	--	

TABLE 5. NAPL OBSERVATIONS

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WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Location	Date	NAPL Thickness ¹ (ft)	NAPL Recovered After Measurement (gal.)	Method of NAPL Observation				
				Visual inspection of purge water and groundwater sample	Visual inspection of tubing used for sample collection	Oil / Water Interface Probe (surface reading)	Oil / Water Interface Probe (bottom reading)	Bailer sent to bottom of well
PZ-20B	04/21/2016	0.00	--	--	--	--	--	--
	04/23/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
	04/21/2020	0.00	--	--	--	--	--	--
	04/27/2021	0.00	--	--	--	--	--	--
MW-21	10/14/2011	--	--	--	--	ND,N	less than 1-foot	--
	10/20/2011	--	--	--	--	oil present, no meas.	--	--
	04/23/2012	0.25	--	--	--	--	--	--
	06/26/2012	0.25	--	--	--	--	--	--
	09/12/2012	0.35	--	--	--	--	--	--
	01/28/2013	0.20	--	--	--	--	--	--
	04/23/2013	0.25	--	--	--	--	--	--
	07/06/2013	0.20	--	--	--	--	--	--
	07/16/2013	0.20	--	--	--	--	--	--
	10/15/2013	0.25	--	--	--	--	--	--
	04/29/2014	0.38	--	--	--	--	--	--
	10/13/2014	0.35	--	--	--	--	--	--
	04/21/2015	0.25	--	--	--	--	--	--
	10/19/2015	0.25	--	--	--	--	--	--
	04/21/2016	0.25	--	--	--	--	--	--
	10/04/2016	0.25	--	--	--	--	--	--
	04/19/2017	0.25	--	--	oil/tar present	--	--	--
	10/23/2017	0.00	--	--	--	--	--	--
	04/10/2018	0.00	--	--	trace NAPL	--	--	--
	10/25/2018	0.00	--	--	--	--	--	--
04/23/2019	0.00	--	--	trace NAPL	--	--	--	
10/31/2019	0.00	--	--	trace NAPL	--	--	--	
04/21/2020	0.00	--	--	--	trace NAPL	--	--	
04/27/2021	0.00	--	--	--	--	--	--	
PZ-21B	10/14/2011	--	--	--	--	ND,N	ND,N	--
	04/21/2016	0.00	--	--	--	--	--	--
	04/23/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
	04/21/2020	0.00	--	--	--	--	--	--
04/27/2021	0.00	--	--	--	--	--	--	
MW-22	10/14/2011	--	--	--	--	ND,N	ND,N	--
	04/23/2012	0.00	--	--	--	--	--	--
	04/23/2013	0.00	--	--	--	--	--	--
	04/29/2014	0.00	--	--	--	--	--	--
	04/21/2015	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	04/10/2018	0.00	--	--	--	--	--	--
	04/23/2019	0.00	--	--	--	--	--	--
	10/31/2019	0.00	--	--	--	--	--	--
	04/21/2020	0.00	--	--	--	--	--	--
04/27/2021	0.00	--	--	--	--	--	--	
PZ-22B	10/14/2011	--	--	--	--	ND,N	ND,N	--
	04/21/2016	0.00	--	--	--	--	--	--
	04/23/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
	04/21/2020	0.00	--	--	--	--	--	--
04/27/2021	0.00	--	--	--	--	--	--	
MW-23	04/23/2012	0.00	--	--	--	--	--	--
	01/07/2016	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
	04/20/2020	0.00	--	--	--	--	--	--
04/26/2021	0.00	--	--	--	--	--	--	
PZ-23	10/08/2009	--	--	N	N	--	--	--
	11/12/2009	--	--	N	N	--	--	--
	02/02/2010	--	--	--	--	ND, N	ND, N	N
	04/07/2010	--	--	N	N	ND, N	ND, N	--
	10/05/2010	--	--	N	N	ND, N	ND, N	--
	01/18/2011	--	--	N	N	--	--	--
	04/11/2011	--	--	N	N	ND, N	ND, N	--
	07/13/2011	--	--	N	N	ND, N	ND, N	--
	10/04/2011	--	--	N	N	ND, N	ND, N	--
	10/14/2011	--	--	--	--	ND, N	ND, N	--
	01/04/2012	--	--	--	--	ND, N	ND, N	--
	04/23/2012	0.00	--	--	--	--	--	--
	06/26/2012	0.00	--	--	--	--	--	--
	09/12/2012	0.00	--	--	--	--	--	--
04/24/2013	0.00	--	--	--	--	--	--	
04/29/2014	0.00	--	--	--	--	--	--	

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WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Location	Date	NAPL Thickness ¹ (ft)	NAPL Recovered After Measurement (gal.)	Method of NAPL Observation				
				Visual inspection of purge water and groundwater sample	Visual inspection of tubing used for sample collection	Oil / Water Interface Probe (surface reading)	Oil / Water Interface Probe (bottom reading)	Bailer sent to bottom of well
PZ-23 cont.	04/21/2015	0.00	--	--	--	--	--	--
	01/07/2016	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	07/14/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	01/22/2018	0.00	--	--	--	--	--	--
	04/11/2018	0.00	--	--	--	--	--	--
	07/26/2018	0.00	--	--	--	--	--	--
	10/24/2018	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
04/20/2020	0.00	--	--	--	--	--	--	
04/26/2021	0.00	--	--	--	--	--	--	
MW-24	01/29/2013	0.00	--	--	--	--	--	--
	04/24/2013	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	10/05/2016	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
	04/20/2020	0.00	--	--	--	--	--	--
04/26/2021	0.00	--	--	--	--	--	--	
MW-25	01/28/2013	0.00	--	--	--	--	--	--
	04/24/2013	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/31/2019	0.00	--	--	--	--	--	--
	04/20/2020	0.00	--	--	--	--	--	--
04/26/2021	0.00	--	--	--	--	--	--	
MW-26	04/21/2015	0.00	--	--	--	--	--	--
	07/14/2015	0.00	--	--	--	--	--	--
	10/19/2015	0.00	--	--	--	--	--	--
	01/07/2016	0.00	--	--	--	--	--	--
	04/22/2016	0.00	--	--	--	--	--	--
	07/14/2016	0.00	--	--	--	--	--	--
	10/05/2016	0.00	--	--	--	--	--	--
	01/18/2017	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	07/12/2017	0.00	--	--	--	--	--	--
	10/23/2017	0.00	--	--	--	--	--	--
	01/22/2018	0.00	--	--	--	--	--	--
	04/11/2018	0.00	--	--	--	--	--	--
	07/26/2018	0.00	--	--	--	--	--	--
	10/24/2018	0.00	--	--	--	--	--	--
04/22/2019	0.00	--	--	--	--	--	--	
10/30/2019	0.00	--	--	--	--	--	--	
04/20/2020	0.00	--	--	--	--	--	--	
04/26/2021	0.00	--	--	--	--	--	--	
PZ-26	04/29/2014	0.30	--	--	--	--	--	--
	07/21/2014	NM	--	--	--	--	--	--
	10/13/2014	4.8	--	--	--	--	--	--
	01/28/2015	10.55	--	--	--	--	--	--
	04/21/2015	4.5	1.0	--	--	--	--	--
	07/14/2015	6.5	1.0	--	--	--	--	--
	10/19/2015	3.6	0.8	--	--	--	--	--
	01/07/2016	4.5	0.5	--	--	--	--	--
	04/21/2016	4.5	0.75	--	--	--	--	--
	07/14/2016	4.5	0.75	--	--	--	--	--
	10/05/2016	4.5	0.75	--	--	--	--	--
	01/18/2017	2	1	--	--	--	--	--
	04/19/2017	4.5	-- ²	--	--	--	--	--
	07/12/2017	14**	0.13	--	--	--	--	--
	08/04/2017	5.3	0.5	--	--	--	--	--
	10/23/2017	4.5	-- ²	--	--	--	--	--
	01/22/2018	2.91	1	--	--	--	--	--
	04/10/2018	2.5	--	--	--	--	--	--
	07/26/2018	2.5	--	--	--	--	--	--
	10/23/2018	2.20	--	trace LNAPL	--	--	--	--
04/22/2019	1.45	--	trace DNAPL	--	--	--	--	
10/30/2019	1.35	--	trace DNAPL	--	--	--	--	
04/20/2020	2.25	--	DNAPL	--	--	--	--	
04/26/2021	2.40	--	DNAPL	--	--	--	--	
MW-27	04/21/2015	0.00	--	--	--	--	--	--
	07/14/2015	0.00	--	--	--	--	--	--
	10/19/2015	0.00	--	--	--	--	--	--
	01/07/2016	0.00	--	--	--	--	--	--
	04/21/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--

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WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE

APPLETON, WI

Location	Date	NAPL Thickness ¹ (ft)	NAPL Recovered After Measurement (gal.)	Method of NAPL Observation				
				Visual inspection of purge water and groundwater sample	Visual inspection of tubing used for sample collection	Oil / Water Interface Probe (surface reading)	Oil / Water Interface Probe (bottom reading)	Bailer sent to bottom of well
MW-27 cont.	01/18/2017	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	07/12/2017	0.00	--	--	--	--	--	--
	10/23/2017	0.00	--	--	--	--	--	--
	01/22/2018	0.00	--	--	--	--	--	--
	04/11/2018	0.00	--	--	--	--	--	--
	07/26/2018	0.00	--	--	--	--	--	--
	10/24/2018	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
04/20/2020	0.00	--	--	--	--	--	--	
04/26/2021	0.00	--	--	--	--	--	--	
PZ-27	04/21/2015	0.00	--	--	--	--	--	--
	07/14/2015	0.00	--	--	--	--	--	--
	10/19/2015	0.00	--	--	--	--	--	--
	01/07/2016	0.00	--	--	--	--	--	--
	04/22/2016	0.00	--	--	--	--	--	--
	07/14/2016	0.00	--	--	--	--	--	--
	10/05/2016	0.00	--	--	--	--	--	--
	01/18/2017	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	07/12/2017	0.00	--	--	--	--	--	--
	10/23/2017	0.00	--	--	--	--	--	--
	01/22/2018	0.00	--	--	--	--	--	--
	04/11/2018	0.00	--	--	--	--	--	--
	07/26/2018	0.00	--	--	--	--	--	--
	10/24/2018	0.00	--	--	--	--	--	--
	04/22/2019	0.00	--	--	--	--	--	--
	10/30/2019	0.00	--	--	--	--	--	--
04/20/2020	0.00	--	--	--	--	--	--	
04/26/2021	0.00	--	--	--	--	--	--	
MW-28	04/21/2015	0.00	--	--	--	--	--	--
	07/14/2015	0.00	--	--	--	--	--	--
	10/19/2015	0.00	--	--	--	--	--	--
	01/07/2016	0.00	--	--	--	--	--	--
	04/22/2016	0.00	--	--	--	--	--	--
	07/14/2016	0.00	--	--	--	--	--	--
	10/04/2016	0.00	--	--	--	--	--	--
	01/18/2017	0.00	--	--	--	--	--	--
	04/19/2017	0.00	--	--	--	--	--	--
	07/12/2017	0.00	--	--	--	--	--	--
	10/23/2017	0.00	--	--	--	--	--	--
	01/22/2018	0.00	--	--	--	--	--	--
	04/11/2018	0.00	--	--	--	--	--	--
	07/26/2018	0.00	--	--	--	--	--	--
	10/24/2018	0.00	--	--	--	--	--	--
04/22/2019	0.00	--	--	--	--	--	--	
10/30/2019	0.00	--	--	--	--	--	--	
04/20/2020	0.00	--	--	--	--	--	--	
04/26/2021	0.00	--	--	--	--	--	--	
PZ-28	04/21/2015	0.00	--	--	--	--	--	--
	07/14/2015	0.35	--	--	--	--	--	--
	10/19/2015	0.45	--	--	--	--	--	--
	01/07/2016	0.45	--	--	--	--	--	--
	04/21/2016	0.25	--	--	--	--	--	--
	07/14/2016	0.30	--	--	--	--	--	--
	10/04/2016	0.25	--	--	--	--	--	--
	01/18/2017	0.5	--	--	--	--	--	--
	04/19/2017	1	-- ²	--	--	--	--	--
	07/12/2017	1.75	0.40	--	--	--	--	--
	08/04/2017	0.6	--	--	--	--	--	--
	10/23/2017	0.25	-- ²	--	--	--	--	--
	01/22/2018	0.88	--	--	--	--	--	--
	04/10/2018	NM	--	trace DNAPL	--	--	--	--
	07/26/2018	0.75	--	--	--	--	--	--
	10/23/2018	1.0	--	trace DNAPL	--	--	--	--
	04/22/2019	1.05	--	trace DNAPL	--	--	--	--
10/30/2019	0.90	--	trace DNAPL	--	--	--	--	
04/20/2020	0.85	--	trace DNAPL	--	--	--	--	
04/26/2021	0.18	--	trace DNAPL	--	--	--	--	

[BGH/RMN 5/10][AMM/KJB 02/11][NDK/BGH 08/11][CJM/AMM 01/12][AMM/JJW 5/12][AMM/ANS 7/12][AMM/NDK10/12][ETE/RJG 3/13] [ETO/RJG 5/13] [NDK/RJG 9/13][ETE/NDK 10/13][U-AJS 6/14]

3/15, C-PMH 2/15][U-PMH 11/15, C-KLT 12/8/15 U:KJS 2/9/17: C: EMS 2/10/17][U: KLT 11/27/17, C: 11/27/17][U: KLT 2/20/17, C: KJK 2/20/18] [U: JOW 2/27/19, C: KLT 3/13/19][U: KLT 4/15/20, C:MIK 4/20/20, U:KJS 8/12/21, C: AGC 8/13/21]

Notes:

- 1: Starting in April 2012, NAPL thickness was measured with weighted tape sent to bottom of well.
- 2: Pump broken
- ** : NAPL remeasured during well repair on August 4, 2017.
- N: No Visible Evidence in water or on equipment (e.g., tubing, probe, bailer).
- No reading
- ND: No detectible NAPL
- NM: Not Measured

TABLE 6. GROUNDWATER MONITORING PLAN
 2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Monitoring Well Location	Analytical Parameters				RNA Parameters			
	BTEX (USEPA 8260B)	Benzene (USEPA 8260B)	Naphthalene (USEPA 8260B)	Arsenic, Dissolved (USEPA 6020)	Geochemical Parameters ¹ (Various)	Field Parameters ²	DNAPL Measurement	Water Levels
Site Monitoring Wells (Area 1 North of Fox River Canal)								
MW-02R	A		A	A	A	A	A	A
MW-08								A
MW-09								A
MW-10								A
MW-12R	A		A	A	A	A	A	A
MW-13R	A		A	A	A	A	A	A
MW-19	A		A	A	A	A	A	A
MW-19S								A
MW-20	A		A	A	A	A	A	A
MW-21	A		A	A	A	A	A	A
MW-22	A		A	A	A	A	A	A
MW-24	A		A	A	A	A		A
MW-25	A		A	A	A	A		A
Site Bedrock Piezometers (Area 1 North of Fox River Canal)								
PZ-12B		A	A			A		A
PZ-20B		A	A			A		A
PZ-21B		A	A			A		A
PZ-22B		A	A			A		A
Fox River Apartment Wells (Area 2 South of Fox River Canal)								
MW-23								A
PZ-23	A		A	A	A	A	A	A
PZ-26 ³	A		A	A	A	A	A ³	A
MW-26	A		A	A	A	A	A	A
MW-27	A		A	A	A	A	A	A
PZ-27	A		A	A	A	A	A	A
MW-28	A		A	A	A	A	A	A
PZ-28 ³	A		A	A	A	A	A ³	A
Staff Gauges								
SG-3								A
SG-4								A

(BGH 3/4/14)(PMH 3/20/14)(U-PMH 2/15)(U-BGH 3/17)(U-KLT 4/25/18)[U: KLT 3/25/19]

Notes:

BTEX = Benzene, ethylbenzene, toluene, xylenes (total)

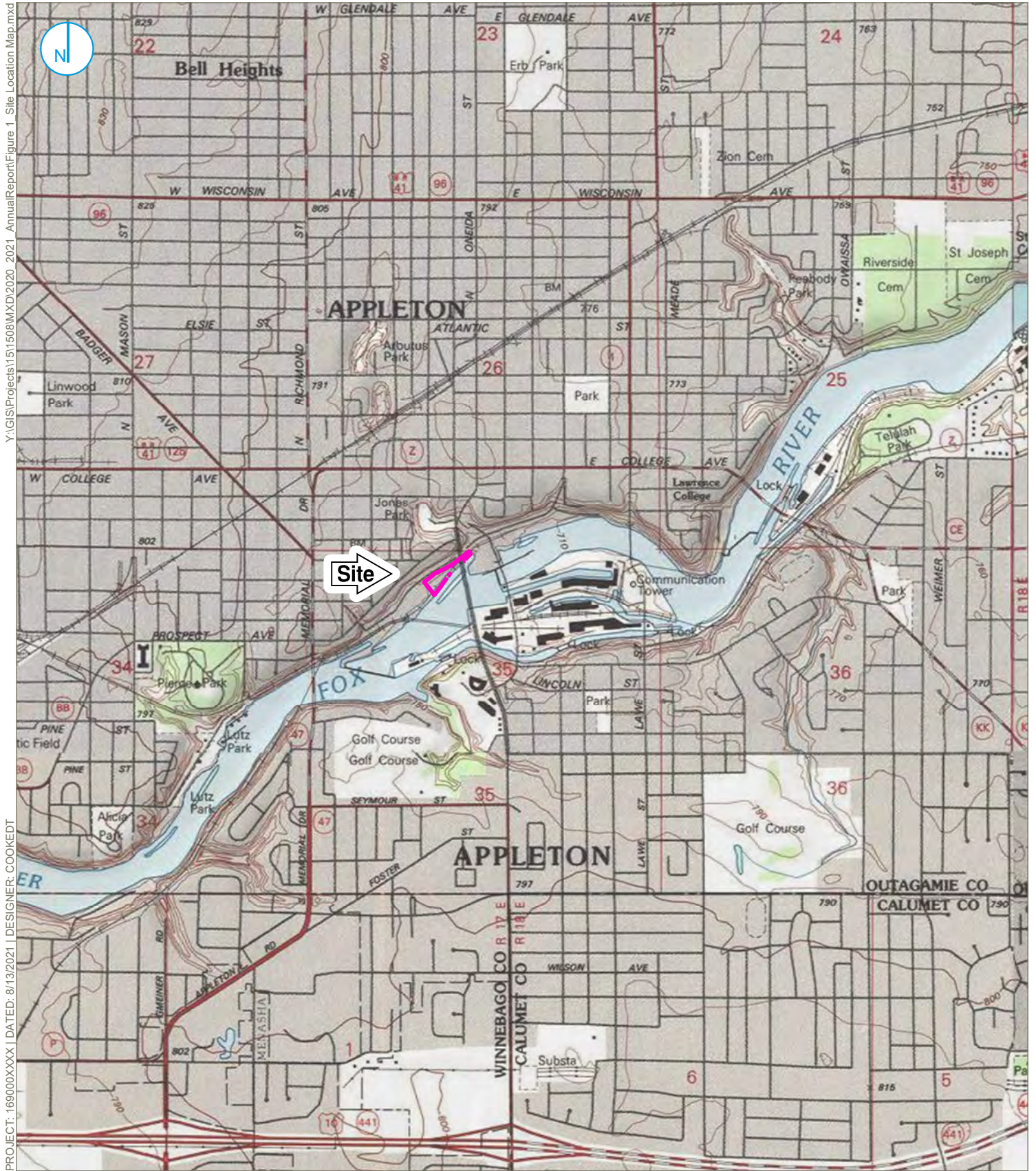
RNA = Remediation by Natural Attenuation

A = Annual Sampling Frequency (Apr)

Well not monitored for designated parameters.

1. Geochemical parameters include: nitrogen (NO₂+NO₃), methane, dissolved iron and manganese, sulfate, and
2. Field parameters include: pH, dissolved oxygen, temperature, specific conductance, and oxidation/reduction p
3. Water quality sampling will not be conducted at this location as long as NAPL remains present.

FIGURES



Y:\GIS\Projects\1511508\MXD\2020_2021_AnnualReport\Figure 1 Site Location Map.mxd

PROJECT: 169000XXXX | DATED: 8/13/2021 | DESIGNER: COOKEDT



KEY MAP

Map Scale: 1:1,19,130,106;
Map Center: 88°24'12"W 44°15'25"N

— FORMER MGP SITE PERIMETER

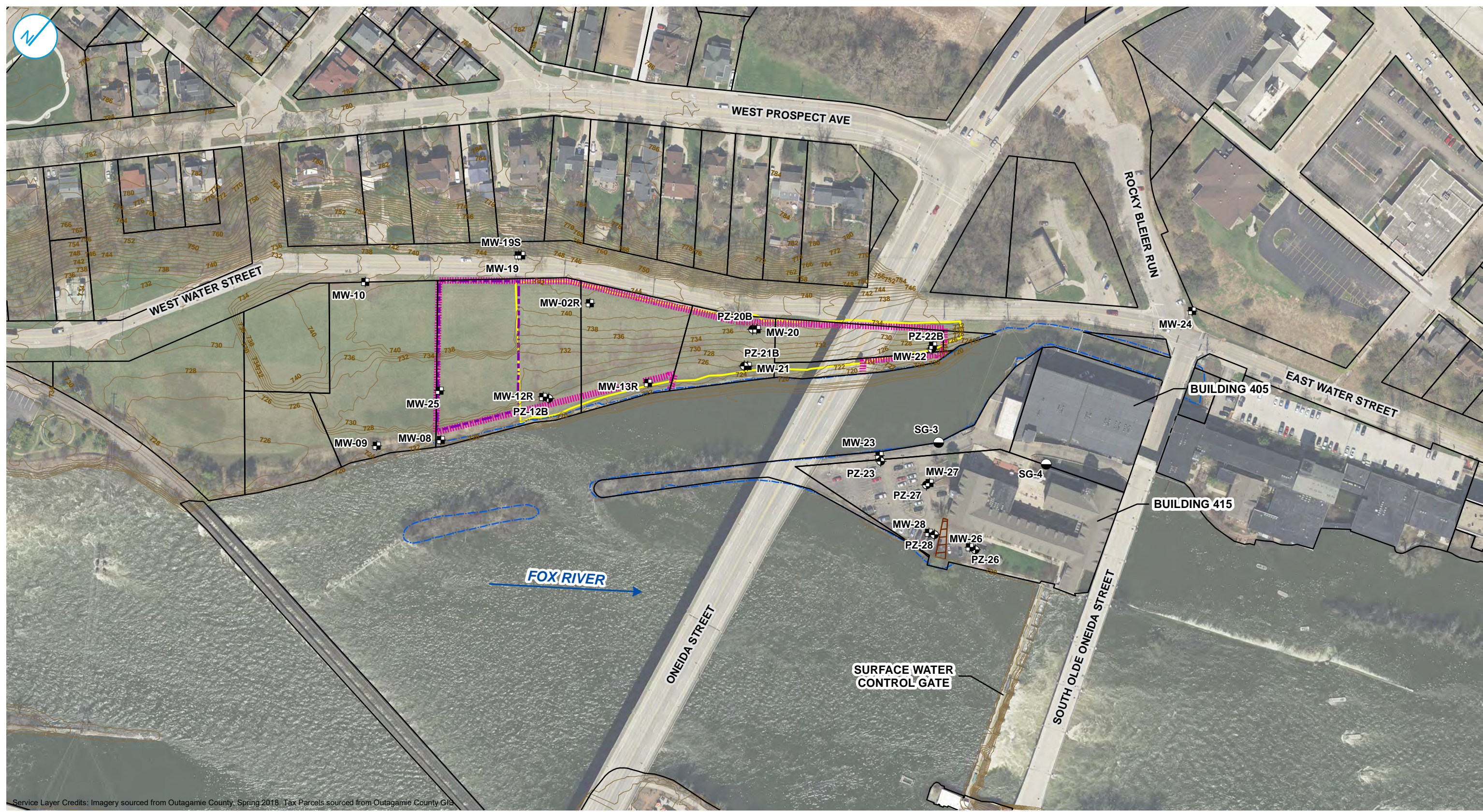
SITE LOCATION
2020-2021 ANNUAL REPORT

FIGURE 1

WE ENERGIES
FORMER APPLETON
MANUFACTURED GAS PLANT (MGP)
APPLETON, WISCONSIN

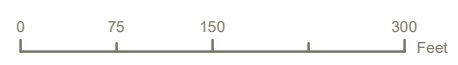
RAMBOLL US CORPORATION
A RAMBOLL COMPANY





- MONITORING WELL LOCATION
- ◆ PIEZOMETER LOCATION
- STAFF GAUGE LOCATION
- GROUND SURFACE ELEVATION CONTOURS (2-FT INTERVAL)
- ➔ FOX RIVER FLOW DIRECTION
- SHORELINE
- ||||| FORMER MGP SITE PERIMETER

- PERIMETER OF ISS TREATMENT
- FORMER WASTE WATER TREATMENT PLANT STRUCTURES DEMOLISHED IN THIS AREA
- ▨ HISTORICAL NEEDLE DAM STRUCTURE
- 2019 TAX PARCEL



Notes
- PLAN NORTH IS N39° 11' 42" OF TRUE NORTH

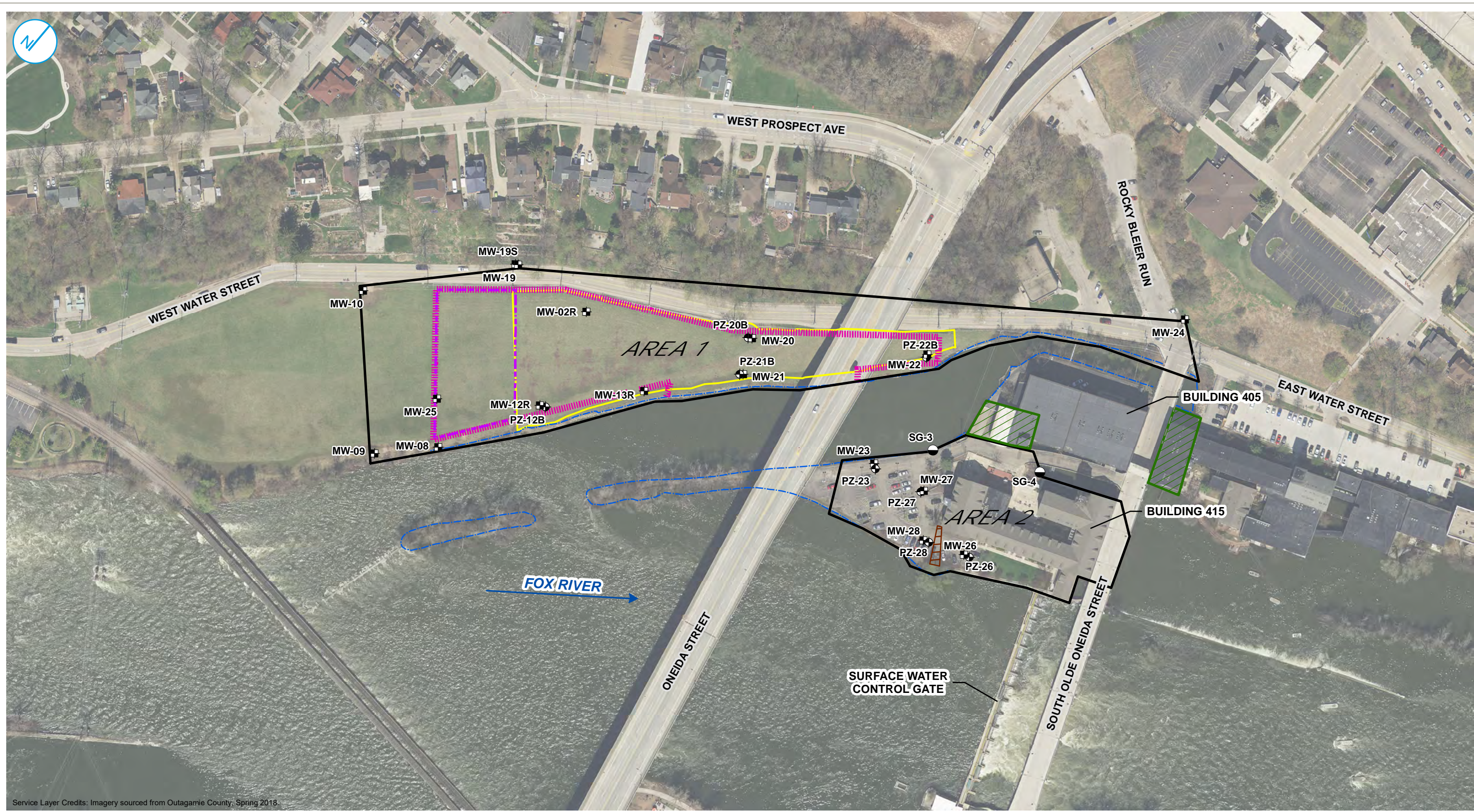
SITE FEATURES
2020-2021 ANNUAL REPORT

WE ENERGIES
FORMER APPLETON
MANUFACTURED GAS PLANT (MGP)
APPLETON, WISCONSIN

FIGURE 2



PROJECT: 169000XXXX | DATED: 8/18/2021 | DESIGNER: COOKEDT



- ⊕ MONITORING WELL LOCATION
- ⊕ PIEZOMETER LOCATION
- STAFF GAUGE LOCATION
- ➔ FOX RIVER FLOW DIRECTION
- SHORELINE
- ▬ FORMER MGP SITE PERIMETER
- ▬ PERIMETER OF ISS TREATMENT

- ▭ HYDROGEOLOGIC AREA
- ▭ APPROXIMATE LOCATION OF HYDROELECTRIC UNIT
- ▬ FORMER WASTE WATER TREATMENT PLANT STRUCTURES DEMOLISHED IN THIS AREA
- ▭ HISTORICAL NEEDLE DAM STRUCTURE



Notes
- PLAN NORTH IS N39° 11' 42" OF TRUE NORTH

HYDROGEOLOGIC AREAS 1 AND 2
2020-2021 ANNUAL REPORT

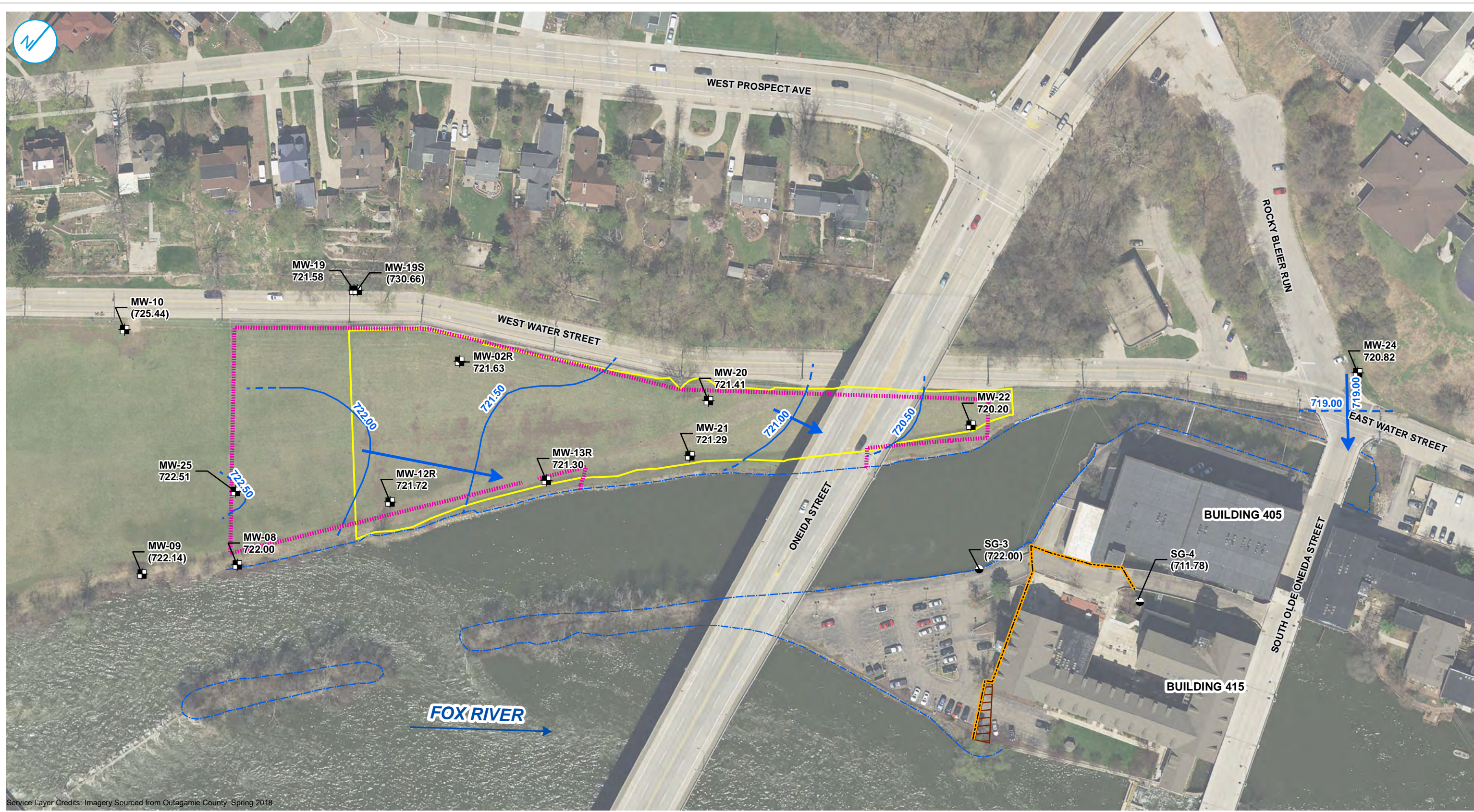
FIGURE 3

WE ENERGIES
FORMER APPLETON
MANUFACTURED GAS PLANT (MGP)
APPLETON, WISCONSIN

RAMBOLL US CORPORATION
A RAMBOLL COMPANY



Service Layer Credits: Imagery sourced from Outagamie County, Spring 2018.



- MONITORING WELL LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88, 1 FT INTERVAL)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- FOX RIVER FLOW DIRECTION
- SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT
- STRUCTURAL BARRIER TO GROUNDWATER FLOW
- HISTORICAL NEEDLE DAM STRUCTURE



Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - WATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING

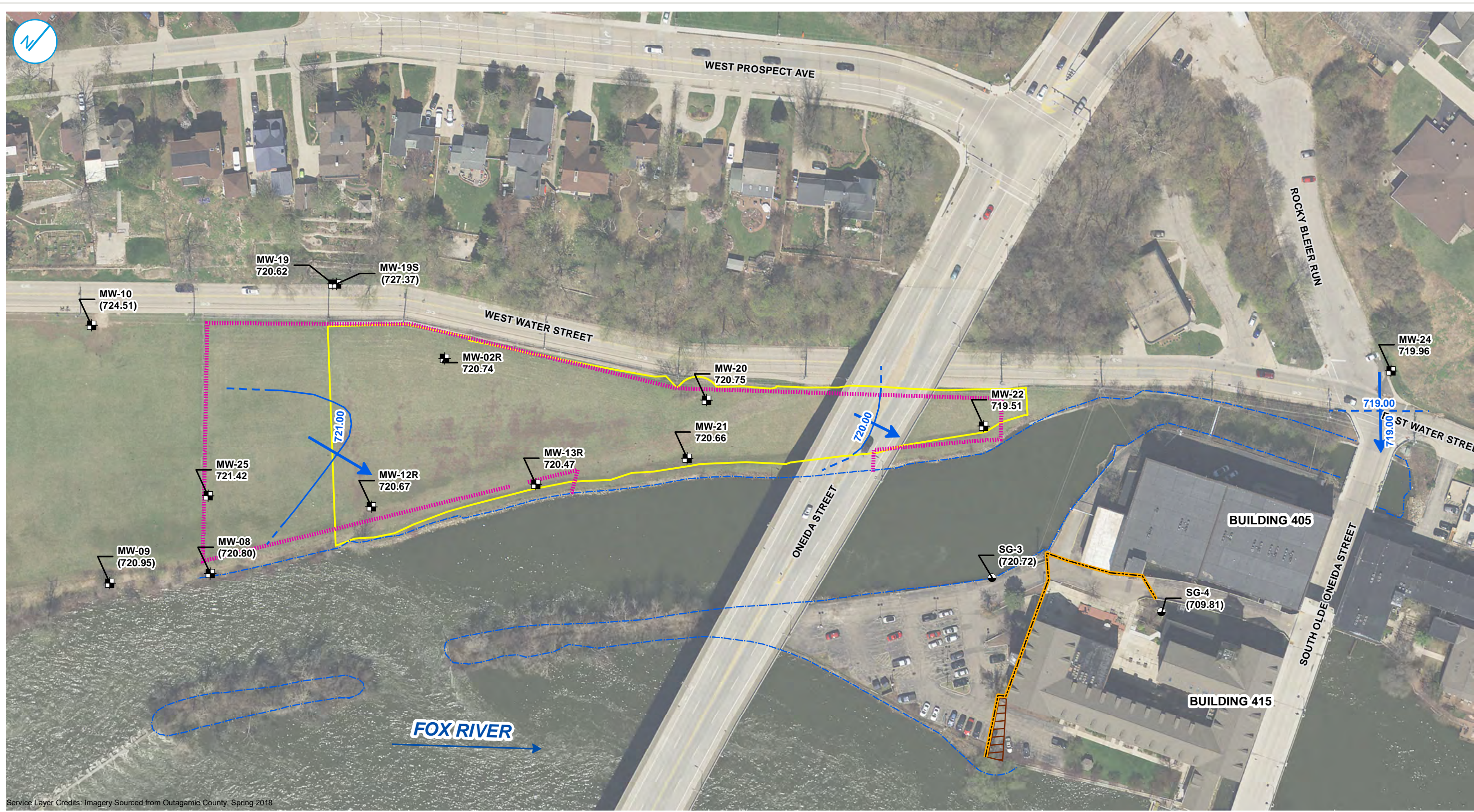
LOWER TILL PIEZOMETRIC SURFACE ELEVATIONS (AREA 1) APRIL 20, 2020
 2020-2021 ANNUAL REPORT

WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN

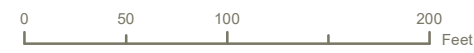
FIGURE 4A



Service Layer Credits: Imagery Sourced from Outagamie County, Spring 2018



- MONITORING WELL LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88, 1 FT INTERVAL)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- FOX RIVER FLOW DIRECTION
- SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT
- STRUCTURAL BARRIER TO GROUNDWATER FLOW
- HISTORICAL NEEDLE DAM STRUCTURE



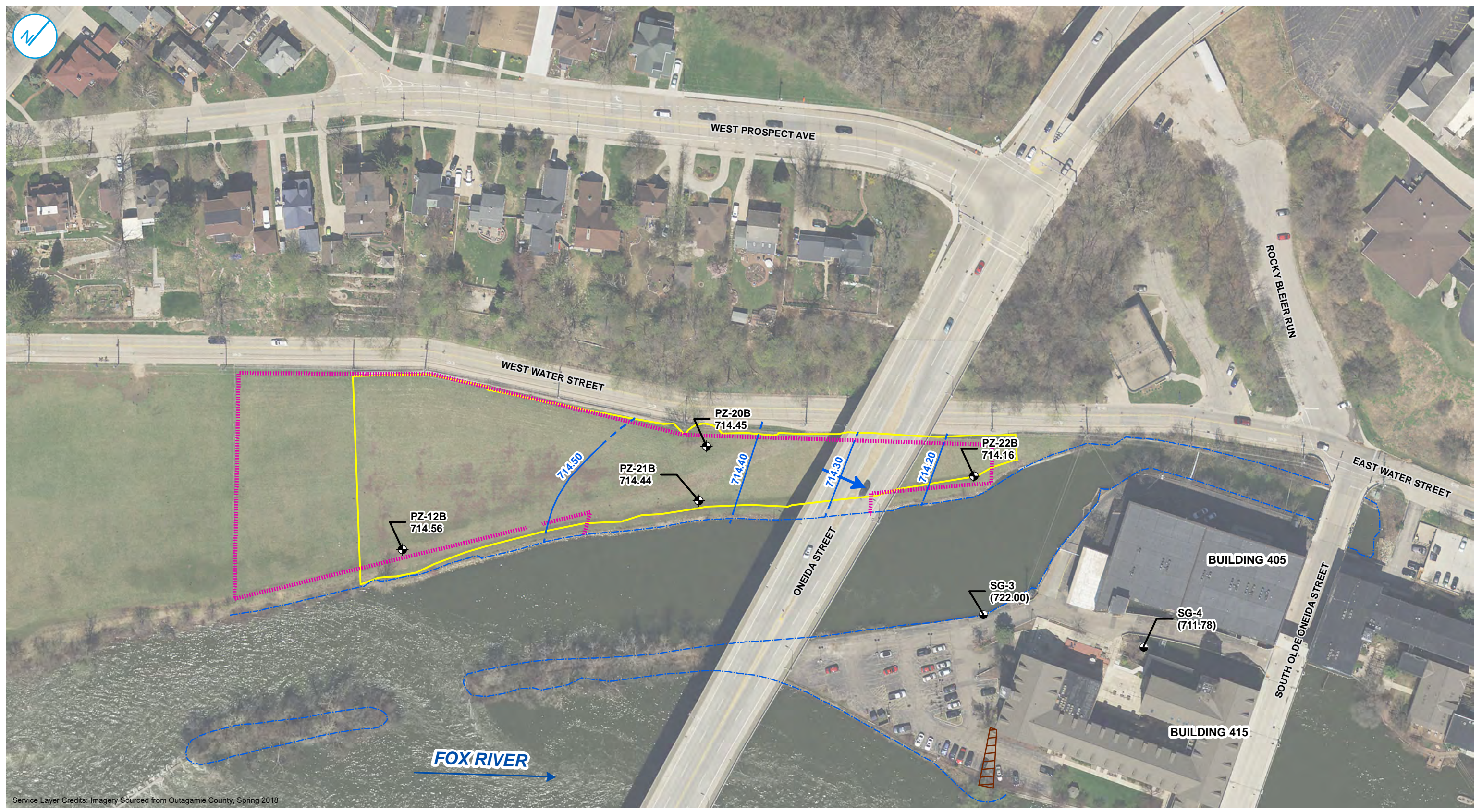
Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - WATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING

LOWER TILL PIEZOMETRIC SURFACE ELEVATIONS (AREA 1) APRIL 26, 2021
 2020-2021 ANNUAL REPORT

WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN

FIGURE 4B





Service Layer Credits: Imagery Sourced from Outagamie County, Spring 2018

- PIEZOMETER
- STAFF GAUGE
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88, 0.5 FT INTERVAL)
- INFERRED GROUNDWATER ELEVATION
- GROUNDWATER FLOW
- FOX RIVER FLOW
- SHORELINE
- FORMER MGP SITE
- PERIMETER OF ISS TREATMENT
- HISTORICAL NEEDLE DAM



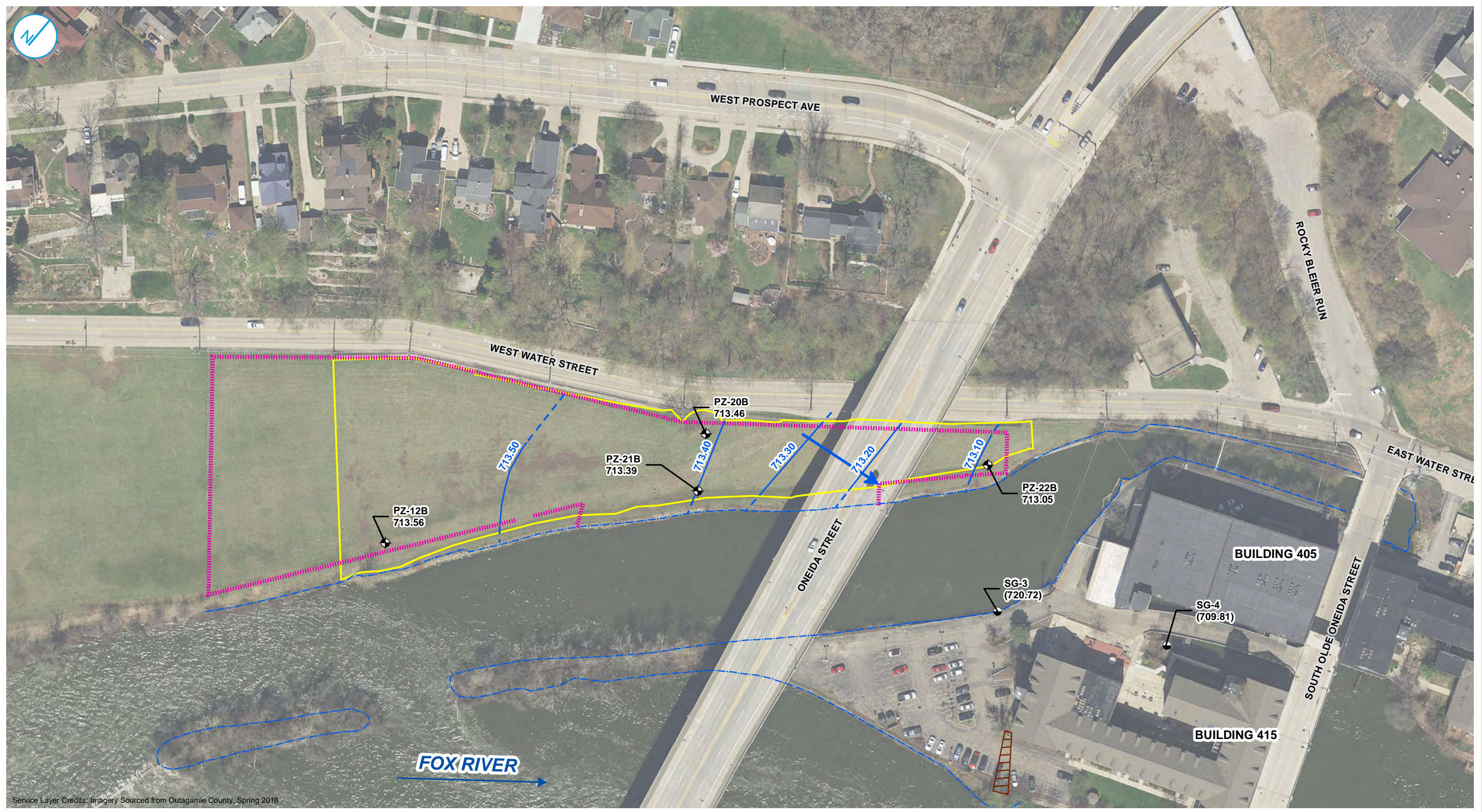
Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - WATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING

BEDROCK PIEZOMETRIC SURFACE ELEVATIONS (AREA 1) APRIL 20, 2020
 2020-2021 ANNUAL REPORT

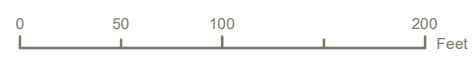
WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN

FIGURE 5A





- PIEZOMETER LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88, 0.5 FT INTERVAL)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- FOX RIVER FLOW DIRECTION
- SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA
- HISTORICAL NEEDLE DAM STRUCTURE



Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - WATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING

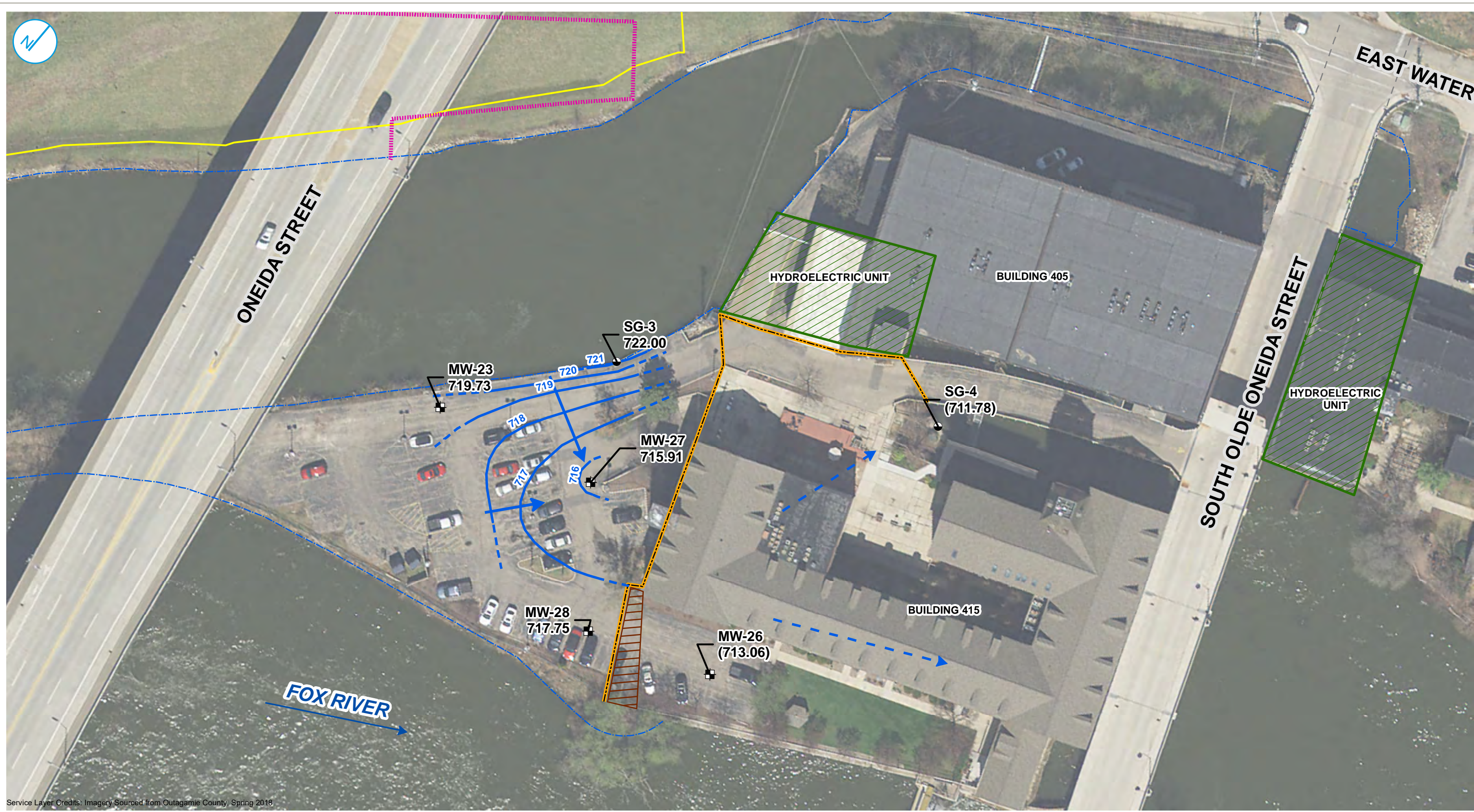
BEDROCK PIEZOMETRIC SURFACE ELEVATIONS (AREA 1) APRIL 20, 2021
 2020-2021 ANNUAL REPORT

WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN

FIGURE 5B



Service Layer Credits: Imagery Sourced from Outagamie County, Spring 2018



Service Layer Credits: Imagery Sourced from Outagamie County, Spring 2018

- MONITORING WELL LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88, 1-FT INTERVAL)
- INFERRED GROUNDWATER ELEVATION
- INFERRED GROUNDWATER FLOW
- GROUNDWATER FLOW
- FOX RIVER FLOW DIRECTION
- SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT
- STRUCTURAL BARRIER TO GROUNDWATER
- APPROXIMATE LOCATION OF HYDROELECTRIC UNIT
- HISTORICAL NEEDLE DAM



Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - WATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING

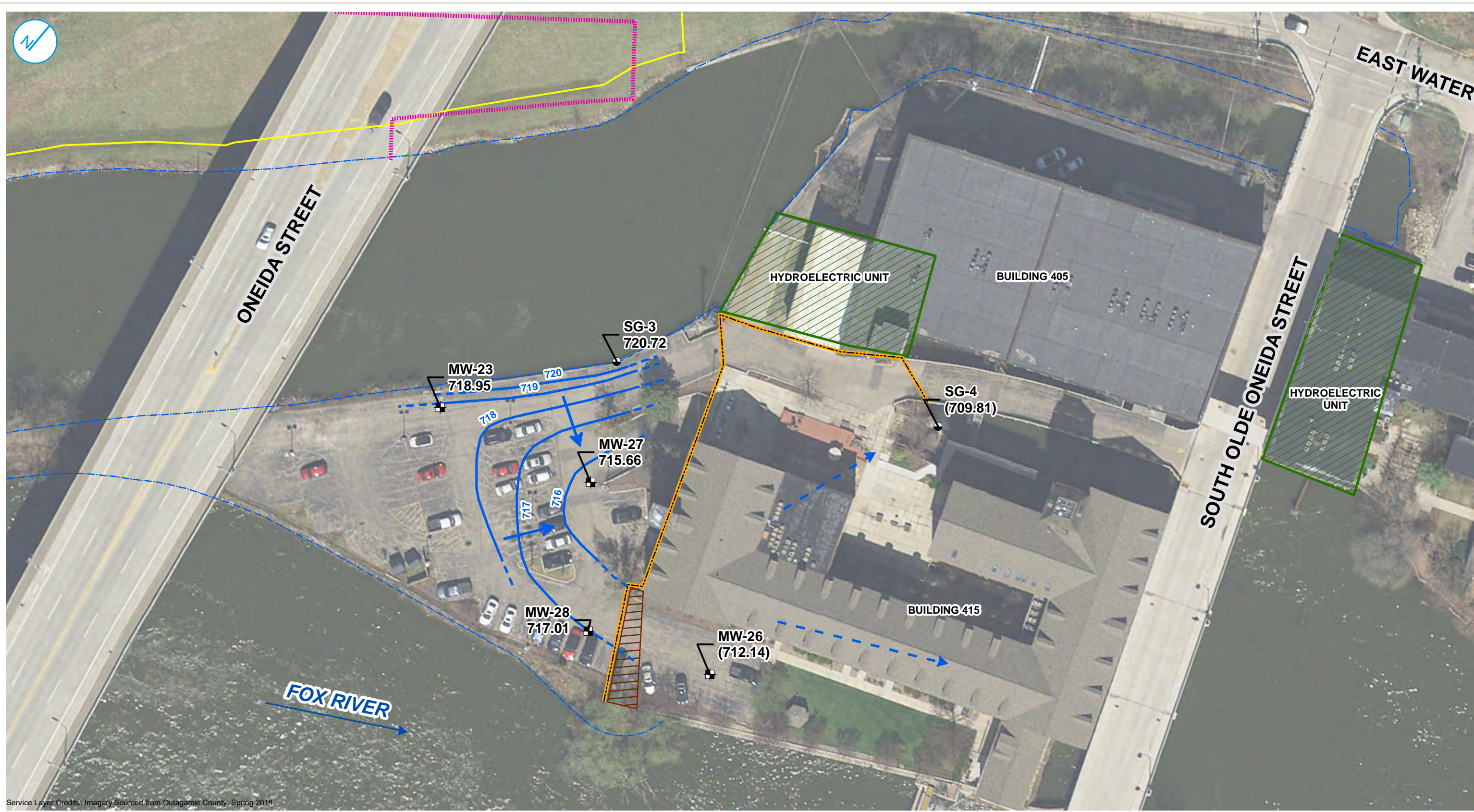
**WATER TABLE ELEVATIONS
 (AREA 2) APRIL 20, 2020
 2020-2021 ANNUAL REPORT**

**WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN**

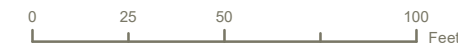
FIGURE 6A

RAMBOLL US CORPORATION
 A RAMBOLL COMPANY





- MONITORING WELL LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88, 1-FT INTERVAL)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER FLOW DIRECTION
- GROUNDWATER FLOW DIRECTION
- FOX RIVER FLOW DIRECTION
- SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT
- STRUCTURAL BARRIER TO GROUNDWATER FLOW
- APPROXIMATE LOCATION OF HYDROELECTRIC UNIT
- HISTORICAL NEEDLE DAM STRUCTURE



Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - WATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING

**WATER TABLE ELEVATIONS
 (AREA 2) APRIL 26, 2021
 2020-2021 ANNUAL REPORT**

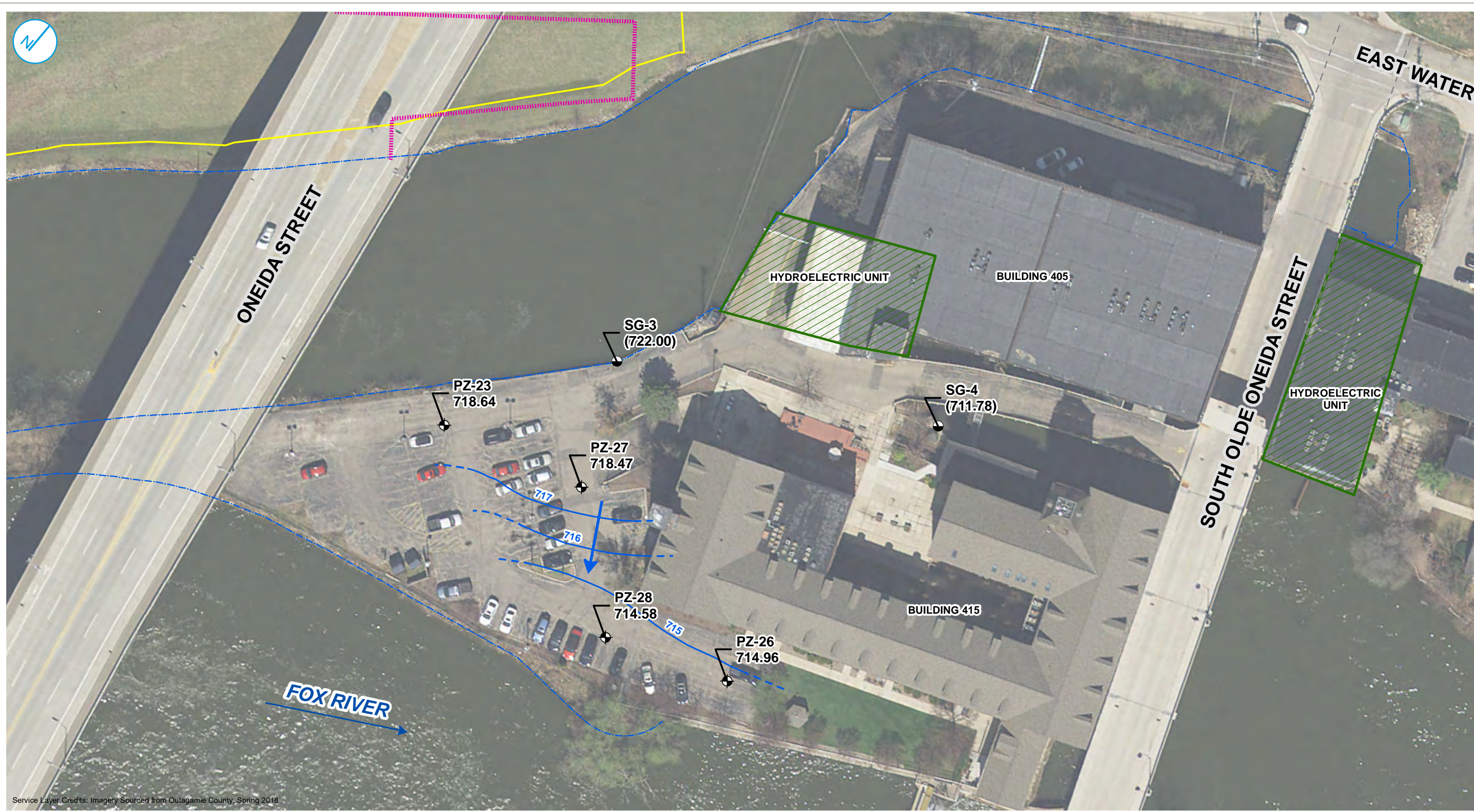
**WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN**

FIGURE 6B

RAMBOLL US CORPORATION
 A RAMBOLL COMPANY



Service Layer Credits: Imagery Sourced from Outagamie County, Spring 2018



Service Layer Credits: Imagery Sourced from Outagamie County, Spring 2018

- PIEZOMETER LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88, 1-FT INTERVAL)
- INFERRED GROUNDWATER ELEVATION
- GROUNDWATER FLOW
- FOX RIVER FLOW DIRECTION
- SHORELINE

- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT
- APPROXIMATE LOCATION OF HYDROELECTRIC UNIT



Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - WATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING

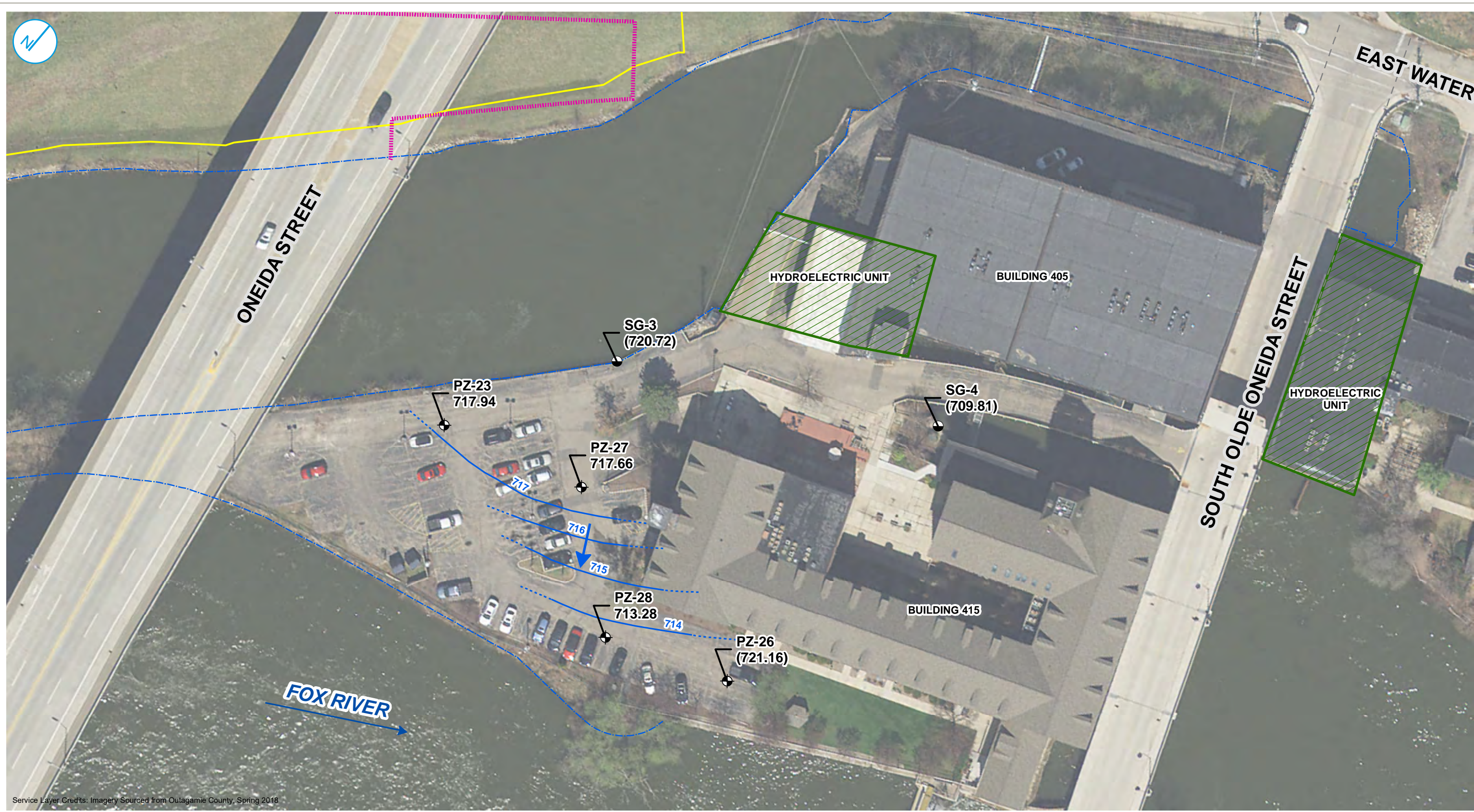
BEDROCK PIEZOMETRIC SURFACE ELEVATIONS (AREA 1) APRIL 20, 2020
 2020-2021 ANNUAL REPORT

WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN

FIGURE 7A

RAMBOLL US CORPORATION
 A RAMBOLL COMPANY





Service Layer Credits: Imagery Sourced from Outagamie County, Spring 2018

- PIEZOMETER LOCATION
- STAFF GAUGE LOCATION
- GROUNDWATER ELEVATION CONTOUR (FT NAVD88, 1-FT INTERVAL)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- ➔ GROUNDWATER FLOW DIRECTION
- ➔ FOX RIVER FLOW DIRECTION
- SHORELINE

- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT
- ▭ APPROXIMATE LOCATION OF HYDROELECTRIC UNIT



Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - WATER ELEVATIONS IN PARENTHESES WERE NOT USED FOR CONTOURING

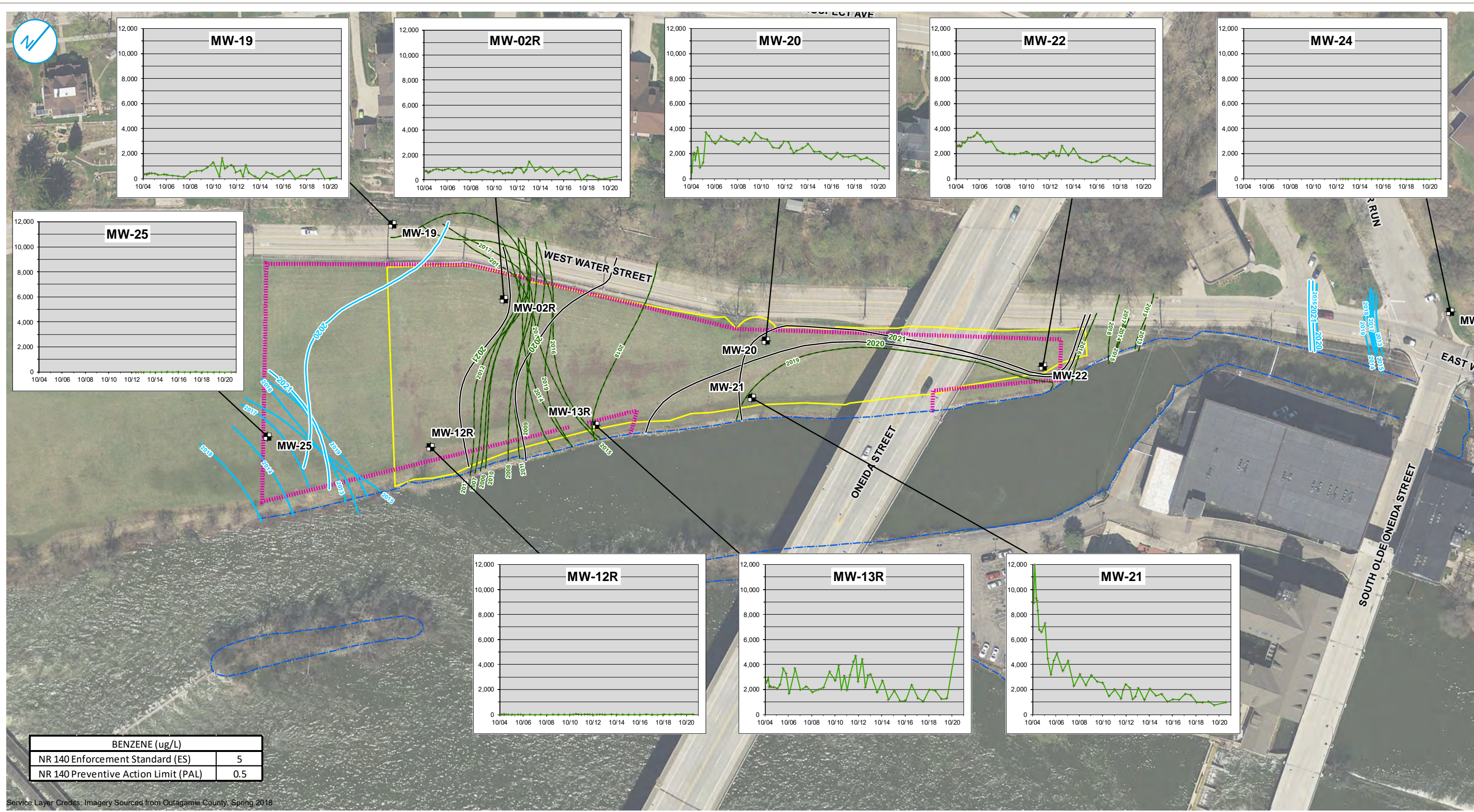
BEDROCK PIEZOMETRIC SURFACE ELEVATIONS (AREA 1) APRIL 26, 2021
 2020-2021 ANNUAL REPORT

WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN

FIGURE 7B

RAMBOLL US CORPORATION
 A RAMBOLL COMPANY





- ☒ MONITORING WELL LOCATION
- 5 µg/L CONTOUR (NR140 ES)
- ANNUAL 1,000 µg/L CONTOUR
- SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA

Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - ISOCONCENTRATION CONTOURS PRESENTED WERE CREATED BY KRIGING WELL DATA COLLECTED DURING APRIL SAMPLING EVENT OF EACH YEAR.
 - DATES SHOWN AS MM/YY
 - CONCENTRATIONS SHOWN AS µg/L (MICROGRAMS PER LITER)

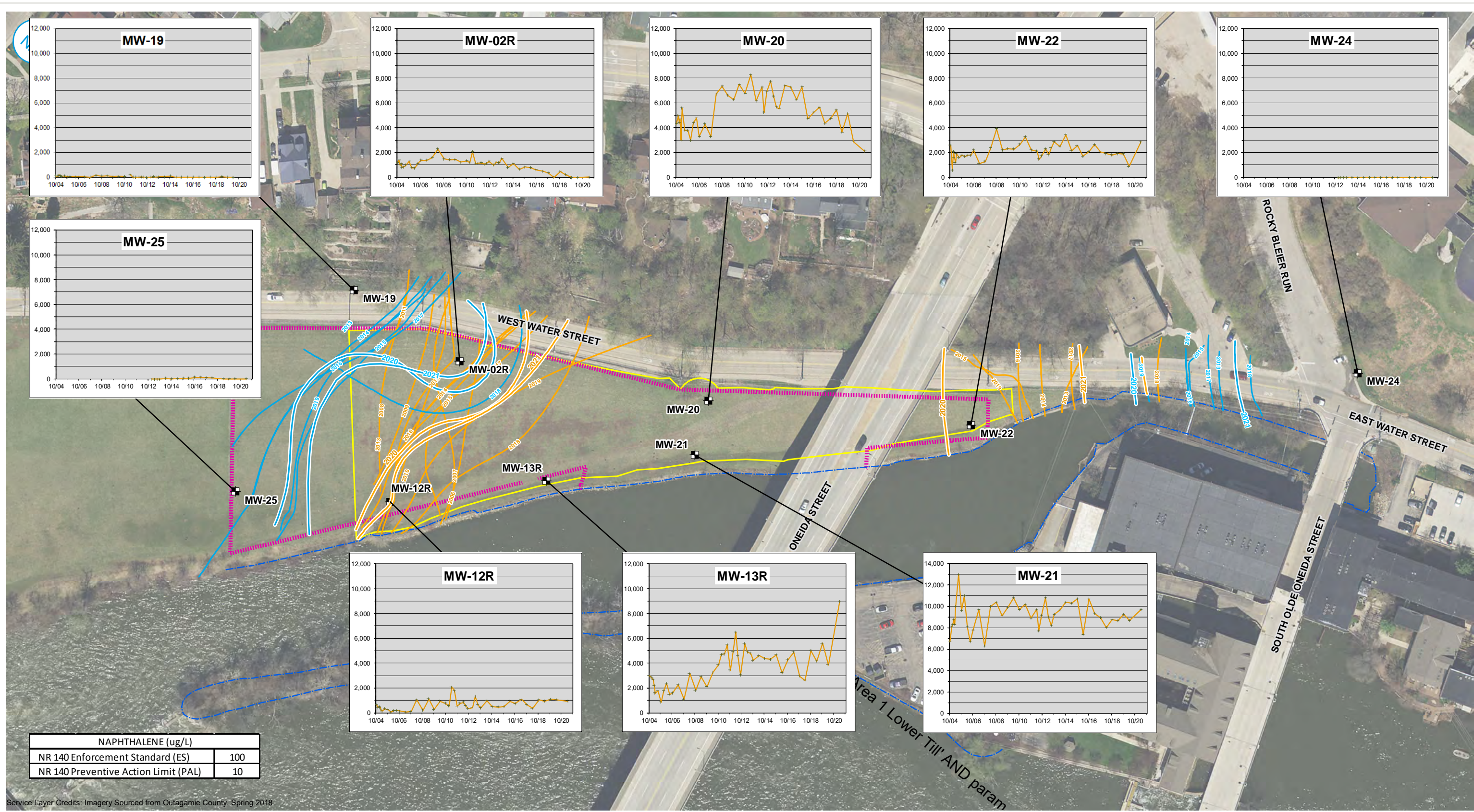
LOWER TILL GROUNDWATER BENZENE ANALYTICAL SUMMARY (AREA 1)
 2020-2021 ANNUAL REPORT

WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN

RAMBOLL US CORPORATION
 A RAMBOLL COMPANY



FIGURE 8



NAPHTHALENE (ug/L)	
NR 140 Enforcement Standard (ES)	100
NR 140 Preventive Action Limit (PAL)	10

- MONITORING WELL LOCATION
- 100 µg/L CONTOUR (NR140 ES)
- ANNUAL 1,000 µg/L CONTOUR
- - - SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA



Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - ISOCONCENTRATION CONTOURS PRESENTED WERE CREATED BY KRIGING WELL DATA COLLECTED DURING APRIL SAMPLING EVENT OF EACH YEAR.
 - DATES SHOWN AS MM/YY
 - CONCENTRATIONS SHOWN AS µg/L (MICROGRAMS PER LITER)

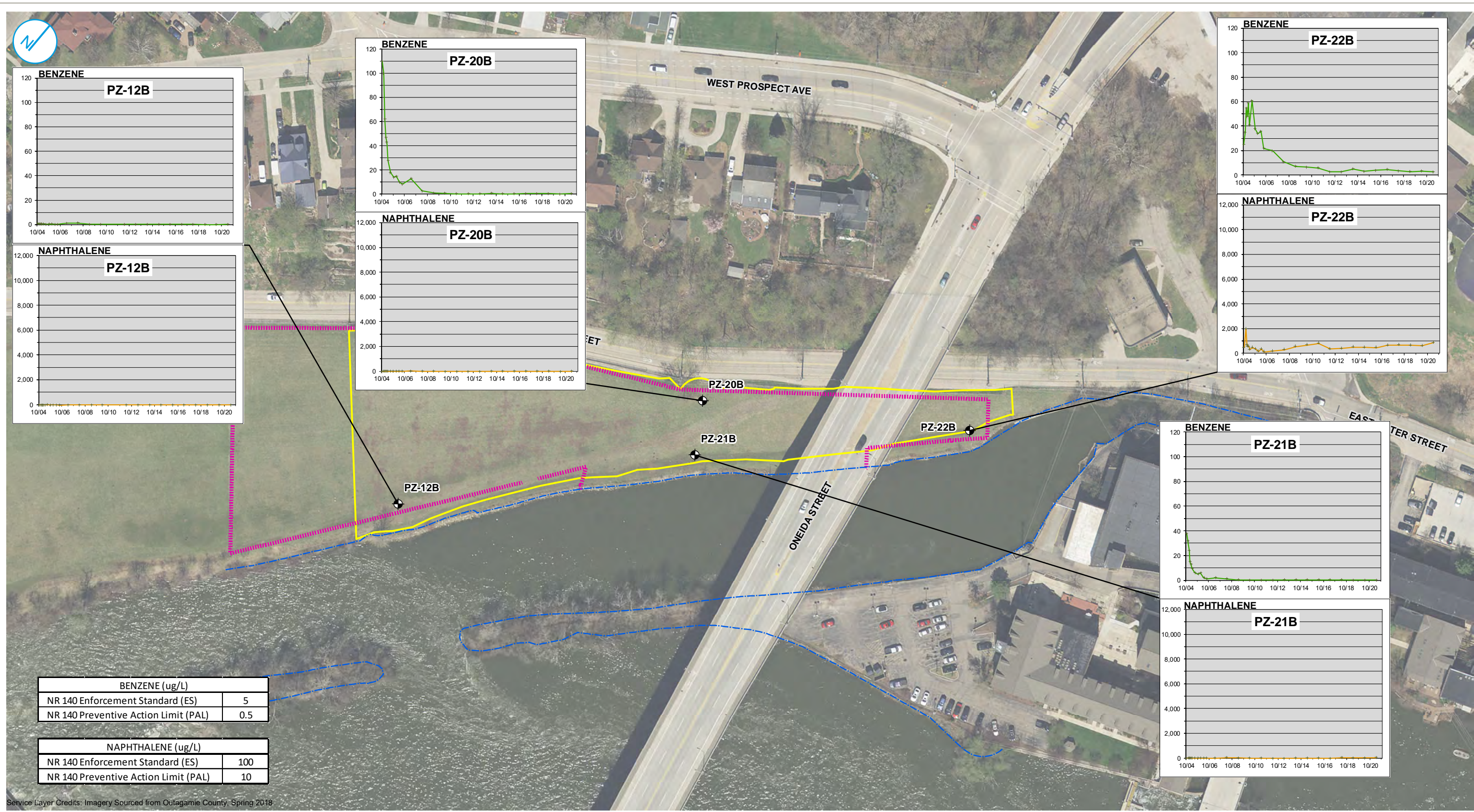
LOWER TILL GROUNDWATER NAPHTHALENE ANALYTICAL SUMMARY (AREA 1) 2020-2021 ANNUAL REPORT

**WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN**

FIGURE 9

RAMBOLL US CORPORATION
 A RAMBOLL COMPANY





BENZENE (ug/L)	
NR 140 Enforcement Standard (ES)	5
NR 140 Preventive Action Limit (PAL)	0.5

NAPHTHALENE (ug/L)	
NR 140 Enforcement Standard (ES)	100
NR 140 Preventive Action Limit (PAL)	10

- ◆ PIEZOMETER LOCATION
- SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA



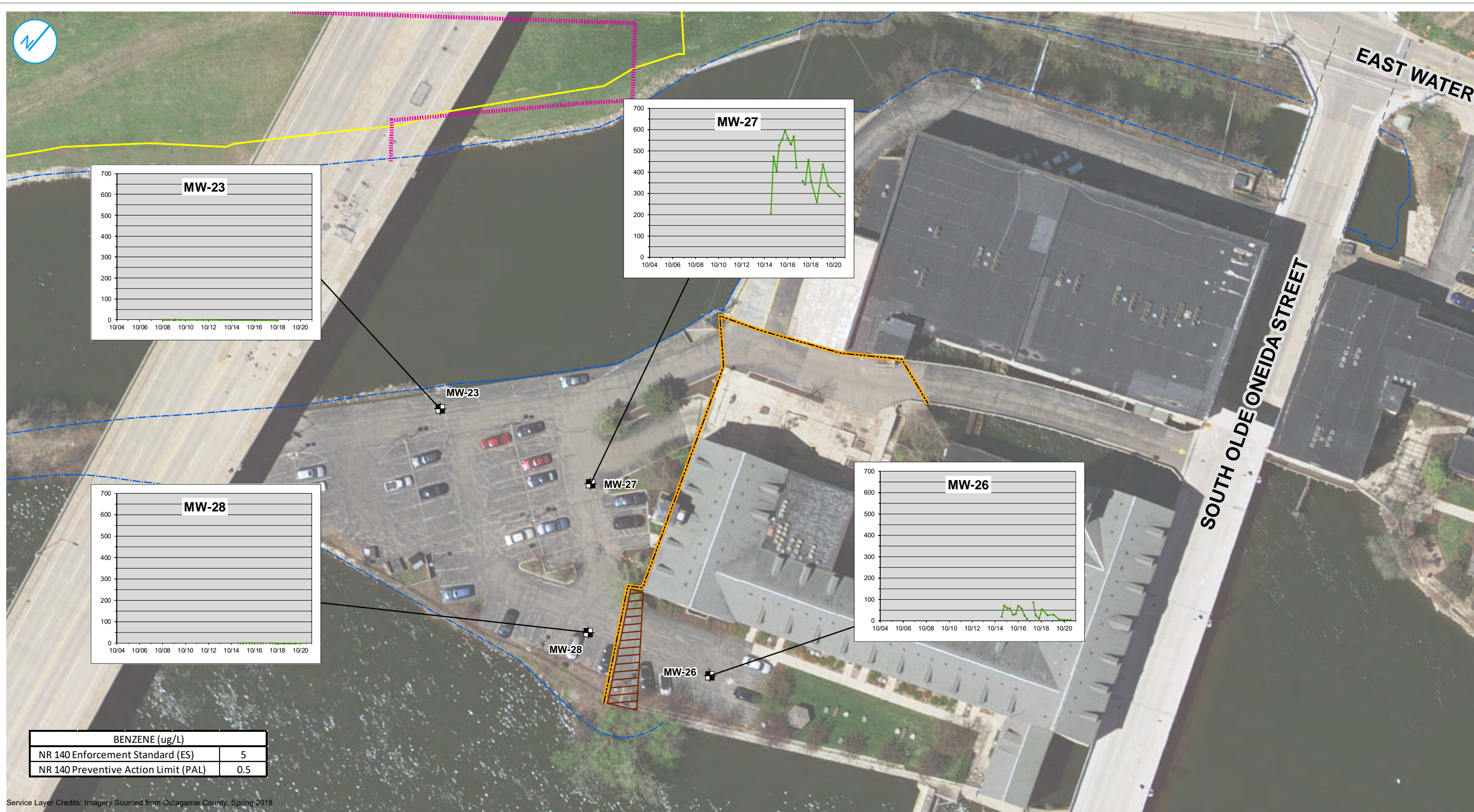
Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - DATES SHOWN AS MM/YY
 - CONCENTRATIONS SHOWN AS µg/L (MICROGRAMS PER LITER)

**BEDROCK GROUNDWATER
 BENZENE AND NAPHTHALENE
 ANALYTICAL SUMMARY (AREA 1)
 2020-2021 ANNUAL REPORT**

**WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN**

FIGURE 10





BENZENE (ug/L)	
NR 140 Enforcement Standard (ES)	5
NR 140 Preventive Action Limit (PAL)	0.5

- MONITORING WELL LOCATION
- - - SHORELINE
- - - STRUCTURAL BARRIER TO GROUNDWATER FLOW
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA
- ▭ HISTORICAL NEEDLE DAM STRUCTURE



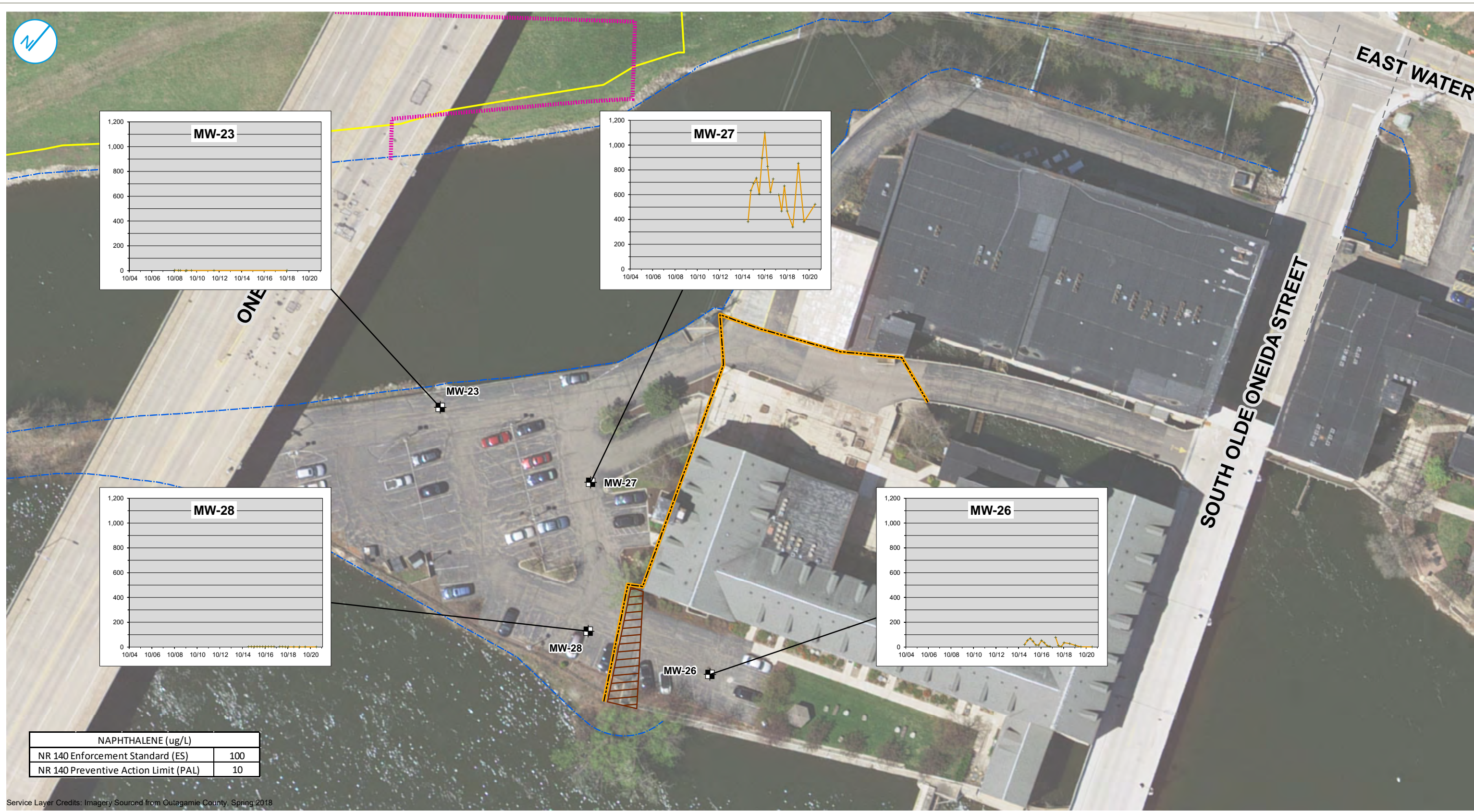
Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - DATES SHOWN AS MM/YY
 - CONCENTRATIONS SHOWN AS µg/L (MICROGRAMS PER LITER)

**WATER TABLE GROUNDWATER
 BENZENE ANALYTICAL SUMMARY (AREA 2)
 2020-2021 ANNUAL REPORT**

**WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN**

FIGURE 11





NAPHTHALENE (ug/L)	
NR 140 Enforcement Standard (ES)	100
NR 140 Preventive Action Limit (PAL)	10

- MONITORING WELL LOCATION
- SHORELINE
- STRUCTURAL BARRIER TO GROUNDWATER FLOW
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA
- HISTORICAL NEEDLE DAM STRUCTURE



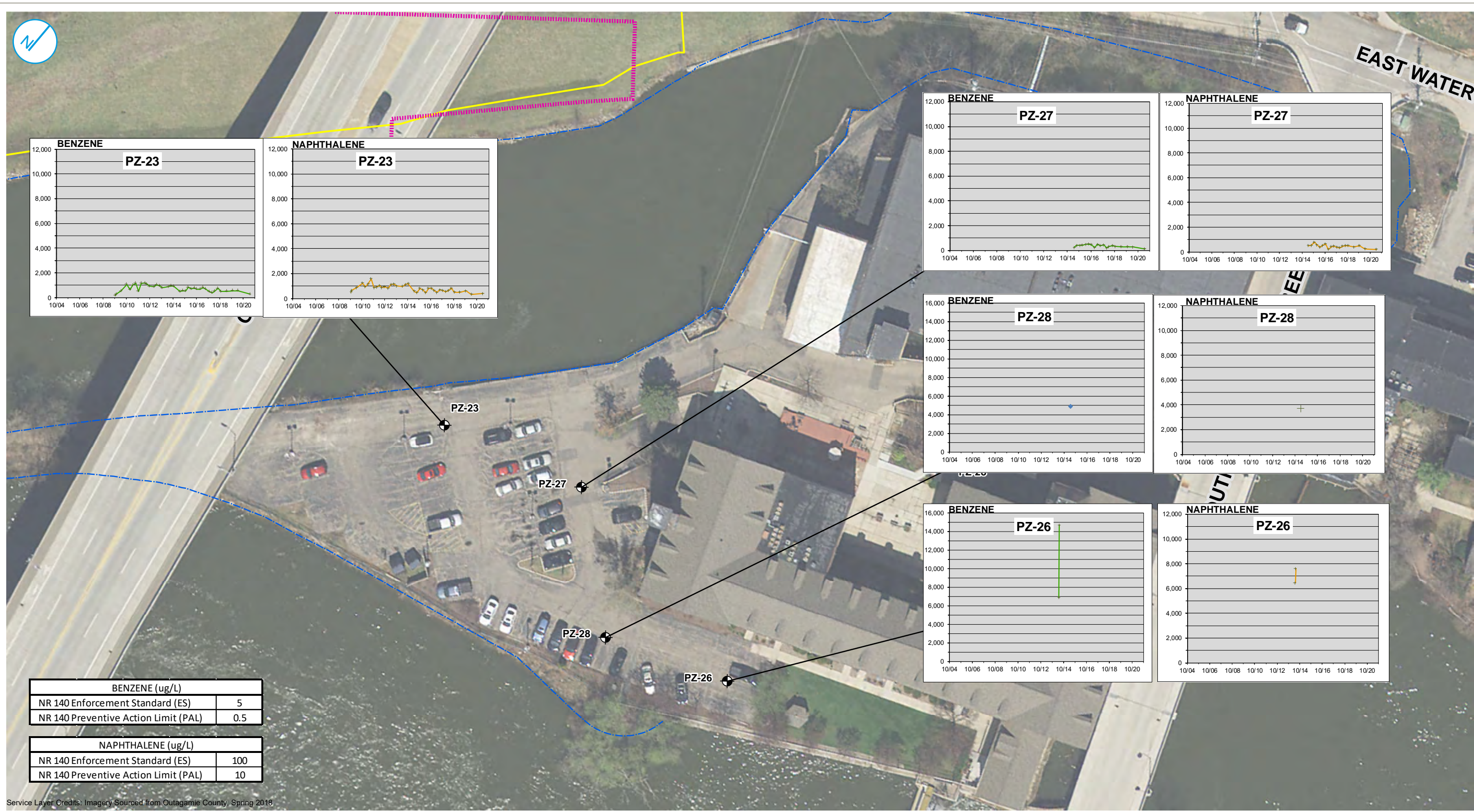
Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - DATES SHOWN AS MM/YY
 - CONCENTRATIONS SHOWN AS ug/L (MICROGRAMS PER LITER)

**WATER TABLE GROUNDWATER
 NAPHTHALENE ANALYTICAL SUMMARY (AREA 2)
 2020-2021 ANNUAL REPORT**

**WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN**

FIGURE 12





BENZENE (ug/L)	
NR 140 Enforcement Standard (ES)	5
NR 140 Preventive Action Limit (PAL)	0.5

NAPHTHALENE (ug/L)	
NR 140 Enforcement Standard (ES)	100
NR 140 Preventive Action Limit (PAL)	10

- ◆ PIEZOMETER LOCATION
- SHORELINE
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA

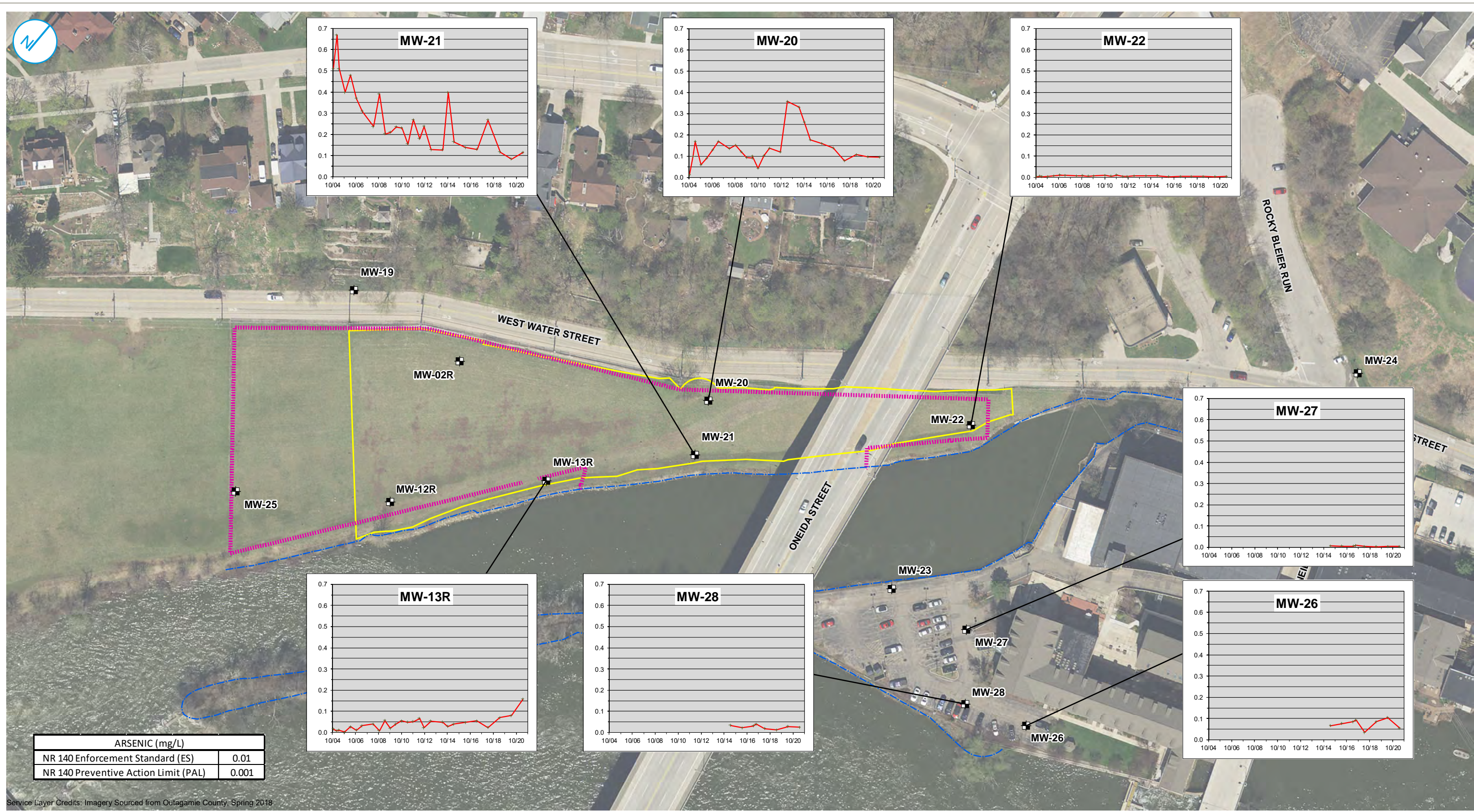
Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - DATES SHOWN AS MM/YY
 - CONCENTRATIONS SHOWN AS µg/L (MICROGRAMS PER LITER)

**UPPER WEATHERED BEDROCK
 GROUNDWATER BENZENE AND
 NAPHTHALENE ANALYTICAL SUMMARY (AREA 2)
 2020-2021 ANNUAL REPORT**

**WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN**

FIGURE 13





- ☒ MONITORING WELL LOCATION
- SHORELINE
- ▬ FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA

0 50 100 200 Feet

Notes
 - PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
 - DATES SHOWN AS MMYY
 - CONCENTRATIONS SHOWN AS mg/L (MILLIGRAMS PER LITER)

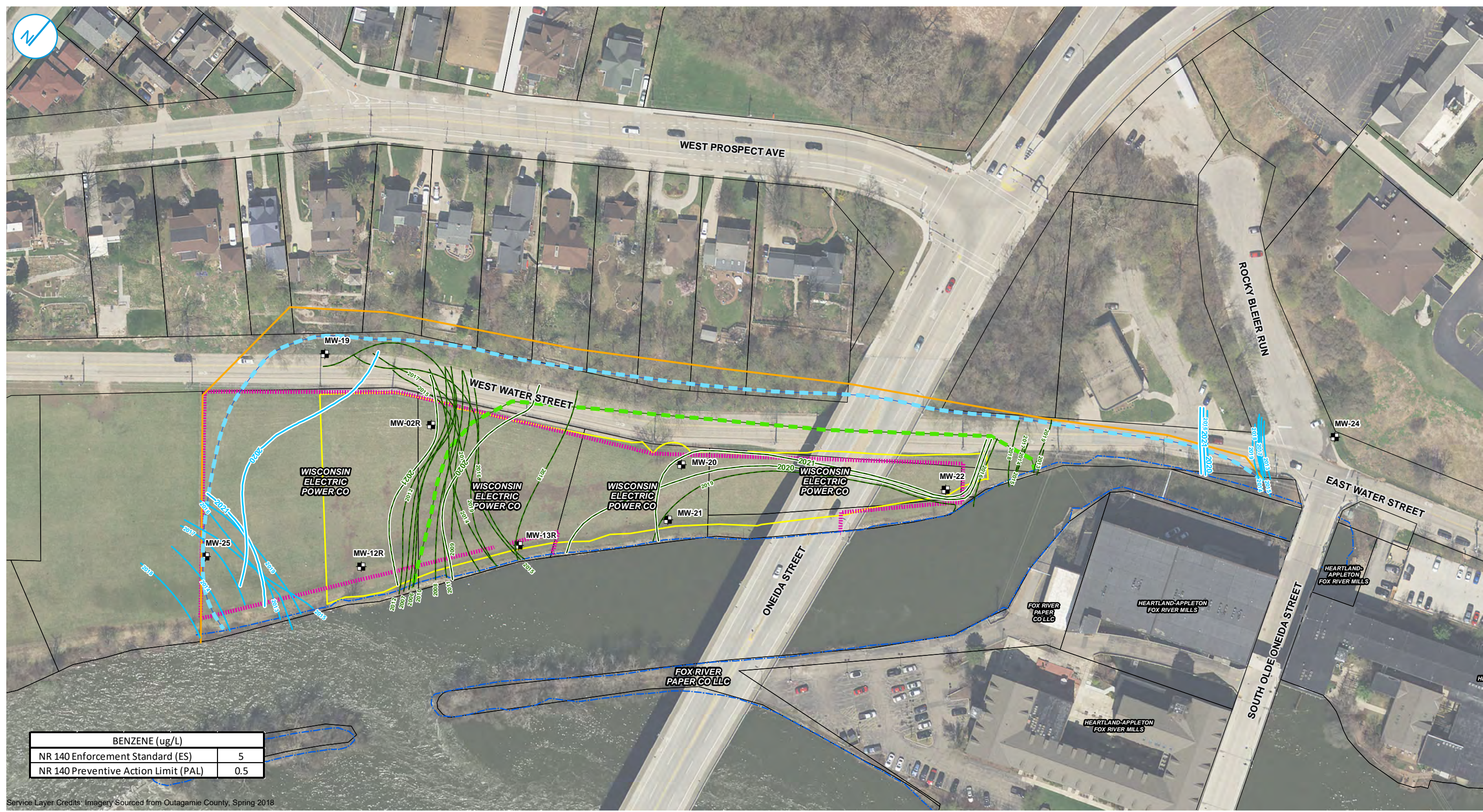
LOWER TILL GROUNDWATER ARSENIC ANALYTICAL SUMMARY (AREAS 1 & 2)
 2020-2021 ANNUAL REPORT

WE ENERGIES
 FORMER APPLETON
 MANUFACTURED GAS PLANT (MGP)
 APPLETON, WISCONSIN

RAMBOLL US CORPORATION
 A RAMBOLL COMPANY



FIGURE 14



BENZENE (ug/L)	
NR 140 Enforcement Standard (ES)	5
NR 140 Preventive Action Limit (PAL)	0.5

- MONITORING WELL LOCATION
- FORMER MGP SITE PERIMETER
- PERIMETER OF ISS TREATMENT AREA
- 2019 TAX PARCEL
- LIMIT OF GROUNDWATER IMPACTS
- CLOSED 5 µg/L BENZENE ISOCONCENTRATION LINE
- CLOSED 1,000 µg/L BENZENE ISOCONCENTRATION LINE
- ANNUAL 1,000 µg/L CONTOUR
- 5 µg/L CONTOUR (NR140 ES)
- SHORELINE



Notes

- PLAN NORTH IS N39° 11' 42" OF TRUE NORTH
- ISOCONCENTRATION CONTOURS PRESENTED WERE CREATED BY KRIGING WELL DATA COLLECTED DURING APRIL SAMPLING EVENT OF EACH YEAR.
- DATES SHOWN AS MM/YY
- CONCENTRATIONS SHOWN AS µg/L (MICROGRAMS PER LITER)

**LIMITS OF GROUNDWATER IMPACTS
2020-2021 ANNUAL REPORT**

FIGURE 15

**WE ENERGIES
FORMER APPLETON
MANUFACTURED GAS PLANT (MGP)
APPLETON, WISCONSIN**

RAMBOLL US CORPORATION
A RAMBOLL COMPANY



APPENDIX A
WELL ABANDONMENT DOCUMENTATION

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

<input type="checkbox"/> Verification Only of Fill and Seal	Route to DNR Bureau:		
<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Watershed/Wastewater	<input checked="" type="checkbox"/> Remediation/Redevelopment	
<input type="checkbox"/> Waste Management	<input type="checkbox"/> Other: _____		

1. Well Location Information	2. Facility / Owner Information
------------------------------	---------------------------------

County Outagamie	WI Unique Well # of Removed Well _____	Hicap # _____	Facility Name Former We Energies Appleton MGP Site		
Latitude / Longitude (see instructions) _____ N _____ W		Format Code <input type="checkbox"/> DD <input type="checkbox"/> DDM	Method Code <input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001	Facility ID (FID or PWS) BRRTS No. 02-45-000042	
¼ / ¼ or Gov't Lot #	Section 35	Township 21 N	Range 17	<input checked="" type="checkbox"/> E <input type="checkbox"/> W	License/Permit/Monitoring # _____
Well Street Address 337 W. Water St.			Original Well Owner _____		
Well City, Village or Town Appleton			Present Well Owner WEC Energy Group - Business Services		
Subdivision Name _____			Well ZIP Code 54914		
Reason for Removal from Service _____			Mailing Address of Present Owner 231 W Michigan St		
WI Unique Well # of Replacement Well _____			City of Present Owner Milwaukee		State WI
			ZIP Code 53203		

3. Filled & Sealed Well / Drillhole / Borehole Information	4. Pump, Liner, Screen, Casing & Sealing Material
--	---

<input checked="" type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) 1995	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach. _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
<input type="checkbox"/> Borehole / Drillhole		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (specify): _____		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
Total Well Depth From Ground Surface (ft.) 26.65	Casing Diameter (in.) 2	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
Lower Drillhole Diameter (in.) 8	Casing Depth (ft.) 26.65	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
If yes, to what depth (feet)? 15.37	Depth to Water (feet) 15.37	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			


5. Material Used to Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	27	1 sack	


6. Comments

MW-10


7. Supervision of Work			DNR Use Only	
Name of Person or Firm Doing Filling & Sealing On-Site Environmental	License # _____	Date of Filling & Sealing or Verification (mm/dd/yyyy) 07/16/2021	Date Received _____	Noted By _____
Street or Route PO Box 280		Telephone Number (608) 837 - 8992	Comments _____	
City Sun Prairie	State WI	ZIP Code 53590	Signature of Person Doing Work 	Date Signed 07/16/2021


PHOTOGRAPHIC LOG

CLIENT NAME: WE Energies		SITE LOCATION: Former Appleton MGP Facility		PROJECT NO. 1940101019
PHOTO NO. 1	DATE: 07/16/21			
DESCRIPTION: Facing Northwest towards the abandonment of MW-10. Protective piping removed.				

CLIENT NAME: WE Energies		SITE LOCATION: Former Appleton MGP Facility	PROJECT NO. 1940101019
PHOTO NO. 2	DATE: 07/16/21		
DESCRIPTION: Facing West towards the abandonment of MW-10. Well casing is being removed from the ground.			

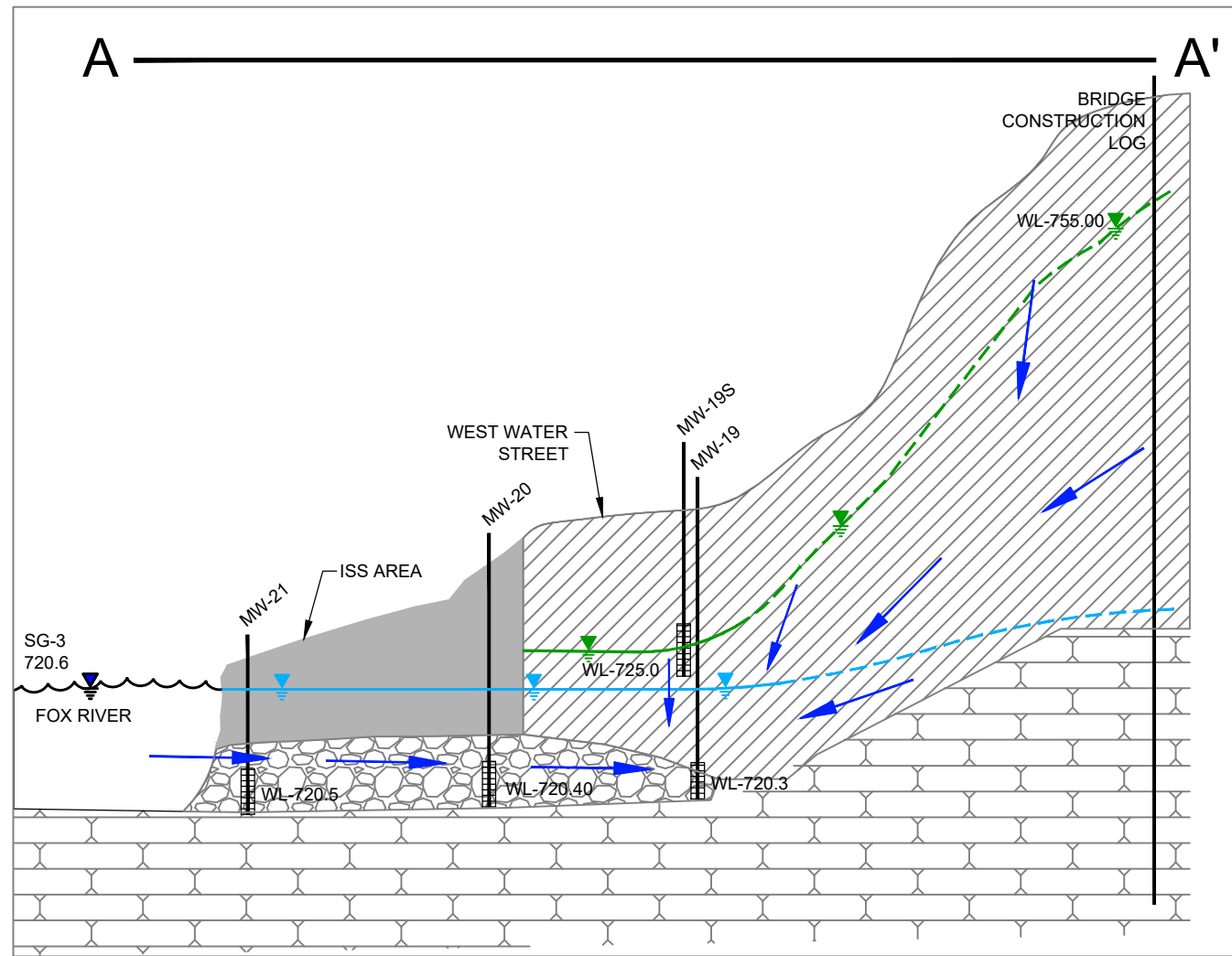
CLIENT NAME: WE Energies		SITE LOCATION: Former Appleton MGP Facility	PROJECT NO. 1940101019
PHOTO NO. 3	DATE: 07/16/21		
DESCRIPTION: Facing Southwest towards the abandonment of MW-10. Three lengths of steel casing have been removed. The uppermost casing was damaged prior to removal (left).			

CLIENT NAME: WE Energies		SITE LOCATION: Former Appleton MGP Facility	PROJECT NO. 1940101019
PHOTO NO. 4	DATE: 07/16/21		
DESCRIPTION: Facing West towards the abandonment of MW-10. The casing and screen have been removed. 3/8" bentonite chips are being poured into the borehole.			

CLIENT NAME: WE Energies		SITE LOCATION: Former Appleton MGP Facility	PROJECT NO. 1940101019
PHOTO NO. 5	DATE: 07/16/21		
DESCRIPTION: Facing South towards the abandonment of MW-10. The borehole has been filled with 3/8" bentonite chips to the surface.			

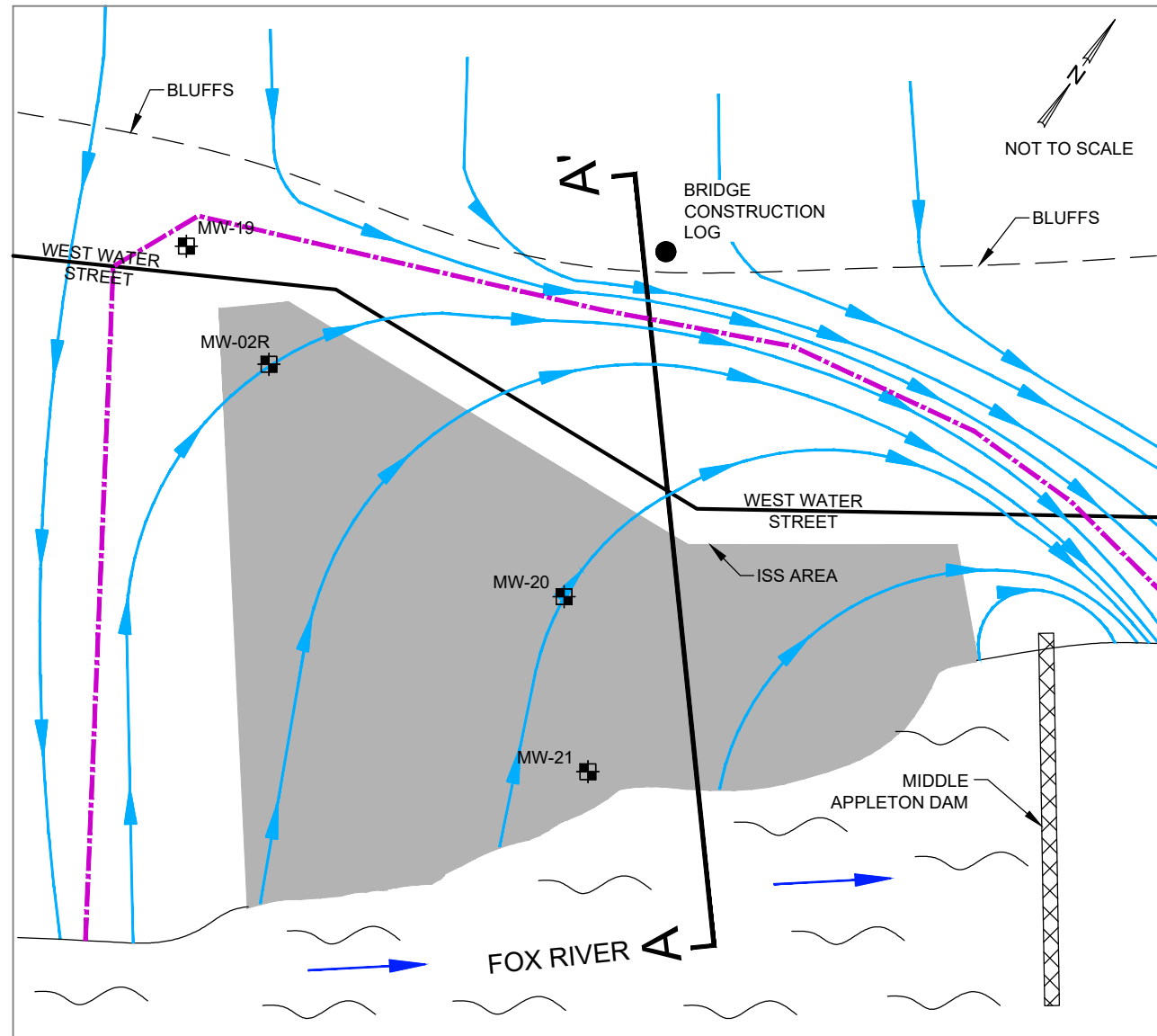
APPENDIX B
CONCEPTUAL FLOW MODEL AND CONCEPTUAL SITE MODEL
FIGURES

CONCEPTUAL FLOW MODEL
(PREVIOUSLY SUBMITTED AS FIGURE 12 OF THE
2014 ANNUAL REPORT)



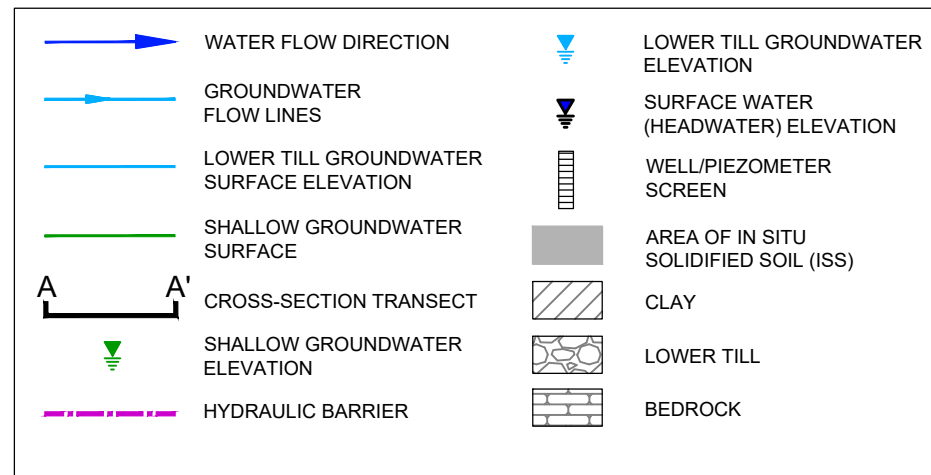
1 CROSS-SECTION A-A'

NOT TO SCALE



2 PLAN VIEW

NOT TO SCALE



DRAWN BY:	DMD	DATE:	03/11/15
CHECKED BY:	BGH	DATE:	03/25/15
APPROVED BY:	BGH	DATE:	04/27/15
DRAWING NO.:	1508-212-B12		
REFERENCE:			

CONCEPTUAL FLOW MODEL

2014 ANNUAL GROUNDWATER REPORT
WE ENERGIES
APPLETON FORMER MGP SITE
APPLETON, WISCONSIN



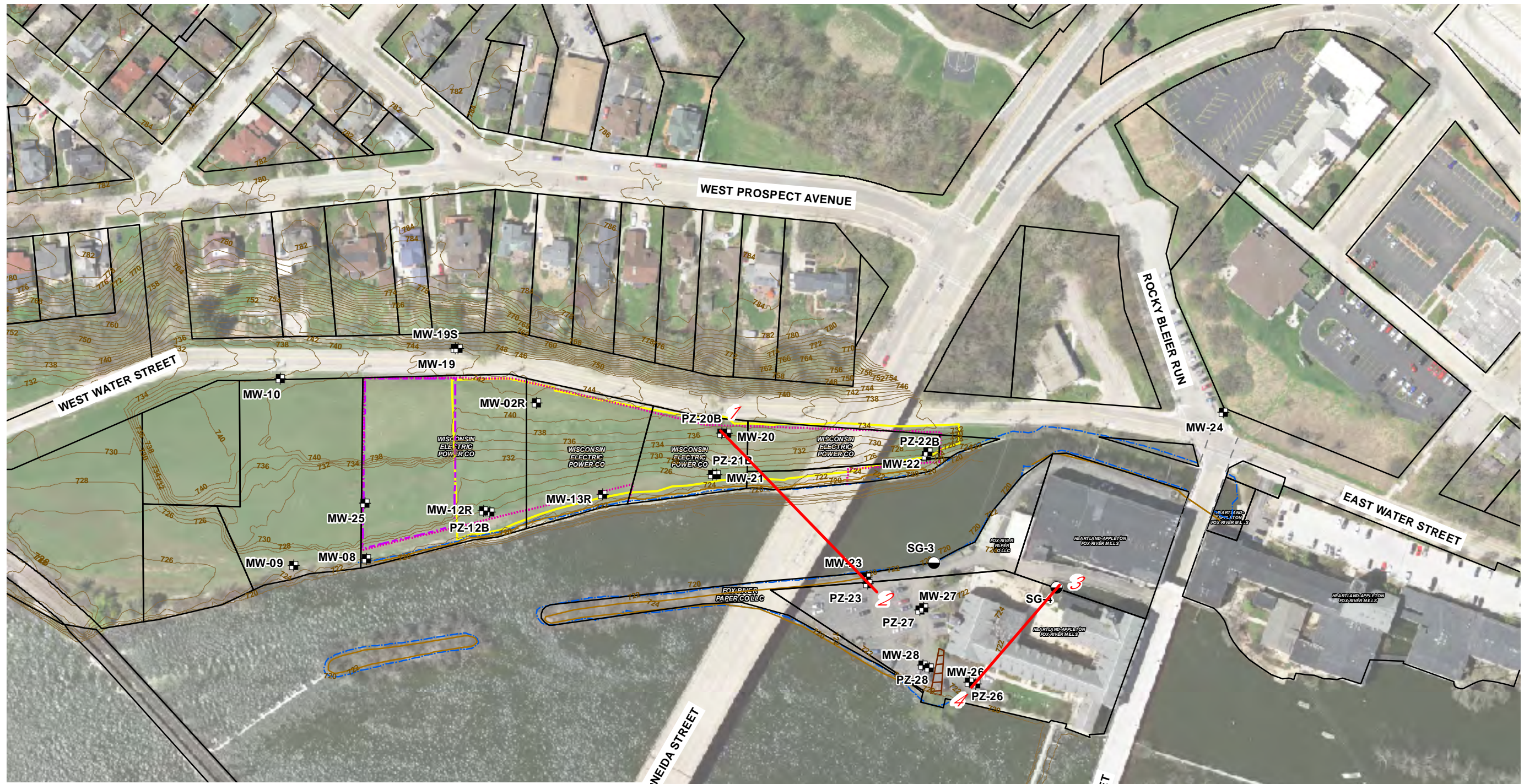
PROJECT NO.
1508/21.2

FIGURE NO.
12

Apr 27, 2015 4:39pm PLOTTED BY: dduda, SAVED BY: dduda
I:\ACAdata\Projects\15\1508\21-2\1508-212-B12.dwg Layout1
XREFS:

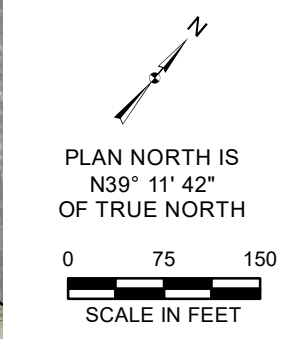
CONCEPTUAL SITE MODEL FIGURES

Y:\GIS\Projects\1511508\MXD\2016_Annual_Report\E1_Site_Features and CSM.mxd Author: stolzsd Date/Time: 4/12/2017 4:15:39 PM



- 1 2 CSM PROFILE (SEE DRAWINGS CSM-1 THROUGH CSM-4)
- + MONITORING WELL LOCATION
- STAFF GAUGE LOCATION
- 2014 TAX PARCEL
- ~ TOP OF BANK
- ~ GROUND SURFACE ELEVATION CONTOURS
- - - FORMER MGP SITE PERIMETER
- - - SHORELINE
- - - FORMER WASTE WATER TREATMENT PLANT STRUCTURES DEMOLISHED IN THIS AREA
- - - PERIMETER OF ISS TREATMENT AREA
- HISTORICAL NEEDLE DAM STRUCTURE

SOURCE: TAX PARCEL DATA OBTAINED FROM OUTAGAMIE COUNTY GIS
IMAGERY SOURCE: OUTAGAMIE COUNTY SPRING 2014



DRAWN BY/DATE:
SDS 2/8/17
REVIEWED BY/DATE:
ANS 2/8/17
APPROVED BY/DATE:
BGH 4/12/17

SITE FEATURES AND CONCEPTUAL SITE MODEL (CSM) PROFILES

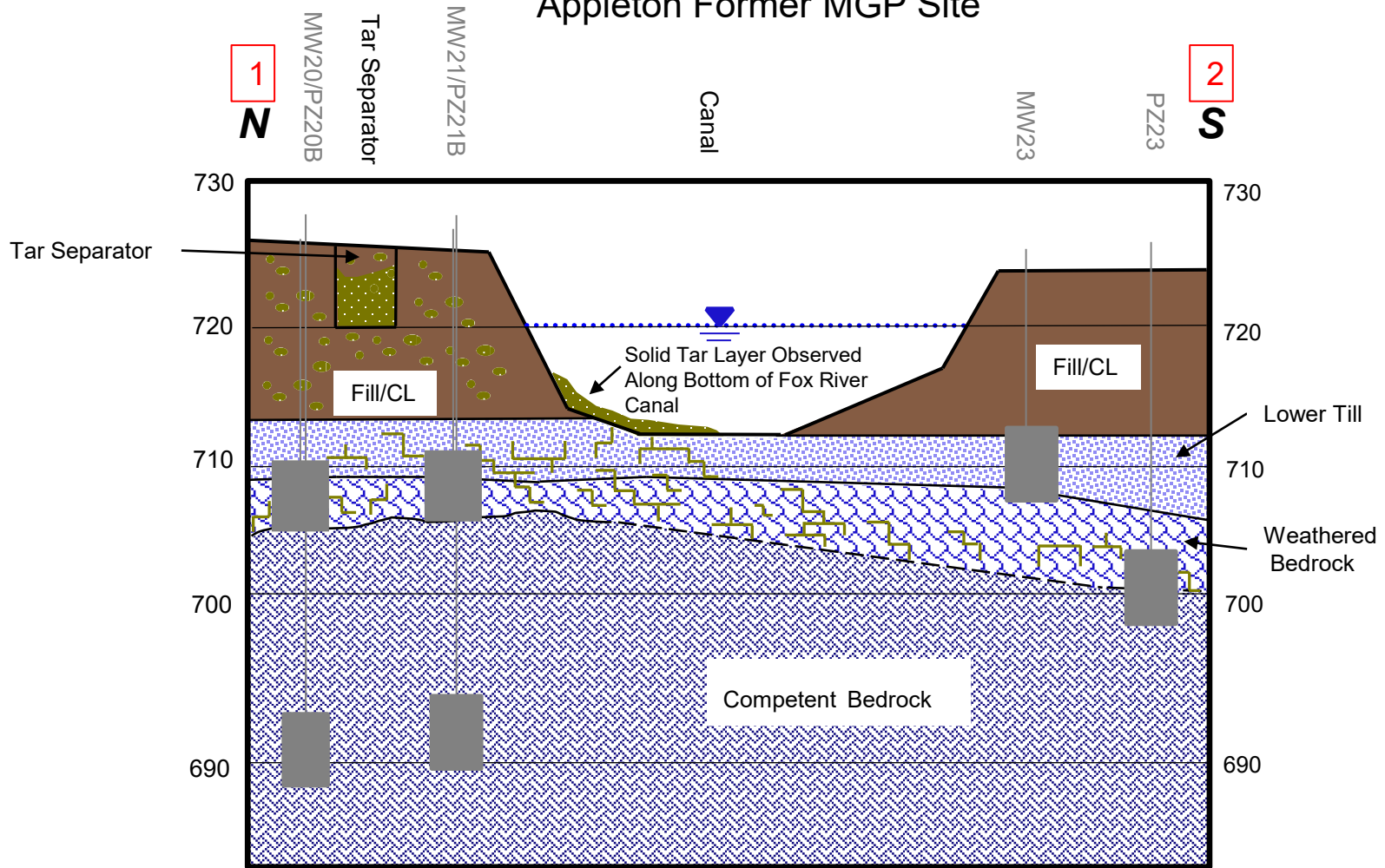
2016 ANNUAL REPORT
FORMER APPLETON MANUFACTURED GAS PLANT (MGP) FACILITY
WE ENERGIES
APPLETON, WISCONSIN

PROJECT NO: 1508

FIGURE NO: E1

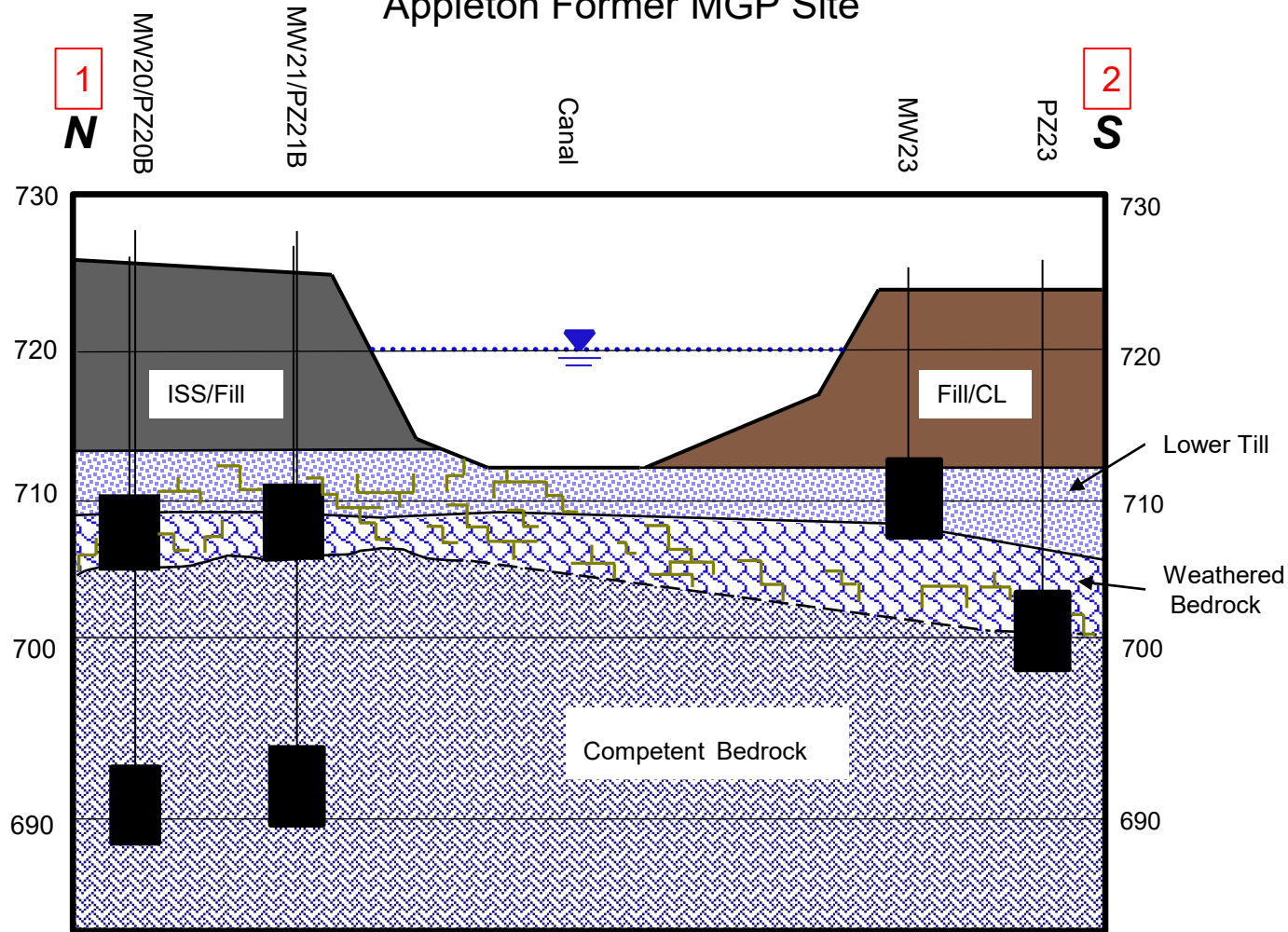


Pre-Remediation Conceptual Drawing of Residual Materials: Appleton Former MGP Site



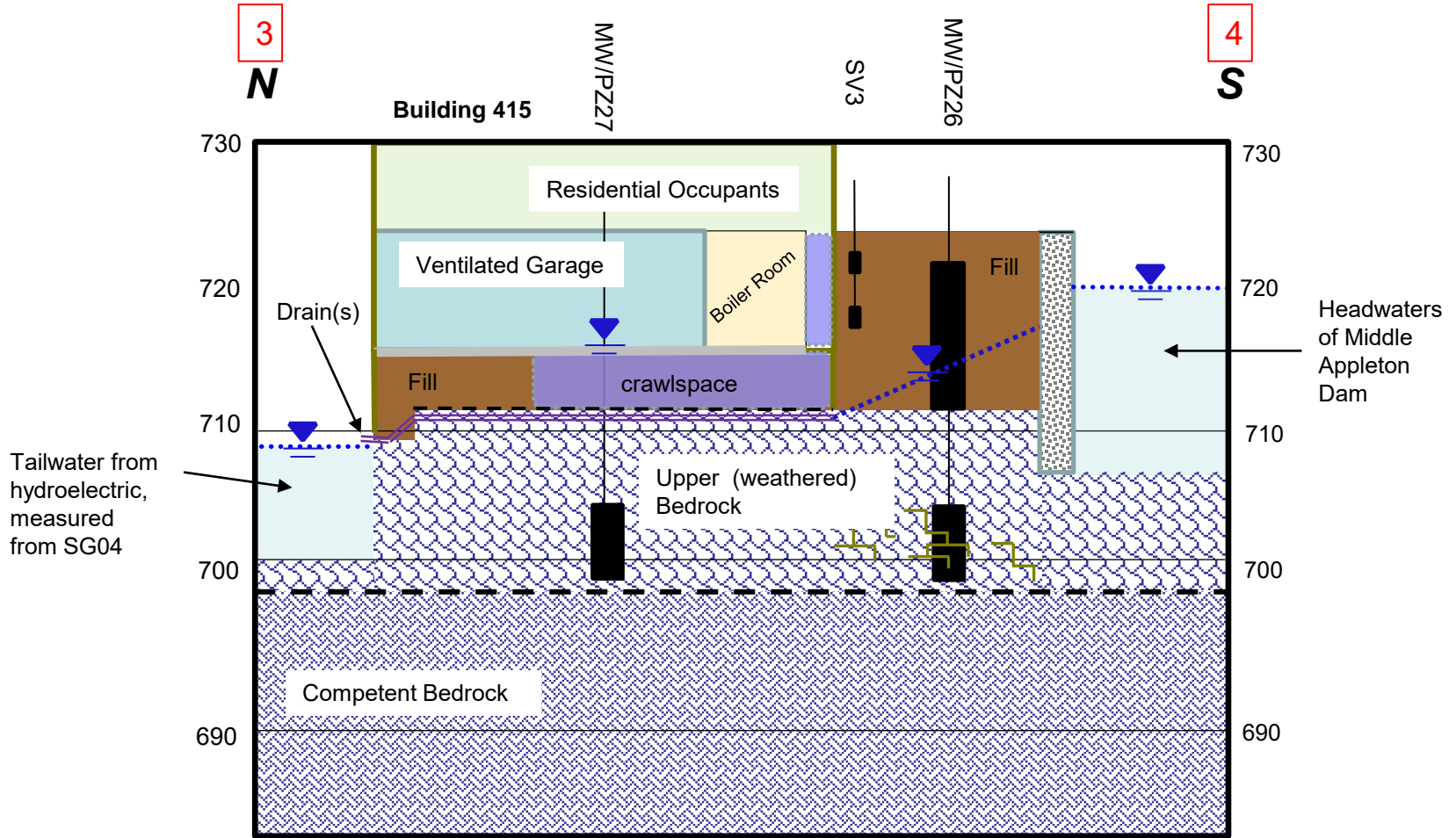
CSM-1. Conceptual drawing that illustrates the presence of MGP residuals prior to remedial construction (source removal and in situ solidification). Residual product is shown in green. Post-construction monitoring wells (gray) were included for reference. During remedial construction in 2002 and 2003, potential source areas such as the material within the tar separator and the solid tar layer observed along the bottom of the canal were removed. Following source removal, the fill and clay north of the canal was solidified. See "Post-Remediation Conceptual Drawing of Residual Materials" for conceptual drawing of post-remediation conditions.

Post-Remediation Conceptual Drawing of Residual Materials: Appleton Former MGP Site



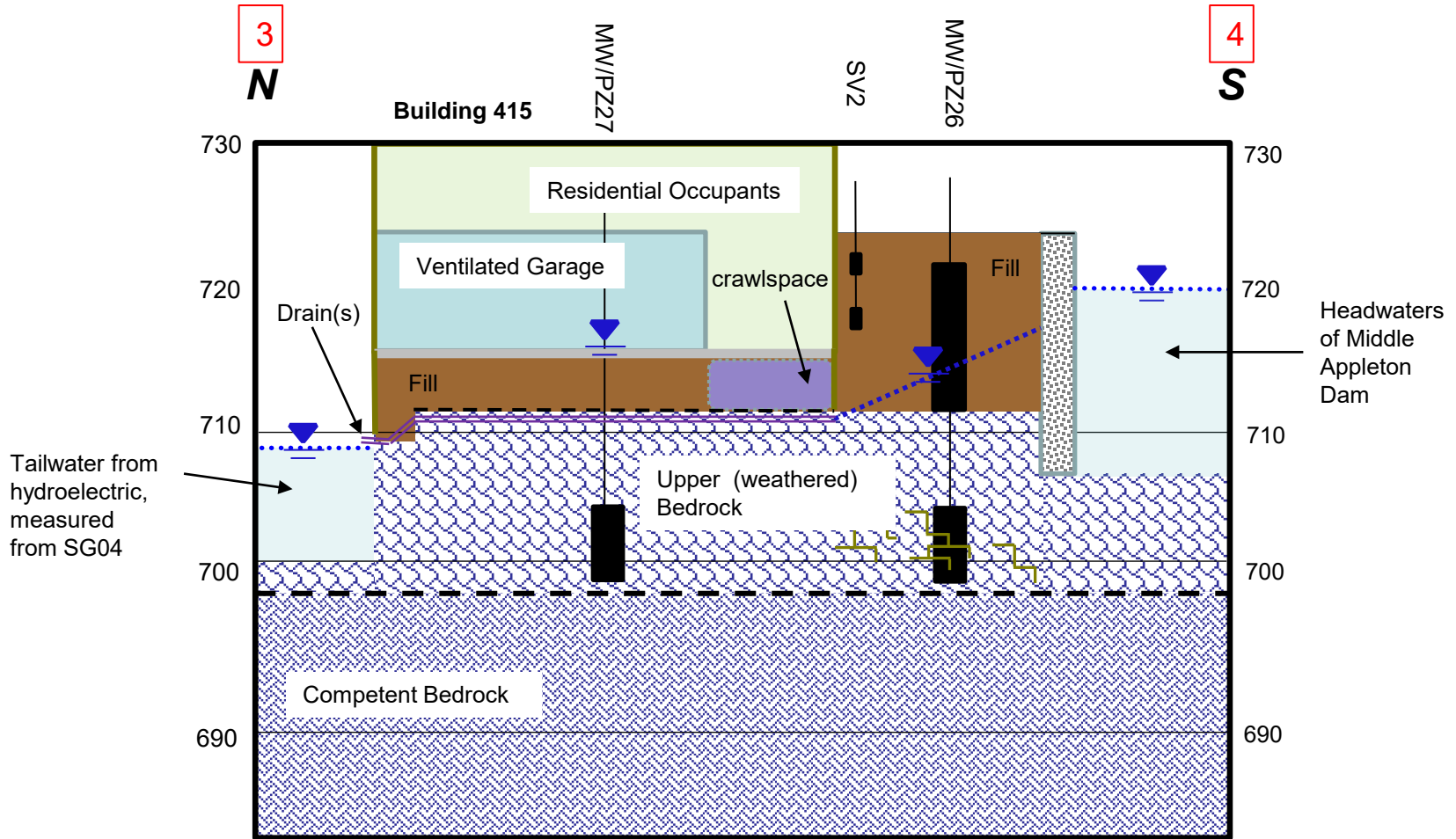
CSM-2. Conceptual drawing that illustrates the presence of MGP residuals following remedial construction (source removal and in situ solidification). Residual product is shown in green. The remediation area, including solidified soils, is shown in gray. Post-construction monitoring wells are in black. Following remedial construction, minor amounts of residual product have been observed in the lower till and weathered bedrock; and, a sheen was observed in portions of the canal bottom when dewatered in November 2011. The source of the observed residuals was removed or solidified during construction.

Conceptual Drawing of Building 415 Appleton Former MGP Site (Boiler Room)



CSM-3. Conceptual drawing that illustrates the profile of the apartment building located at 415 South Olde Oneida Street. Monitoring wells and soil vapor probes have been projected onto the profile. Residual product observed in shallow (weathered) bedrock is shown in green. The floor of the garage has been surveyed at 715 feet NAVD 88. Observations suggest that the wall of the building sits on bedrock near the elevation of the tailwater from the hydroelectric units, a crawlspace was observed beneath the garage slab along the southern wall of the building and PVC drain pipes were observed in the wall near SG04 at approximately 709.5 feet, the drain pipes become submerged when tailwater elevations exceed 710 feet.

Conceptual Drawing of Building 415 Appleton Former MGP Site (Near Occupied Space)



CSM-4. Conceptual drawing that illustrates the profile of the apartment building located at 415 South Olde Oneida Street. Monitoring wells and soil vapor probes have been projected onto the profile. Residual product observed in shallow (weathered) bedrock is shown in green. The floor of the garage has been surveyed at 715 feet NAVD 88. Observations suggest that the wall of the building sits on bedrock near the elevation of the tailwater from the hydroelectric units, a crawlspace was observed beneath the garage slab along the southern wall of the building and PVC drain pipes were observed in the wall near SG04 at approximately 709.5 feet, the drain pipes become submerged when tailwater elevations exceed 710 feet.

APPENDIX C
2020 AND 2021 GROUNDWATER LABORATORY REPORTS
(ON CD)

APPENDIX C1
APRIL 2020 LABORATORY REPORT

May 05, 2020

Frank Dombrowski
WE Energies
333 W. Everett St
Milwaukee, WI 53203

RE: Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

Dear Frank Dombrowski:

Enclosed are the analytical results for sample(s) received by the laboratory on April 21, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Alex Bartelme, Ramboll
NRT Data, OBG
Brian Hennings, Ramboll
WE Energies Lab Reports, WE Energies



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40206571001	MW-25	Water	04/20/20 16:37	04/21/20 14:30
40206571002	MW-12R	Water	04/20/20 17:04	04/21/20 14:30
40206571003	PZ-12B	Water	04/20/20 17:39	04/21/20 14:30
40206571004	MW-13R	Water	04/20/20 18:13	04/21/20 14:30
40206571005	QA/QC2	Water	04/20/20 18:18	04/21/20 14:30
40206571006	MW-22	Water	04/21/20 07:50	04/21/20 14:30
40206571007	PZ-22B	Water	04/21/20 08:27	04/21/20 14:30
40206571008	MW-21	Water	04/21/20 08:59	04/21/20 14:30
40206571009	PZ-21B	Water	04/21/20 09:30	04/21/20 14:30
40206571010	MW-20	Water	04/21/20 10:18	04/21/20 14:30
40206571011	PZ-20B	Water	04/21/20 10:54	04/21/20 14:30
40206571012	MW-02R	Water	04/21/20 11:39	04/21/20 14:30
40206571013	EB-1	Water	04/20/20 18:40	04/21/20 14:30
40206571014	EB-2	Water	04/21/20 12:00	04/21/20 14:30
40206571015	TB	Water	04/21/20 00:00	04/21/20 14:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40206571001	MW-25	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206571002	MW-12R	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206571003	PZ-12B	EPA 8260	HNW	5
40206571004	MW-13R	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206571005	QA/QC2	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206571006	MW-22	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206571007	PZ-22B	EPA 8260	HNW	5
40206571008	MW-21	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40206571009	PZ-21B	EPA 353.2	DAW	1
		EPA 8260	HNW	5
40206571010	MW-20	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
		EPA 8260	HNW	5
40206571011	PZ-20B	EPA 8015B Modified	ALD	1
40206571012	MW-02R	EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
		EPA 8260	HNW	9
		EPA 8260	LAP	9
40206571013	EB-1	EPA 8260	LAP	9
40206571014	EB-2	EPA 8260	LAP	9
40206571015	TB	EPA 8260	LAP	9

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

Sample: MW-25 **Lab ID: 40206571001** Collected: 04/20/20 16:37 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	924	ug/L	28.0	6.6	10		04/28/20 15:10	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	2.8	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 11:15	7440-38-2	
Iron, Dissolved	66.2J	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 11:15	7439-89-6	
Manganese, Dissolved	<1.2	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 11:15	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	0.94J	ug/L	1.0	0.25	1		04/24/20 15:40	71-43-2	
Ethylbenzene	1.5	ug/L	1.1	0.32	1		04/24/20 15:40	100-41-4	
Naphthalene	26.7	ug/L	5.0	1.2	1		04/24/20 15:40	91-20-3	
Toluene	0.31J	ug/L	0.90	0.27	1		04/24/20 15:40	108-88-3	
m&p-Xylene	1.3J	ug/L	2.0	0.47	1		04/24/20 15:40	179601-23-1	
o-Xylene	0.65J	ug/L	1.0	0.26	1		04/24/20 15:40	95-47-6	
Surrogates									
Dibromofluoromethane (S)	108	%	70-130		1		04/24/20 15:40	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		04/24/20 15:40	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/24/20 15:40	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	59.1	mg/L	10.0	2.2	5		04/30/20 12:18	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	271	mg/L	49.6	14.9	2		04/23/20 15:16		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:03		

Sample: MW-12R **Lab ID: 40206571002** Collected: 04/20/20 17:04 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	2360	ug/L	56.0	13.3	20		04/28/20 15:17	74-82-8	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Sample: MW-12R **Lab ID: 40206571002** Collected: 04/20/20 17:04 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	1.3	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 11:29	7440-38-2	
Iron, Dissolved	176J	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 11:29	7439-89-6	
Manganese, Dissolved	10.1	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 11:29	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	37.8	ug/L	4.0	0.99	4		04/24/20 11:33	71-43-2	
Ethylbenzene	98.1	ug/L	4.2	1.3	4		04/24/20 11:33	100-41-4	
Naphthalene	1090	ug/L	20.0	4.7	4		04/24/20 11:33	91-20-3	
Toluene	13.6	ug/L	3.6	1.1	4		04/24/20 11:33	108-88-3	
m&p-Xylene	31.7	ug/L	8.0	1.9	4		04/24/20 11:33	179601-23-1	
o-Xylene	43.7	ug/L	4.0	1.0	4		04/24/20 11:33	95-47-6	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		4		04/24/20 11:33	1868-53-7	
Toluene-d8 (S)	102	%	70-130		4		04/24/20 11:33	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		4		04/24/20 11:33	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	69.0	mg/L	10.0	2.2	5		04/30/20 10:43	14808-79-8	M0
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	351	mg/L	49.6	14.9	2		04/23/20 15:17		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:03		

Sample: PZ-12B **Lab ID: 40206571003** Collected: 04/20/20 17:39 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.25	ug/L	1.0	0.25	1		04/24/20 16:03	71-43-2	
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/24/20 16:03	91-20-3	
Surrogates									
Dibromofluoromethane (S)	108	%	70-130		1		04/24/20 16:03	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		04/24/20 16:03	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		1		04/24/20 16:03	460-00-4	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Sample: MW-13R **Lab ID: 40206571004** Collected: 04/20/20 18:13 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	990	ug/L	11.2	2.7	4		04/28/20 12:59	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	74.3	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 11:36	7440-38-2	
Iron, Dissolved	578	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 11:36	7439-89-6	
Manganese, Dissolved	37.2	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 11:36	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	1250	ug/L	40.0	9.9	40		04/24/20 11:55	71-43-2	
Ethylbenzene	413	ug/L	42.5	12.7	40		04/24/20 11:55	100-41-4	
Naphthalene	3840	ug/L	200	47.0	40		04/24/20 11:55	91-20-3	
Toluene	302	ug/L	35.9	10.8	40		04/24/20 11:55	108-88-3	
m&p-Xylene	428	ug/L	80.0	18.6	40		04/24/20 11:55	179601-23-1	
o-Xylene	216	ug/L	40.0	10.5	40		04/24/20 11:55	95-47-6	
Surrogates									
Dibromofluoromethane (S)	105	%	70-130		40		04/24/20 11:55	1868-53-7	
Toluene-d8 (S)	102	%	70-130		40		04/24/20 11:55	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		40		04/24/20 11:55	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	1060	mg/L	40.0	8.9	20		04/30/20 12:12	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	181J	mg/L	248	74.4	10		04/23/20 15:21		D3
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:04		

Sample: QA/QC2 **Lab ID: 40206571005** Collected: 04/20/20 18:18 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	957	ug/L	14.0	3.3	5		04/28/20 13:06	74-82-8	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Sample: QA/QC2 **Lab ID: 40206571005** Collected: 04/20/20 18:18 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	81.5	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 11:42	7440-38-2	
Iron, Dissolved	606	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 11:42	7439-89-6	
Manganese, Dissolved	38.7	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 11:42	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	1310	ug/L	20.0	4.9	20		04/24/20 12:18	71-43-2	
Ethylbenzene	418	ug/L	21.2	6.4	20		04/24/20 12:18	100-41-4	
Naphthalene	3870	ug/L	100	23.5	20		04/24/20 12:18	91-20-3	
Toluene	304	ug/L	18.0	5.4	20		04/24/20 12:18	108-88-3	
m&p-Xylene	422	ug/L	40.0	9.3	20		04/24/20 12:18	179601-23-1	
o-Xylene	222	ug/L	20.0	5.2	20		04/24/20 12:18	95-47-6	
Surrogates									
Dibromofluoromethane (S)	108	%	70-130		20		04/24/20 12:18	1868-53-7	
Toluene-d8 (S)	101	%	70-130		20		04/24/20 12:18	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		20		04/24/20 12:18	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	1050	mg/L	40.0	8.9	20		04/30/20 12:27	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	198	mg/L	124	37.2	5		04/23/20 15:22		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:05		

Sample: MW-22 **Lab ID: 40206571006** Collected: 04/21/20 07:50 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	2140	ug/L	28.0	6.6	10		04/28/20 13:13	74-82-8	M1
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Iron, Dissolved	86.4J	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 10:34	7439-89-6	
Manganese, Dissolved	44.8	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 10:34	7439-96-5	
Arsenic, Dissolved	4.5	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 10:34	7440-38-2	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Sample: MW-22 **Lab ID: 40206571006** Collected: 04/21/20 07:50 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
Benzene	1280	ug/L	25.0	6.2	25		04/24/20 11:10	71-43-2	
Ethylbenzene	206	ug/L	26.6	8.0	25		04/24/20 11:10	100-41-4	
Naphthalene	897	ug/L	125	29.4	25		04/24/20 11:10	91-20-3	
Toluene	<6.7	ug/L	22.4	6.7	25		04/24/20 11:10	108-88-3	
m&p-Xylene	14.2J	ug/L	50.0	11.6	25		04/24/20 11:10	179601-23-1	
o-Xylene	16.5J	ug/L	25.0	6.5	25		04/24/20 11:10	95-47-6	
Surrogates									
Dibromofluoromethane (S)	108	%	70-130		25		04/24/20 11:10	1868-53-7	
Toluene-d8 (S)	101	%	70-130		25		04/24/20 11:10	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		25		04/24/20 11:10	460-00-4	

300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Sulfate	10.9	mg/L	2.0	0.44	1		04/28/20 14:15	14808-79-8	M0

310.2 Alkalinity									
Analytical Method: EPA 310.2									
Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	389	mg/L	49.6	14.9	2		04/23/20 15:23		

353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2									
Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:05		

Sample: PZ-22B **Lab ID: 40206571007** Collected: 04/21/20 08:27 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
Benzene	3.5J	ug/L	5.0	1.2	5		04/24/20 12:40	71-43-2	
Naphthalene	623	ug/L	25.0	5.9	5		04/24/20 12:40	91-20-3	
Surrogates									
Dibromofluoromethane (S)	103	%	70-130		5		04/24/20 12:40	1868-53-7	
Toluene-d8 (S)	102	%	70-130		5		04/24/20 12:40	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		5		04/24/20 12:40	460-00-4	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

Sample: MW-21 **Lab ID: 40206571008** Collected: 04/21/20 08:59 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	30.1	ug/L	2.8	0.66	1		04/28/20 10:13	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	85.5	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 11:49	7440-38-2	
Iron, Dissolved	123J	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 11:49	7439-89-6	
Manganese, Dissolved	<1.2	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 11:49	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	775	ug/L	100	24.6	100		04/24/20 13:03	71-43-2	
Ethylbenzene	178	ug/L	106	31.9	100		04/24/20 13:03	100-41-4	
Naphthalene	8680	ug/L	500	118	100		04/24/20 13:03	91-20-3	
Toluene	809	ug/L	89.8	26.9	100		04/24/20 13:03	108-88-3	
m&p-Xylene	466	ug/L	200	46.5	100		04/24/20 13:03	179601-23-1	
o-Xylene	274	ug/L	100	26.2	100		04/24/20 13:03	95-47-6	
Surrogates									
Dibromofluoromethane (S)	105	%	70-130		100		04/24/20 13:03	1868-53-7	
Toluene-d8 (S)	102	%	70-130		100		04/24/20 13:03	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		100		04/24/20 13:03	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	392	mg/L	40.0	8.9	20		04/30/20 13:26	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	96.6	mg/L	24.8	7.4	1		04/23/20 15:27		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	1.9	mg/L	0.25	0.059	1		04/28/20 12:07		

Sample: PZ-21B **Lab ID: 40206571009** Collected: 04/21/20 09:30 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	0.40J	ug/L	1.0	0.25	1		04/27/20 08:39	71-43-2	
Naphthalene	48.4	ug/L	5.0	1.2	1		04/27/20 08:39	91-20-3	
Surrogates									
Dibromofluoromethane (S)	107	%	70-130		1		04/27/20 08:39	1868-53-7	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Sample: PZ-21B **Lab ID: 40206571009** Collected: 04/21/20 09:30 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		04/27/20 08:39	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/27/20 08:39	460-00-4	

Sample: MW-20 **Lab ID: 40206571010** Collected: 04/21/20 10:18 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	238	ug/L	2.8	0.66	1		04/28/20 10:20	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	97.3	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 11:56	7440-38-2	
Iron, Dissolved	134J	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 11:56	7439-89-6	
Manganese, Dissolved	<1.2	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 11:56	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	1450	ug/L	50.0	12.3	50		04/24/20 13:25	71-43-2	
Ethylbenzene	494	ug/L	53.1	15.9	50		04/24/20 13:25	100-41-4	
Naphthalene	2860	ug/L	250	58.8	50		04/24/20 13:25	91-20-3	
Toluene	1010	ug/L	44.9	13.5	50		04/24/20 13:25	108-88-3	
m&p-Xylene	527	ug/L	100	23.3	50		04/24/20 13:25	179601-23-1	
o-Xylene	384	ug/L	50.0	13.1	50		04/24/20 13:25	95-47-6	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		50		04/24/20 13:25	1868-53-7	
Toluene-d8 (S)	101	%	70-130		50		04/24/20 13:25	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		50		04/24/20 13:25	460-00-4	

300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	394	mg/L	40.0	8.9	20		04/30/20 13:41	14808-79-8	

310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	354	mg/L	124	37.2	5		04/23/20 15:28		

353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	0.084J	mg/L	0.25	0.059	1		04/28/20 12:10		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Sample: PZ-20B **Lab ID: 40206571011** Collected: 04/21/20 10:54 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.25	ug/L	1.0	0.25	1		04/27/20 09:01	71-43-2	
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/27/20 09:01	91-20-3	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		1		04/27/20 09:01	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		04/27/20 09:01	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/27/20 09:01	460-00-4	

Sample: MW-02R **Lab ID: 40206571012** Collected: 04/21/20 11:39 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	759	ug/L	14.0	3.3	5		04/28/20 13:20	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	1.5	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 12:03	7440-38-2	
Iron, Dissolved	527	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 12:03	7439-89-6	
Manganese, Dissolved	9.8	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 12:03	7439-96-5	

8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	121	ug/L	1.0	0.25	1		04/27/20 09:24	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/27/20 09:24	100-41-4	
Naphthalene	1.5J	ug/L	5.0	1.2	1		04/27/20 09:24	91-20-3	
Toluene	<0.27	ug/L	0.90	0.27	1		04/27/20 09:24	108-88-3	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/27/20 09:24	179601-23-1	
o-Xylene	0.30J	ug/L	1.0	0.26	1		04/27/20 09:24	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%	70-130		1		04/27/20 09:24	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		04/27/20 09:24	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/27/20 09:24	460-00-4	

300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	419	mg/L	40.0	8.9	20		04/30/20 13:56	14808-79-8	

310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	382	mg/L	24.8	7.4	1		04/23/20 15:29		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Sample: MW-02R Lab ID: 40206571012 Collected: 04/21/20 11:39 Received: 04/21/20 14:30 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:11		

Sample: EB-1 Lab ID: 40206571013 Collected: 04/20/20 18:40 Received: 04/21/20 14:30 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.25	ug/L	1.0	0.25	1		04/27/20 09:46	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/27/20 09:46	100-41-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/27/20 09:46	91-20-3	
Toluene	<0.27	ug/L	0.90	0.27	1		04/27/20 09:46	108-88-3	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/27/20 09:46	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		04/27/20 09:46	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%	70-130		1		04/27/20 09:46	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		04/27/20 09:46	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/27/20 09:46	460-00-4	

Sample: EB-2 Lab ID: 40206571014 Collected: 04/21/20 12:00 Received: 04/21/20 14:30 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.25	ug/L	1.0	0.25	1		04/27/20 08:37	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/27/20 08:37	100-41-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/27/20 08:37	91-20-3	
Toluene	<0.27	ug/L	0.90	0.27	1		04/27/20 08:37	108-88-3	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/27/20 08:37	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		04/27/20 08:37	95-47-6	
Surrogates									
Dibromofluoromethane (S)	104	%	70-130		1		04/27/20 08:37	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		04/27/20 08:37	2037-26-5	
4-Bromofluorobenzene (S)	84	%	70-130		1		04/27/20 08:37	460-00-4	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Sample: TB **Lab ID: 40206571015** Collected: 04/21/20 00:00 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
Benzene	<0.25	ug/L	1.0	0.25	1		04/27/20 08:56	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/27/20 08:56	100-41-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/27/20 08:56	91-20-3	
Toluene	<0.27	ug/L	0.90	0.27	1		04/27/20 08:56	108-88-3	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/27/20 08:56	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		04/27/20 08:56	95-47-6	
Surrogates									
Dibromofluoromethane (S)	101	%	70-130		1		04/27/20 08:56	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		04/27/20 08:56	2037-26-5	
4-Bromofluorobenzene (S)	83	%	70-130		1		04/27/20 08:56	460-00-4	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

QC Batch:	353515	Analysis Method:	EPA 8015B Modified
QC Batch Method:	EPA 8015B Modified	Analysis Description:	Methane, Ethane, Ethene GCV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40206571001, 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

METHOD BLANK: 2046577 Matrix: Water

Associated Lab Samples: 40206571001, 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<0.66	2.8	04/28/20 08:53	

LABORATORY CONTROL SAMPLE & LCSD: 2046578 2046579

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	28.2	28.5	99	100	79-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046580 2046581

Parameter	Units	40206571006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	2140	286	286	2960	2840	286	243	10-200	4	20	E,M1

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

QC Batch:	353096	Analysis Method:	EPA 6020
QC Batch Method:	EPA 3010	Analysis Description:	6020 MET Dissolved
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40206571001, 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

METHOD BLANK: 2044153 Matrix: Water
Associated Lab Samples: 40206571001, 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<0.28	1.0	04/30/20 09:52	
Iron, Dissolved	ug/L	<58.0	250	04/30/20 09:52	
Manganese, Dissolved	ug/L	<1.2	4.0	04/30/20 09:52	

LABORATORY CONTROL SAMPLE: 2044154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	500	497	99	80-120	
Iron, Dissolved	ug/L	5000	4710	94	80-120	
Manganese, Dissolved	ug/L	500	476	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044155 2044156

Parameter	Units	2044155		2044156		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40206571006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Arsenic, Dissolved	ug/L	4.5	500	500	512	517	102	102	75-125	1	20
Iron, Dissolved	ug/L	86.4J	5000	5000	4750	4760	93	93	75-125	0	20
Manganese, Dissolved	ug/L	44.8	500	500	524	523	96	96	75-125	0	20

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

QC Batch:	353111	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40206571001, 40206571002, 40206571003, 40206571004, 40206571005, 40206571006, 40206571007, 40206571008, 40206571009, 40206571010, 40206571011, 40206571012, 40206571013

METHOD BLANK: 2044187 Matrix: Water
Associated Lab Samples: 40206571001, 40206571002, 40206571003, 40206571004, 40206571005, 40206571006, 40206571007, 40206571008, 40206571009, 40206571010, 40206571011, 40206571012, 40206571013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.25	1.0	04/24/20 06:40	
Ethylbenzene	ug/L	<0.32	1.1	04/24/20 06:40	
m&p-Xylene	ug/L	<0.47	2.0	04/24/20 06:40	
Naphthalene	ug/L	<1.2	5.0	04/24/20 06:40	
o-Xylene	ug/L	<0.26	1.0	04/24/20 06:40	
Toluene	ug/L	<0.27	0.90	04/24/20 06:40	
4-Bromofluorobenzene (S)	%	96	70-130	04/24/20 06:40	
Dibromofluoromethane (S)	%	107	70-130	04/24/20 06:40	
Toluene-d8 (S)	%	100	70-130	04/24/20 06:40	

LABORATORY CONTROL SAMPLE: 2044188

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	50.0	100	70-130	
Ethylbenzene	ug/L	50	48.4	97	80-120	
m&p-Xylene	ug/L	100	95.8	96	70-130	
o-Xylene	ug/L	50	46.7	93	70-130	
Toluene	ug/L	50	48.1	96	80-120	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			110	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044189 2044190

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40206571006 Result	Spike Conc.	Spike Conc.	MS Result						
Benzene	ug/L	1280	1250	1250	2570	2470	103	95	70-136	4	20
Ethylbenzene	ug/L	206	1250	1250	1480	1410	102	97	80-120	5	20
m&p-Xylene	ug/L	14.2J	2500	2500	2490	2360	99	94	70-130	5	20
o-Xylene	ug/L	16.5J	1250	1250	1220	1170	97	92	70-130	5	20
Toluene	ug/L	<6.7	1250	1250	1240	1200	99	96	80-120	4	20
4-Bromofluorobenzene (S)	%						99	99	70-130		
Dibromofluoromethane (S)	%						109	109	70-130		
Toluene-d8 (S)	%						99	99	70-130		

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

QC Batch: 353337	Analysis Method: EPA 8260
QC Batch Method: EPA 8260	Analysis Description: 8260 MSV UST-WATER
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206571014, 40206571015

METHOD BLANK: 2045498 Matrix: Water

Associated Lab Samples: 40206571014, 40206571015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.25	1.0	04/27/20 07:01	
Ethylbenzene	ug/L	<0.32	1.1	04/27/20 07:01	
m&p-Xylene	ug/L	<0.47	2.0	04/27/20 07:01	
Naphthalene	ug/L	<1.2	5.0	04/27/20 07:01	
o-Xylene	ug/L	<0.26	1.0	04/27/20 07:01	
Toluene	ug/L	<0.27	0.90	04/27/20 07:01	
4-Bromofluorobenzene (S)	%	83	70-130	04/27/20 07:01	
Dibromofluoromethane (S)	%	100	70-130	04/27/20 07:01	
Toluene-d8 (S)	%	101	70-130	04/27/20 07:01	

LABORATORY CONTROL SAMPLE: 2045499

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	53.5	107	70-130	
Ethylbenzene	ug/L	50	51.9	104	80-120	
m&p-Xylene	ug/L	100	102	102	70-130	
o-Xylene	ug/L	50	48.1	96	70-130	
Toluene	ug/L	50	51.5	103	80-120	
4-Bromofluorobenzene (S)	%			90	70-130	
Dibromofluoromethane (S)	%			100	70-130	
Toluene-d8 (S)	%			105	70-130	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

QC Batch: 353365 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206571001

METHOD BLANK: 2045764 Matrix: Water
Associated Lab Samples: 40206571001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	04/28/20 10:15	

LABORATORY CONTROL SAMPLE: 2045765

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.9	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2045766 2045767

Parameter	Units	2045766		2045767		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40206505001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Sulfate	mg/L	745	400	400	1110	1030	92	72	90-110	7	15	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2045768 2045769

Parameter	Units	2045768		2045769		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40206571001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Sulfate	mg/L	59.1	100	100	160	159	101	100	90-110	1	15	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

QC Batch: 353377 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

METHOD BLANK: 2045884 Matrix: Water
Associated Lab Samples: 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	04/28/20 11:47	

LABORATORY CONTROL SAMPLE: 2045885

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	21.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2045886 2045888

Parameter	Units	40206571002		40206571006		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfate	mg/L	69.0	100	100	179	157	110	88	90-110	13	15 M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2045889 2045890

Parameter	Units	40206571006		40206571006		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Sulfate	mg/L	10.9	20	20	34.6	34.7	118	119	90-110	0	15 M0

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

QC Batch:	353228	Analysis Method:	EPA 310.2
QC Batch Method:	EPA 310.2	Analysis Description:	310.2 Alkalinity
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40206571001, 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

METHOD BLANK: 2044718 Matrix: Water

Associated Lab Samples: 40206571001, 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	04/23/20 14:59	

LABORATORY CONTROL SAMPLE: 2044719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	102	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044720 2044721

Parameter	Units	40206571006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	389	200	200	581	579	96	95	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044722 2044723

Parameter	Units	40206572002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	413	500	500	923	927	102	103	90-110	0	20	

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

QC Batch:	353540	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40206571001, 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

METHOD BLANK: 2046643 Matrix: Water

Associated Lab Samples: 40206571001, 40206571002, 40206571004, 40206571005, 40206571006, 40206571008, 40206571010, 40206571012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	04/28/20 11:55	

LABORATORY CONTROL SAMPLE: 2046644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.6	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046645 2046646

Parameter	Units	40206571006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	102	103	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046647 2046648

Parameter	Units	40206573003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.5	2.5	102	102	90-110	0	20	

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

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QUALIFIERS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206571

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40206571001	MW-25	EPA 8015B Modified	353515		
40206571002	MW-12R	EPA 8015B Modified	353515		
40206571004	MW-13R	EPA 8015B Modified	353515		
40206571005	QA/QC2	EPA 8015B Modified	353515		
40206571006	MW-22	EPA 8015B Modified	353515		
40206571008	MW-21	EPA 8015B Modified	353515		
40206571010	MW-20	EPA 8015B Modified	353515		
40206571012	MW-02R	EPA 8015B Modified	353515		
40206571001	MW-25	EPA 3010	353096	EPA 6020	353149
40206571002	MW-12R	EPA 3010	353096	EPA 6020	353149
40206571004	MW-13R	EPA 3010	353096	EPA 6020	353149
40206571005	QA/QC2	EPA 3010	353096	EPA 6020	353149
40206571006	MW-22	EPA 3010	353096	EPA 6020	353149
40206571008	MW-21	EPA 3010	353096	EPA 6020	353149
40206571010	MW-20	EPA 3010	353096	EPA 6020	353149
40206571012	MW-02R	EPA 3010	353096	EPA 6020	353149
40206571001	MW-25	EPA 8260	353111		
40206571002	MW-12R	EPA 8260	353111		
40206571003	PZ-12B	EPA 8260	353111		
40206571004	MW-13R	EPA 8260	353111		
40206571005	QA/QC2	EPA 8260	353111		
40206571006	MW-22	EPA 8260	353111		
40206571007	PZ-22B	EPA 8260	353111		
40206571008	MW-21	EPA 8260	353111		
40206571009	PZ-21B	EPA 8260	353111		
40206571010	MW-20	EPA 8260	353111		
40206571011	PZ-20B	EPA 8260	353111		
40206571012	MW-02R	EPA 8260	353111		
40206571013	EB-1	EPA 8260	353111		
40206571014	EB-2	EPA 8260	353337		
40206571015	TB	EPA 8260	353337		
40206571001	MW-25	EPA 300.0	353365		
40206571002	MW-12R	EPA 300.0	353377		
40206571004	MW-13R	EPA 300.0	353377		
40206571005	QA/QC2	EPA 300.0	353377		
40206571006	MW-22	EPA 300.0	353377		
40206571008	MW-21	EPA 300.0	353377		
40206571010	MW-20	EPA 300.0	353377		
40206571012	MW-02R	EPA 300.0	353377		
40206571001	MW-25	EPA 310.2	353228		
40206571002	MW-12R	EPA 310.2	353228		
40206571004	MW-13R	EPA 310.2	353228		
40206571005	QA/QC2	EPA 310.2	353228		
40206571006	MW-22	EPA 310.2	353228		
40206571008	MW-21	EPA 310.2	353228		
40206571010	MW-20	EPA 310.2	353228		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206571

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40206571012	MW-02R	EPA 310.2	353228		
40206571001	MW-25	EPA 353.2	353540		
40206571002	MW-12R	EPA 353.2	353540		
40206571004	MW-13R	EPA 353.2	353540		
40206571005	QA/QC2	EPA 353.2	353540		
40206571006	MW-22	EPA 353.2	353540		
40206571008	MW-21	EPA 353.2	353540		
40206571010	MW-20	EPA 353.2	353540		
40206571012	MW-02R	EPA 353.2	353540		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

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

75502-0920-001

RA/AC: MWM
4-21-20

10206577

Section A Required Client Information:
 Company: We Energies
 Address: 333 W. Everett St. Milwaukee, WI 53203
 Email To: dave.kollikowsky@we-energies.com
 Phone:
 Requested Due Date/TAT: standard

Section B Required Project Information:
 Report To: David Kollikowsky
 Copy To: Brian Hennings, O'Brien and Gere Engineers
 Purchase Order No.:
 Project Name: Appleton Former MGP
 Project Number: 67973.200.038

Section C Invoice Information:
 Attention: Accounts Payable
 Company Name: We Energies
 Address: 333 W Everett St. Milwaukee WI
 Pace Quote Reference: Pace Project Manager: Pace Profile #:
 Site Location STATE: WI

REGULATORY AGENCY
 NPDES GROUND WATER DRINKING WATER
 UST RCRA OTHER

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WW WASTE WATER P PRODUCT SL SOL/SOLID OL OIL WP WIPE AR AIR OT OTHER TS	COLLECTED		DATE	DATE	DATE	DATE	TIME	TIME	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
			COMPOSITE START	COMPOSITE END/GRAB												
1	MW-26				4-21-20	11:37	9	X	X	X				4-21-20	14:30	001
2	MW-28				4-21-20	12:54	9	X	X	X				4-21-20	14:30	002
3	PZ-27				4-21-20	13:36	9	X	X	X				4-21-20	14:30	003
4	MW-27				4-21-20	14:17	9	X	X	X				4-21-20	14:30	003
5	DZ-23				4-21-20	14:22	9	X	X	X				4-21-20	14:30	003
6	QA/AC1				4-21-20	15:28	9	X	X	X				4-21-20	14:30	002
7	MW-24				4-21-20	15:51	9	X	X	X				4-21-20	14:30	001
8	MW-19				4-21-20	16:37	9	X	X	X				4-21-20	14:30	001
9	MW-25				4-21-20	17:04	9	X	X	X				4-21-20	14:30	002
10	MW-12R				4-21-20	17:34	9	X	X	X				4-21-20	14:30	003
11	PZ-12B				4-21-20	18:13	9	X	X	X				4-21-20	14:30	004
12	MW-13R				4-21-20	18:13	9	X	X	X				4-21-20	14:30	004

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Melissa Morris
 SIGNATURE of SAMPLER: *M. Morris*
 DATE Signed (MM/DD/YY): 4-21-20

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days. F-ALL-Q-020/rev.08, 12-Oct-2007

Depot off of Pace

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

636606
75502-0920-001
Page 2 of 2
40200571

Section A Required Client Information: Company: We Energies Address: 333 W. Everett St. Milwaukee, WI 53203 Email To: dave.kollakowsky@we-energies.com Phone: _____ Fax: _____ Requested Data Date/AT: standard		Section B Required Project Information: Report To: David Kollakowky Copy To: Brian Hennings, O'Brien and Gere Engineers Purchase Order No.: _____ Project Name: Appleton Former MGP Project Number: 67973.200.038		Section C Invoice Information: Attention: Accounts Payable Company Name: We Energies Address: 333 W. Everett St. Milwaukee WI Pace Quote Reference: Pace Project Manager: Pace Profile #: _____	
Regulatory Agency: <input type="checkbox"/> NPDES <input checked="" type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> OTHER <input type="checkbox"/> UST <input type="checkbox"/> RCRA				Site Location STATE: WI	

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL SOLID SL OIL WIFE AIR OTHER TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives							Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab ID.
					DATE	TIME			DATE	TIME	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH			
1	QA/AC2		G	G	4-21-20	1616	9	X	X	X	X	X	X	X	X	X	X	005
2	Mw-22				4-21-20	750	27	X	X	X	X	X	X	X	X	X	X	006
3	P2-228				4-21-20	827	3	X	X	X	X	X	X	X	X	X	X	007
4	Mw-21				4-21-20	852	9	X	X	X	X	X	X	X	X	X	X	008
5	P2-218				4-21-20	930	3	X	X	X	X	X	X	X	X	X	X	009
6	Mw-20				4-21-20	1018	4	X	X	X	X	X	X	X	X	X	X	010
7	P2-200				4-21-20	1054	3	X	X	X	X	X	X	X	X	X	X	011
8	Mw-02R				4-21-20	1134	4	X	X	X	X	X	X	X	X	X	X	012
9	EB-1				4-21-20	1840	3	X	X	X	X	X	X	X	X	X	X	013
10	EB-2				4-21-20	1206	3	X	X	X	X	X	X	X	X	X	X	014
11	TB						2	X	X	X	X	X	X	X	X	X	X	015
12																		

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		<i>[Signature]</i>	4-21-20	1730	Bahn (off of pace)	4/21/20	1730	Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Melissa Morris SIGNATURE OF SAMPLER: <i>[Signature]</i>				DATE Signed (MM/DD/YY): 4-21-20
---	--	--	--	---------------------------------

Client Name: WE Energies

Sample Preservation Receipt Form

Project # 40206571

All containers needing preservation have been checked and noted below: Yes No N/A

Lab Lot# of pH paper: 10VSD27-51

Lab Sid #ID of preservation (if pH adjusted):

Initial when completed: MP


Date/Time:

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 96
Green Bay, WI 54302

Pace Lab #	Glass						Plastic					Vials					Jars			General			VOA Vials (>6mm) *				Volume (mL)							
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN		H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted		
001									1	1	1	1			9																			2.5 / 5 / 10
002									1	1	1	1			9																			2.5 / 5 / 10
003															3																			2.5 / 5 / 10
004									1	1	1	1			9																			2.5 / 5 / 10
005									1	1	1	1			9																			2.5 / 5 / 10
006									3	3	3	3			18																			2.5 / 5 / 10
007															3																			2.5 / 5 / 10
008									1	1	1	1			9																			2.5 / 5 / 10
009															3																			2.5 / 5 / 10
010									1	1	1	1			9																			2.5 / 5 / 10
011															3																			2.5 / 5 / 10
012									1	1	1	1			9																			2.5 / 5 / 10
013															3																			2.5 / 5 / 10
014															3																			2.5 / 5 / 10
015															2																			2.5 / 5 / 10
016																																		2.5 / 5 / 10
017																																		2.5 / 5 / 10
018																																		2.5 / 5 / 10
019																																		2.5 / 5 / 10
020																																		2.5 / 5 / 10

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

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						


 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: Wk Energies

WO#: 40206571



40206571

Courier: CS Logistics Fed Ex Speedee UPS Walco
 Client Pace Other: _____

Tracking #: _____

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

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

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR - NA Type of Ice: Blue Dry None

Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 20.1 /Corr: _____

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Person examining contents: Date: <u>4/21/20</u> /Initials: <u>[Signature]</u> Labeled By Initials: <u>[Signature]</u>

Temp should be above freezing to 6°C.
 Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: <u>4/21/20</u>	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>Sample 007 - 'PZ-22'</u> <u>4/21/20</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>441</u>		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

May 05, 2020

Frank Dombrowski
WE Energies
333 W. Everett St
Milwaukee, WI 53203

RE: Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206572

Dear Frank Dombrowski:

Enclosed are the analytical results for sample(s) received by the laboratory on April 21, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Alex Bartelme, Ramboll
NRT Data, OBG
Brian Hennings, Ramboll
WE Energies Lab Reports, WE Energies



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40206572001	MW-24	Water	04/20/20 15:20	04/21/20 14:30
40206572002	MW-19	Water	04/20/20 15:51	04/21/20 14:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40206572001	MW-24	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206572002	MW-19	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

Sample: MW-24 **Lab ID: 40206572001** Collected: 04/20/20 15:20 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	<0.66	ug/L	2.8	0.66	1		04/28/20 10:34	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	<0.28	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 17:12	7440-38-2	
Iron, Dissolved	<58.0	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 17:12	7439-89-6	
Manganese, Dissolved	18.1	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 17:12	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.25	ug/L	1.0	0.25	1		04/23/20 15:20	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/23/20 15:20	100-41-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/23/20 15:20	91-20-3	
Toluene	<0.27	ug/L	0.90	0.27	1		04/23/20 15:20	108-88-3	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/23/20 15:20	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		04/23/20 15:20	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%	70-130		1		04/23/20 15:20	1868-53-7	
Toluene-d8 (S)	105	%	70-130		1		04/23/20 15:20	2037-26-5	
4-Bromofluorobenzene (S)	79	%	70-130		1		04/23/20 15:20	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	114	mg/L	10.0	2.2	5		04/30/20 14:14	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	449	mg/L	49.6	14.9	2		04/23/20 15:30		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:11		

Sample: MW-19 **Lab ID: 40206572002** Collected: 04/20/20 15:51 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	520	ug/L	11.2	2.7	4		04/28/20 13:27	74-82-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

Sample: MW-19 **Lab ID: 40206572002** Collected: 04/20/20 15:51 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Arsenic, Dissolved	1.5	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 17:19	7440-38-2	
Iron, Dissolved	394	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 17:19	7439-89-6	
Manganese, Dissolved	12.1	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 17:19	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
Benzene	<0.25	ug/L	1.0	0.25	1		04/23/20 15:39	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/23/20 15:39	100-41-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/23/20 15:39	91-20-3	
Toluene	<0.27	ug/L	0.90	0.27	1		04/23/20 15:39	108-88-3	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/23/20 15:39	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		04/23/20 15:39	95-47-6	
Surrogates									
Dibromofluoromethane (S)	103	%	70-130		1		04/23/20 15:39	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		04/23/20 15:39	2037-26-5	
4-Bromofluorobenzene (S)	83	%	70-130		1		04/23/20 15:39	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Sulfate	353	mg/L	40.0	8.9	20		04/30/20 14:29	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2									
Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	413	mg/L	124	37.2	5		04/23/20 15:31		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2									
Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	0.093J	mg/L	0.25	0.059	1		04/28/20 12:12		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206572

QC Batch: 353515 Analysis Method: EPA 8015B Modified
QC Batch Method: EPA 8015B Modified Analysis Description: Methane, Ethane, Ethene GCV
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206572001, 40206572002

METHOD BLANK: 2046577 Matrix: Water

Associated Lab Samples: 40206572001, 40206572002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<0.66	2.8	04/28/20 08:53	

LABORATORY CONTROL SAMPLE & LCSD: 2046578

2046579

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	28.2	28.5	99	100	79-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046580

2046581

Parameter	Units	40206571006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	2140	286	286	2960	2840	286	243	10-200	4	20	E,M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206572

QC Batch: 353096 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206572001, 40206572002

METHOD BLANK: 2044153 Matrix: Water

Associated Lab Samples: 40206572001, 40206572002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<0.28	1.0	04/30/20 09:52	
Iron, Dissolved	ug/L	<58.0	250	04/30/20 09:52	
Manganese, Dissolved	ug/L	<1.2	4.0	04/30/20 09:52	

LABORATORY CONTROL SAMPLE: 2044154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	500	497	99	80-120	
Iron, Dissolved	ug/L	5000	4710	94	80-120	
Manganese, Dissolved	ug/L	500	476	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044155 2044156

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40206571006 Result	Spike Conc.	Spike Conc.	Result								
Arsenic, Dissolved	ug/L	4.5	500	500	512	517	102	102	75-125	1	20		
Iron, Dissolved	ug/L	86.4J	5000	5000	4750	4760	93	93	75-125	0	20		
Manganese, Dissolved	ug/L	44.8	500	500	524	523	96	96	75-125	0	20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

QC Batch: 353114	Analysis Method: EPA 8260
QC Batch Method: EPA 8260	Analysis Description: 8260 MSV UST-WATER
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206572001, 40206572002

METHOD BLANK: 2044195 Matrix: Water

Associated Lab Samples: 40206572001, 40206572002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.25	1.0	04/23/20 06:36	
Ethylbenzene	ug/L	<0.32	1.1	04/23/20 06:36	
m&p-Xylene	ug/L	<0.47	2.0	04/23/20 06:36	
Naphthalene	ug/L	<1.2	5.0	04/23/20 06:36	
o-Xylene	ug/L	<0.26	1.0	04/23/20 06:36	
Toluene	ug/L	<0.27	0.90	04/23/20 06:36	
4-Bromofluorobenzene (S)	%	82	70-130	04/23/20 06:36	
Dibromofluoromethane (S)	%	103	70-130	04/23/20 06:36	
Toluene-d8 (S)	%	104	70-130	04/23/20 06:36	

LABORATORY CONTROL SAMPLE: 2044196

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	57.9	116	70-130	
Ethylbenzene	ug/L	50	53.1	106	80-120	
m&p-Xylene	ug/L	100	105	105	70-130	
o-Xylene	ug/L	50	50.6	101	70-130	
Toluene	ug/L	50	53.7	107	80-120	
4-Bromofluorobenzene (S)	%			89	70-130	
Dibromofluoromethane (S)	%			102	70-130	
Toluene-d8 (S)	%			104	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206572

QC Batch: 353377 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40206572001, 40206572002

METHOD BLANK: 2045884 Matrix: Water
Associated Lab Samples: 40206572001, 40206572002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	04/28/20 11:47	

LABORATORY CONTROL SAMPLE: 2045885

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	21.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2045886 2045888

Parameter	Units	40206571002		2045888		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Sulfate	mg/L	69.0	100	100	179	157	110	88	90-110	13	15 M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2045889 2045890

Parameter	Units	40206571006		2045890		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Sulfate	mg/L	10.9	20	20	34.6	34.7	118	119	90-110	0	15 M0

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

QC Batch: 353228	Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2	Analysis Description: 310.2 Alkalinity
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206572001, 40206572002

METHOD BLANK: 2044718 Matrix: Water

Associated Lab Samples: 40206572001, 40206572002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	04/23/20 14:59	

LABORATORY CONTROL SAMPLE: 2044719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	102	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044720 2044721

Parameter	Units	2044720		2044721		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	389	200	581	579	96	95	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044722 2044723

Parameter	Units	2044722		2044723		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Result	MSD Result						
Alkalinity, Total as CaCO3	mg/L	413	500	923	927	102	103	90-110	0	20	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206572

QC Batch: 353540 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40206572001, 40206572002

METHOD BLANK: 2046643 Matrix: Water
Associated Lab Samples: 40206572001, 40206572002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	04/28/20 11:55	

LABORATORY CONTROL SAMPLE: 2046644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.6	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046645 2046646

Parameter	Units	2046645		2046646		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	102	103	90-110	0	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046647 2046648

Parameter	Units	2046647		2046648		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.5	2.5	102	102	90-110	0	20

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206572

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40206572001	MW-24	EPA 8015B Modified	353515		
40206572002	MW-19	EPA 8015B Modified	353515		
40206572001	MW-24	EPA 3010	353096	EPA 6020	353149
40206572002	MW-19	EPA 3010	353096	EPA 6020	353149
40206572001	MW-24	EPA 8260	353114		
40206572002	MW-19	EPA 8260	353114		
40206572001	MW-24	EPA 300.0	353377		
40206572002	MW-19	EPA 300.0	353377		
40206572001	MW-24	EPA 310.2	353228		
40206572002	MW-19	EPA 310.2	353228		
40206572001	MW-24	EPA 353.2	353540		
40206572002	MW-19	EPA 353.2	353540		

REPORT OF LABORATORY ANALYSIS

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 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: Wre Energies

WO# : 40206572



40206572

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

Tracking #: _____

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

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

Packing Material: Bubble Wrap Bubble Bags None Other

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

Cooler Temperature Uncorr: LOL / Corr: _____

Temp Blank Present: yes no Biological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:	
Date: <u>4/21/20</u>	Initials: <u>mg</u>
Labeled By Initials: <u>BIL</u>	

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

If checked, see attached form for additional comments

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

May 05, 2020

Frank Dombrowski
WE Energies
333 W. Everett St
Milwaukee, WI 53203

RE: Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

Dear Frank Dombrowski:

Enclosed are the analytical results for sample(s) received by the laboratory on April 21, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Alex Bartelme, Ramboll
NRT Data, OBG
Brian Hennings, Ramboll
WE Energies Lab Reports, WE Energies



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40206573001	MW-26	Water	04/20/20 11:37	04/21/20 14:30
40206573002	MW-28	Water	04/20/20 12:24	04/21/20 14:30
40206573003	PZ-27	Water	04/20/20 12:59	04/21/20 14:30
40206573004	MW-27	Water	04/20/20 13:36	04/21/20 14:30
40206573005	PZ-23	Water	04/20/20 14:17	04/21/20 14:30
40206573006	QA/QC1	Water	04/20/20 14:22	04/21/20 14:30

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40206573001	MW-26	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206573002	MW-28	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206573003	PZ-27	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206573004	MW-27	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206573005	PZ-23	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40206573006	QA/QC1	EPA 8015B Modified	ALD	1
		EPA 6020	DS1	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

Lab ID	Sample ID	Method	Analysts	Analytes Reported
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PASI-G = Pace Analytical Services - Green Bay

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

Sample: MW-26 **Lab ID: 40206573001** Collected: 04/20/20 11:37 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	4360	ug/L	56.0	13.3	20		04/28/20 13:34	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	105	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 17:26	7440-38-2	
Iron, Dissolved	1970	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 17:26	7439-89-6	
Manganese, Dissolved	300	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 17:26	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	6.8	ug/L	1.0	0.25	1		04/27/20 10:09	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/27/20 10:09	100-41-4	
Naphthalene	1.5J	ug/L	5.0	1.2	1		04/27/20 10:09	91-20-3	
Toluene	<0.27	ug/L	0.90	0.27	1		04/27/20 10:09	108-88-3	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/27/20 10:09	179601-23-1	
o-Xylene	0.37J	ug/L	1.0	0.26	1		04/27/20 10:09	95-47-6	
Surrogates									
Dibromofluoromethane (S)	108	%	70-130		1		04/27/20 10:09	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		04/27/20 10:09	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/27/20 10:09	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	30.8	mg/L	2.0	0.44	1		04/28/20 17:15	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	398	mg/L	24.8	7.4	1		05/04/20 14:43		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:13		

Sample: MW-28 **Lab ID: 40206573002** Collected: 04/20/20 12:24 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	3350	ug/L	70.0	16.6	25		04/28/20 15:24	74-82-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

Sample: MW-28 **Lab ID: 40206573002** Collected: 04/20/20 12:24 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	30.0	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 17:33	7440-38-2	
Iron, Dissolved	1270	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 17:33	7439-89-6	
Manganese, Dissolved	576	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 17:33	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.25	ug/L	1.0	0.25	1		04/24/20 15:18	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/24/20 15:18	100-41-4	
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/24/20 15:18	91-20-3	
Toluene	<0.27	ug/L	0.90	0.27	1		04/24/20 15:18	108-88-3	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/24/20 15:18	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		04/24/20 15:18	95-47-6	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		1		04/24/20 15:18	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		04/24/20 15:18	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130		1		04/24/20 15:18	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	48.1	mg/L	2.0	0.44	1		04/28/20 17:29	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	245	mg/L	24.8	7.4	1		05/04/20 14:44		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:14		

Sample: PZ-27 **Lab ID: 40206573003** Collected: 04/20/20 12:59 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	2530	ug/L	56.0	13.3	20		04/28/20 13:48	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	2.4	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 17:39	7440-38-2	
Iron, Dissolved	840	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 17:39	7439-89-6	
Manganese, Dissolved	95.3	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 17:39	7439-96-5	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

Sample: PZ-27 **Lab ID: 40206573003** Collected: 04/20/20 12:59 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	298	ug/L	5.0	1.2	5		04/24/20 13:48	71-43-2	
Ethylbenzene	30.3	ug/L	5.3	1.6	5		04/24/20 13:48	100-41-4	
Naphthalene	276	ug/L	25.0	5.9	5		04/24/20 13:48	91-20-3	
Toluene	2.0J	ug/L	4.5	1.3	5		04/24/20 13:48	108-88-3	
m&p-Xylene	5.1J	ug/L	10.0	2.3	5		04/24/20 13:48	179601-23-1	
o-Xylene	8.4	ug/L	5.0	1.3	5		04/24/20 13:48	95-47-6	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		5		04/24/20 13:48	1868-53-7	
Toluene-d8 (S)	101	%	70-130		5		04/24/20 13:48	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		5		04/24/20 13:48	460-00-4	

300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	1.2J	mg/L	2.0	0.44	1		04/28/20 17:44	14808-79-8	

310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	207	mg/L	24.8	7.4	1		05/04/20 14:45		

353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:14		

Sample: MW-27 **Lab ID: 40206573004** Collected: 04/20/20 13:36 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	977	ug/L	28.0	6.6	10		04/28/20 15:55	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	5.3	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 17:46	7440-38-2	
Iron, Dissolved	391	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 17:46	7439-89-6	
Manganese, Dissolved	91.1	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 17:46	7439-96-5	

8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	335	ug/L	5.0	1.2	5		04/24/20 14:10	71-43-2	
Ethylbenzene	67.2	ug/L	5.3	1.6	5		04/24/20 14:10	100-41-4	
Naphthalene	381	ug/L	25.0	5.9	5		04/24/20 14:10	91-20-3	
Toluene	1.8J	ug/L	4.5	1.3	5		04/24/20 14:10	108-88-3	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

Sample: MW-27 **Lab ID: 40206573004** Collected: 04/20/20 13:36 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
m&p-Xylene	5.0J	ug/L	10.0	2.3	5		04/24/20 14:10	179601-23-1	
o-Xylene	8.4	ug/L	5.0	1.3	5		04/24/20 14:10	95-47-6	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		5		04/24/20 14:10	1868-53-7	
Toluene-d8 (S)	102	%	70-130		5		04/24/20 14:10	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		5		04/24/20 14:10	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	6.2	mg/L	2.0	0.44	1		04/28/20 17:59	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	209	mg/L	24.8	7.4	1		05/04/20 14:46		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	0.068J	mg/L	0.25	0.059	1		04/28/20 12:20		

Sample: PZ-23 **Lab ID: 40206573005** Collected: 04/20/20 14:17 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	4320	ug/L	56.0	13.3	20		04/28/20 14:28	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	5.1	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 17:53	7440-38-2	
Iron, Dissolved	309	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 17:53	7439-89-6	
Manganese, Dissolved	55.7	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 17:53	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	461	ug/L	10.0	2.5	10		04/24/20 14:33	71-43-2	
Ethylbenzene	36.1	ug/L	10.6	3.2	10		04/24/20 14:33	100-41-4	
Naphthalene	254	ug/L	50.0	11.8	10		04/24/20 14:33	91-20-3	
Toluene	<2.7	ug/L	9.0	2.7	10		04/24/20 14:33	108-88-3	
m&p-Xylene	<4.7	ug/L	20.0	4.7	10		04/24/20 14:33	179601-23-1	
o-Xylene	7.3J	ug/L	10.0	2.6	10		04/24/20 14:33	95-47-6	
Surrogates									
Dibromofluoromethane (S)	107	%	70-130		10		04/24/20 14:33	1868-53-7	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

Sample: PZ-23 **Lab ID: 40206573005** Collected: 04/20/20 14:17 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Surrogates									
Toluene-d8 (S)	102	%	70-130		10		04/24/20 14:33	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		10		04/24/20 14:33	460-00-4	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	3.9	mg/L	2.0	0.44	1		04/28/20 18:14	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	215	mg/L	24.8	7.4	1		05/04/20 14:47		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/28/20 12:20		

Sample: QA/QC1 **Lab ID: 40206573006** Collected: 04/20/20 14:22 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	5520	ug/L	112	26.6	40		04/28/20 14:35	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	5.3	ug/L	1.0	0.28	1	04/21/20 22:52	04/30/20 18:00	7440-38-2	
Iron, Dissolved	247J	ug/L	250	58.0	1	04/21/20 22:52	04/30/20 18:00	7439-89-6	
Manganese, Dissolved	56.8	ug/L	4.0	1.2	1	04/21/20 22:52	04/30/20 18:00	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	563	ug/L	5.0	1.2	5		04/23/20 16:18	71-43-2	
Ethylbenzene	44.3	ug/L	5.3	1.6	5		04/23/20 16:18	100-41-4	
Naphthalene	363	ug/L	25.0	5.9	5		04/23/20 16:18	91-20-3	
Toluene	2.8J	ug/L	4.5	1.3	5		04/23/20 16:18	108-88-3	
m&p-Xylene	6.7J	ug/L	10.0	2.3	5		04/23/20 16:18	179601-23-1	
o-Xylene	7.9	ug/L	5.0	1.3	5		04/23/20 16:18	95-47-6	
Surrogates									
Dibromofluoromethane (S)	99	%	70-130		5		04/23/20 16:18	1868-53-7	
Toluene-d8 (S)	104	%	70-130		5		04/23/20 16:18	2037-26-5	
4-Bromofluorobenzene (S)	81	%	70-130		5		04/23/20 16:18	460-00-4	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

Sample: QA/QC1 **Lab ID: 40206573006** Collected: 04/20/20 14:22 Received: 04/21/20 14:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	4.0	mg/L	2.0	0.44	1		04/28/20 18:29	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO ₃	210	mg/L	24.8	7.4	1		05/04/20 14:52		
353.2 Nitrogen, NO₂/NO₃ pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO ₂ plus NO ₃	<0.059	mg/L	0.25	0.059	1		04/28/20 12:21		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

QC Batch:	353515	Analysis Method:	EPA 8015B Modified
QC Batch Method:	EPA 8015B Modified	Analysis Description:	Methane, Ethane, Ethene GCV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005, 40206573006

METHOD BLANK: 2046577 Matrix: Water
Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005, 40206573006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<0.66	2.8	04/28/20 08:53	

LABORATORY CONTROL SAMPLE & LCSD: 2046578 2046579

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	28.2	28.5	99	100	79-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046580 2046581

Parameter	Units	40206571006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	2140	286	286	2960	2840	286	243	10-200	4	20	E,M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

QC Batch:	353096	Analysis Method:	EPA 6020
QC Batch Method:	EPA 3010	Analysis Description:	6020 MET Dissolved
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005, 40206573006

METHOD BLANK: 2044153 Matrix: Water
Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005, 40206573006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<0.28	1.0	04/30/20 09:52	
Iron, Dissolved	ug/L	<58.0	250	04/30/20 09:52	
Manganese, Dissolved	ug/L	<1.2	4.0	04/30/20 09:52	

LABORATORY CONTROL SAMPLE: 2044154

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	500	497	99	80-120	
Iron, Dissolved	ug/L	5000	4710	94	80-120	
Manganese, Dissolved	ug/L	500	476	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044155 2044156

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40206571006 Result	Spike Conc.	Spike Conc.	Conc.								
Arsenic, Dissolved	ug/L	4.5	500	500	512	517	102	102	75-125	1	20		
Iron, Dissolved	ug/L	86.4J	5000	5000	4750	4760	93	93	75-125	0	20		
Manganese, Dissolved	ug/L	44.8	500	500	524	523	96	96	75-125	0	20		

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

QC Batch: 353111 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005

METHOD BLANK: 2044187 Matrix: Water
Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.25	1.0	04/24/20 06:40	
Ethylbenzene	ug/L	<0.32	1.1	04/24/20 06:40	
m&p-Xylene	ug/L	<0.47	2.0	04/24/20 06:40	
Naphthalene	ug/L	<1.2	5.0	04/24/20 06:40	
o-Xylene	ug/L	<0.26	1.0	04/24/20 06:40	
Toluene	ug/L	<0.27	0.90	04/24/20 06:40	
4-Bromofluorobenzene (S)	%	96	70-130	04/24/20 06:40	
Dibromofluoromethane (S)	%	107	70-130	04/24/20 06:40	
Toluene-d8 (S)	%	100	70-130	04/24/20 06:40	

LABORATORY CONTROL SAMPLE: 2044188

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	50.0	100	70-130	
Ethylbenzene	ug/L	50	48.4	97	80-120	
m&p-Xylene	ug/L	100	95.8	96	70-130	
o-Xylene	ug/L	50	46.7	93	70-130	
Toluene	ug/L	50	48.1	96	80-120	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			110	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2044189 2044190

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40206571006 Result	Spike Conc.	Spike Conc.	Result								
Benzene	ug/L	1280	1250	1250	2570	2470	103	95	70-136	4	20		
Ethylbenzene	ug/L	206	1250	1250	1480	1410	102	97	80-120	5	20		
m&p-Xylene	ug/L	14.2J	2500	2500	2490	2360	99	94	70-130	5	20		
o-Xylene	ug/L	16.5J	1250	1250	1220	1170	97	92	70-130	5	20		
Toluene	ug/L	<6.7	1250	1250	1240	1200	99	96	80-120	4	20		
4-Bromofluorobenzene (S)	%						99	99	70-130				
Dibromofluoromethane (S)	%						109	109	70-130				
Toluene-d8 (S)	%						99	99	70-130				

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

QC Batch: 353114

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206573006

METHOD BLANK: 2044195

Matrix: Water

Associated Lab Samples: 40206573006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.25	1.0	04/23/20 06:36	
Ethylbenzene	ug/L	<0.32	1.1	04/23/20 06:36	
m&p-Xylene	ug/L	<0.47	2.0	04/23/20 06:36	
Naphthalene	ug/L	<1.2	5.0	04/23/20 06:36	
o-Xylene	ug/L	<0.26	1.0	04/23/20 06:36	
Toluene	ug/L	<0.27	0.90	04/23/20 06:36	
4-Bromofluorobenzene (S)	%	82	70-130	04/23/20 06:36	
Dibromofluoromethane (S)	%	103	70-130	04/23/20 06:36	
Toluene-d8 (S)	%	104	70-130	04/23/20 06:36	

LABORATORY CONTROL SAMPLE: 2044196

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	57.9	116	70-130	
Ethylbenzene	ug/L	50	53.1	106	80-120	
m&p-Xylene	ug/L	100	105	105	70-130	
o-Xylene	ug/L	50	50.6	101	70-130	
Toluene	ug/L	50	53.7	107	80-120	
4-Bromofluorobenzene (S)	%			89	70-130	
Dibromofluoromethane (S)	%			102	70-130	
Toluene-d8 (S)	%			104	70-130	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

QC Batch: 353377 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005, 40206573006

METHOD BLANK: 2045884 Matrix: Water
Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005, 40206573006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	04/28/20 11:47	

LABORATORY CONTROL SAMPLE: 2045885

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	21.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2045886 2045888

Parameter	Units	40206571002		2045888		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Sulfate	mg/L	69.0	100	100	179	157	110	88	90-110	13	15 M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2045889 2045890

Parameter	Units	40206571006		2045890		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Sulfate	mg/L	10.9	20	20	34.6	34.7	118	119	90-110	0	15 M0

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

QC Batch: 353942 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005, 40206573006

METHOD BLANK: 2048676 Matrix: Water
Associated Lab Samples: 40206573001, 40206573002, 40206573003, 40206573004, 40206573005, 40206573006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	05/04/20 14:37	

LABORATORY CONTROL SAMPLE: 2048677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	99.5	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2048678 2048679

Parameter	Units	2048678		2048679		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Alkalinity, Total as CaCO3	mg/L	1120	2500	3470	2500	94	96	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2048680 2048681

Parameter	Units	2048680		2048681		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Alkalinity, Total as CaCO3	mg/L	235	100	280	100	45	42	90-110	1	20 M0	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

QC Batch: 353540 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40206573001, 40206573002, 40206573003

METHOD BLANK: 2046643 Matrix: Water
Associated Lab Samples: 40206573001, 40206573002, 40206573003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	04/28/20 11:55	

LABORATORY CONTROL SAMPLE: 2046644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.6	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046645 2046646

Parameter	Units	2046645		2046646		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	102	103	90-110	0	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046647 2046648

Parameter	Units	2046647		2046648		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.5	2.5	102	102	90-110	0	20

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

QC Batch: 353541 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206573004, 40206573005, 40206573006

METHOD BLANK: 2046649 Matrix: Water
Associated Lab Samples: 40206573004, 40206573005, 40206573006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	04/28/20 12:16	

LABORATORY CONTROL SAMPLE: 2046650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046651 2046652

Parameter	Units	2046651		2046652		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	6.1	2.5	2.5	8.8	8.7	106	102	90-110	1	20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2046653 2046654

Parameter	Units	2046653		2046654		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Result	MS Result	MSD Result						
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.3	2.4	93	94	90-110	1	20

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QUALIFIERS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40206573

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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

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

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40206573

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40206573001	MW-26	EPA 8015B Modified	353515		
40206573002	MW-28	EPA 8015B Modified	353515		
40206573003	PZ-27	EPA 8015B Modified	353515		
40206573004	MW-27	EPA 8015B Modified	353515		
40206573005	PZ-23	EPA 8015B Modified	353515		
40206573006	QA/QC1	EPA 8015B Modified	353515		
40206573001	MW-26	EPA 3010	353096	EPA 6020	353149
40206573002	MW-28	EPA 3010	353096	EPA 6020	353149
40206573003	PZ-27	EPA 3010	353096	EPA 6020	353149
40206573004	MW-27	EPA 3010	353096	EPA 6020	353149
40206573005	PZ-23	EPA 3010	353096	EPA 6020	353149
40206573006	QA/QC1	EPA 3010	353096	EPA 6020	353149
40206573001	MW-26	EPA 8260	353111		
40206573002	MW-28	EPA 8260	353111		
40206573003	PZ-27	EPA 8260	353111		
40206573004	MW-27	EPA 8260	353111		
40206573005	PZ-23	EPA 8260	353111		
40206573006	QA/QC1	EPA 8260	353114		
40206573001	MW-26	EPA 300.0	353377		
40206573002	MW-28	EPA 300.0	353377		
40206573003	PZ-27	EPA 300.0	353377		
40206573004	MW-27	EPA 300.0	353377		
40206573005	PZ-23	EPA 300.0	353377		
40206573006	QA/QC1	EPA 300.0	353377		
40206573001	MW-26	EPA 310.2	353942		
40206573002	MW-28	EPA 310.2	353942		
40206573003	PZ-27	EPA 310.2	353942		
40206573004	MW-27	EPA 310.2	353942		
40206573005	PZ-23	EPA 310.2	353942		
40206573006	QA/QC1	EPA 310.2	353942		
40206573001	MW-26	EPA 353.2	353540		
40206573002	MW-28	EPA 353.2	353540		
40206573003	PZ-27	EPA 353.2	353540		
40206573004	MW-27	EPA 353.2	353541		
40206573005	PZ-23	EPA 353.2	353541		
40206573006	QA/QC1	EPA 353.2	353541		

REPORT OF LABORATORY ANALYSIS

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Client Name: WE energies

Sample Preservation Receipt Form

Project # 10001573

All containers needing preservation have been checked and noted below. Yes No N/A

Lab Lot# of pH paper: 1003791

Lab Sid #ID of preservation (if pH adjusted):

Initial when completed:


Date/Time: MP

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 4
Green Bay, WI 54304
Page 2 of 5

Pace Lab #	Glass						Plastic				Vials				Jars			General			VOA Vials (>6mm) *			Volume (mL)											
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU		SP5T	ZPLC	GN	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted			
001																																			
002																																			
003																																			
004																																			
005																																			
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015																																			
016																																			
017																																			
018																																			
019																																			
020																																			

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

AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN
1 liter amber glass	1 liter clear glass	1 liter amber glass HCL	125 mL amber glass H2SO4	120 mL amber glass unpres	100 mL amber glass unpres	500 mL amber glass H2SO4	250 mL clear glass unpres	1 liter plastic unpres	250 mL plastic unpres	250 mL plastic NaOH	250 mL plastic HNO3	250 mL plastic H2SO4	40 mL clear ascorbic	40 mL clear Na Thio	40 mL clear vial unpres	40 mL clear vial HCL	40 mL clear vial MeOH	40 mL clear vial DI	4 oz amber jar unpres	9 oz amber jar unpres	4 oz clear jar unpres	4 oz plastic jar unpres	120 mL plastic Na Thiosulfate	ziploc bag	GN

 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

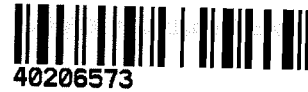
Sample Condition Upon Receipt Form (SCUR)

Client Name: WE Energies

Project #:

WO# : 40206573

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



Tracking #: _____

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

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

Packing Material: Bubble Wrap Bubble Bags None Other

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

Cooler Temperature Uncorr: 10.5 /Corr: _____

Temp Blank Present: yes no Biological Tissue is Frozen: yes no

Person examining contents: Date: <u>4/21/20</u> /Initials: <u>MP</u> Labeled By Initials: <u>BC</u>

Temp should be above freezing to 6°C.
 Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ If checked, see attached form for additional comments

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

APPENDIX C2
APRIL 2021 LABORATORY REPORT

May 10, 2021

Frank Dombrowski
WE Energies
333 W. Everett St
Milwaukee, WI 53203

RE: Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Dear Frank Dombrowski:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Alex Bartelme, Ramboll
NRT Data, Ramboll
Brian Hennings, Ramboll Americas
WE Energies Lab Reports, WE Energies



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

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SAMPLE SUMMARY

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40225831001	MW-25	Water	04/26/21 16:22	04/27/21 13:15
40225831002	MW-12R	Water	04/26/21 16:53	04/27/21 13:15
40225831003	PZ-12B	Water	04/26/21 17:24	04/27/21 13:15
40225831004	MW-13R	Water	04/26/21 17:47	04/27/21 13:15
40225831005	QA/QC2	Water	04/26/21 17:52	04/27/21 13:15
40225831006	EB-1	Water	04/26/21 18:00	04/27/21 13:15
40225831007	MW-22	Water	04/27/21 08:05	04/27/21 13:15
40225831008	PZ-22B	Water	04/27/21 08:47	04/27/21 13:15
40225831009	MW-21	Water	04/27/21 09:19	04/27/21 13:15
40225831010	PZ-21B	Water	04/27/21 09:52	04/27/21 13:15
40225831011	MW-20	Water	04/27/21 10:23	04/27/21 13:15
40225831012	PZ-20B	Water	04/27/21 10:59	04/27/21 13:15
40225831013	MW-02R	Water	04/27/21 11:29	04/27/21 13:15
40225831014	EB-2	Water	04/27/21 12:00	04/27/21 13:15
40225831015	TB-1	Water	04/27/21 00:00	04/27/21 13:15

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40225831001	MW-25	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225831002	MW-12R	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225831003	PZ-12B	EPA 8260	HNW	5
40225831004	MW-13R	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225831005	QA/QC2	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225831006	EB-1	EPA 8260	HNW	5
40225831007	MW-22	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225831008	PZ-22B	EPA 8260	HNW	5
40225831009	MW-21	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225831010	PZ-21B	EPA 8260	HNW	5
40225831011	MW-20	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225831012	PZ-20B	EPA 8260	HNW	5
40225831013	MW-02R	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225831014	EB-2	EPA 8260	HNW	5
40225831015	TB-1	EPA 8260	HNW	5

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Sample: MW-25 **Lab ID: 40225831001** Collected: 04/26/21 16:22 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	315	ug/L	5.6	1.3	2		04/28/21 16:44	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	3.4	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 07:09	7440-38-2	
Iron, Dissolved	117J	ug/L	500	116	2	04/28/21 06:07	05/04/21 07:09	7439-89-6	D3
Manganese, Dissolved	2.5J	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 07:09	7439-96-5	D3
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	0.74J	ug/L	1.0	0.30	1		04/28/21 12:51	71-43-2	
Ethylbenzene	1.1	ug/L	1.0	0.33	1		04/28/21 12:51	100-41-4	
Naphthalene	12.4	ug/L	5.0	1.1	1		04/28/21 12:51	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		04/28/21 12:51	108-88-3	
m&p-Xylene	0.90J	ug/L	2.0	0.70	1		04/28/21 12:51	179601-23-1	
o-Xylene	0.92J	ug/L	1.0	0.35	1		04/28/21 12:51	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		04/28/21 12:51	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130		1		04/28/21 12:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		04/28/21 12:51	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	99.0	mg/L	10.0	2.2	5		05/08/21 13:45	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	175	mg/L	24.8	7.4	1		04/30/21 12:30		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	2.5	mg/L	0.25	0.059	1		05/06/21 08:13		

Sample: MW-12R **Lab ID: 40225831002** Collected: 04/26/21 16:53 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	1950	ug/L	70.0	16.6	25		04/28/21 16:51	74-82-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Sample: MW-12R **Lab ID: 40225831002** Collected: 04/26/21 16:53 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	1.2J	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 07:22	7440-38-2	D3
Iron, Dissolved	197J	ug/L	500	116	2	04/28/21 06:07	05/04/21 07:22	7439-89-6	D3
Manganese, Dissolved	7.6J	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 07:22	7439-96-5	D3
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	30.1	ug/L	10.0	3.0	10		04/28/21 10:53	71-43-2	
Ethylbenzene	67.9	ug/L	10.0	3.3	10		04/28/21 10:53	100-41-4	
Naphthalene	950	ug/L	50.0	11.3	10		04/28/21 10:53	91-20-3	
Toluene	9.8J	ug/L	10.0	2.9	10		04/28/21 10:53	108-88-3	
m&p-Xylene	24.0	ug/L	20.0	7.0	10		04/28/21 10:53	179601-23-1	
o-Xylene	30.9	ug/L	10.0	3.5	10		04/28/21 10:53	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	70-130		10		04/28/21 10:53	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		10		04/28/21 10:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		10		04/28/21 10:53	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	125	mg/L	10.0	2.2	5		05/08/21 13:59	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	372	mg/L	24.8	7.4	1		04/30/21 12:34		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:14		

Sample: PZ-12B **Lab ID: 40225831003** Collected: 04/26/21 17:24 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/28/21 13:11	71-43-2	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/28/21 13:11	91-20-3	
Surrogates									
Toluene-d8 (S)	99	%	70-130		1		04/28/21 13:11	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		1		04/28/21 13:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		04/28/21 13:11	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

Sample: MW-13R **Lab ID: 40225831004** Collected: 04/26/21 17:47 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	566	ug/L	14.0	3.3	5		04/28/21 16:58	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	149	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 07:29	7440-38-2	
Iron, Dissolved	443J	ug/L	500	116	2	04/28/21 06:07	05/04/21 07:29	7439-89-6	D3
Manganese, Dissolved	41.1	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 07:29	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	6480	ug/L	50.0	14.8	50		04/28/21 11:13	71-43-2	
Ethylbenzene	1030	ug/L	50.0	16.3	50		04/28/21 11:13	100-41-4	
Naphthalene	8380	ug/L	250	56.5	50		04/28/21 11:13	91-20-3	
Toluene	1120	ug/L	50.0	14.4	50		04/28/21 11:13	108-88-3	
m&p-Xylene	1450	ug/L	100	35.0	50		04/28/21 11:13	179601-23-1	
o-Xylene	562	ug/L	50.0	17.4	50		04/28/21 11:13	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	70-130		50		04/28/21 11:13	2037-26-5	
4-Bromofluorobenzene (S)	100	%	70-130		50		04/28/21 11:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		50		04/28/21 11:13	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	1000	mg/L	200	44.4	100		05/08/21 14:57	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	249	mg/L	49.6	14.9	2		04/30/21 12:35		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:15		

Sample: QA/QC2 **Lab ID: 40225831005** Collected: 04/26/21 17:52 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	540	ug/L	14.0	3.3	5		04/28/21 17:05	74-82-8	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Sample: QA/QC2 Lab ID: 40225831005 Collected: 04/26/21 17:52 Received: 04/27/21 13:15 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	158	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 07:50	7440-38-2	
Iron, Dissolved	462J	ug/L	500	116	2	04/28/21 06:07	05/04/21 07:50	7439-89-6	D3
Manganese, Dissolved	41.3	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 07:50	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	6940	ug/L	50.0	14.8	50		04/28/21 11:33	71-43-2	
Ethylbenzene	1110	ug/L	50.0	16.3	50		04/28/21 11:33	100-41-4	
Naphthalene	8990	ug/L	250	56.5	50		04/28/21 11:33	91-20-3	
Toluene	1260	ug/L	50.0	14.4	50		04/28/21 11:33	108-88-3	
m&p-Xylene	1520	ug/L	100	35.0	50		04/28/21 11:33	179601-23-1	
o-Xylene	596	ug/L	50.0	17.4	50		04/28/21 11:33	95-47-6	
Surrogates									
Toluene-d8 (S)	98	%	70-130		50		04/28/21 11:33	2037-26-5	
4-Bromofluorobenzene (S)	98	%	70-130		50		04/28/21 11:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		50		04/28/21 11:33	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	964	mg/L	100	22.2	50		05/10/21 11:15	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	250	mg/L	49.6	14.9	2		04/30/21 12:36		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:15		

Sample: EB-1 Lab ID: 40225831006 Collected: 04/26/21 18:00 Received: 04/27/21 13:15 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/28/21 19:29	71-43-2	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/28/21 19:29	91-20-3	
Surrogates									
Toluene-d8 (S)	102	%	70-130		1		04/28/21 19:29	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130		1		04/28/21 19:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		04/28/21 19:29	2199-69-1	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Sample: MW-22 **Lab ID: 40225831007** Collected: 04/27/21 08:05 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	1800	ug/L	70.0	16.6	25		04/28/21 17:12	74-82-8	M1
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	6.0	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 06:42	7440-38-2	
Iron, Dissolved	152J	ug/L	500	116	2	04/28/21 06:07	05/04/21 06:42	7439-89-6	D3
Manganese, Dissolved	48.8	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 06:42	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	1120	ug/L	25.0	7.4	25		04/28/21 09:54	71-43-2	
Ethylbenzene	358	ug/L	25.0	8.1	25		04/28/21 09:54	100-41-4	
Naphthalene	2870	ug/L	125	28.2	25		04/28/21 09:54	91-20-3	
Toluene	<7.2	ug/L	25.0	7.2	25		04/28/21 09:54	108-88-3	
m&p-Xylene	28.9J	ug/L	50.0	17.5	25		04/28/21 09:54	179601-23-1	
o-Xylene	34.1	ug/L	25.0	8.7	25		04/28/21 09:54	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	70-130		25		04/28/21 09:54	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		25		04/28/21 09:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		25		04/28/21 09:54	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	9.7	mg/L	2.0	0.44	1		05/08/21 15:26	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	409	mg/L	49.6	14.9	2		04/30/21 12:37		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:16		

Sample: PZ-22B **Lab ID: 40225831008** Collected: 04/27/21 08:47 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	2.9J	ug/L	5.0	1.5	5		04/28/21 11:52	71-43-2	
Naphthalene	879	ug/L	25.0	5.6	5		04/28/21 11:52	91-20-3	
Surrogates									
Toluene-d8 (S)	99	%	70-130		5		04/28/21 11:52	2037-26-5	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

Sample: PZ-22B **Lab ID: 40225831008** Collected: 04/27/21 08:47 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		5		04/28/21 11:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		5		04/28/21 11:52	2199-69-1	

Sample: MW-21 **Lab ID: 40225831009** Collected: 04/27/21 09:19 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified									
Pace Analytical Services - Green Bay									
Methane	23.2	ug/L	2.8	0.66	1		04/30/21 07:55	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Arsenic, Dissolved	117	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 07:56	7440-38-2	
Iron, Dissolved	228J	ug/L	500	116	2	04/28/21 06:07	05/04/21 07:56	7439-89-6	D3
Manganese, Dissolved	<2.4	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 07:56	7439-96-5	D3

8260 MSV UST									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
Benzene	993	ug/L	100	29.5	100		04/28/21 12:12	71-43-2	
Ethylbenzene	209	ug/L	100	32.5	100		04/28/21 12:12	100-41-4	
Naphthalene	9700	ug/L	500	113	100		04/28/21 12:12	91-20-3	
Toluene	844	ug/L	100	28.8	100		04/28/21 12:12	108-88-3	
m&p-Xylene	490	ug/L	200	70.0	100		04/28/21 12:12	179601-23-1	
o-Xylene	253	ug/L	100	34.8	100		04/28/21 12:12	95-47-6	
Surrogates									
Toluene-d8 (S)	99	%	70-130		100		04/28/21 12:12	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130		100		04/28/21 12:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		100		04/28/21 12:12	2199-69-1	

300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Sulfate	397	mg/L	40.0	8.9	20		05/08/21 16:09	14808-79-8	

310.2 Alkalinity									
Analytical Method: EPA 310.2									
Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	137	mg/L	24.8	7.4	1		04/30/21 12:40		

353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2									
Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	1.6	mg/L	0.25	0.059	1		05/06/21 08:20		

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Sample: PZ-21B **Lab ID: 40225831010** Collected: 04/27/21 09:52 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	0.35J	ug/L	1.0	0.30	1		04/28/21 13:30	71-43-2	
Naphthalene	52.2	ug/L	5.0	1.1	1		04/28/21 13:30	91-20-3	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		04/28/21 13:30	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		1		04/28/21 13:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		04/28/21 13:30	2199-69-1	

Sample: MW-20 **Lab ID: 40225831011** Collected: 04/27/21 10:23 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	59.7	ug/L	2.8	0.66	1		04/30/21 08:02	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	95.7	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 08:03	7440-38-2	
Iron, Dissolved	131J	ug/L	500	116	2	04/28/21 06:07	05/04/21 08:03	7439-89-6	D3
Manganese, Dissolved	<2.4	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 08:03	7439-96-5	D3

8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	861	ug/L	25.0	7.4	25		04/28/21 16:33	71-43-2	
Ethylbenzene	350	ug/L	25.0	8.1	25		04/28/21 16:33	100-41-4	
Naphthalene	2110	ug/L	125	28.2	25		04/28/21 16:33	91-20-3	
Toluene	646	ug/L	25.0	7.2	25		04/28/21 16:33	108-88-3	
m&p-Xylene	367	ug/L	50.0	17.5	25		04/28/21 16:33	179601-23-1	
o-Xylene	283	ug/L	25.0	8.7	25		04/28/21 16:33	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	70-130		25		04/28/21 16:33	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130		25		04/28/21 16:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		25		04/28/21 16:33	2199-69-1	

300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	370	mg/L	40.0	8.9	20		05/08/21 16:23	14808-79-8	

310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	390	mg/L	124	37.2	5		04/30/21 12:41		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Sample: MW-20									
Lab ID: 40225831011 Collected: 04/27/21 10:23 Received: 04/27/21 13:15 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	0.12J	mg/L	0.25	0.059	1		05/06/21 08:21		

Sample: PZ-20B									
Lab ID: 40225831012 Collected: 04/27/21 10:59 Received: 04/27/21 13:15 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	0.70J	ug/L	1.0	0.30	1		04/28/21 16:52	71-43-2	
Naphthalene	9.4	ug/L	5.0	1.1	1		04/28/21 16:52	91-20-3	
Surrogates									
Toluene-d8 (S)	103	%	70-130		1		04/28/21 16:52	2037-26-5	
4-Bromofluorobenzene (S)	109	%	70-130		1		04/28/21 16:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		04/28/21 16:52	2199-69-1	

Sample: MW-02R									
Lab ID: 40225831013 Collected: 04/27/21 11:29 Received: 04/27/21 13:15 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	234	ug/L	2.8	0.66	1		04/30/21 08:09	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	1.1J	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 08:10	7440-38-2	D3
Iron, Dissolved	479J	ug/L	500	116	2	04/28/21 06:07	05/04/21 08:10	7439-89-6	D3
Manganese, Dissolved	6.1J	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 08:10	7439-96-5	D3

Sample: MW-02R									
Lab ID: 40225831013 Collected: 04/27/21 11:29 Received: 04/27/21 13:15 Matrix: Water									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	290	ug/L	5.0	1.5	5		04/29/21 08:32	71-43-2	
Ethylbenzene	122	ug/L	1.0	0.33	1		04/28/21 17:12	100-41-4	
Naphthalene	47.1	ug/L	5.0	1.1	1		04/28/21 17:12	91-20-3	
Toluene	7.1	ug/L	1.0	0.29	1		04/28/21 17:12	108-88-3	
m&p-Xylene	22.8	ug/L	2.0	0.70	1		04/28/21 17:12	179601-23-1	
o-Xylene	45.8	ug/L	1.0	0.35	1		04/28/21 17:12	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		1		04/28/21 17:12	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130		1		04/28/21 17:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	70-130		1		04/28/21 17:12	2199-69-1	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Sample: MW-02R **Lab ID: 40225831013** Collected: 04/27/21 11:29 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	372	mg/L	40.0	8.9	20		05/08/21 16:37	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	447	mg/L	49.6	14.9	2		04/30/21 12:42		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:21		

Sample: EB-2 **Lab ID: 40225831014** Collected: 04/27/21 12:00 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/28/21 19:49	71-43-2	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/28/21 19:49	91-20-3	
Surrogates									
Toluene-d8 (S)	101	%	70-130		1		04/28/21 19:49	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130		1		04/28/21 19:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		04/28/21 19:49	2199-69-1	

Sample: TB-1 **Lab ID: 40225831015** Collected: 04/27/21 00:00 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/28/21 20:09	71-43-2	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/28/21 20:09	91-20-3	
Surrogates									
Toluene-d8 (S)	104	%	70-130		1		04/28/21 20:09	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130		1		04/28/21 20:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		1		04/28/21 20:09	2199-69-1	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

QC Batch: 383668 Analysis Method: EPA 8015B Modified
 QC Batch Method: EPA 8015B Modified Analysis Description: Methane, Ethane, Ethene GCV
 Laboratory: Pace Analytical Services - Green Bay
 Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007

METHOD BLANK: 2213134 Matrix: Water
 Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<0.66	2.8	04/28/21 10:01	

LABORATORY CONTROL SAMPLE & LCSD: 2213135 2213136

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	26.6	26.6	93	93	80-121	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2213137 2213138

Parameter	Units	40225831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	1800	714	714	3020	3270	170	205	10-200	8	20	M1

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

QC Batch: 383913	Analysis Method: EPA 8015B Modified
QC Batch Method: EPA 8015B Modified	Analysis Description: Methane, Ethane, Ethene GCV
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225831009, 40225831011, 40225831013

METHOD BLANK: 2214605 Matrix: Water

Associated Lab Samples: 40225831009, 40225831011, 40225831013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<0.66	2.8	04/30/21 07:25	

LABORATORY CONTROL SAMPLE & LCSD: 2214606 2214607

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	27.9	27.9	98	98	80-121	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214962 2214963

Parameter	Units	40225931008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	<0.66	28.6	28.6	95.5	103	334	359	10-200	7	20	M1

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

QC Batch:	383646	Analysis Method:	EPA 6020
QC Batch Method:	EPA 3010	Analysis Description:	6020 MET Dissolved
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007, 40225831009, 40225831011, 40225831013

METHOD BLANK: 2213052 Matrix: Water

Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007, 40225831009, 40225831011, 40225831013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<0.28	1.0	05/04/21 06:28	
Iron, Dissolved	ug/L	<58.0	250	05/04/21 06:28	
Manganese, Dissolved	ug/L	<1.2	4.0	05/04/21 06:28	

LABORATORY CONTROL SAMPLE: 2213053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	500	486	97	80-120	
Iron, Dissolved	ug/L	5000	4460	89	80-120	
Manganese, Dissolved	ug/L	500	441	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2213054 2213055

Parameter	Units	2213054		2213055		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40225831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Arsenic, Dissolved	ug/L	6.0	500	500	501	500	99	99	75-125	0	20
Iron, Dissolved	ug/L	152J	5000	5000	4680	4810	91	93	75-125	3	20
Manganese, Dissolved	ug/L	48.8	500	500	502	507	91	92	75-125	1	20

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

QC Batch: 383620 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225831001, 40225831002, 40225831003, 40225831004, 40225831005, 40225831006, 40225831007, 40225831008, 40225831009, 40225831010, 40225831011, 40225831012, 40225831013, 40225831014, 40225831015

METHOD BLANK: 2212973 Matrix: Water
Associated Lab Samples: 40225831001, 40225831002, 40225831003, 40225831004, 40225831005, 40225831006, 40225831007, 40225831008, 40225831009, 40225831010, 40225831011, 40225831012, 40225831013, 40225831014, 40225831015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.30	1.0	04/28/21 07:16	
Ethylbenzene	ug/L	<0.33	1.0	04/28/21 07:16	
m&p-Xylene	ug/L	<0.70	2.0	04/28/21 07:16	
Naphthalene	ug/L	<1.1	5.0	04/28/21 07:16	
o-Xylene	ug/L	<0.35	1.0	04/28/21 07:16	
Toluene	ug/L	<0.29	1.0	04/28/21 07:16	
1,2-Dichlorobenzene-d4 (S)	%	106	70-130	04/28/21 07:16	
4-Bromofluorobenzene (S)	%	100	70-130	04/28/21 07:16	
Toluene-d8 (S)	%	101	70-130	04/28/21 07:16	

LABORATORY CONTROL SAMPLE: 2212974

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	49.8	100	70-132	
Ethylbenzene	ug/L	50	48.8	98	80-123	
m&p-Xylene	ug/L	100	98.1	98	70-130	
o-Xylene	ug/L	50	47.8	96	70-130	
Toluene	ug/L	50	46.3	93	80-121	
1,2-Dichlorobenzene-d4 (S)	%			109	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2212975 2212976

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40225831007 Result	MS Spike Conc.	MSD Spike Conc.	MSD Result							
Benzene	ug/L	1120	1250	1250	2330	2280	96	93	70-132	2	20	
Ethylbenzene	ug/L	358	1250	1250	1600	1610	99	100	80-123	1	20	
m&p-Xylene	ug/L	28.9J	2500	2500	2510	2520	99	100	70-130	1	20	
o-Xylene	ug/L	34.1	1250	1250	1240	1260	97	98	70-130	1	20	
Toluene	ug/L	<7.2	1250	1250	1190	1200	95	95	80-121	1	20	
1,2-Dichlorobenzene-d4 (S)	%						110	107	70-130			
4-Bromofluorobenzene (S)	%						107	100	70-130			
Toluene-d8 (S)	%						98	99	70-130			

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

QC Batch:	384629	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007, 40225831009, 40225831011, 40225831013

METHOD BLANK: 2218870 Matrix: Water

Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007, 40225831009, 40225831011, 40225831013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	05/08/21 08:43	

LABORATORY CONTROL SAMPLE: 2218871

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2218872 2218873

Parameter	Units	40225952001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	89.9	100	100	191	189	101	99	90-110	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2218874 2218875

Parameter	Units	40225831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	9.7	20	20	31.7	31.7	110	110	90-110	0	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

QC Batch:	383846	Analysis Method:	EPA 310.2
QC Batch Method:	EPA 310.2	Analysis Description:	310.2 Alkalinity
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007, 40225831009, 40225831011, 40225831013

METHOD BLANK: 2214081 Matrix: Water
Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007, 40225831009, 40225831011, 40225831013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	04/30/21 12:24	

LABORATORY CONTROL SAMPLE: 2214082

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	103	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214083 2214084

Parameter	Units	40225831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	409	200	200	608	610	99	100	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214085 2214086

Parameter	Units	40225837006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	228	100	100	327	328	99	100	90-110	0	20	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

QC Batch:	384414	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40225831001, 40225831002, 40225831004, 40225831005, 40225831007, 40225831009, 40225831011, 40225831013

METHOD BLANK:	2217519	Matrix:	Water
Associated Lab Samples:	40225831001, 40225831002, 40225831004, 40225831005, 40225831007, 40225831009, 40225831011, 40225831013		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	05/06/21 08:07	

LABORATORY CONTROL SAMPLE: 2217520						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217521												2217522	
Parameter	Units	40225831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	104	103	90-110	1	20		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217523												2217524	
Parameter	Units	40225837005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	102	103	90-110	1	20		

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QUALIFIERS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225831

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40225831001	MW-25	EPA 8015B Modified	383668		
40225831002	MW-12R	EPA 8015B Modified	383668		
40225831004	MW-13R	EPA 8015B Modified	383668		
40225831005	QA/QC2	EPA 8015B Modified	383668		
40225831007	MW-22	EPA 8015B Modified	383668		
40225831009	MW-21	EPA 8015B Modified	383913		
40225831011	MW-20	EPA 8015B Modified	383913		
40225831013	MW-02R	EPA 8015B Modified	383913		
40225831001	MW-25	EPA 3010	383646	EPA 6020	383725
40225831002	MW-12R	EPA 3010	383646	EPA 6020	383725
40225831004	MW-13R	EPA 3010	383646	EPA 6020	383725
40225831005	QA/QC2	EPA 3010	383646	EPA 6020	383725
40225831007	MW-22	EPA 3010	383646	EPA 6020	383725
40225831009	MW-21	EPA 3010	383646	EPA 6020	383725
40225831011	MW-20	EPA 3010	383646	EPA 6020	383725
40225831013	MW-02R	EPA 3010	383646	EPA 6020	383725
40225831001	MW-25	EPA 8260	383620		
40225831002	MW-12R	EPA 8260	383620		
40225831003	PZ-12B	EPA 8260	383620		
40225831004	MW-13R	EPA 8260	383620		
40225831005	QA/QC2	EPA 8260	383620		
40225831006	EB-1	EPA 8260	383620		
40225831007	MW-22	EPA 8260	383620		
40225831008	PZ-22B	EPA 8260	383620		
40225831009	MW-21	EPA 8260	383620		
40225831010	PZ-21B	EPA 8260	383620		
40225831011	MW-20	EPA 8260	383620		
40225831012	PZ-20B	EPA 8260	383620		
40225831013	MW-02R	EPA 8260	383620		
40225831014	EB-2	EPA 8260	383620		
40225831015	TB-1	EPA 8260	383620		
40225831001	MW-25	EPA 300.0	384629		
40225831002	MW-12R	EPA 300.0	384629		
40225831004	MW-13R	EPA 300.0	384629		
40225831005	QA/QC2	EPA 300.0	384629		
40225831007	MW-22	EPA 300.0	384629		
40225831009	MW-21	EPA 300.0	384629		
40225831011	MW-20	EPA 300.0	384629		
40225831013	MW-02R	EPA 300.0	384629		
40225831001	MW-25	EPA 310.2	383846		
40225831002	MW-12R	EPA 310.2	383846		
40225831004	MW-13R	EPA 310.2	383846		
40225831005	QA/QC2	EPA 310.2	383846		
40225831007	MW-22	EPA 310.2	383846		
40225831009	MW-21	EPA 310.2	383846		
40225831011	MW-20	EPA 310.2	383846		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225831

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40225831013	MW-02R	EPA 310.2	383846		
40225831001	MW-25	EPA 353.2	384414		
40225831002	MW-12R	EPA 353.2	384414		
40225831004	MW-13R	EPA 353.2	384414		
40225831005	QA/QC2	EPA 353.2	384414		
40225831007	MW-22	EPA 353.2	384414		
40225831009	MW-21	EPA 353.2	384414		
40225831011	MW-20	EPA 353.2	384414		
40225831013	MW-02R	EPA 353.2	384414		

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

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

67973.6426.001

60225831

Section A

Required Client Information:

Company: Ramboll
Address: 234 W. Florida St, 5th Floor
Milwaukee, WI 53204
Email: Nathan.duda@ramboll.com
Phone: 262-719-4512
Requested Due Date:

Section B

Required Project Information:

Report To: Duda, Nathan - David Kolla-Kouby
Copy To: Brian Hennings
Purchase Order #:
Project Name: Appleton MGP
Project #: 67973

Section C

Invoice Information:

Attention: Accounts Payable
Company Name: WE Energies
Address: 333 W. Everett St. Milwaukee, WI
Pace Quote:
Pace Project Manager: brian.basten@pacelabs.com
Pace Profile #: 829

Page: 1 Of 2

Main data table with columns: ITEM #, MATRIX CODE, COLLECTED (START/END), PRESERVATIVES, ANALYSES TEST, Residual Chlorine (Y/N). Rows 1-12 with handwritten sample IDs like MW-26, PE-27, etc.

Table with columns: ADDITIONAL COMMENTS, RELINQUISHED BY / AFFILIATION, DATE, TIME, ACCEPTED BY / AFFILIATION, DATE, TIME, SAMPLE CONDITIONS. Row 1 contains handwritten signature and date 4-27-21.

SAMPLER NAME AND SIGNATURE section with fields for PRINT Name of SAMPLER (Nathan Duda/Ramboll), SIGNATURE of SAMPLER, and DATE Signed (4-27-21).

Sample Preservation Receipt Form

Client Name: Rambold/WE energies Project # 4022583

All containers needing preservation have been checked and noted below: Yes No N/A

Lab Lot# of pH paper: 10D3601


Lab Std #ID of preservation (if pH adjusted): MULY-27-21

Initial when completed: RS Date/Time:

Pace Lab #	Glass							Plastic					Vials				Jars				General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)					
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU								SP5T	ZPLC	GN		
001									1		1	1				6														X			X		2.5 / 5 / 10
002									1		1	1				6														X			X		2.5 / 5 / 10
003																3																			2.5 / 5 / 10
004									1		1	1				6														X			X		2.5 / 5 / 10
005									1		1	1				6														X			X		2.5 / 5 / 10
006																3																			2.5 / 5 / 10
007									3		3	3				18														X			X		2.5 / 5 / 10
008																3																			2.5 / 5 / 10
009									1		1	1				6														X			X		2.5 / 5 / 10
010																3																			2.5 / 5 / 10
011									1		1	1				6														X			X		2.5 / 5 / 10
012																3																			2.5 / 5 / 10
013									1		1	1				6														X			X		2.5 / 5 / 10
014																3																			2.5 / 5 / 10
015																2																			2.5 / 5 / 10
016																																			2.5 / 5 / 10
017																																			2.5 / 5 / 10
018																																			2.5 / 5 / 10
019																																			2.5 / 5 / 10
020																																			2.5 / 5 / 10

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

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						

 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: MU4-27-21 Ramboll We energies
Courier: CS Logistics Fed Ex Speedee UPS Waltco
 Client Pace Other: _____

Project #: _____

WO#: 40225831



40225831

Tracking #: _____
Custody Seal on Cooler/Box Present: yes no **Seals intact:** yes no
Custody Seal on Samples Present: yes no **Seals intact:** yes no
Packing Material: Bubble Wrap Bubble Bags None Other
Thermometer Used SR - 10399 **Type of Ice:** Wet Blue Dry None Samples on ice, cooling process has begun
Cooler Temperature Uncorr: 3.35 Corr: 3.5
Temp Blank Present: yes no MU4-27-21 **Biological Tissue is Frozen:** yes no
 Temp should be above freezing to 6°C.
 Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:
Date: 4/27/21 **Initials:** KS
Labeled By Initials: MUR

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	8.	
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
- Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
- Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests <u>4/27/21</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: <u>MU4-27-21</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>005803N missing date</u> <u>MUR</u> <u>4-27-21</u>
- Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>4163</u>		

Client Notification/ Resolution: _____ If checked, see attached form for additional comments
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

May 11, 2021

Frank Dombrowski
WE Energies
333 W. Everett St
Milwaukee, WI 53203

RE: Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225835

Dear Frank Dombrowski:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Alex Bartelme, Ramboll
NRT Data, Ramboll
Brian Hennings, Ramboll Americas
WE Energies Lab Reports, WE Energies



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225835

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225835

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40225835001	MW-24	Water	04/26/21 14:48	04/27/21 13:15
40225835002	MW-19	Water	04/26/21 15:37	04/27/21 13:15

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225835

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40225835001	MW-24	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225835002	MW-19	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	HNW	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225835

Sample: MW-24 **Lab ID: 40225835001** Collected: 04/26/21 14:48 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	2.3J	ug/L	2.8	0.66	1		04/30/21 08:16	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	<0.56	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 08:17	7440-38-2	D3
Iron, Dissolved	354J	ug/L	500	116	2	04/28/21 06:07	05/04/21 08:17	7439-89-6	D3
Manganese, Dissolved	64.7	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 08:17	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/28/21 17:32	71-43-2	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		04/28/21 17:32	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/28/21 17:32	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		04/28/21 17:32	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		04/28/21 17:32	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		04/28/21 17:32	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		04/28/21 17:32	2037-26-5	
4-Bromofluorobenzene (S)	105	%	70-130		1		04/28/21 17:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		1		04/28/21 17:32	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	123	mg/L	10.0	2.2	5		05/08/21 16:52	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	471	mg/L	49.6	14.9	2		04/30/21 12:43		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:22		

Sample: MW-19 **Lab ID: 40225835002** Collected: 04/26/21 15:37 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	200	ug/L	5.6	1.3	2		04/30/21 11:40	74-82-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225835

Sample: MW-19 **Lab ID: 40225835002** Collected: 04/26/21 15:37 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	0.80J	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 08:24	7440-38-2	D3
Iron, Dissolved	651	ug/L	500	116	2	04/28/21 06:07	05/04/21 08:24	7439-89-6	
Manganese, Dissolved	18.0	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 08:24	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	120	ug/L	1.0	0.30	1		04/28/21 15:53	71-43-2	
Ethylbenzene	6.3	ug/L	1.0	0.33	1		04/28/21 15:53	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/28/21 15:53	91-20-3	
Toluene	0.48J	ug/L	1.0	0.29	1		04/28/21 15:53	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		04/28/21 15:53	179601-23-1	
o-Xylene	2.2	ug/L	1.0	0.35	1		04/28/21 15:53	95-47-6	
Surrogates									
Toluene-d8 (S)	101	%	70-130		1		04/28/21 15:53	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130		1		04/28/21 15:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		04/28/21 15:53	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	249	mg/L	40.0	8.9	20		05/10/21 15:05	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	447	mg/L	49.6	14.9	2		04/30/21 12:47		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:23		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225835

QC Batch: 383913 Analysis Method: EPA 8015B Modified
QC Batch Method: EPA 8015B Modified Analysis Description: Methane, Ethane, Ethene GCV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225835001, 40225835002

METHOD BLANK: 2214605 Matrix: Water
Associated Lab Samples: 40225835001, 40225835002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<0.66	2.8	04/30/21 07:25	

LABORATORY CONTROL SAMPLE & LCSD: 2214606 2214607

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	27.9	27.9	98	98	80-121	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214962 2214963

Parameter	Units	40225931008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	<0.66	28.6	28.6	95.5	103	334	359	10-200	7	20	M1

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225835

QC Batch: 383646

Analysis Method: EPA 6020

QC Batch Method: EPA 3010

Analysis Description: 6020 MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225835001, 40225835002

METHOD BLANK: 2213052

Matrix: Water

Associated Lab Samples: 40225835001, 40225835002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<0.28	1.0	05/04/21 06:28	
Iron, Dissolved	ug/L	<58.0	250	05/04/21 06:28	
Manganese, Dissolved	ug/L	<1.2	4.0	05/04/21 06:28	

LABORATORY CONTROL SAMPLE: 2213053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	500	486	97	80-120	
Iron, Dissolved	ug/L	5000	4460	89	80-120	
Manganese, Dissolved	ug/L	500	441	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2213054 2213055

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40225831007 Result	Spike Conc.	Spike Conc.	Result								
Arsenic, Dissolved	ug/L	6.0	500	500	501	500	99	99	75-125	0	20		
Iron, Dissolved	ug/L	152J	5000	5000	4680	4810	91	93	75-125	3	20		
Manganese, Dissolved	ug/L	48.8	500	500	502	507	91	92	75-125	1	20		

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225835

QC Batch: 383620 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225835001, 40225835002

METHOD BLANK: 2212973 Matrix: Water

Associated Lab Samples: 40225835001, 40225835002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.30	1.0	04/28/21 07:16	
Ethylbenzene	ug/L	<0.33	1.0	04/28/21 07:16	
m&p-Xylene	ug/L	<0.70	2.0	04/28/21 07:16	
Naphthalene	ug/L	<1.1	5.0	04/28/21 07:16	
o-Xylene	ug/L	<0.35	1.0	04/28/21 07:16	
Toluene	ug/L	<0.29	1.0	04/28/21 07:16	
1,2-Dichlorobenzene-d4 (S)	%	106	70-130	04/28/21 07:16	
4-Bromofluorobenzene (S)	%	100	70-130	04/28/21 07:16	
Toluene-d8 (S)	%	101	70-130	04/28/21 07:16	

LABORATORY CONTROL SAMPLE: 2212974

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	49.8	100	70-132	
Ethylbenzene	ug/L	50	48.8	98	80-123	
m&p-Xylene	ug/L	100	98.1	98	70-130	
o-Xylene	ug/L	50	47.8	96	70-130	
Toluene	ug/L	50	46.3	93	80-121	
1,2-Dichlorobenzene-d4 (S)	%			109	70-130	
4-Bromofluorobenzene (S)	%			104	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2212975 2212976

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40225831007 Result	Spike Conc.	Spike Conc.	MS Conc.								
Benzene	ug/L	1120	1250	1250	2330	2280	96	93	70-132	2	20		
Ethylbenzene	ug/L	358	1250	1250	1600	1610	99	100	80-123	1	20		
m&p-Xylene	ug/L	28.9J	2500	2500	2510	2520	99	100	70-130	1	20		
o-Xylene	ug/L	34.1	1250	1250	1240	1260	97	98	70-130	1	20		
Toluene	ug/L	<7.2	1250	1250	1190	1200	95	95	80-121	1	20		
1,2-Dichlorobenzene-d4 (S)	%						110	107	70-130				
4-Bromofluorobenzene (S)	%						107	100	70-130				
Toluene-d8 (S)	%						98	99	70-130				

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225835

QC Batch: 384629

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225835001

METHOD BLANK: 2218870

Matrix: Water

Associated Lab Samples: 40225835001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	05/08/21 08:43	

LABORATORY CONTROL SAMPLE: 2218871

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2218872 2218873

Parameter	Units	40225952001		2218872		2218873		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS % Rec	MSD % Rec				
Sulfate	mg/L	89.9	100	191	100	189	101	90-110	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2218874 2218875

Parameter	Units	40225831007		2218874		2218875		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS % Rec	MSD % Rec				
Sulfate	mg/L	9.7	20	31.7	20	31.7	110	90-110	0	15	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225835

QC Batch: 384631

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225835002

METHOD BLANK: 2218891

Matrix: Water

Associated Lab Samples: 40225835002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	05/10/21 10:32	

LABORATORY CONTROL SAMPLE: 2218892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	20.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2218893 2218894

Parameter	Units	2218893		2218894		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40225835002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Sulfate	mg/L	249	400	400	665	674	104	106	90-110	1	15

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225835

QC Batch: 383846	Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2	Analysis Description: 310.2 Alkalinity
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225835001, 40225835002

METHOD BLANK: 2214081 Matrix: Water

Associated Lab Samples: 40225835001, 40225835002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	04/30/21 12:24	

LABORATORY CONTROL SAMPLE: 2214082

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	103	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214083 2214084

Parameter	Units	2214083		2214084		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40225831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Alkalinity, Total as CaCO3	mg/L	409	200	200	608	610	99	100	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214085 2214086

Parameter	Units	2214085		2214086		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40225837006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result							MSD Result
Alkalinity, Total as CaCO3	mg/L	228	100	100	327	328	99	100	90-110	0	20	

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225835

QC Batch: 384414	Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2	Analysis Description: 353.2 Nitrate + Nitrite, preserved
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225835001, 40225835002

METHOD BLANK: 2217519 Matrix: Water
Associated Lab Samples: 40225835001, 40225835002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	05/06/21 08:07	

LABORATORY CONTROL SAMPLE: 2217520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217521 2217522

Parameter	Units	40225831007		2217521		2217522		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	104	103	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217523 2217524

Parameter	Units	40225837005		2217523		2217524		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	102	103	90-110	1	20	

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QUALIFIERS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225835

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225835

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40225835001	MW-24	EPA 8015B Modified	383913		
40225835002	MW-19	EPA 8015B Modified	383913		
40225835001	MW-24	EPA 3010	383646	EPA 6020	383725
40225835002	MW-19	EPA 3010	383646	EPA 6020	383725
40225835001	MW-24	EPA 8260	383620		
40225835002	MW-19	EPA 8260	383620		
40225835001	MW-24	EPA 300.0	384629		
40225835002	MW-19	EPA 300.0	384631		
40225835001	MW-24	EPA 310.2	383846		
40225835002	MW-19	EPA 310.2	383846		
40225835001	MW-24	EPA 353.2	384414		
40225835002	MW-19	EPA 353.2	384414		

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 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: _____

Client Name: Ramboll

WO# : 40225835

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



Tracking #: _____

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

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

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR - 103 Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3 ICorr: 3.5

Person examining contents:	
Date: <u>4/27/21</u>	Initials: <u>KG</u>
Labeled By Initials: _____	

Temp Blank Present: yes no Biological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.
 Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

May 11, 2021

Frank Dombrowski
WE Energies
333 W. Everett St
Milwaukee, WI 53203

RE: Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

Dear Frank Dombrowski:

Enclosed are the analytical results for sample(s) received by the laboratory on April 27, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Alex Bartelme, Ramboll
NRT Data, Ramboll
Brian Hennings, Ramboll Americas
WE Energies Lab Reports, WE Energies



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

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SAMPLE SUMMARY

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40225837001	MW-26	Water	04/26/21 11:13	04/27/21 13:15
40225837002	MW-28	Water	04/26/21 11:50	04/27/21 13:15
40225837003	PZ-27	Water	04/26/21 12:45	04/27/21 13:15
40225837004	MW-27	Water	04/26/21 13:16	04/27/21 13:15
40225837005	PZ-23	Water	04/26/21 13:51	04/27/21 13:15
40225837006	QA/QC1	Water	04/26/21 13:56	04/27/21 13:15

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40225837001	MW-26	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225837002	MW-28	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225837003	PZ-27	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225837004	MW-27	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225837005	PZ-23	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40225837006	QA/QC1	EPA 8015B Modified	ALD	1
		EPA 6020	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1

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SAMPLE ANALYTE COUNT

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

Lab ID	Sample ID	Method	Analysts	Analytes Reported
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PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

Sample: MW-26 **Lab ID: 40225837001** Collected: 04/26/21 11:13 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	1390	ug/L	56.0	13.3	20		04/30/21 11:46	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	56.2	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 08:30	7440-38-2	
Iron, Dissolved	2270	ug/L	500	116	2	04/28/21 06:07	05/04/21 08:30	7439-89-6	
Manganese, Dissolved	370	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 08:30	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	3.3	ug/L	1.0	0.30	1		04/29/21 08:40	71-43-2	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		04/29/21 08:40	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/29/21 08:40	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		04/29/21 08:40	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		04/29/21 08:40	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		04/29/21 08:40	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		04/29/21 08:40	2037-26-5	
4-Bromofluorobenzene (S)	109	%	70-130		1		04/29/21 08:40	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		04/29/21 08:40	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	26.3	mg/L	2.0	0.44	1		05/10/21 15:48	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	554	mg/L	124	37.2	5		04/30/21 13:59		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:23		

Sample: MW-28 **Lab ID: 40225837002** Collected: 04/26/21 11:50 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	1600	ug/L	70.0	16.6	25		04/30/21 11:53	74-82-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

Sample: MW-28 **Lab ID: 40225837002** Collected: 04/26/21 11:50 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Arsenic, Dissolved	25.3	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 08:37	7440-38-2	
Iron, Dissolved	1520	ug/L	500	116	2	04/28/21 06:07	05/04/21 08:37	7439-89-6	
Manganese, Dissolved	580	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 08:37	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/29/21 08:59	71-43-2	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		04/29/21 08:59	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/29/21 08:59	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		04/29/21 08:59	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		04/29/21 08:59	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		04/29/21 08:59	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		1		04/29/21 08:59	2037-26-5	
4-Bromofluorobenzene (S)	109	%	70-130		1		04/29/21 08:59	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		04/29/21 08:59	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0									
Pace Analytical Services - Green Bay									
Sulfate	63.9	mg/L	10.0	2.2	5		05/11/21 10:05	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2									
Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	252	mg/L	24.8	7.4	1		04/30/21 12:49		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2									
Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:24		

Sample: PZ-27 **Lab ID: 40225837003** Collected: 04/26/21 12:45 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified									
Pace Analytical Services - Green Bay									
Methane	1450	ug/L	70.0	16.6	25		04/30/21 12:00	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010									
Pace Analytical Services - Green Bay									
Arsenic, Dissolved	1.8J	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 08:44	7440-38-2	D3
Iron, Dissolved	1330	ug/L	500	116	2	04/28/21 06:07	05/04/21 08:44	7439-89-6	
Manganese, Dissolved	113	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 08:44	7439-96-5	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

Sample: PZ-27 **Lab ID: 40225837003** Collected: 04/26/21 12:45 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	154	ug/L	5.0	1.5	5		04/29/21 00:13	71-43-2	
Ethylbenzene	19.5	ug/L	5.0	1.6	5		04/29/21 00:13	100-41-4	
Naphthalene	233	ug/L	25.0	5.6	5		04/29/21 00:13	91-20-3	
Toluene	1.8J	ug/L	5.0	1.4	5		04/29/21 00:13	108-88-3	
m&p-Xylene	6.0J	ug/L	10.0	3.5	5		04/29/21 00:13	179601-23-1	
o-Xylene	8.7	ug/L	5.0	1.7	5		04/29/21 00:13	95-47-6	
Surrogates									
Toluene-d8 (S)	103	%	70-130		5		04/29/21 00:13	2037-26-5	
4-Bromofluorobenzene (S)	109	%	70-130		5		04/29/21 00:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		5		04/29/21 00:13	2199-69-1	

300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	0.59J	mg/L	2.0	0.44	1		05/10/21 17:34	14808-79-8	

310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	224	mg/L	24.8	7.4	1		04/30/21 12:50		

353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:25		

Sample: MW-27 **Lab ID: 40225837004** Collected: 04/26/21 13:16 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	1190	ug/L	70.0	16.6	25		04/30/21 12:07	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	5.4	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 08:51	7440-38-2	
Iron, Dissolved	578	ug/L	500	116	2	04/28/21 06:07	05/04/21 08:51	7439-89-6	
Manganese, Dissolved	95.1	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 08:51	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	285	ug/L	5.0	1.5	5		04/29/21 00:32	71-43-2	
Ethylbenzene	70.2	ug/L	5.0	1.6	5		04/29/21 00:32	100-41-4	
Naphthalene	523	ug/L	25.0	5.6	5		04/29/21 00:32	91-20-3	
Toluene	1.9J	ug/L	5.0	1.4	5		04/29/21 00:32	108-88-3	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

Sample: MW-27 **Lab ID: 40225837004** Collected: 04/26/21 13:16 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
m&p-Xylene	6.6J	ug/L	10.0	3.5	5		04/29/21 00:32	179601-23-1	
o-Xylene	10.5	ug/L	5.0	1.7	5		04/29/21 00:32	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		5		04/29/21 00:32	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130		5		04/29/21 00:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		5		04/29/21 00:32	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	5.7	mg/L	2.0	0.44	1		05/10/21 17:49	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	229	mg/L	24.8	7.4	1		04/30/21 12:51		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:25		

Sample: PZ-23 **Lab ID: 40225837005** Collected: 04/26/21 13:51 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	1880	ug/L	70.0	16.6	25		04/30/21 12:14	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	4.0	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 09:11	7440-38-2	
Iron, Dissolved	334J	ug/L	500	116	2	04/28/21 06:07	05/04/21 09:11	7439-89-6	D3
Manganese, Dissolved	57.6	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 09:11	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	290	ug/L	10.0	3.0	10		04/29/21 01:09	71-43-2	
Ethylbenzene	21.1	ug/L	10.0	3.3	10		04/29/21 01:09	100-41-4	
Naphthalene	425	ug/L	50.0	11.3	10		04/29/21 01:09	91-20-3	
Toluene	<2.9	ug/L	10.0	2.9	10		04/29/21 01:09	108-88-3	
m&p-Xylene	<7.0	ug/L	20.0	7.0	10		04/29/21 01:09	179601-23-1	
o-Xylene	5.3J	ug/L	10.0	3.5	10		04/29/21 01:09	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		10		04/29/21 01:09	2037-26-5	

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

Sample: PZ-23 **Lab ID: 40225837005** Collected: 04/26/21 13:51 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Surrogates									
4-Bromofluorobenzene (S)	108	%	70-130		10		04/29/21 01:09	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		10		04/29/21 01:09	2199-69-1	
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	1.5J	mg/L	2.0	0.44	1		05/10/21 18:03	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	228	mg/L	24.8	7.4	1		04/30/21 12:52		
353.2 Nitrogen, NO2/NO3 pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		05/06/21 08:26		

Sample: QA/QC1 **Lab ID: 40225837006** Collected: 04/26/21 13:56 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	2710	ug/L	28.0	6.6	10		04/30/21 12:21	74-82-8	
6020 MET ICPMS, Dissolved									
Analytical Method: EPA 6020 Preparation Method: EPA 3010 Pace Analytical Services - Green Bay									
Arsenic, Dissolved	4.0	ug/L	2.0	0.56	2	04/28/21 06:07	05/04/21 09:18	7440-38-2	
Iron, Dissolved	337J	ug/L	500	116	2	04/28/21 06:07	05/04/21 09:18	7439-89-6	D3
Manganese, Dissolved	57.2	ug/L	8.1	2.4	2	04/28/21 06:07	05/04/21 09:18	7439-96-5	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	261	ug/L	2.0	0.59	2		04/29/21 00:50	71-43-2	
Ethylbenzene	18.7	ug/L	2.0	0.65	2		04/29/21 00:50	100-41-4	
Naphthalene	266	ug/L	10.0	2.3	2		04/29/21 00:50	91-20-3	
Toluene	1.4J	ug/L	2.0	0.58	2		04/29/21 00:50	108-88-3	
m&p-Xylene	2.9J	ug/L	4.0	1.4	2		04/29/21 00:50	179601-23-1	
o-Xylene	4.5	ug/L	2.0	0.70	2		04/29/21 00:50	95-47-6	
Surrogates									
Toluene-d8 (S)	102	%	70-130		2		04/29/21 00:50	2037-26-5	
4-Bromofluorobenzene (S)	108	%	70-130		2		04/29/21 00:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		2		04/29/21 00:50	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

Sample: QA/QC1 **Lab ID: 40225837006** Collected: 04/26/21 13:56 Received: 04/27/21 13:15 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	1.5J	mg/L	2.0	0.44	1		05/10/21 18:18	14808-79-8	
310.2 Alkalinity									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO ₃	228	mg/L	24.8	7.4	1		04/30/21 12:53		
353.2 Nitrogen, NO₂/NO₃ pres.									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO ₂ plus NO ₃	<0.059	mg/L	0.25	0.059	1		05/06/21 08:31		

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

QC Batch: 383913 Analysis Method: EPA 8015B Modified
QC Batch Method: EPA 8015B Modified Analysis Description: Methane, Ethane, Ethene GCV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

METHOD BLANK: 2214605 Matrix: Water
Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<0.66	2.8	04/30/21 07:25	

LABORATORY CONTROL SAMPLE & LCSD: 2214606 2214607

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	27.9	27.9	98	98	80-121	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214962 2214963

Parameter	Units	40225931008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	<0.66	28.6	28.6	95.5	103	334	359	10-200	7	20	M1

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

QC Batch: 383646	Analysis Method: EPA 6020
QC Batch Method: EPA 3010	Analysis Description: 6020 MET Dissolved
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

METHOD BLANK: 2213052 Matrix: Water
Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<0.28	1.0	05/04/21 06:28	
Iron, Dissolved	ug/L	<58.0	250	05/04/21 06:28	
Manganese, Dissolved	ug/L	<1.2	4.0	05/04/21 06:28	

LABORATORY CONTROL SAMPLE: 2213053

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	500	486	97	80-120	
Iron, Dissolved	ug/L	5000	4460	89	80-120	
Manganese, Dissolved	ug/L	500	441	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2213054 2213055

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40225831007 Result	Spike Conc.	Spike Conc.	Result								
Arsenic, Dissolved	ug/L	6.0	500	500	501	500	99	99	75-125	0	20		
Iron, Dissolved	ug/L	152J	5000	5000	4680	4810	91	93	75-125	3	20		
Manganese, Dissolved	ug/L	48.8	500	500	502	507	91	92	75-125	1	20		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

QC Batch: 383664 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

METHOD BLANK: 2213127 Matrix: Water
Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.30	1.0	04/28/21 17:05	
Ethylbenzene	ug/L	<0.33	1.0	04/28/21 17:05	
m&p-Xylene	ug/L	<0.70	2.0	04/28/21 17:05	
Naphthalene	ug/L	<1.1	5.0	04/28/21 17:05	
o-Xylene	ug/L	<0.35	1.0	04/28/21 17:05	
Toluene	ug/L	<0.29	1.0	04/28/21 17:05	
1,2-Dichlorobenzene-d4 (S)	%	103	70-130	04/28/21 17:05	
4-Bromofluorobenzene (S)	%	108	70-130	04/28/21 17:05	
Toluene-d8 (S)	%	101	70-130	04/28/21 17:05	

LABORATORY CONTROL SAMPLE: 2213128

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	55.2	110	70-132	
Ethylbenzene	ug/L	50	55.9	112	80-123	
m&p-Xylene	ug/L	100	109	109	70-130	
o-Xylene	ug/L	50	54.5	109	70-130	
Toluene	ug/L	50	53.0	106	80-121	
1,2-Dichlorobenzene-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			111	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214209 2214210

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40225837002 Result	Spike Conc.	Spike Conc.	Result						
Benzene	ug/L	<0.30	50	50	53.1	53.0	106	106	70-132	0	20
Ethylbenzene	ug/L	<0.33	50	50	55.0	56.0	110	112	80-123	2	20
m&p-Xylene	ug/L	<0.70	100	100	106	109	106	109	70-130	2	20
o-Xylene	ug/L	<0.35	50	50	53.5	54.7	107	109	70-130	2	20
Toluene	ug/L	<0.29	50	50	52.1	54.1	104	108	80-121	4	20
1,2-Dichlorobenzene-d4 (S)	%						102	101	70-130		
4-Bromofluorobenzene (S)	%						112	111	70-130		
Toluene-d8 (S)	%						102	103	70-130		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

QC Batch: 384631	Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0	Analysis Description: 300.0 IC Anions
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

METHOD BLANK: 2218891 Matrix: Water

Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	05/10/21 10:32	

LABORATORY CONTROL SAMPLE: 2218892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	20.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2218893 2218894

Parameter	Units	40225835002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	249	400	400	665	674	104	106	90-110	1	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

QC Batch: 383846	Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2	Analysis Description: 310.2 Alkalinity
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

METHOD BLANK: 2214081 Matrix: Water
Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005, 40225837006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.4	24.8	04/30/21 12:24	

LABORATORY CONTROL SAMPLE: 2214082

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	103	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214083 2214084

Parameter	Units	40225831007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	409	200	200	608	610	99	100	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2214085 2214086

Parameter	Units	40225837006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	228	100	100	327	328	99	100	90-110	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

QC Batch: 384414 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005

METHOD BLANK: 2217519 Matrix: Water
Associated Lab Samples: 40225837001, 40225837002, 40225837003, 40225837004, 40225837005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	05/06/21 08:07	

LABORATORY CONTROL SAMPLE: 2217520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217521 2217522

Parameter	Units	40225831007		2217521		2217522		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	104	103	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217523 2217524

Parameter	Units	40225837005		2217523		2217524		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.					
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.6	2.6	102	103	90-110	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67973.200.038 APPLETON FMR MGP
Pace Project No.: 40225837

QC Batch: 384415	Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2	Analysis Description: 353.2 Nitrate + Nitrite, preserved
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40225837006

METHOD BLANK: 2217525 Matrix: Water

Associated Lab Samples: 40225837006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	05/06/21 08:30	

LABORATORY CONTROL SAMPLE: 2217526

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217527 2217528

Parameter	Units	1057246004		MS		MSD		% Rec		Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.5	2.5	2.5	100	99	90-110	1	20		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2217529 2217530

Parameter	Units	10557513003		MS		MSD		% Rec		Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Nitrogen, NO2 plus NO3	mg/L	ND	2.5	2.5	2.4	2.4	97	97	90-110	0	20		

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE


Project: 67973.200.038 APPLETON FMR MGP

Pace Project No.: 40225837

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40225837001	MW-26	EPA 8015B Modified	383913		
40225837002	MW-28	EPA 8015B Modified	383913		
40225837003	PZ-27	EPA 8015B Modified	383913		
40225837004	MW-27	EPA 8015B Modified	383913		
40225837005	PZ-23	EPA 8015B Modified	383913		
40225837006	QA/QC1	EPA 8015B Modified	383913		
40225837001	MW-26	EPA 3010	383646	EPA 6020	383725
40225837002	MW-28	EPA 3010	383646	EPA 6020	383725
40225837003	PZ-27	EPA 3010	383646	EPA 6020	383725
40225837004	MW-27	EPA 3010	383646	EPA 6020	383725
40225837005	PZ-23	EPA 3010	383646	EPA 6020	383725
40225837006	QA/QC1	EPA 3010	383646	EPA 6020	383725
40225837001	MW-26	EPA 8260	383664		
40225837002	MW-28	EPA 8260	383664		
40225837003	PZ-27	EPA 8260	383664		
40225837004	MW-27	EPA 8260	383664		
40225837005	PZ-23	EPA 8260	383664		
40225837006	QA/QC1	EPA 8260	383664		
40225837001	MW-26	EPA 300.0	384631		
40225837002	MW-28	EPA 300.0	384631		
40225837003	PZ-27	EPA 300.0	384631		
40225837004	MW-27	EPA 300.0	384631		
40225837005	PZ-23	EPA 300.0	384631		
40225837006	QA/QC1	EPA 300.0	384631		
40225837001	MW-26	EPA 310.2	383846		
40225837002	MW-28	EPA 310.2	383846		
40225837003	PZ-27	EPA 310.2	383846		
40225837004	MW-27	EPA 310.2	383846		
40225837005	PZ-23	EPA 310.2	383846		
40225837006	QA/QC1	EPA 310.2	383846		
40225837001	MW-26	EPA 353.2	384414		
40225837002	MW-28	EPA 353.2	384414		
40225837003	PZ-27	EPA 353.2	384414		
40225837004	MW-27	EPA 353.2	384414		
40225837005	PZ-23	EPA 353.2	384414		
40225837006	QA/QC1	EPA 353.2	384415		

REPORT OF LABORATORY ANALYSIS

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 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: _____

Client Name: Ramboll

WO# : 40225837



40225837

Courier: CS Logistics Fed Ex Speedee UPS Walto
 Client Pace Other: _____

Tracking #: _____

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

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

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR - 103 Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3 /ICorr: 3.5

Temp Blank Present: yes no Biological Tissue is Frozen: yes no

Person examining contents:	
Date: <u>4/27/21</u>	Initials: <u>KS</u>
Labeled By Initials: <u>VL</u>	

Temp should be above freezing to 6°C.
 Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

July 29, 2021

Evvan Plank
Ramboll
234 W Florida St
Milwaukee, WI 53204

RE: Project: APPLETON MGP
Pace Project No.: 40230123

Dear Evvan Plank:

Enclosed are the analytical results for sample(s) received by the laboratory on July 16, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,



Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Alex Bartelme, Ramboll
NRT Data, Ramboll
Frank Dombrowski, WE Energies
Brian Hennings, Ramboll Americas
WE Energies Lab Reports, WE Energies



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: APPLETON MGP

Pace Project No.: 40230123

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: APPLETON MGP

Pace Project No.: 40230123

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40230123001	071621001	Water	07/16/21 13:26	07/16/21 14:55
40230123002	071621002	Water	07/16/21 00:00	07/16/21 14:55

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: APPLETON MGP

Pace Project No.: 40230123

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40230123001	071621001	EPA 6020B	DS1	1
		EPA 8260	LAP	9
40230123002	071621002	EPA 8260	LAP	9

PASI-G = Pace Analytical Services - Green Bay

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ANALYTICAL RESULTS

Project: APPLETON MGP

Pace Project No.: 40230123

Sample: 071621001 **Lab ID: 40230123001** Collected: 07/16/21 13:26 Received: 07/16/21 14:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS									
Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Green Bay									
Arsenic	0.67J	ug/L	1.0	0.28	1	07/27/21 05:34	07/27/21 16:30	7440-38-2	
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		07/19/21 18:19	71-43-2	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		07/19/21 18:19	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		07/19/21 18:19	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		07/19/21 18:19	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		07/19/21 18:19	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		07/19/21 18:19	95-47-6	
Surrogates									
Toluene-d8 (S)	97	%	70-130		1		07/19/21 18:19	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130		1		07/19/21 18:19	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	70-130		1		07/19/21 18:19	2199-69-1	

Sample: 071621002 **Lab ID: 40230123002** Collected: 07/16/21 00:00 Received: 07/16/21 14:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		07/19/21 15:56	71-43-2	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		07/19/21 15:56	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		07/19/21 15:56	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		07/19/21 15:56	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		07/19/21 15:56	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		07/19/21 15:56	95-47-6	
Surrogates									
Toluene-d8 (S)	100	%	70-130		1		07/19/21 15:56	2037-26-5	
4-Bromofluorobenzene (S)	105	%	70-130		1		07/19/21 15:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	70-130		1		07/19/21 15:56	2199-69-1	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: APPLETON MGP
Pace Project No.: 40230123

QC Batch: 391395 Analysis Method: EPA 6020B
QC Batch Method: EPA 3010A Analysis Description: 6020B MET
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40230123001

METHOD BLANK: 2257629 Matrix: Water
Associated Lab Samples: 40230123001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	ug/L	<0.28	1.0	07/27/21 16:16	

LABORATORY CONTROL SAMPLE: 2257630

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	ug/L	250	242	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2257631 2257632

Parameter	Units	40230123001		2257632		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Arsenic	ug/L	0.67J	250	250	251	245	100	98	75-125	3	20

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: APPLETON MGP

Pace Project No.: 40230123

QC Batch: 390616

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40230123001, 40230123002

METHOD BLANK: 2252737

Matrix: Water

Associated Lab Samples: 40230123001, 40230123002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.30	1.0	07/19/21 09:31	
Ethylbenzene	ug/L	<0.33	1.0	07/19/21 09:31	
m&p-Xylene	ug/L	<0.70	2.0	07/19/21 09:31	
Naphthalene	ug/L	<1.1	5.0	07/19/21 09:31	
o-Xylene	ug/L	<0.35	1.0	07/19/21 09:31	
Toluene	ug/L	<0.29	1.0	07/19/21 09:31	
1,2-Dichlorobenzene-d4 (S)	%	100	70-130	07/19/21 09:31	
4-Bromofluorobenzene (S)	%	106	70-130	07/19/21 09:31	
Toluene-d8 (S)	%	97	70-130	07/19/21 09:31	

LABORATORY CONTROL SAMPLE: 2252738

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	57.0	114	70-132	
Ethylbenzene	ug/L	50	54.2	108	80-123	
m&p-Xylene	ug/L	100	106	106	70-130	
o-Xylene	ug/L	50	52.4	105	70-130	
Toluene	ug/L	50	51.1	102	80-121	
1,2-Dichlorobenzene-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			100	70-130	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: APPLETON MGP

Pace Project No.: 40230123

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: APPLETON MGP

Pace Project No.: 40230123

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40230123001	071621001	EPA 3010A	391395	EPA 6020B	391477
40230123001	071621001	EPA 8260	390616		
40230123002	071621002	EPA 8260	390616		

REPORT OF LABORATORY ANALYSIS

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Document Name:
Sample Condition Upon Receipt (SCUR)
 Document No.:
ENV-FRM-GBAY-0014-Rev.00

Document Revised: 26Mar2020
 Author:
 Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: _____

Client Name: Ramball

WO#: **40230123**

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



Tracking #: _____

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

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

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR - 102 Type of Ice: Wet Blue Dry None

Samples on ice, cooling process has begun

Cooler Temperature Uncorr: .5 /Corr: 1

Person examining contents:
 Date: 7/16/21 /Initials: EL
 Labeled By Initials: P.C.

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>Print # + Invoice info 7/16/21 EL</u>
Chain of Custody Relinquished: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt <input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Correct Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>200 no labels 7/16/21 EL</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>	
Trip Blank Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>467</u>	

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

APPENDIX D
O&M FORM 4400-194

State of Wisconsin

Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 07/19)

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

GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM:

Completion of the applicable portions of this form is required under Wis. Admin. Code § NR 724.13(3). Failure to submit this form as required is a violation of that rule section and is subject to the penalties in Wis. Stats. § 292.99. This form must be submitted every six months for remediation projects that report operation and maintenance progress, in accordance with Wis. Admin. Code §. NR 724.13(3). A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Submittal of this form is not a substitute for reporting required by department programs such as Waste Water or Air Management.

Notes:

- Long-term monitoring results submitted in accordance with Wis. Admin. Code § NR 724.17(3) are required to be submitted within 10 business days of receiving sampling results and are not required to be submitted using this form. However, portions of this form require monitoring data summary information that may be based on information previously submitted in accordance with that section of code.
- Responsible parties should check with the department Project Manager assigned to the site to determine if this form is required to be submitted at sites responded to under the Federal Comprehensive Environmental Response and Compensation Act (commonly known as Superfund) or an equivalent state-lead response.
- Responsible parties should check with the department Project Manager assigned to the site to determine if any of the information required in this form may be omitted or changed and should obtain prior written approval for any omissions or changes.
- Responsible parties are required to report separately on a semi-annual basis under Wis. Admin. Code § NR 700.11(1). Reporting under that provision is through an internet-based form. More information can be found at: <http://dnr.wi.gov/topic/Brownfields/documents/regs/NR700progreport.pdf>.
- Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by Remediation and Redevelopment Program. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (Wis. Stats. §§ 19.31–19.39).

Section GI - General Site Information

A. General Information

1. Site name

Appleton City (Coal Tar), aka Appleton MGP

2. Reporting period from: 01/01/2020	To: 10/8/2021	Days in period: 646
3. Regulatory agency (enter DNR, DATCP and/or other) DNR	4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific) 02-45-000042	

5. Site location

Region Northeast Region	County Outagamie	Address 337 Water Street				
Municipality name <input type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village City of Appleton	Township 21 N	Range <input type="radio"/> E <input checked="" type="radio"/> W 17	Section 35	¼	¼ ¼	

6. Responsible party

Name

We Energies

Mailing address

333 W. Everett, Street, A231

Phone number

(414) 221-2156

7. Consultant

 Select if the following information has changed since the last submittal

Company name

Ramboll

Mailing address

234 W Florida St, Milwaukee, WI 53204

Phone number

(414) 837-3607

8. Contaminants

Benzene, Naphthalene

9. Soil types (USCS or USDA)

Fill: solidified soil (cement), Native: CL,ML,SP,GW,GP,Dolomite

10. Hydraulic conductivity(cm/sec):

2E-7 to 9E-10 cm/s (solidified soil), 1E-3 to 1E-2 cm/s (till 0.003ft/yr (solidified soil), 50 ft/yr (lower till)

11. Average linear velocity of groundwater (ft/yr)

Site name: Appleton City (Coal Tar), aka Appleton MGP

Reporting period from: 01/01/2020 To: 10/08/2021

Days in period: 646

Remediation Site Operation, Maintenance, Monitoring & Optimization Report

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

If yes, give location: Region

County

Municipality name City Town Village

Township

Range

E

Section

$\frac{1}{4}$

$\frac{1}{4}$

$\frac{1}{4}$

N

W

B. Remediation Method

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

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

C. General Effectiveness Evaluation for All Active Systems

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

1. Is the system operating at design rates and specifications? Yes No

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

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

If yes, explain:

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

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

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

If yes, explain:

Site name: Appleton City (Coal Tar), aka Appleton MGP

Reporting period from: 01/01/2020 To: 10/08/2021

Days in period: 646

Remediation Site Operation, Maintenance, Monitoring & Optimization Report

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D. Economic and Cost Data to Date

- Total investigation cost: \$1,340,000.00
- Implementation costs (design, capital and installation costs, excluding investigation costs): \$10,000,000.00
- Total costs during the previous reporting period: \$35,000.00
- Total costs during this reporting period: \$35,000.00
- Total anticipated costs for the next reporting period: \$30,000.00
- Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? Yes No
If yes, explain:


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

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

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


Registered Professional Engineers:

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

Print name	Title
Jay F. Karls PhD PE	Managing Engineer
Signature 	Date
	10/8/2021

Hydrogeologists:

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

Print name	Title
Brian G. Hennings PG	Managing Hydrogeologist
Signature 	Date
	10/8/2021

Scientists:

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

Print name	Title
Signature	Date

Other Persons:

Print name	Title
Signature	Date

Site name: Appleton City (Coal Tar), aka Appleton MGP

Reporting period from: 01/01/2020 To: 10/08/2021

Days in period: 646

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Professional Seal(s), if applicable:



Site name: Appleton City (Coal Tar), aka Appleton MGP

Reporting period from: 01/01/2020 To: 10/08/2021

Days in period: 646

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

A. Groundwater Extraction System Operation:

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

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

4. Quantity of groundwater extracted during this time period: _____ gallons

5. Average groundwater extraction rate: _____ gpm

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

B. Free Product Recovery System Operation

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

If yes, explain: _____

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

3. Average free product extraction rate: _____ gpm

C. System Effectiveness Evaluation

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

If no, explain: _____

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

If no, explain: _____

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

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

a. Contaminant: _____

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

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

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

Site name: Appleton City (Coal Tar), aka Appleton MGP

Reporting period from: 01/01/2020 To: 10/08/2021

Days in period: 646

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

D. Additional Attachments

Attach the following to this form:

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

Site name: Appleton City (Coal Tar), aka Appleton MGP

Reporting period from: 01/01/2020 To: 10/08/2021

Days in period: 646

Remediation Site Operation, Maintenance, Monitoring & Optimization Report

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Section GW-2, In Situ Air Sparging Systems

A. In Situ Air Sparging System Operation

1. Number of air injection wells at the site and the number actually in use during the period: _____
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): _____
3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain: _____

B. System Effectiveness Evaluation

1. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in B.1.a.
 - a. Contaminant: _____
 - b. Percent reduction necessary to reach ch. NR 140 ES and PAL: _____ %
 - c. Maximum contaminant concentration level in any monitoring well: _____ µg/L
2. Is there any evidence that air is short circuiting through natural or man-made pathways? Yes No
If yes, explain: _____
3. Is the size of the plume: Increasing Stabalized Decreasing ?
If increasing, explain: _____

C. Additional Attachments

Attach the following to this form:

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

Site name: Appleton City (Coal Tar), aka Appleton MGP

Reporting period from: 01/01/2020 To: 10/08/2021

Days in period: 646

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

A. Effectiveness Evaluation

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

a. Contaminant: Benzene-Free product observed in 3 wells, see attached Annal Report Section 3.0 GW Quality

b. Percent reduction necessary to reach ch. NR 140 ES and PAL: 99.97 %

c. Maximum contaminant concentration level in any monitoring well of that contaminant: 6,940 $\mu\text{g/L}$

2. Aquifer parameters:

a. Hydraulic conductivity: 0.0033 cm/sec

b. Groundwater average linear velocity: 50 ft/yr

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

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

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

If yes, explain:

6. Biodegradation parameters:

a. Upgradient (or other site specific background) DO level: 230 $\mu\text{g/L}$

b. DO levels in the part of the plume that is most heavily contaminated 40 $\mu\text{g/L}$

7. Is site closure a viable option within 12 months from the date of this form? Yes

8. Are there any modifications that can improve cost effectiveness? Yes No

If yes, explain:

9. Have groundwater table fluctuations changed the contaminant level trends over time? Yes No

If yes, explain:

localized variable flow affects individual wells, site-wide trends are stable to decreasing

10. Has the direction of groundwater flow changed during the reporting period? Yes No

If yes, approximate change in degrees: _____

B. Additional Attachments

Attach the following:

- Groundwater contour map.
- Groundwater contaminant distribution map (may be combined with contour map).
- When contaminants are aerobically biodegradable, attach a dissolved oxygen in groundwater map (dissolved oxygen may be combined with the contaminant data on a single map).
- Graph of contaminant concentrations versus time for the contaminant listed in A.1.a. (above) for the monitoring point with the greatest level of contamination.

Note: This is the minimum required graph; however, it is recommended that multiple time versus contamination concentration graphs as described in the instructions on page 24 for Natural Attenuation of Groundwater be submitted.

- Graph of contaminant concentrations versus distance.
- Groundwater contaminant chemistry table.
- Groundwater biological parameters.
- Groundwater elevations table.

APPENDIX E
BENZENE AND NAPHTHALENE GROUNDWATER TRENDS
SUMMARY

APPENDIX E. BENZENE AND NAPHTHALENE GROUNDWATER TRENDS
 2020-2021 ANNUAL REPORT
 WE ENERGIES APPLETON FORMER MANUFACTURED GAS PLANT SITE
 APPLETON, WI

Area	Well Location	Well	Log ₁₀ [Benzene] vs. Time				Log ₁₀ [Naphthalene] vs. Time				Log ₁₀ [Benzene] vs. Groundwater Elevation		Log ₁₀ [Naphthalene] vs. Groundwater Elevation	
			Long-Term R ² (coefficient of determination)	Long-Term General Trend	Short-Term R ² (coefficient of determination)	Short-Term General Trend	Long-Term R ² (coefficient of determination)	Long-Term General Trend	Short-Term R ² (coefficient of determination)	Short-Term General Trend	Long-Term R ²	Short-Term R ²	Long-Term R ²	Short-Term R ²
Area 1	Lower Till	MW-02R	0.2566	Flat	0.0840	Decreasing	0.3607	Decreasing	0.2565	Decreasing	0.1254	0.0252	0.0615	0.0218
		MW-12R	0.2764	Flat	0.0859	Increasing	0.3227	Increasing	0.1162	Increasing	0.2124	0.7528	0.1208	0.9147
		MW-13R	0.0656	Flat	0.2235	Increasing	0.4641	Flat	0.4028	Increasing	0.0183	0.0154	0.0628	0.1232
		MW-19	0.1026	Decreasing	0.0248	Decreasing	0.4916	Decreasing	0.1529	Decreasing	0.0041	0.0537	0.0128	0.1046
		MW-20	0.0311	Flat	0.7320	Decreasing	0.0028	Flat	0.6458	Decreasing	0.0009	0.0098	0.0123	0.0438
		MW-21	0.8334	Decreasing	0.4619	Decreasing	0.0138	Flat	0.1145	Flat	0.2630	0.5623	0.0026	0.0044
		MW-22	0.7424	Flat	0.8048	Decreasing	0.0216	Flat	0.0436	Flat	0.1145	0.1282	0.0067	0.1123
		MW-24	0.6316	Decreasing*	ND		ND		ND		0.5624	NA	0.0822	NA
	MW-25	0.0001	Flat	0.6063	Decreasing	0.2558	Increasing	0.7994	Decreasing	0.0705	0.3104	0.0165	0.0667	
	Bedrock	PZ-20B	0.7399	Decreasing	0.0858	Decreasing	0.0230	Flat	0.1892	Decreasing	0.6600	0.1473	0.0221	0.0853
PZ-21B		0.6803	Decreasing	ND		0.0901	Flat	0.4425	Increasing	0.4724	NA	0.0387	0.1687	
PZ-22B		0.8098	Decreasing	0.7409	Decreasing	0.0838	Flat	0.2402	Flat	0.6461	0.0010	0.0863	0.5213	
Area 2	Water Table	MW-26	0.3547	Decreasing	0.3190	Decreasing	0.3917	Decreasing	0.1916	Decreasing	0.0063	0.0000	0.0027	0.0054
		MW-27	0.1299	Flat	0.4623	Decreasing	0.1090	Flat	0.1862	Decreasing	0.1632	0.3709	0.2648	0.4142
	Upper Weathered Bedrock	PZ-23	0.0576	Flat	0.3984	Decreasing	0.3917	Flat	0.3588	Decreasing	0.0555	0.0649	0.2771	0.1692
		PZ-27	0.2918	Decreasing	0.2997	Decreasing	0.2930	Decreasing	0.0615	Flat	0.0400	0.0097	0.0929	0.0233

[O: EDP 2/16/17, C/U: ANS 2/17/17, C: EDP 2/21/17] [U: KLT 1/11/18, C: EDP 4/29/20], [U: KJS 8/11/21, C: ABB 8/19/21]

Notes:

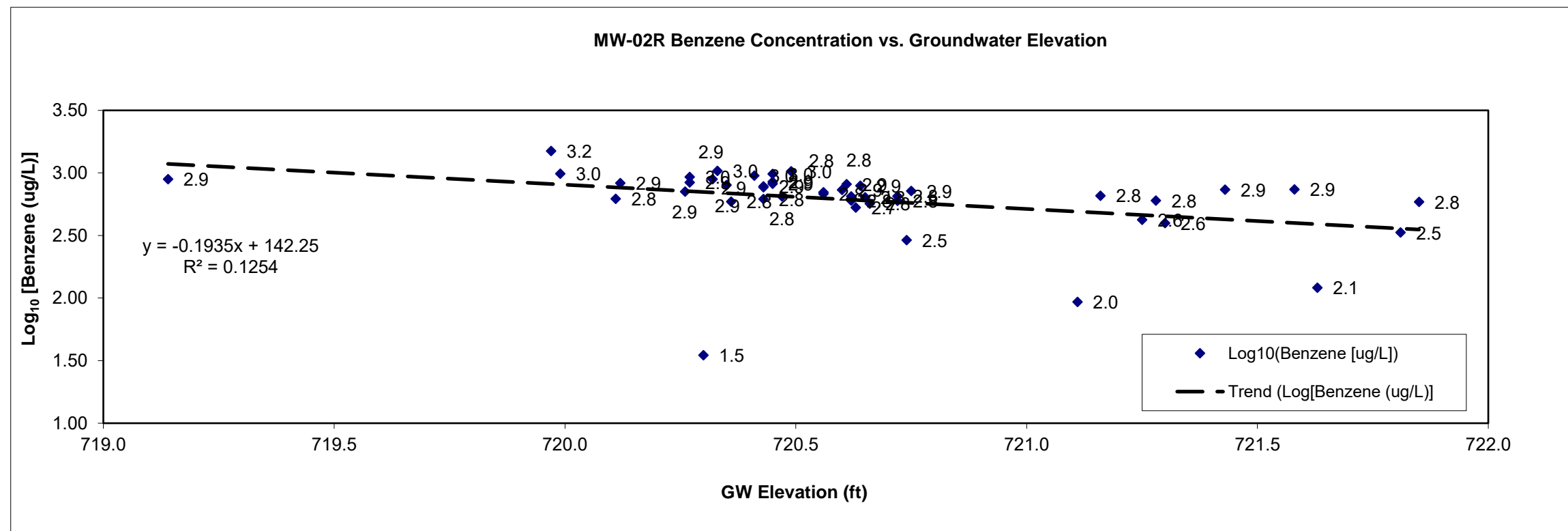
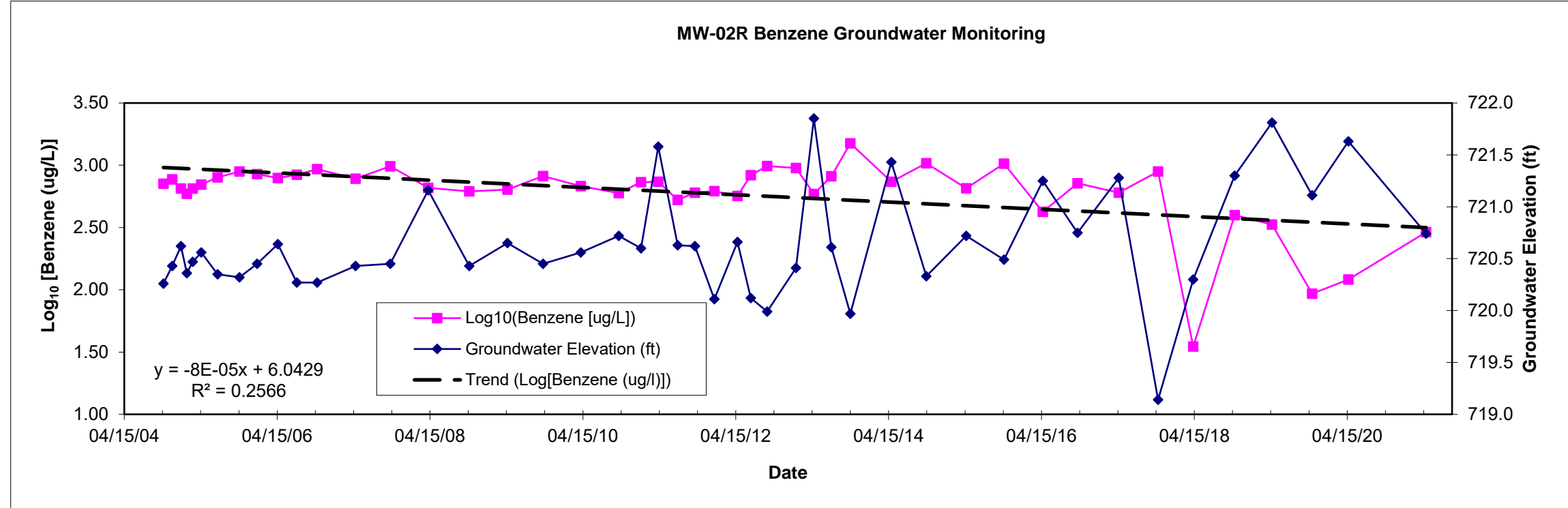
1. Non-detect results were included in the regression plots using the full reporting limit (e.g., <0.41 = 0.41)
2. Long-term trends include all sample data collected for the duration of the wells installation.
3. Short-term trends include sample data from the last five years (from the beginning of 2017 through the end of 2021).
4. If -0.0001 < trendline slope < 0.0001 general trend is considered Stable.
5. If trendline slope < -0.0001 general trend is considered Decreasing.
6. If trendline slope > 0.0001 general trend is considered Increasing.

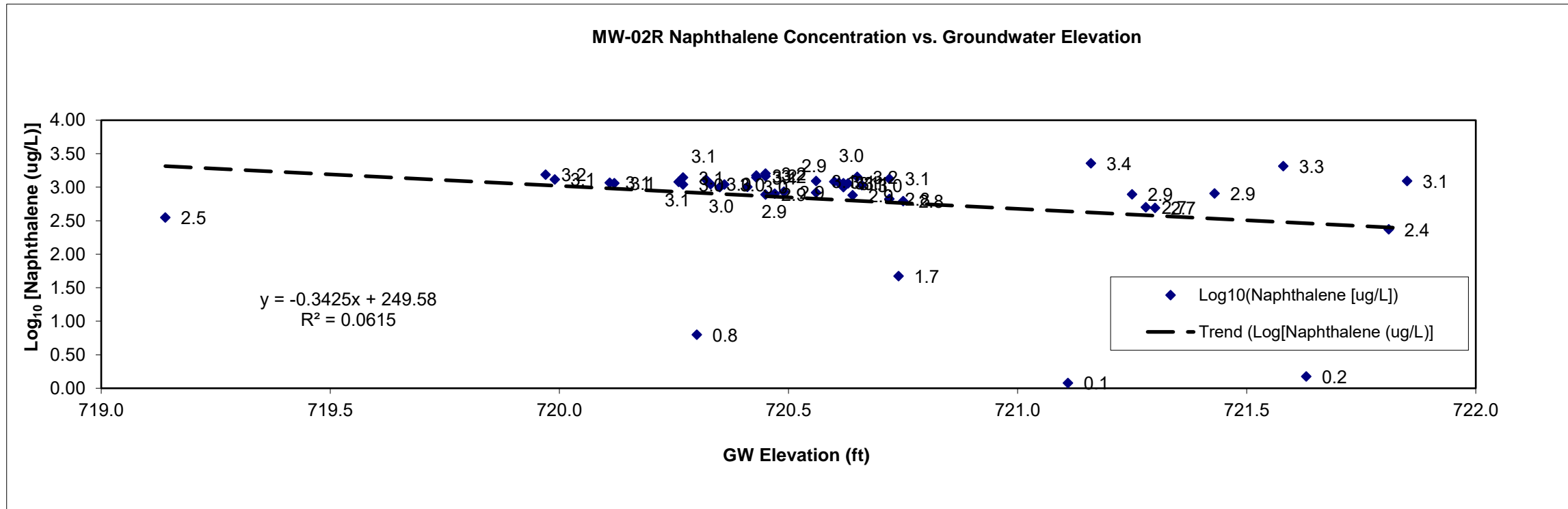
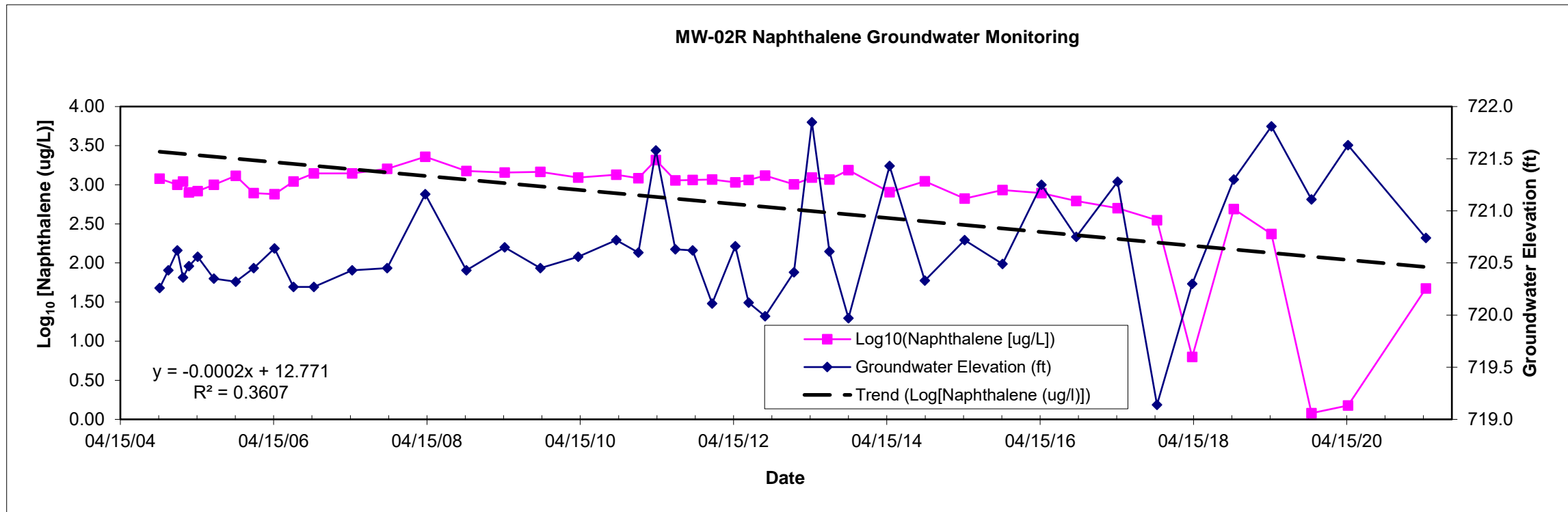
* = greater than 50% non-detect results

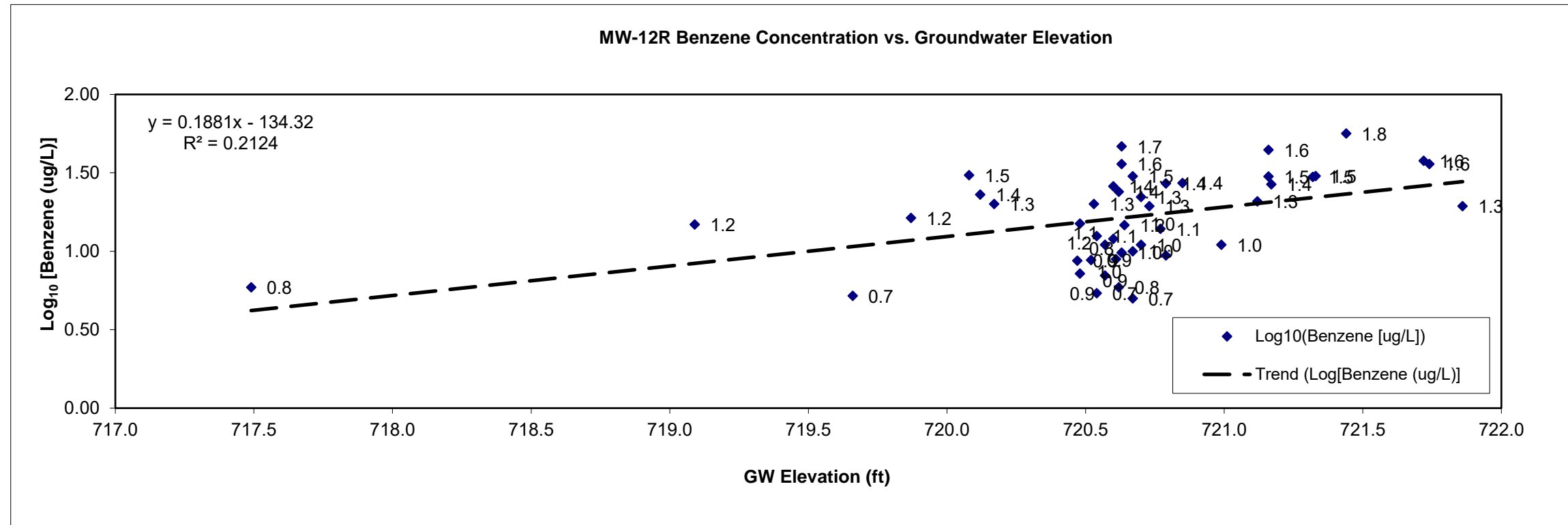
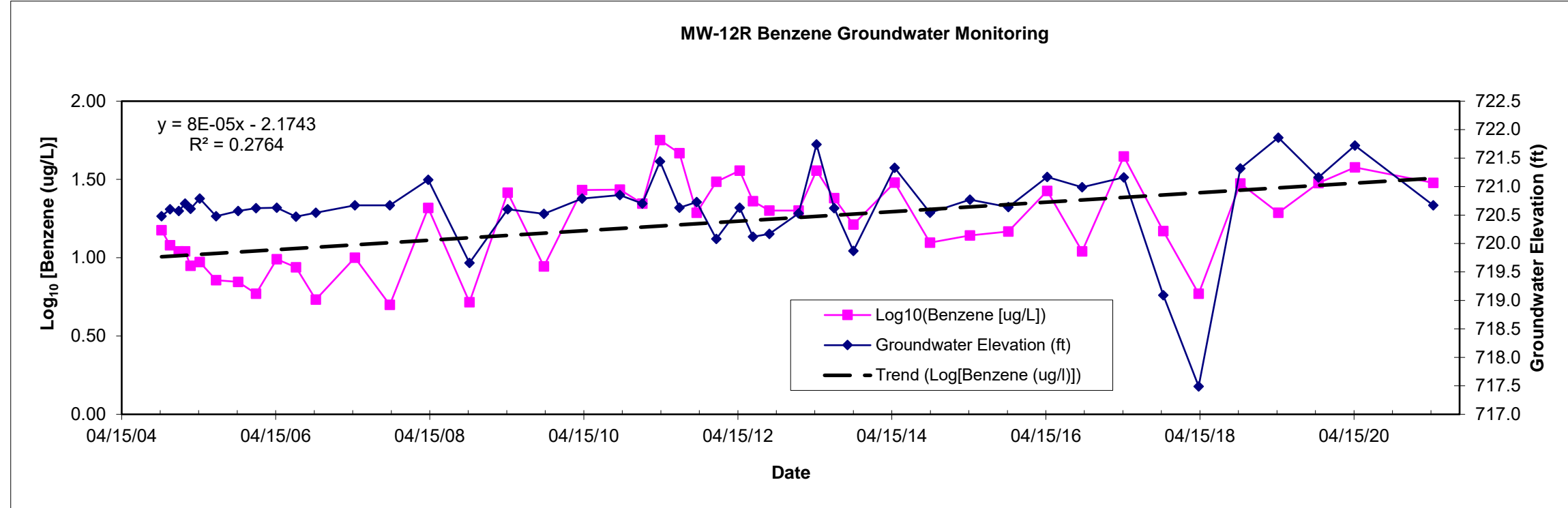
NA = not applicable, contaminant vs. groundwater R² listed as NA if all data is ND

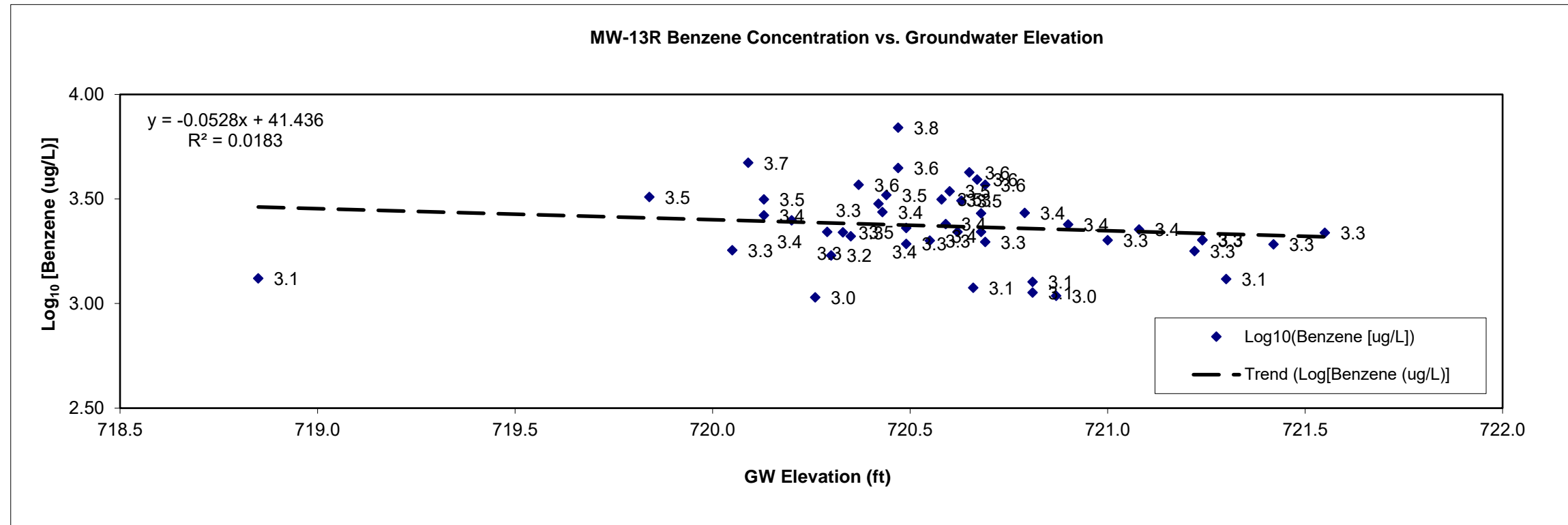
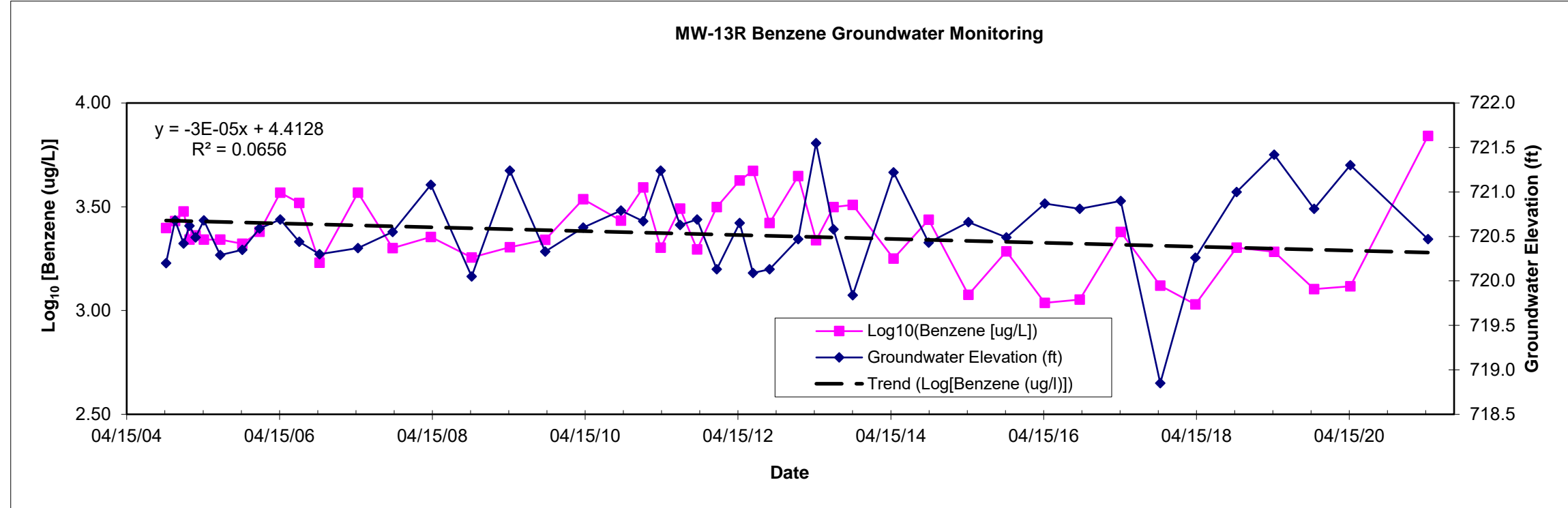
ND = all data is non-detect

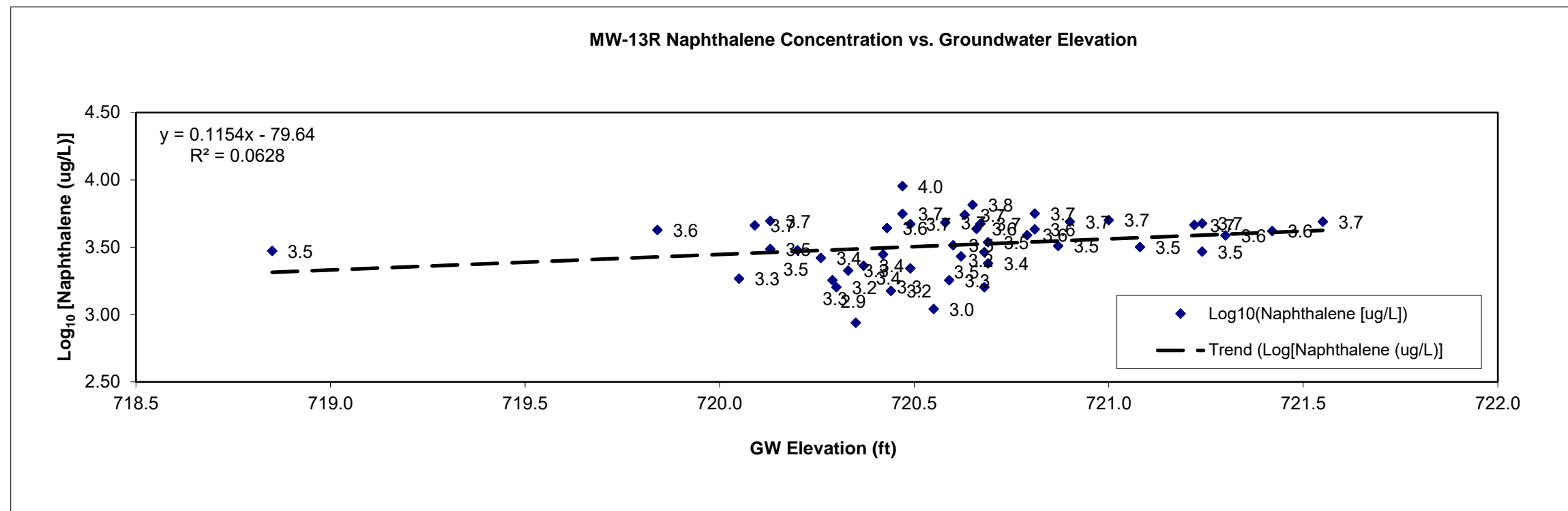
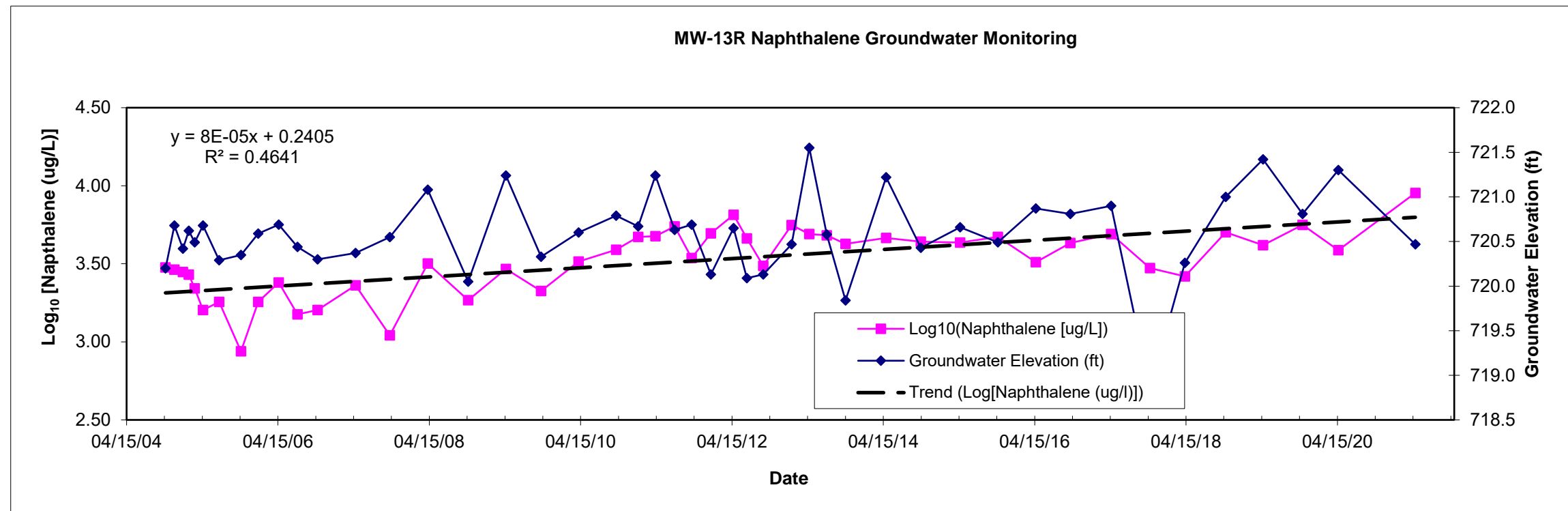
APPENDIX E1
LONG-TERM TREND GRAPHS

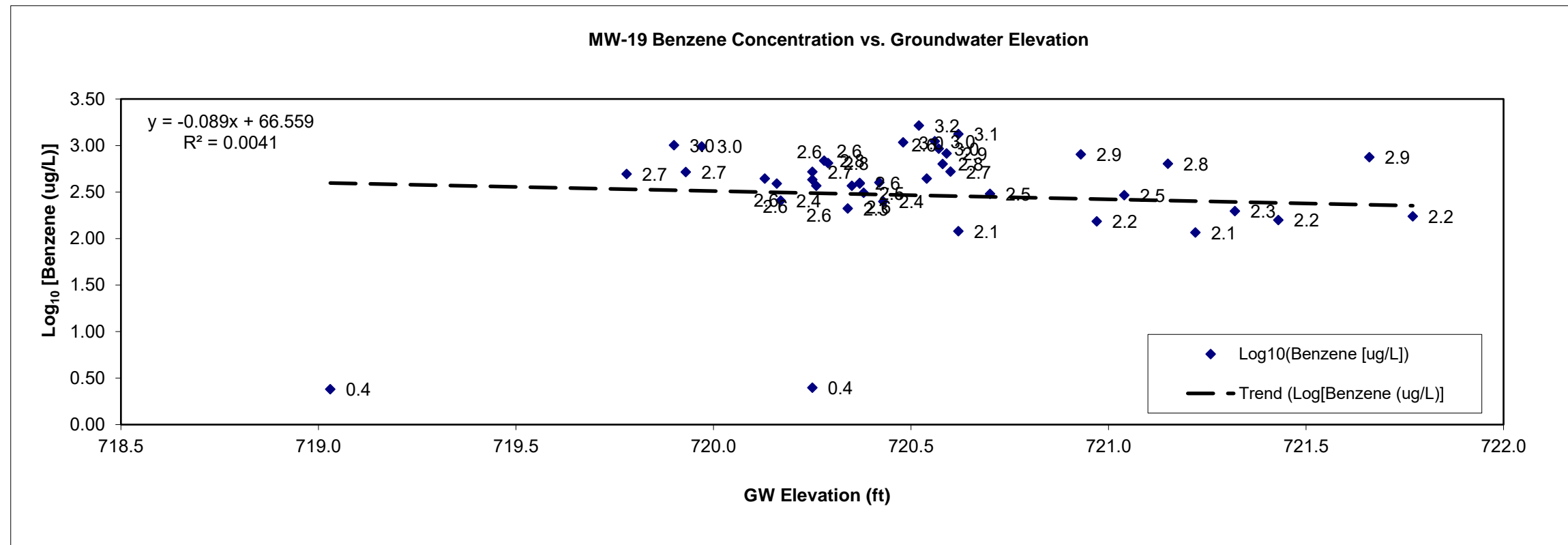
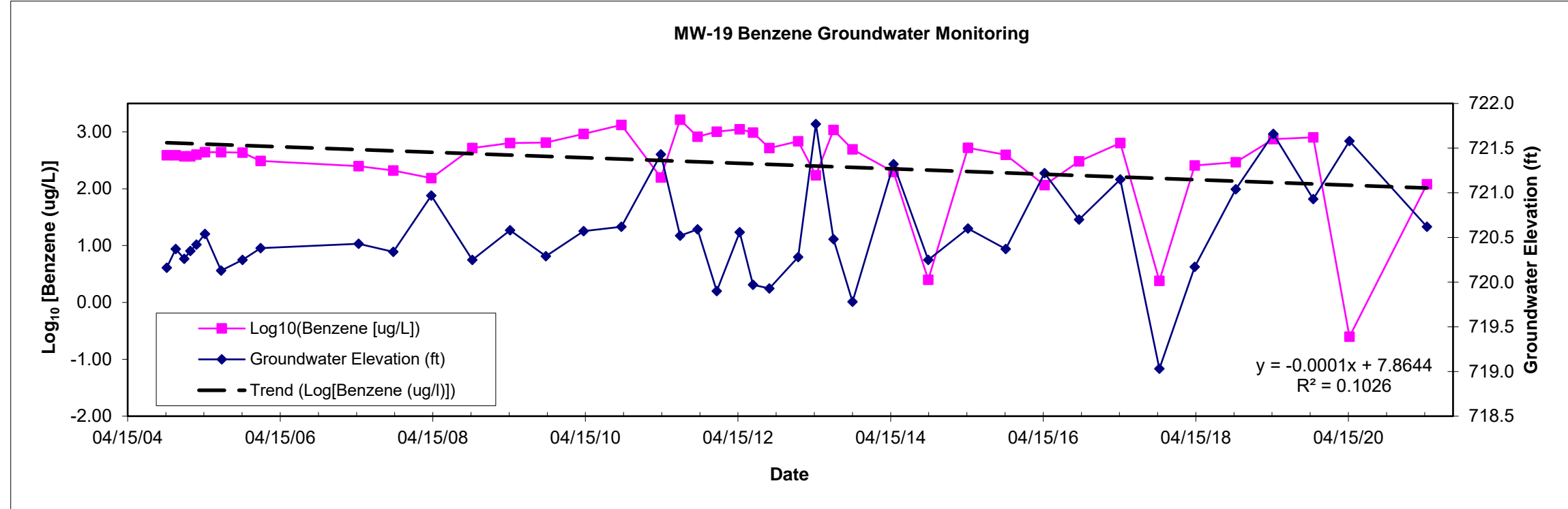


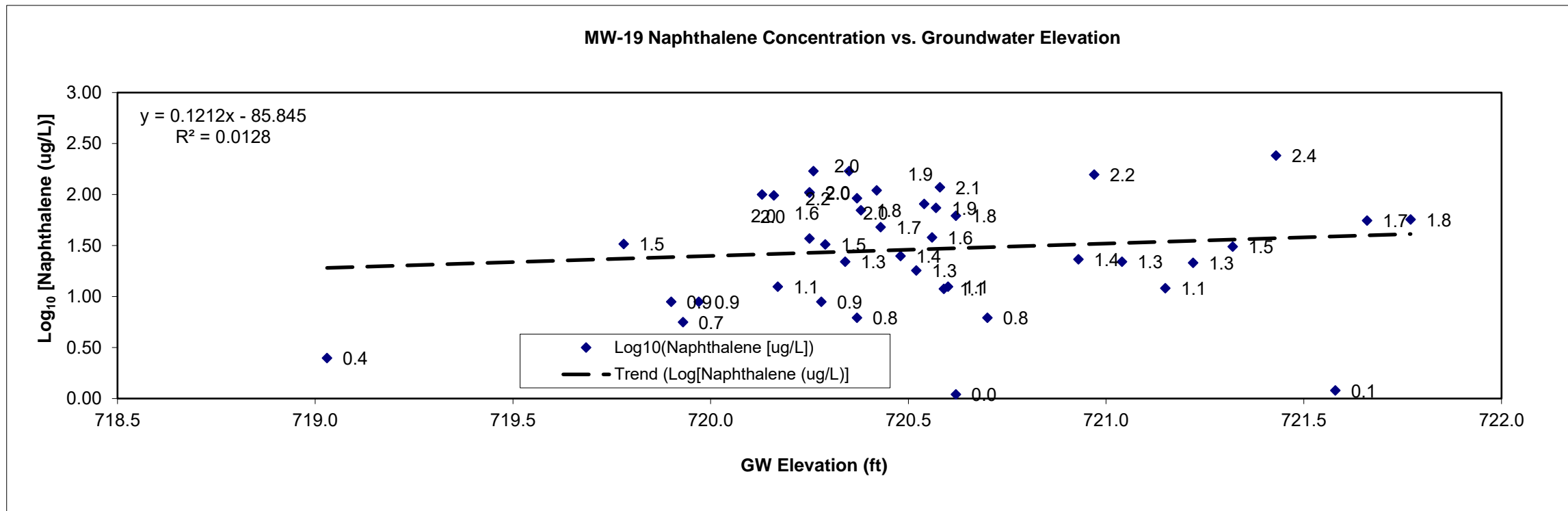
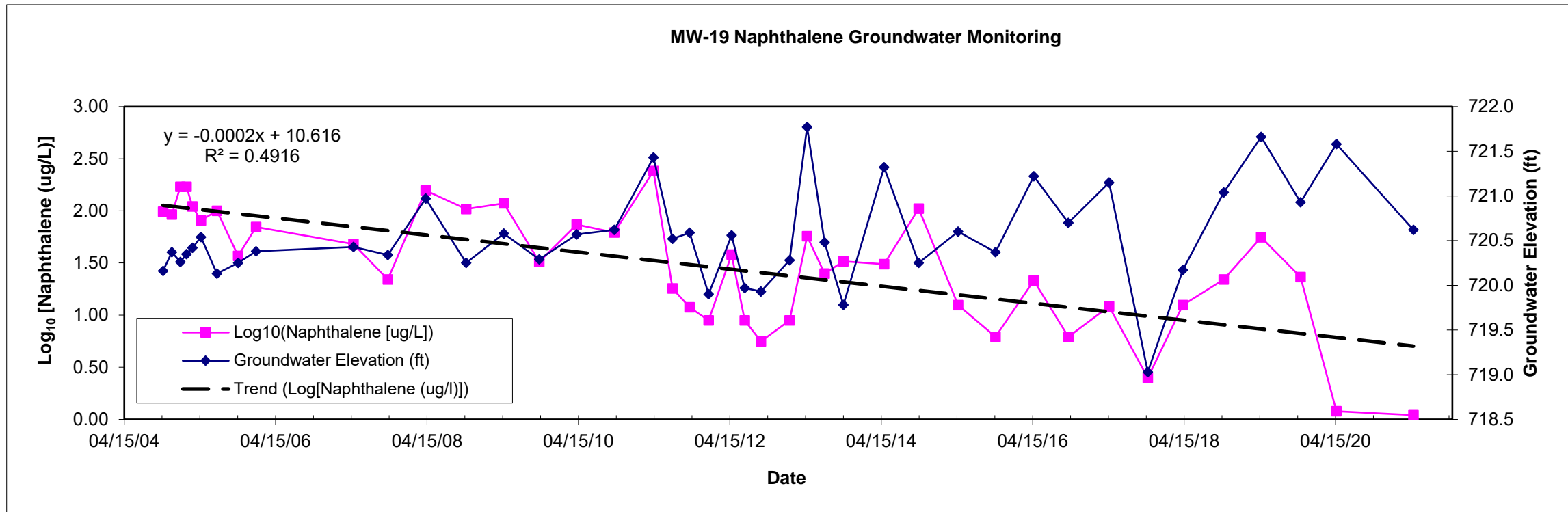


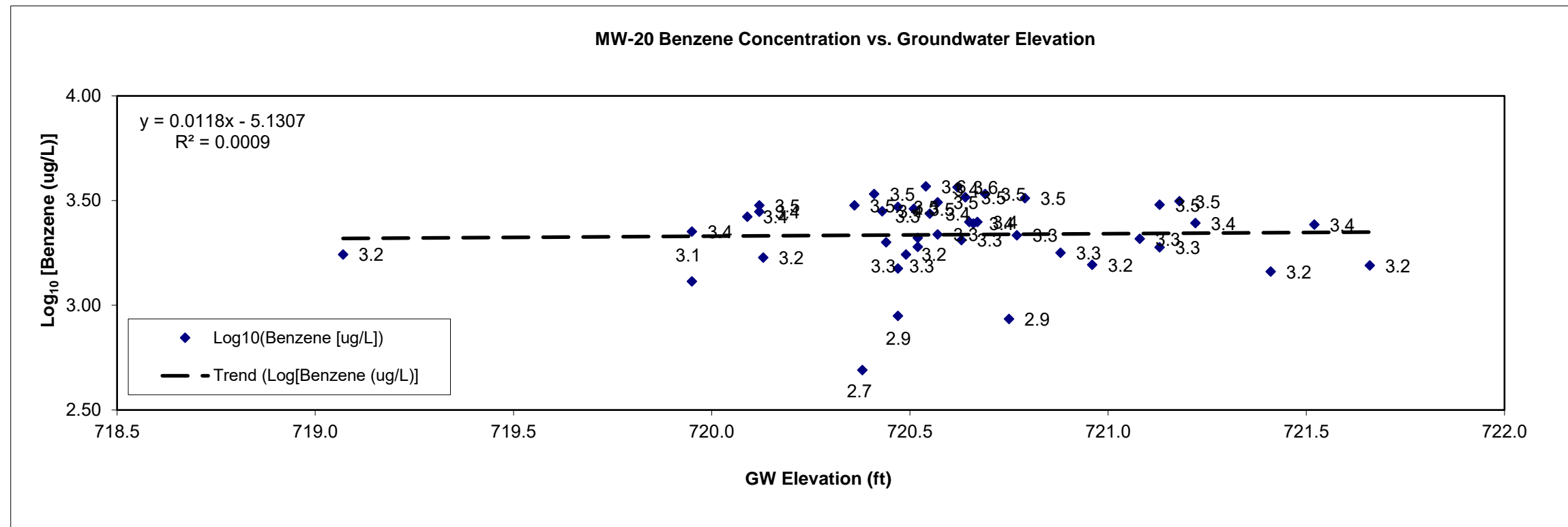
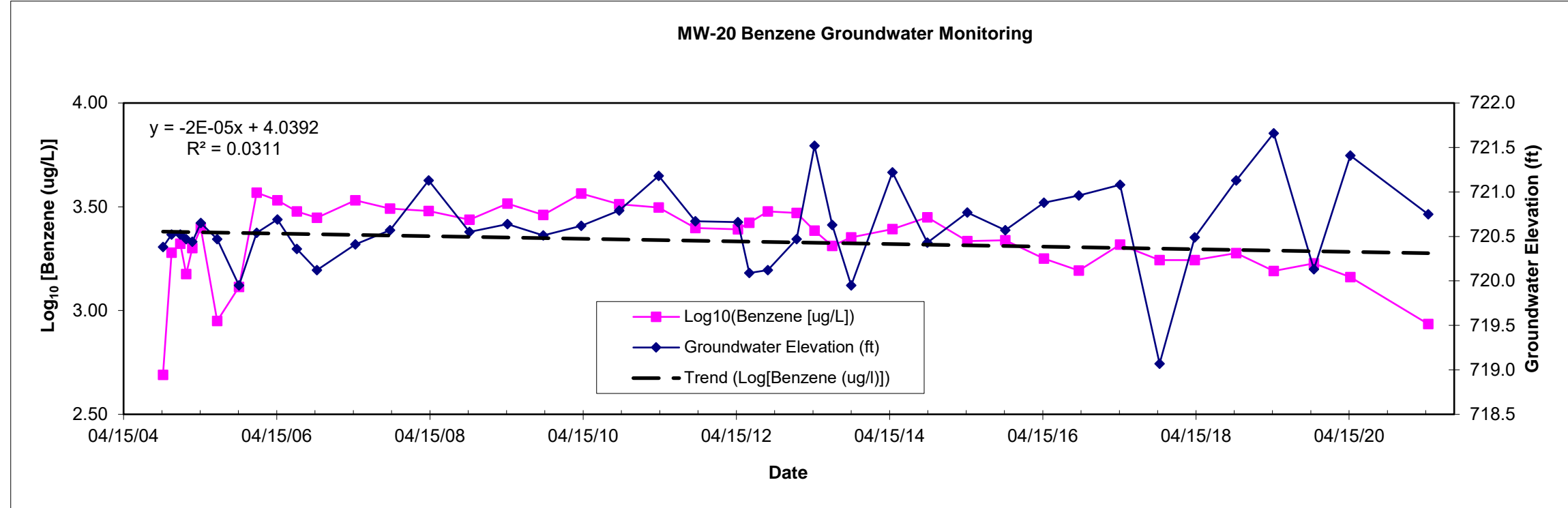


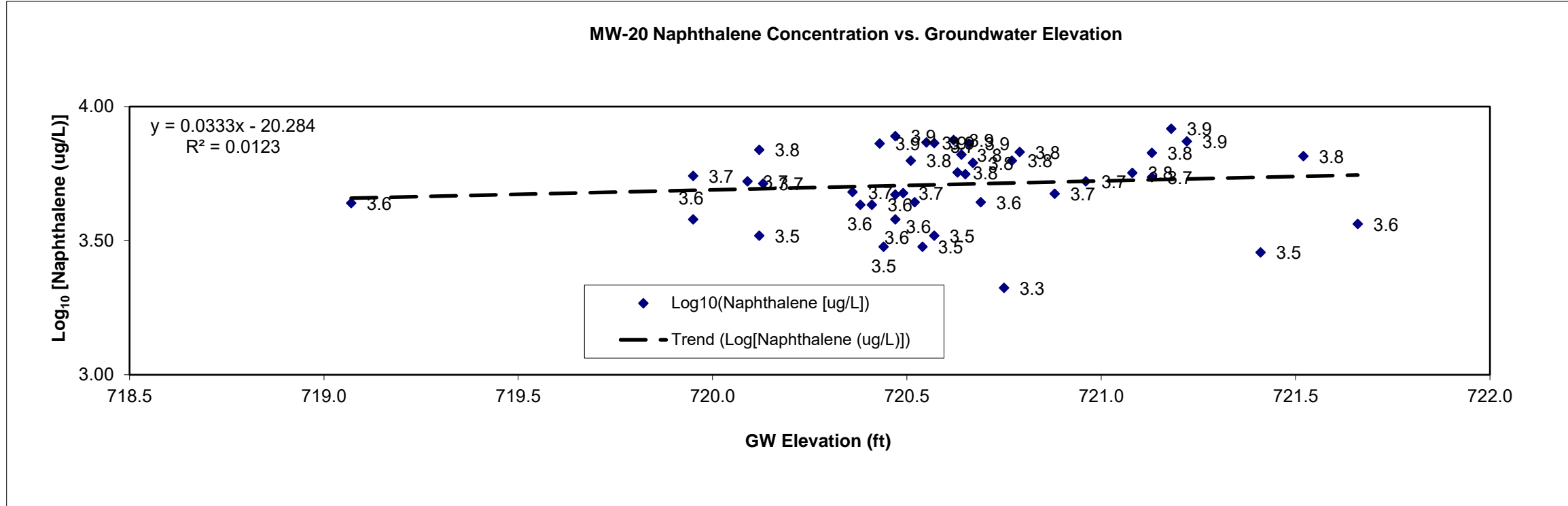
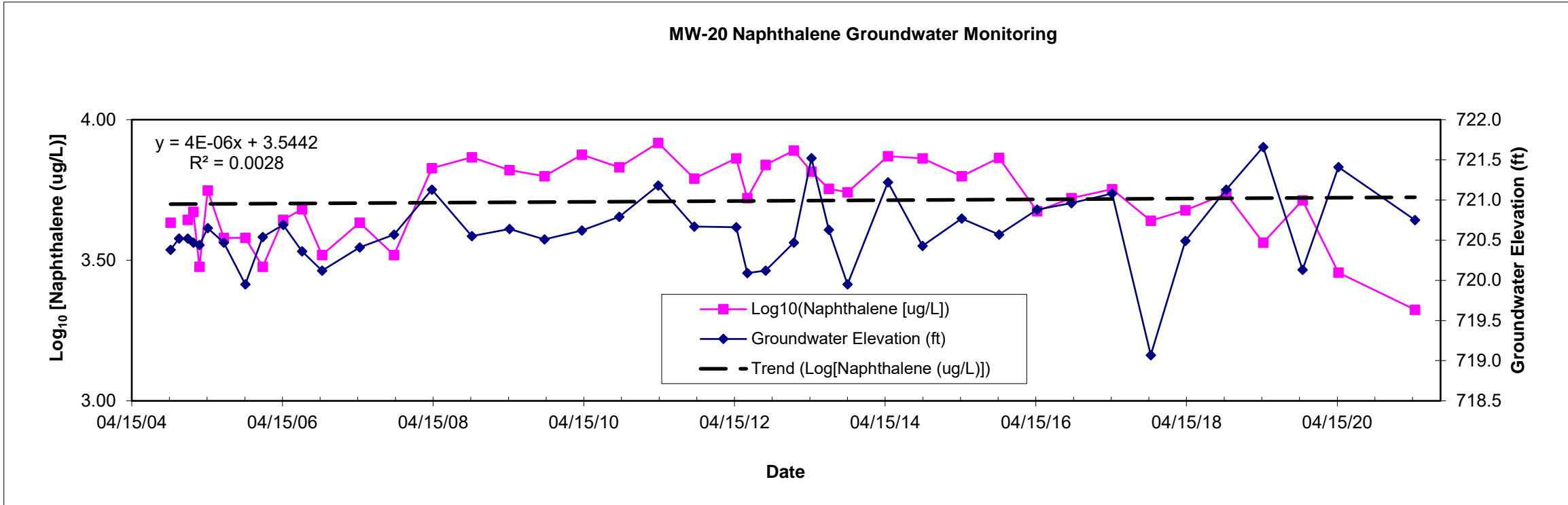


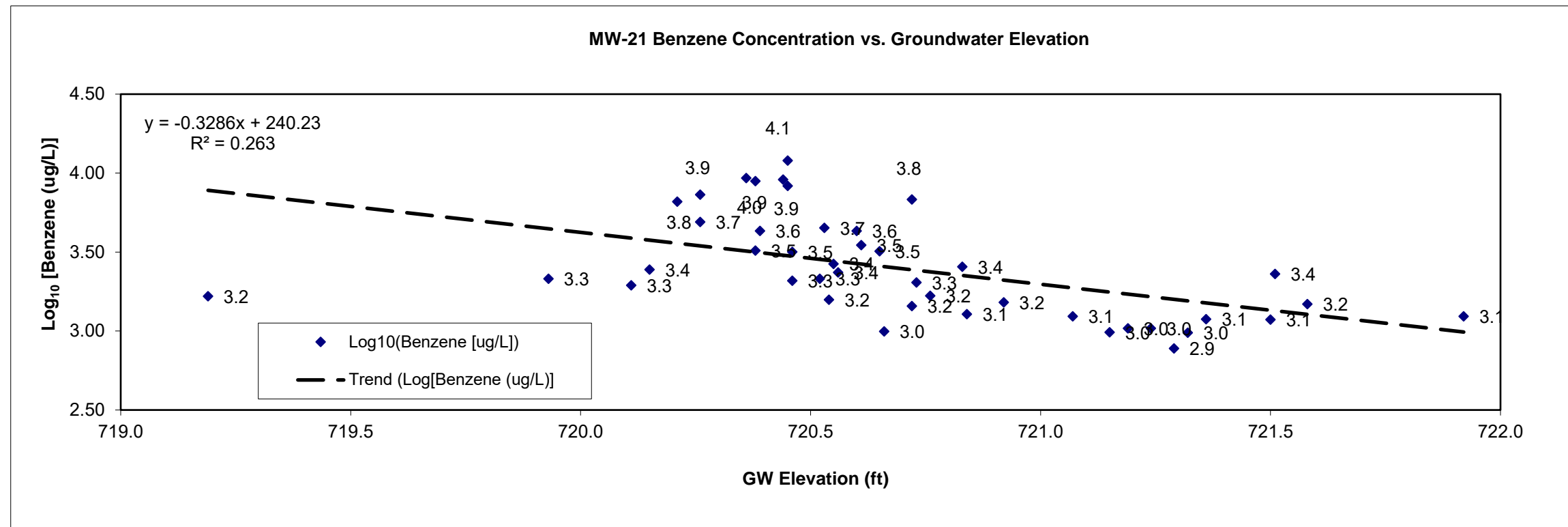
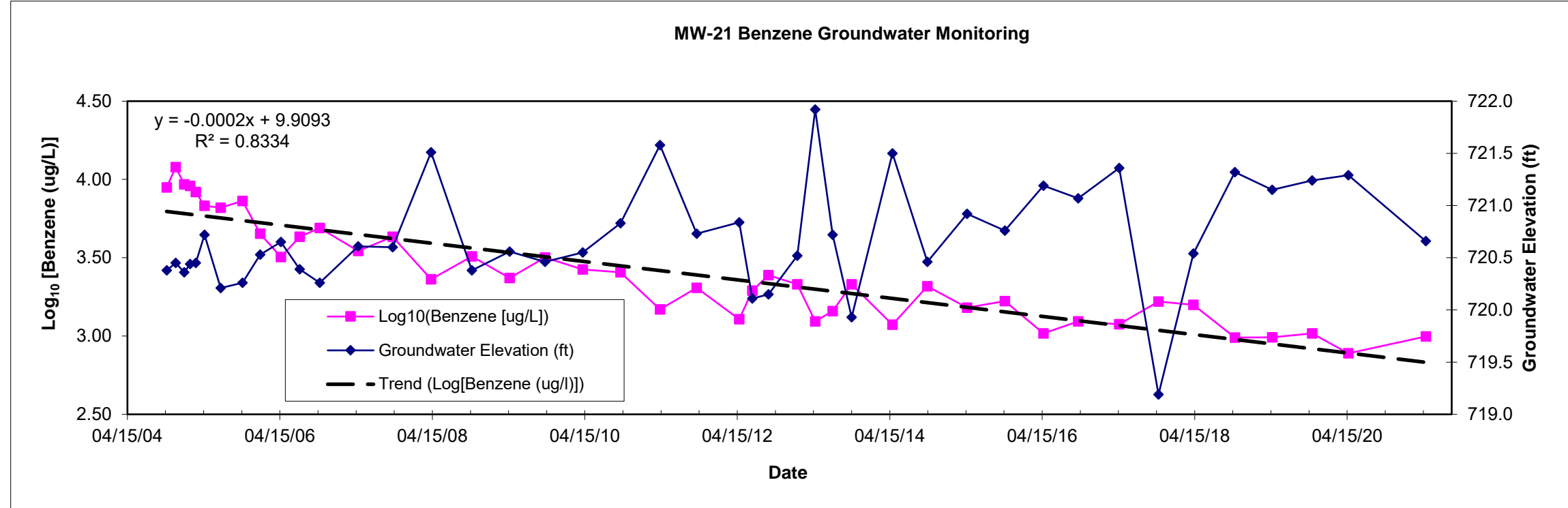


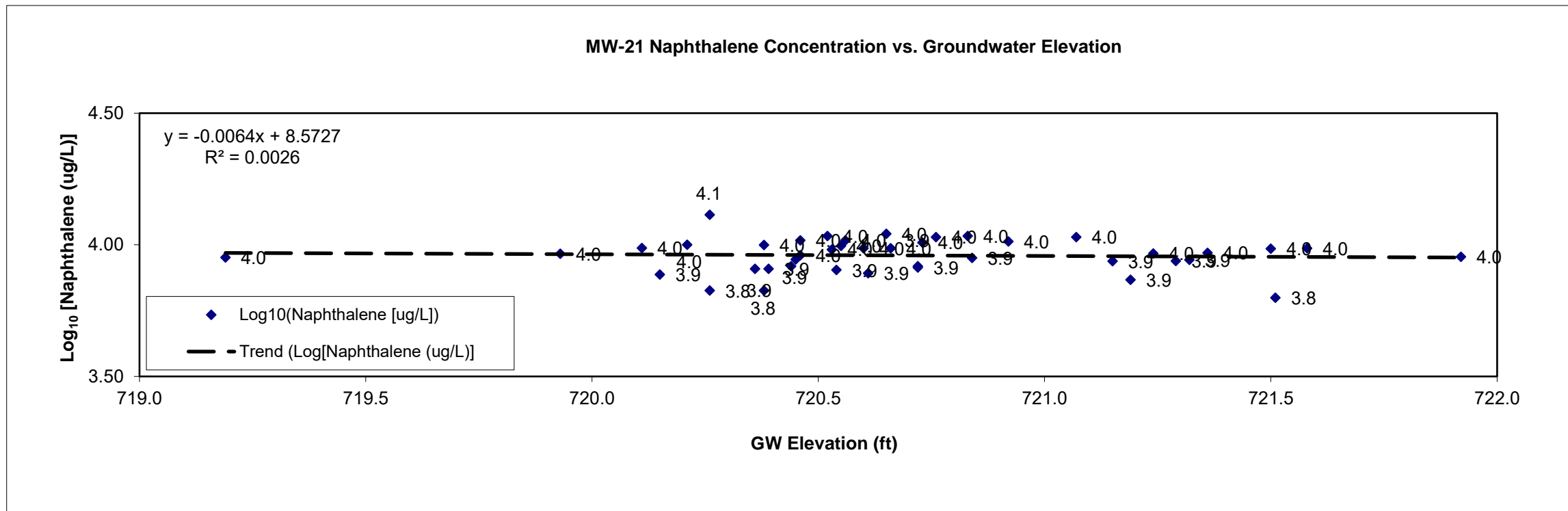
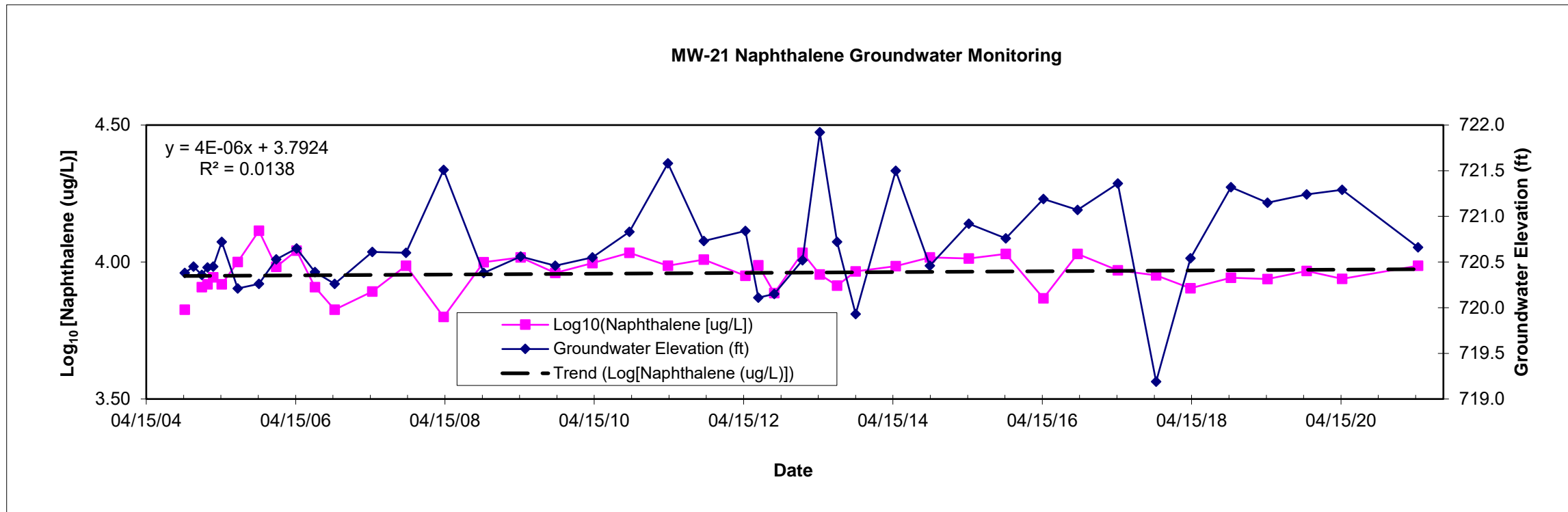


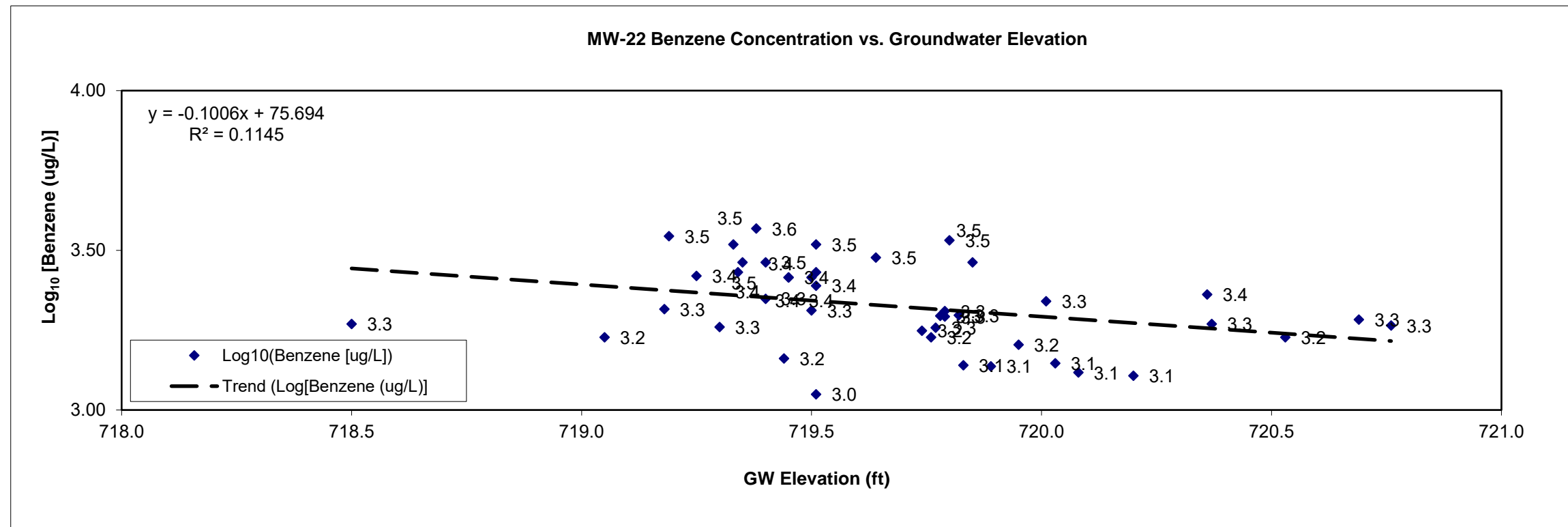
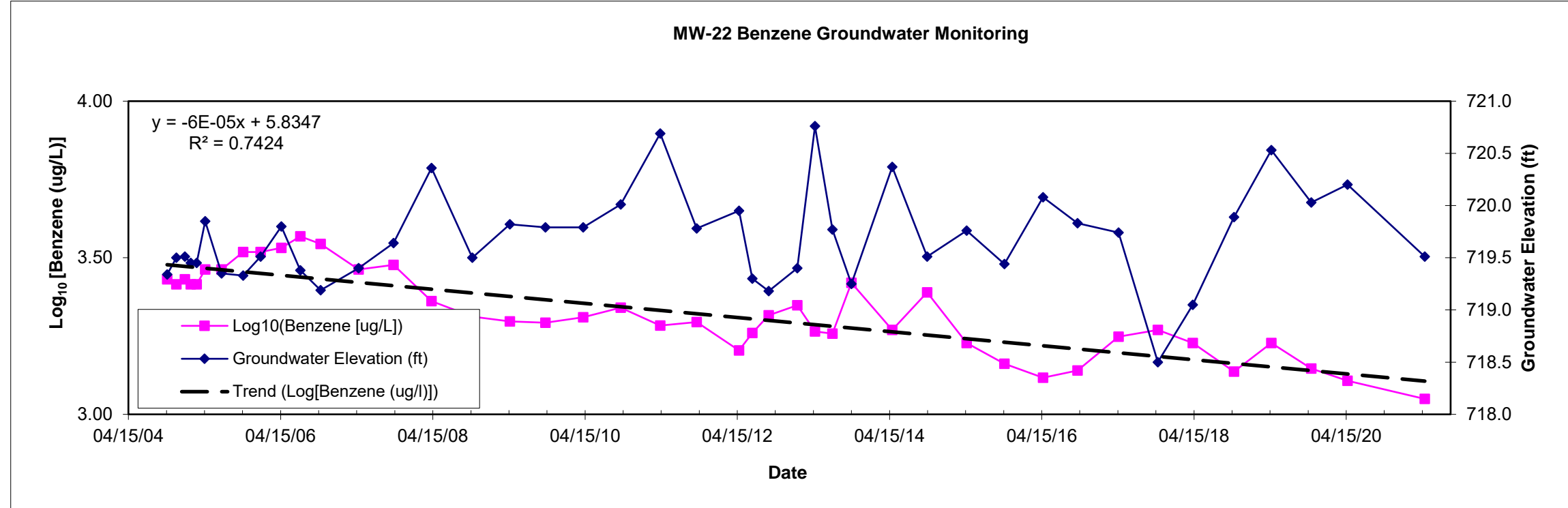


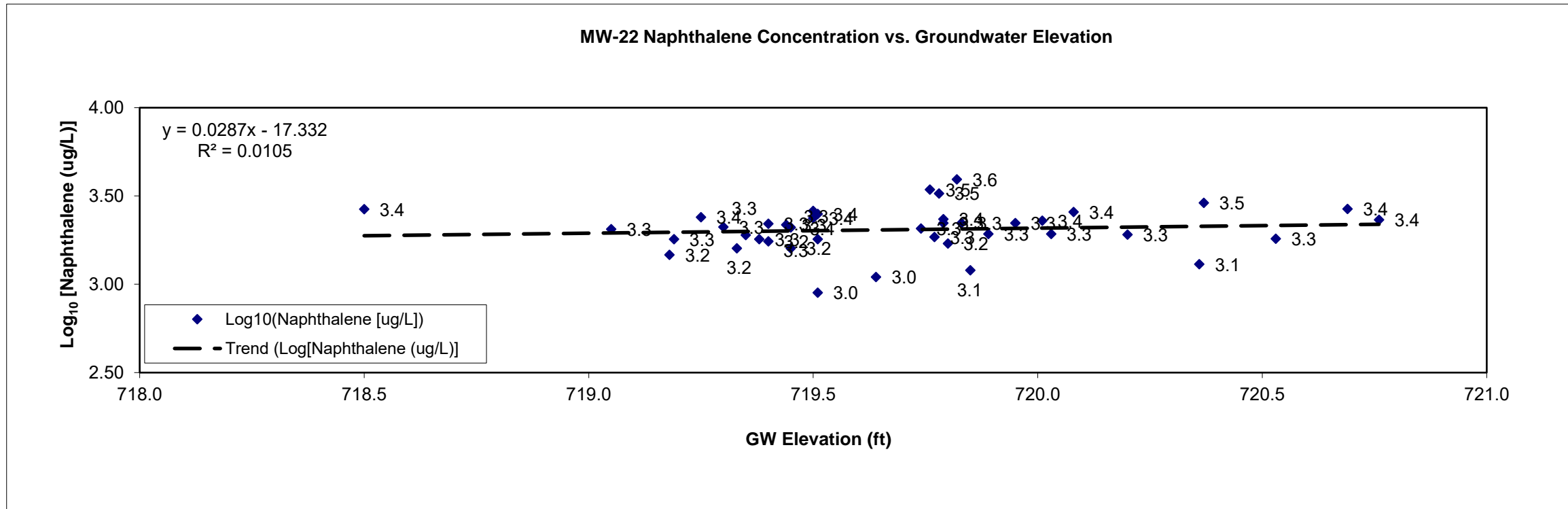
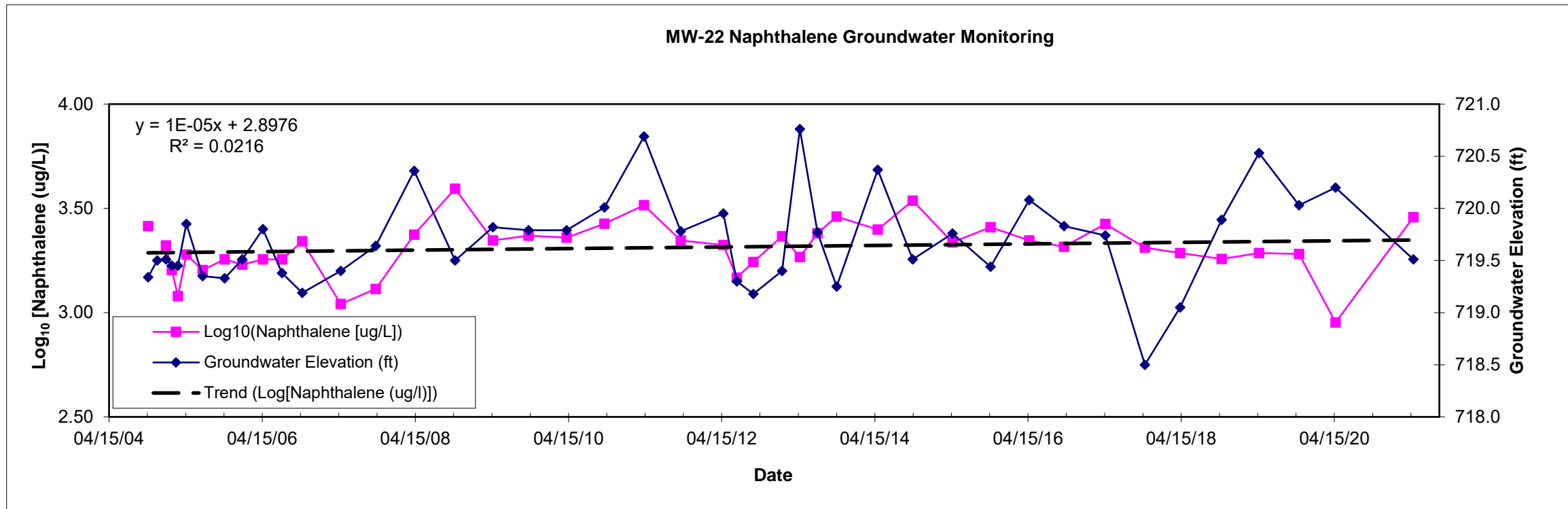


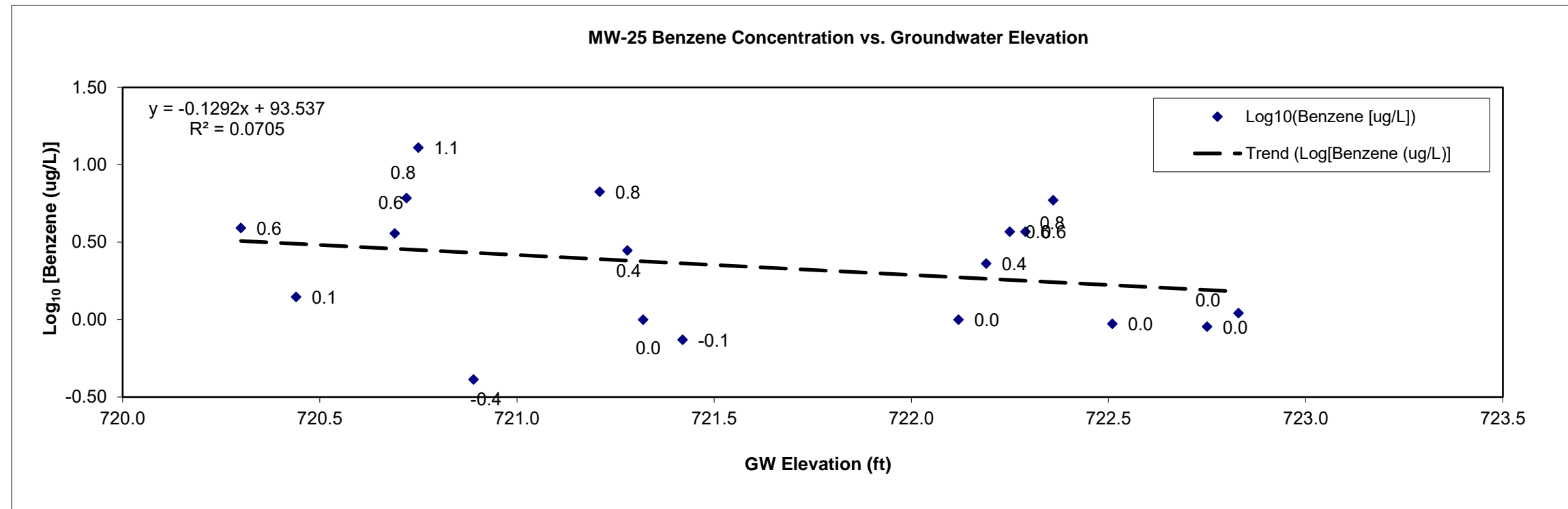
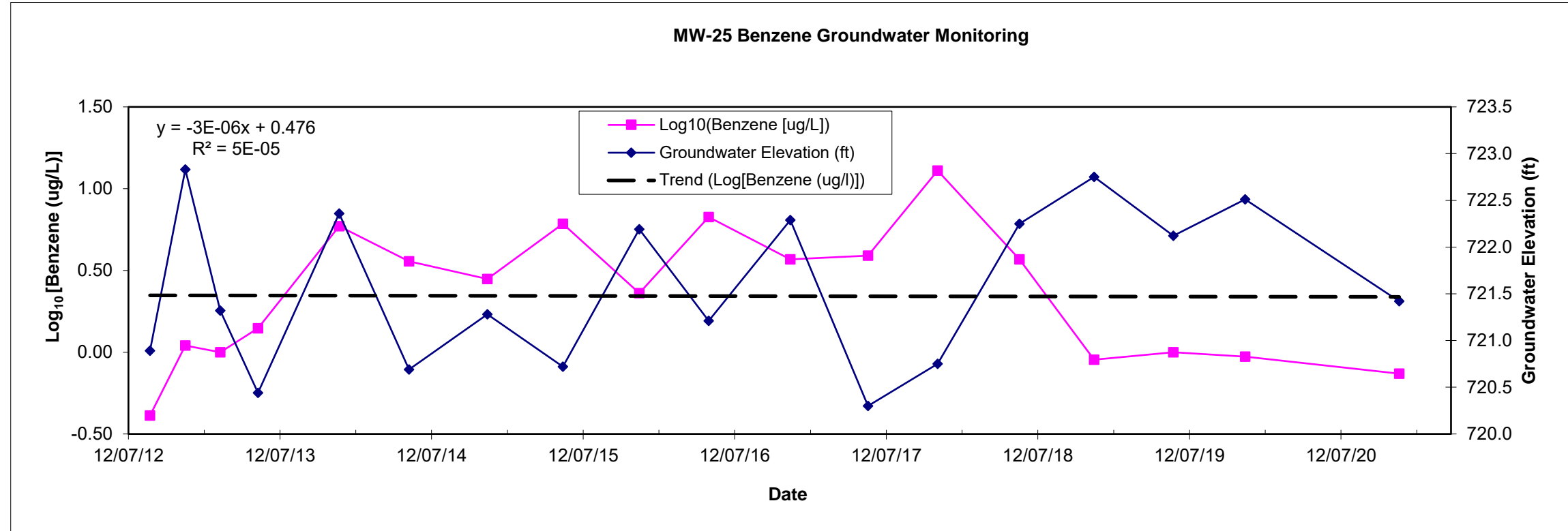


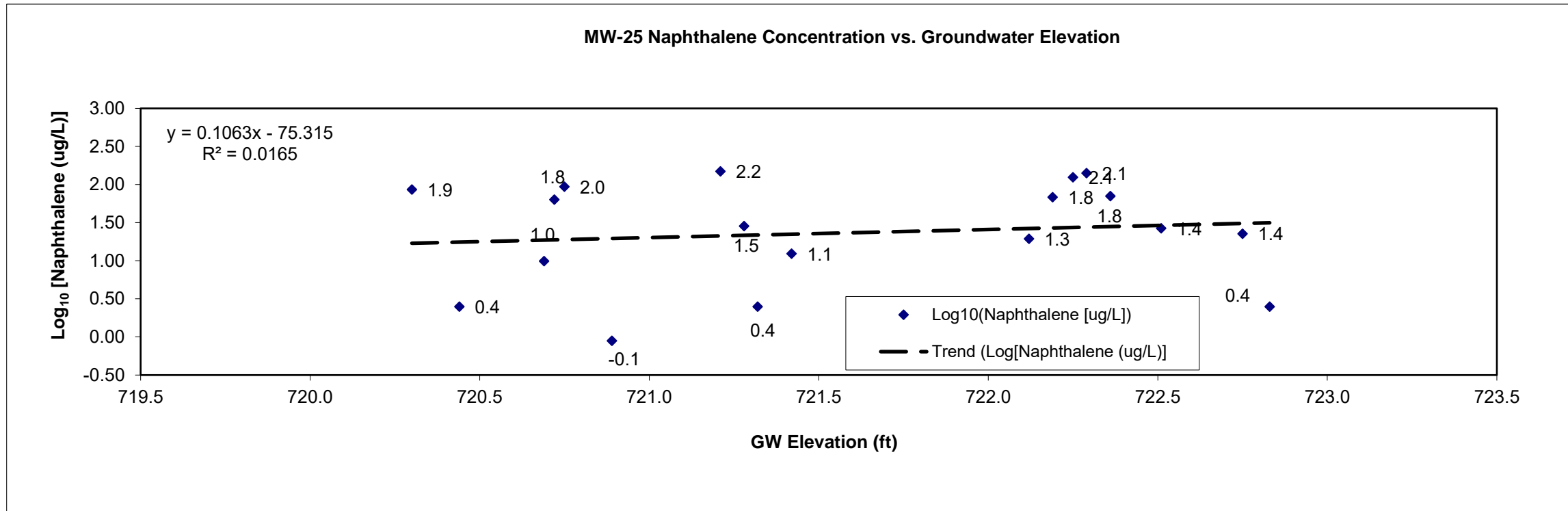
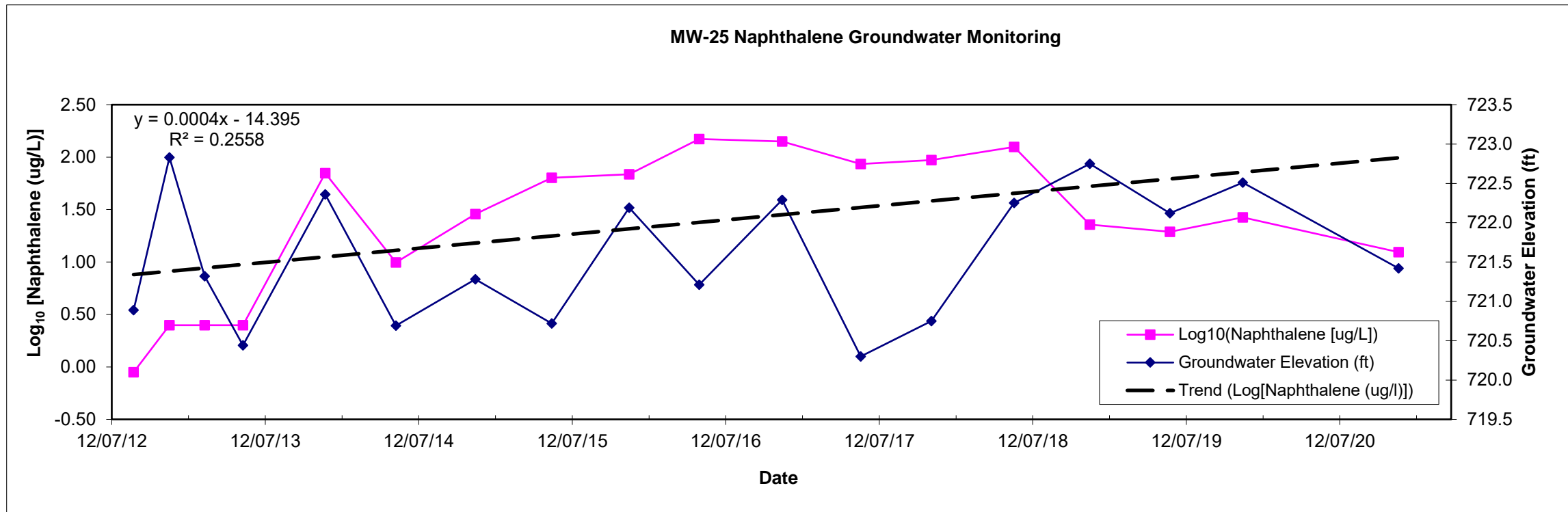


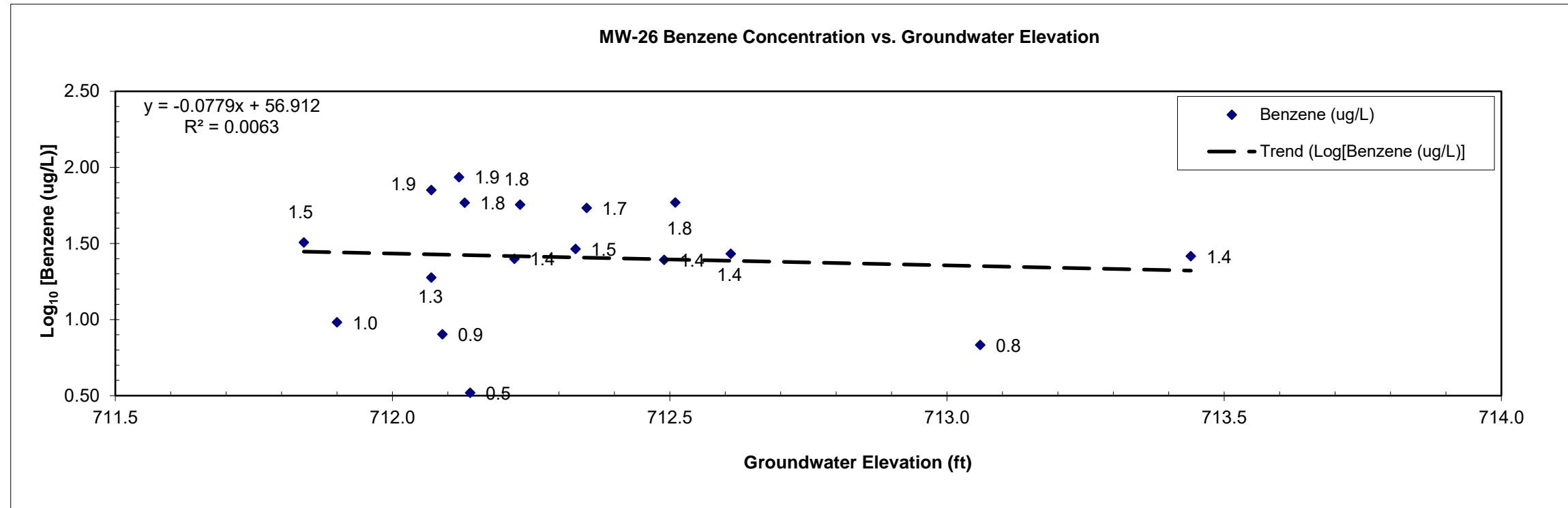
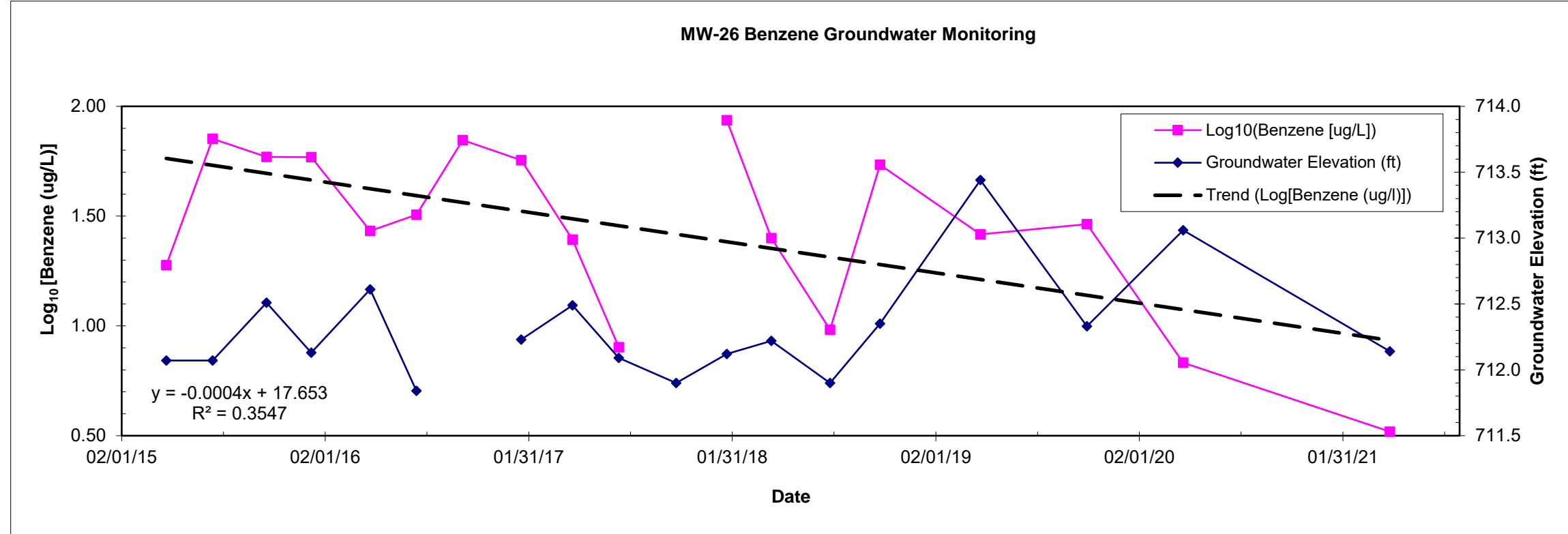


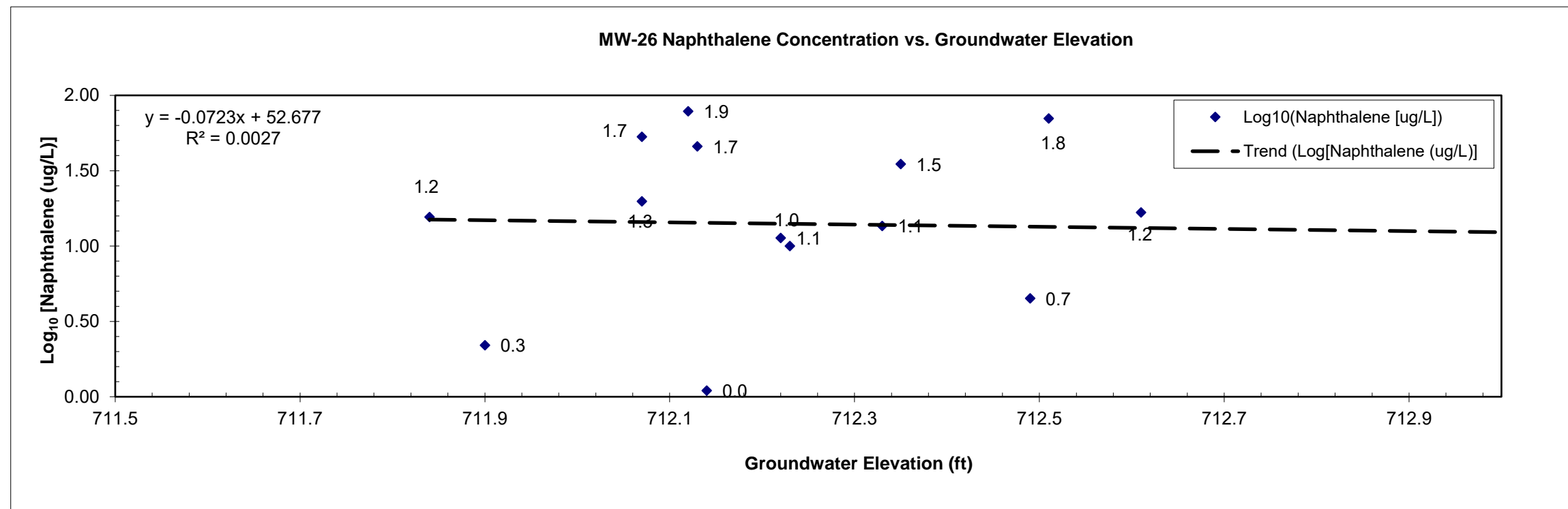
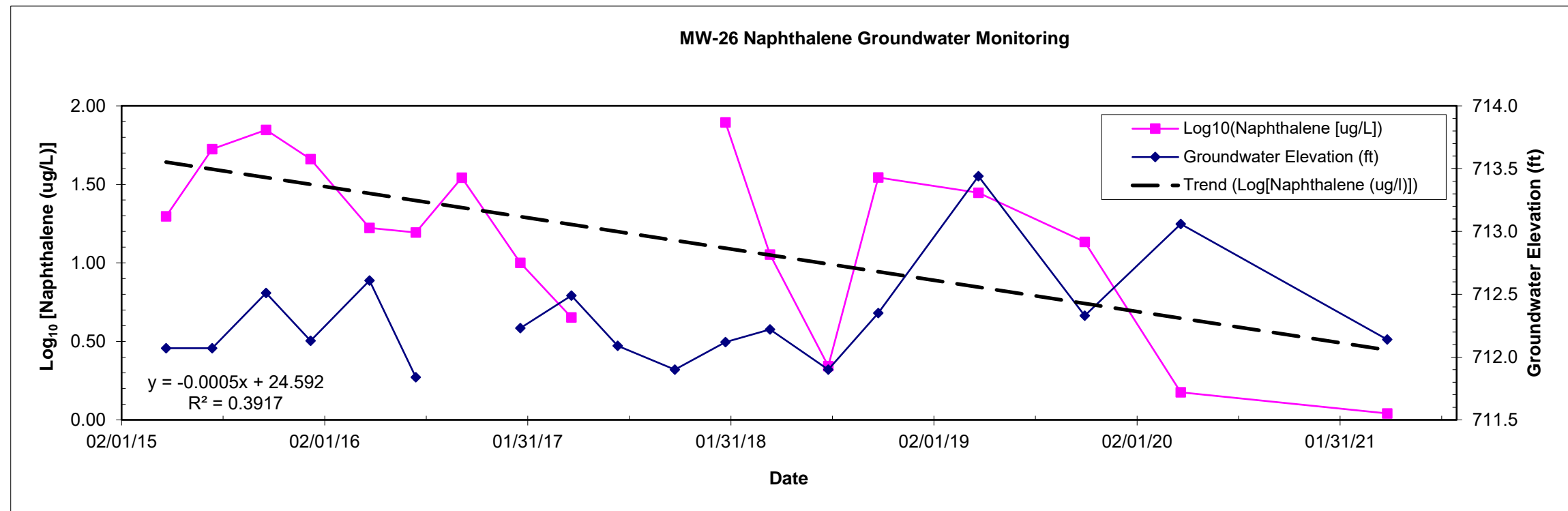


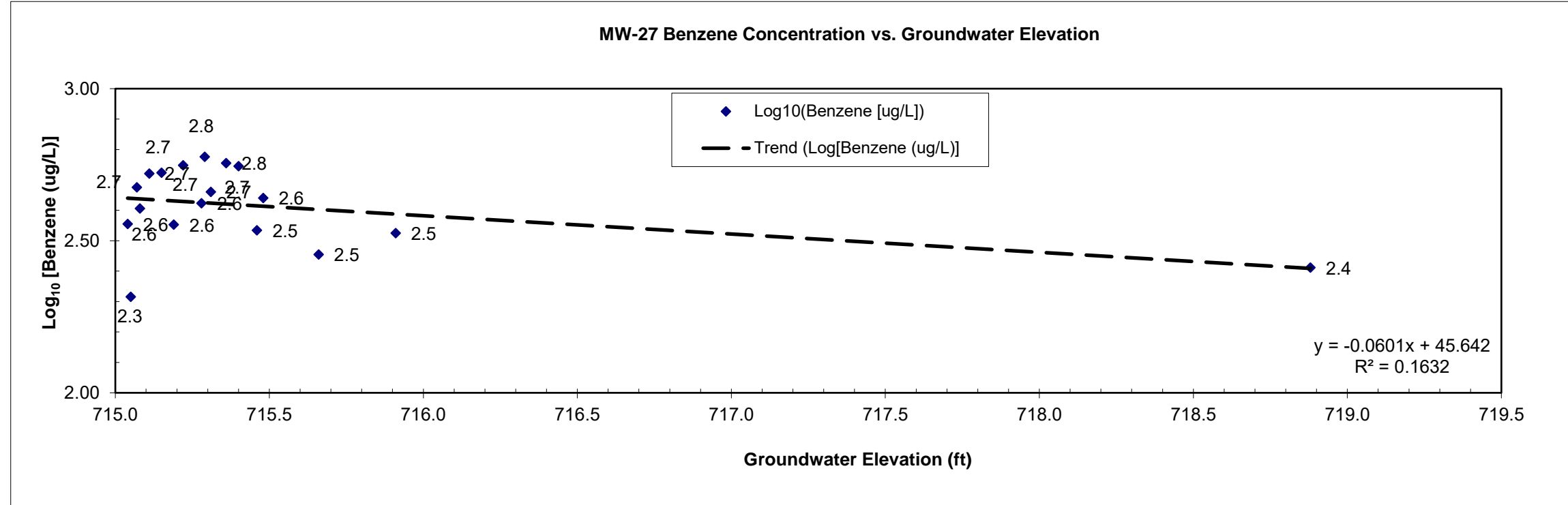
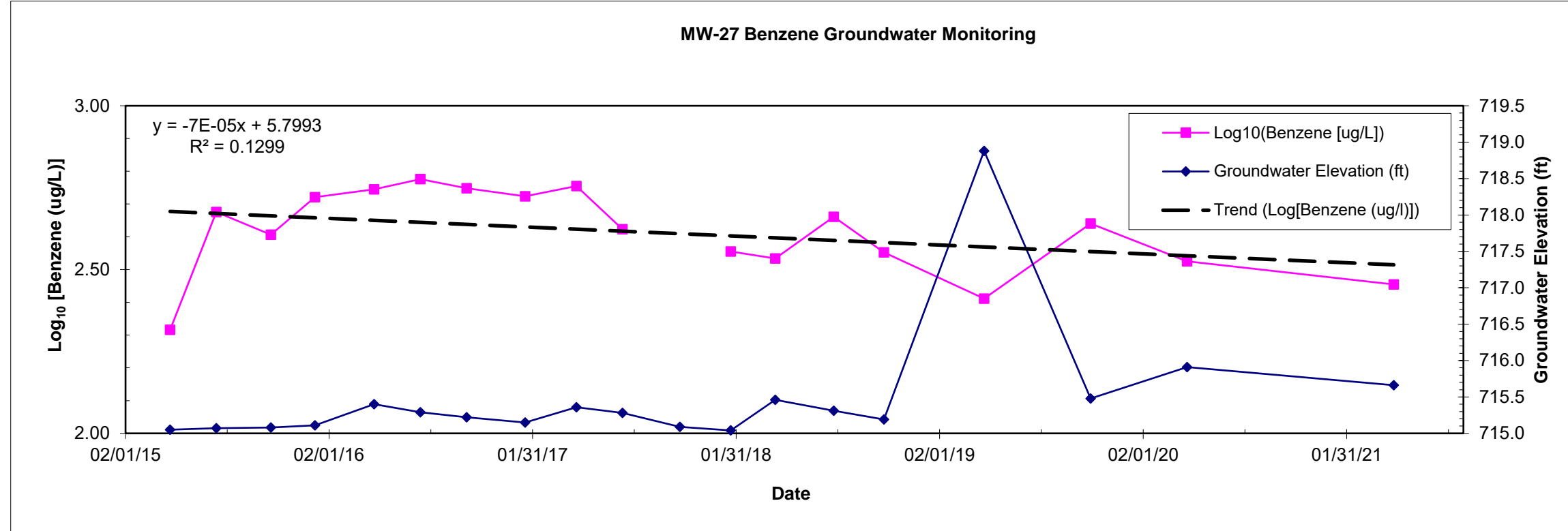


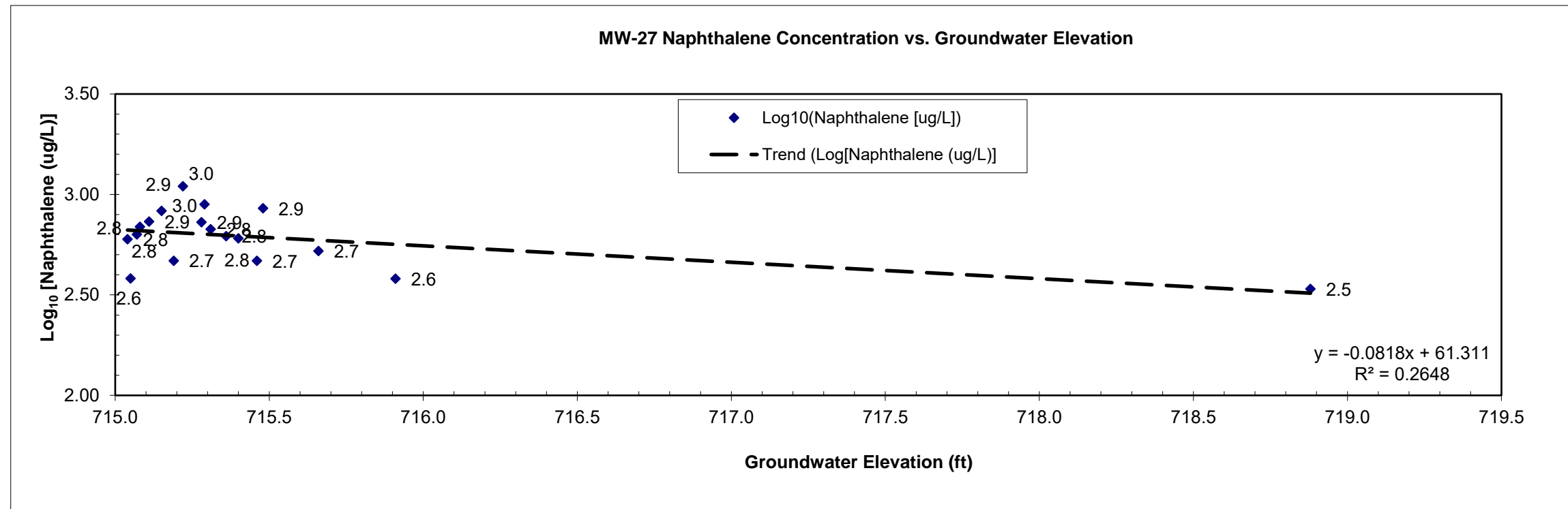
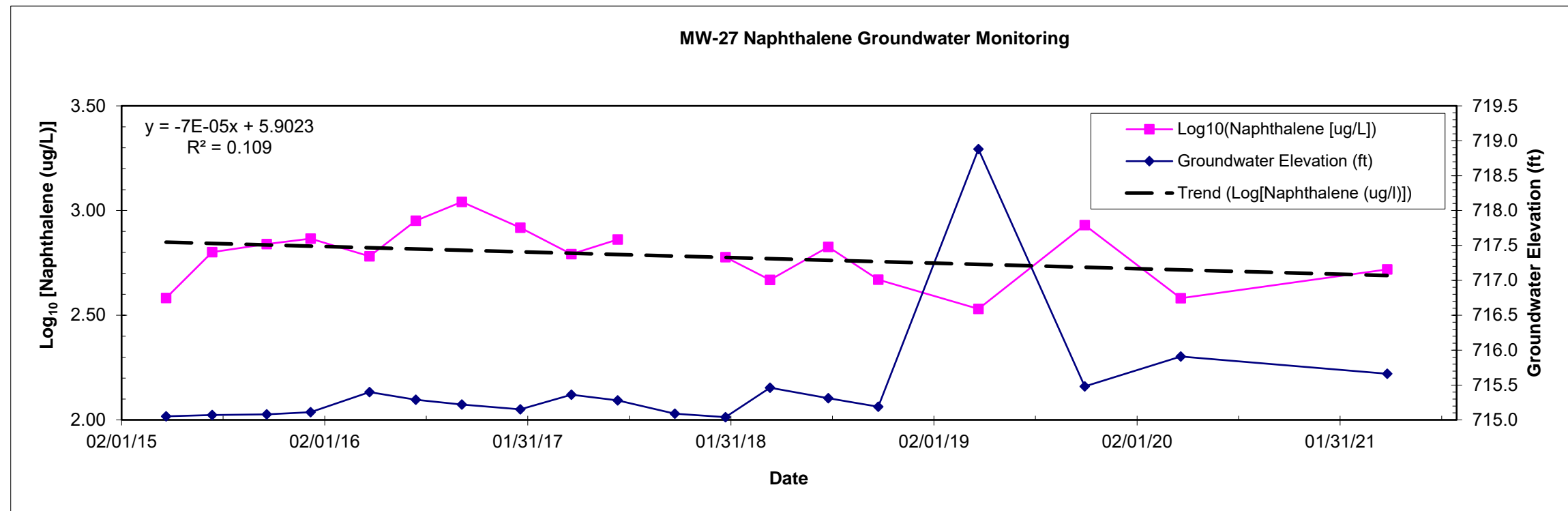


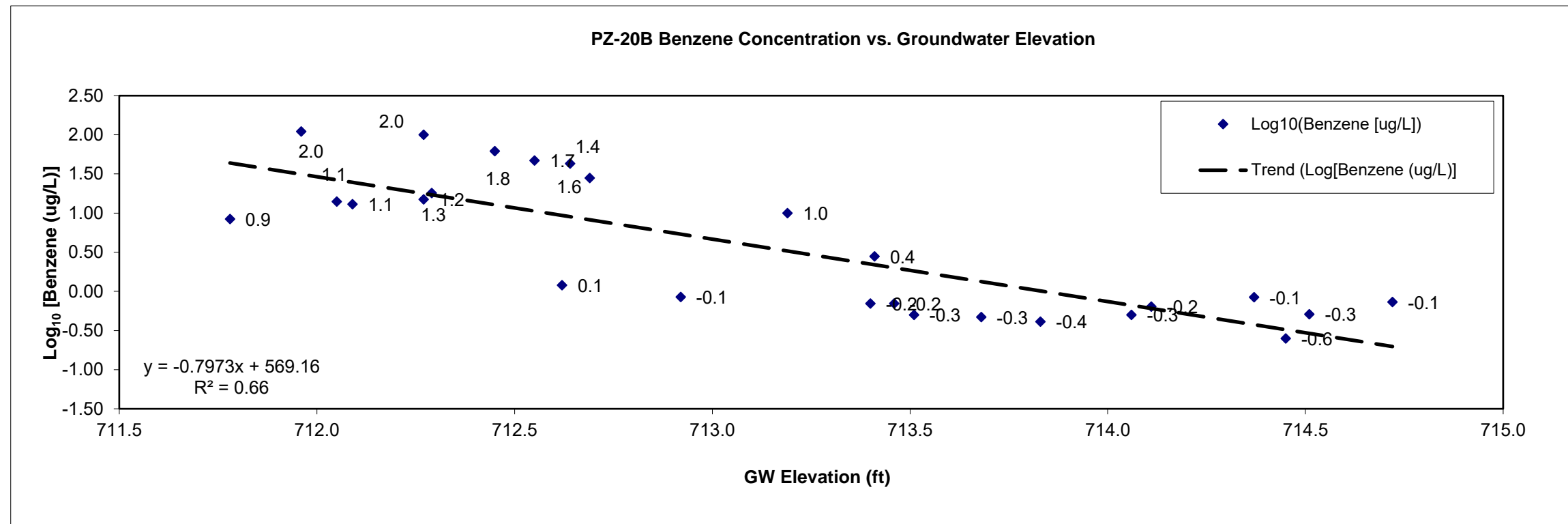
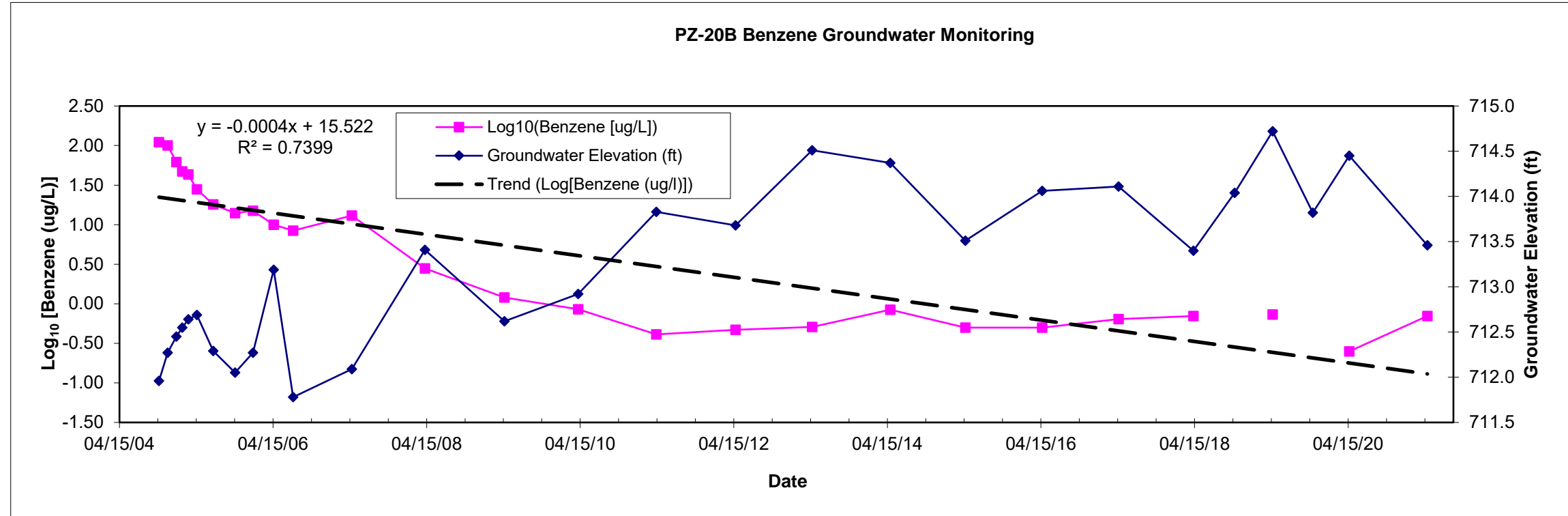


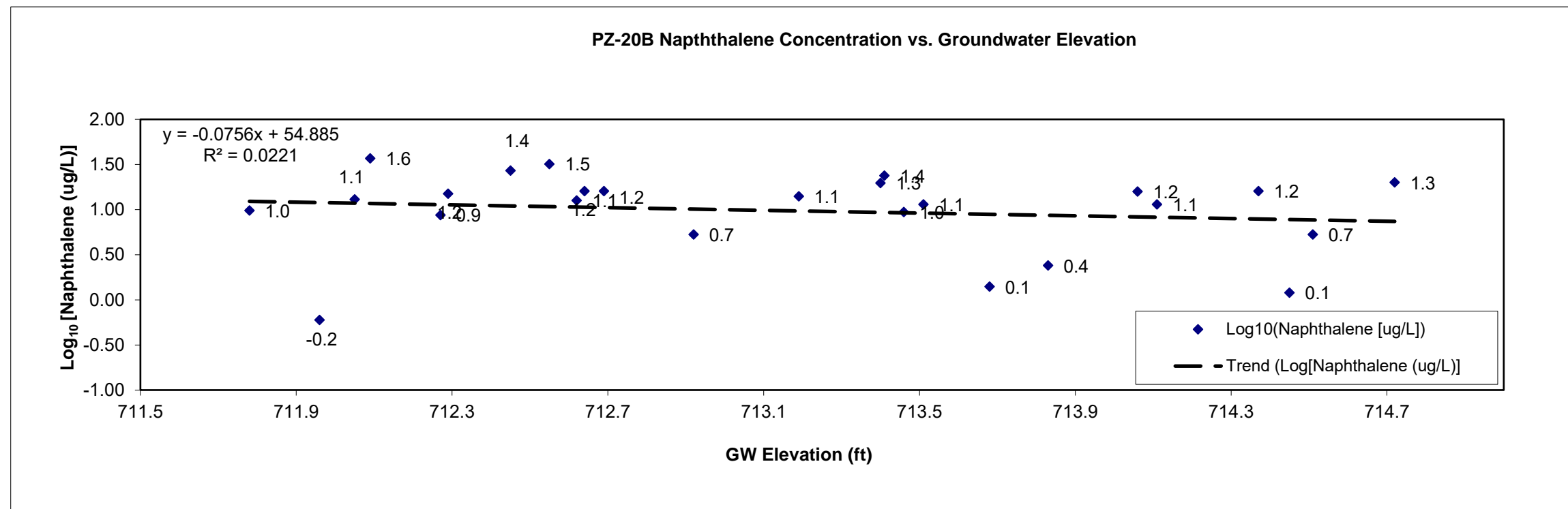
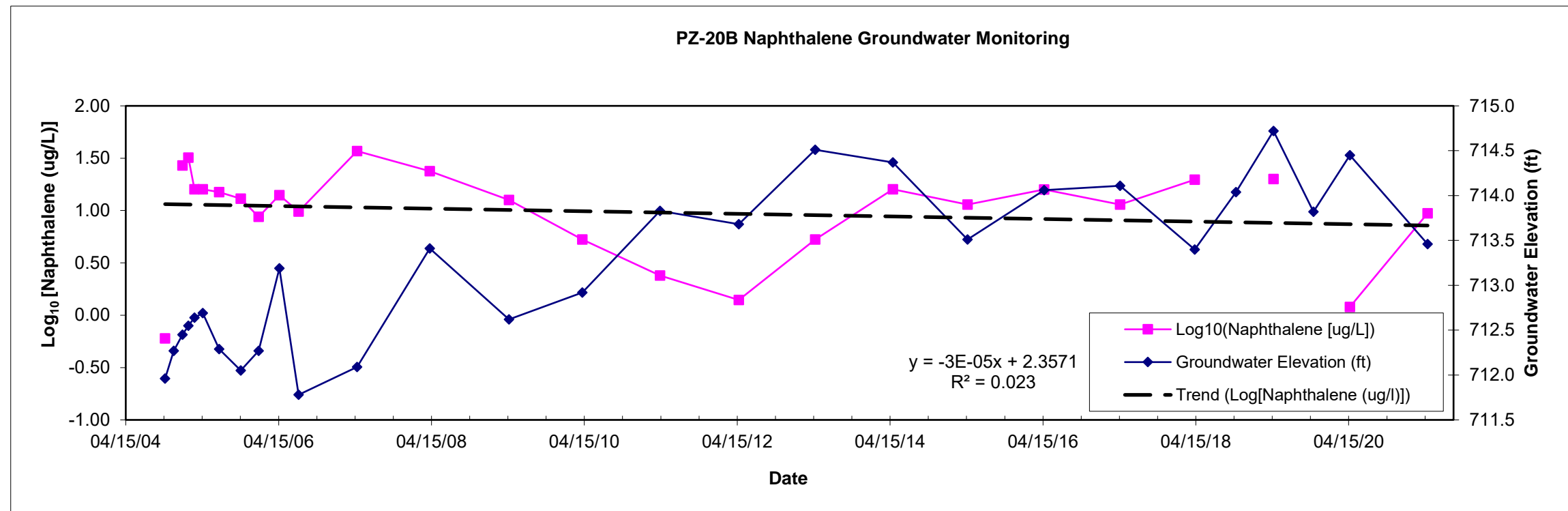


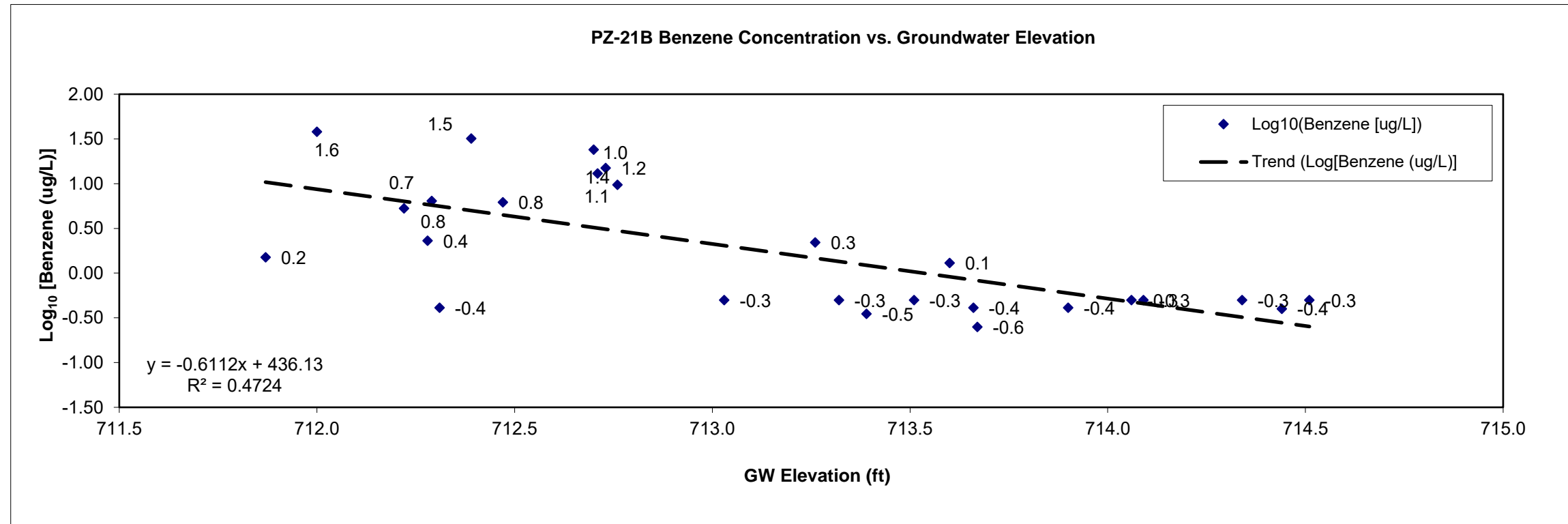
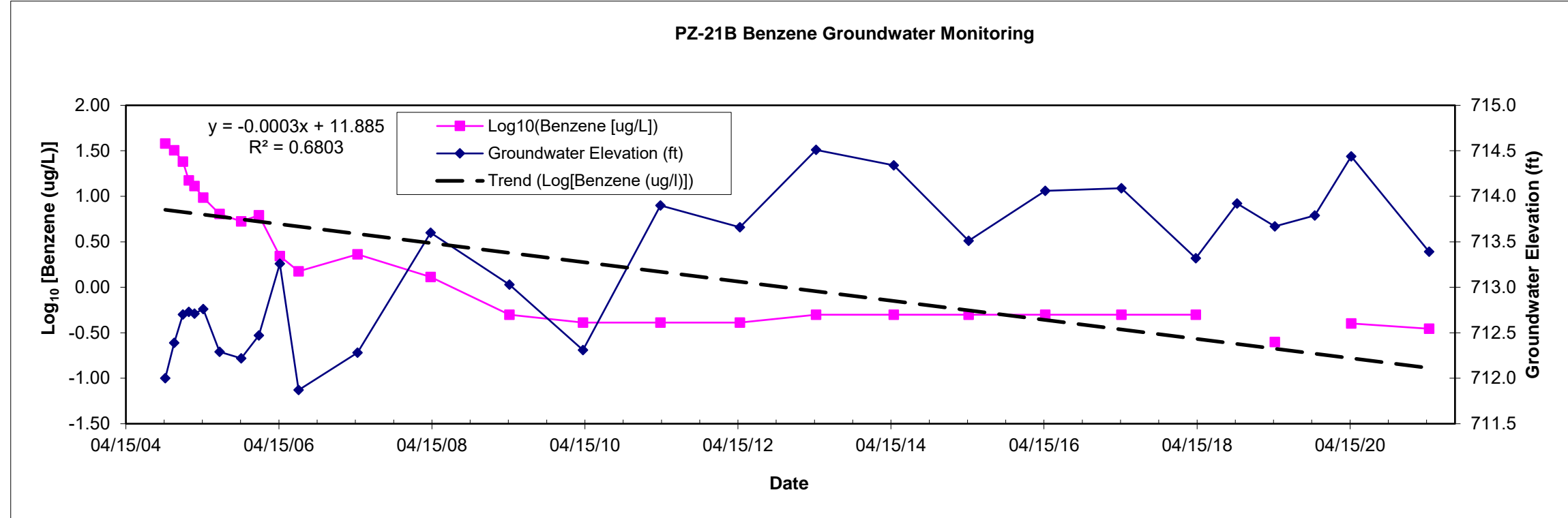


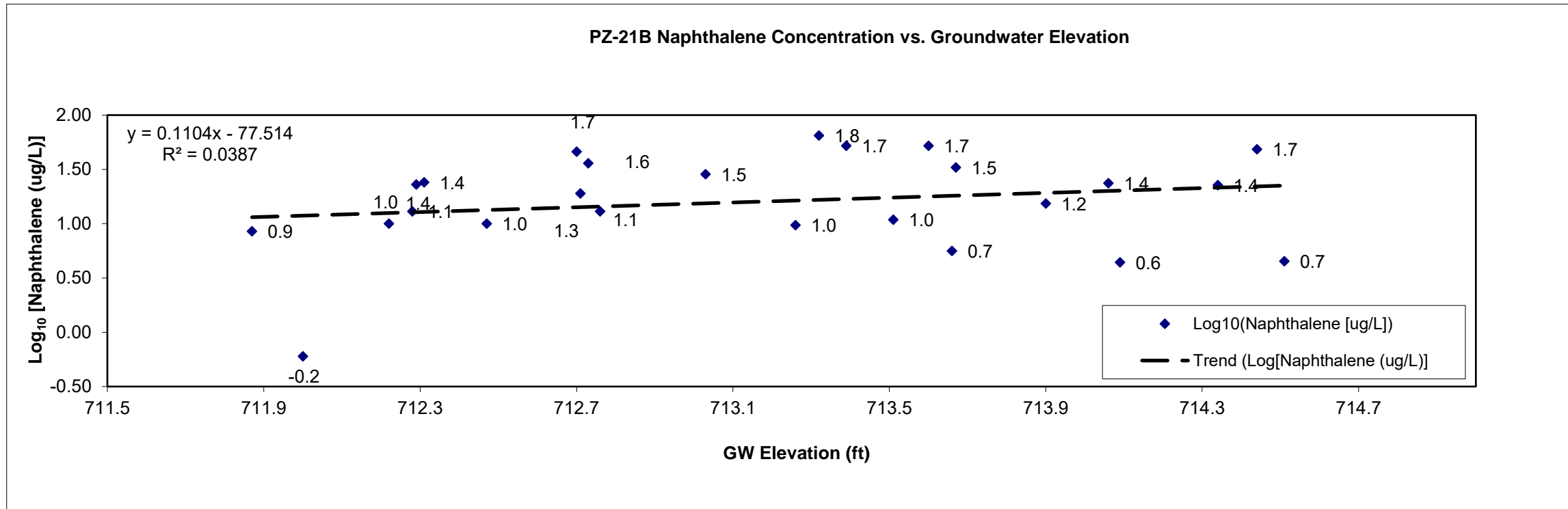
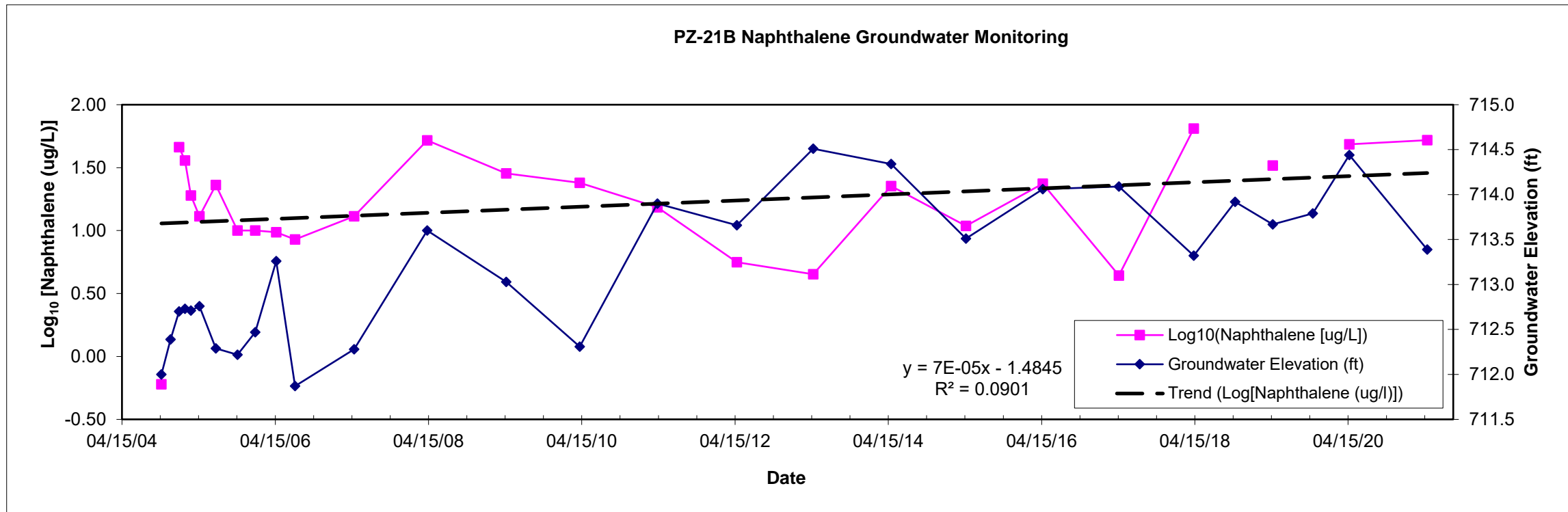


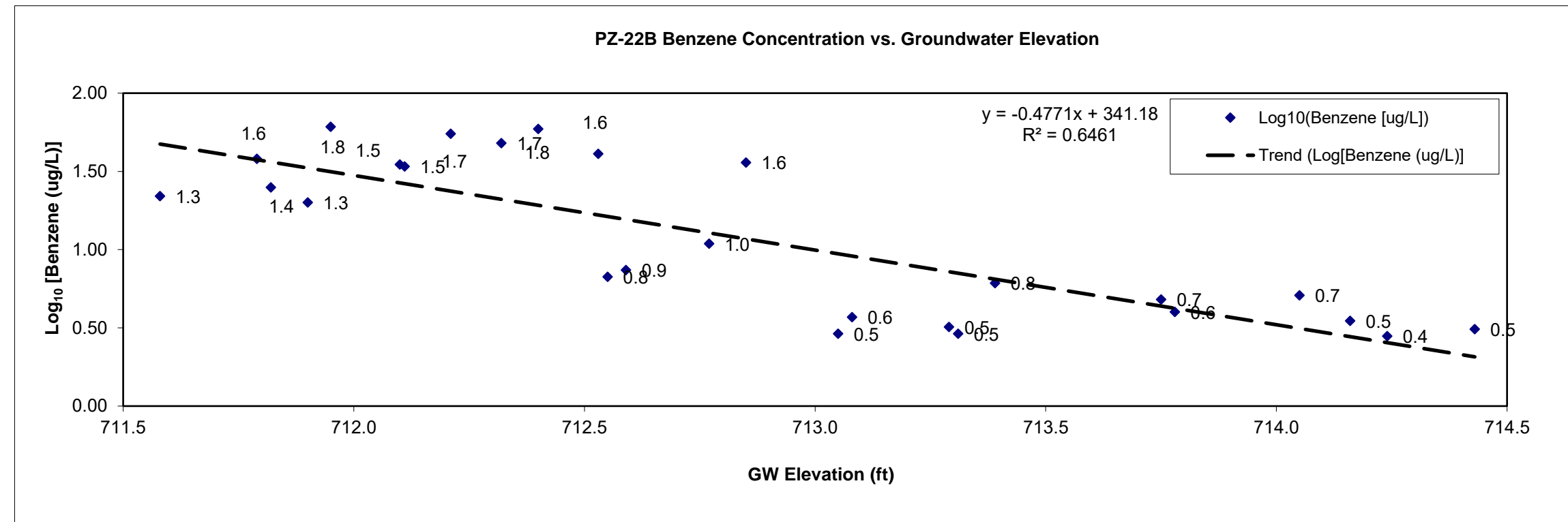
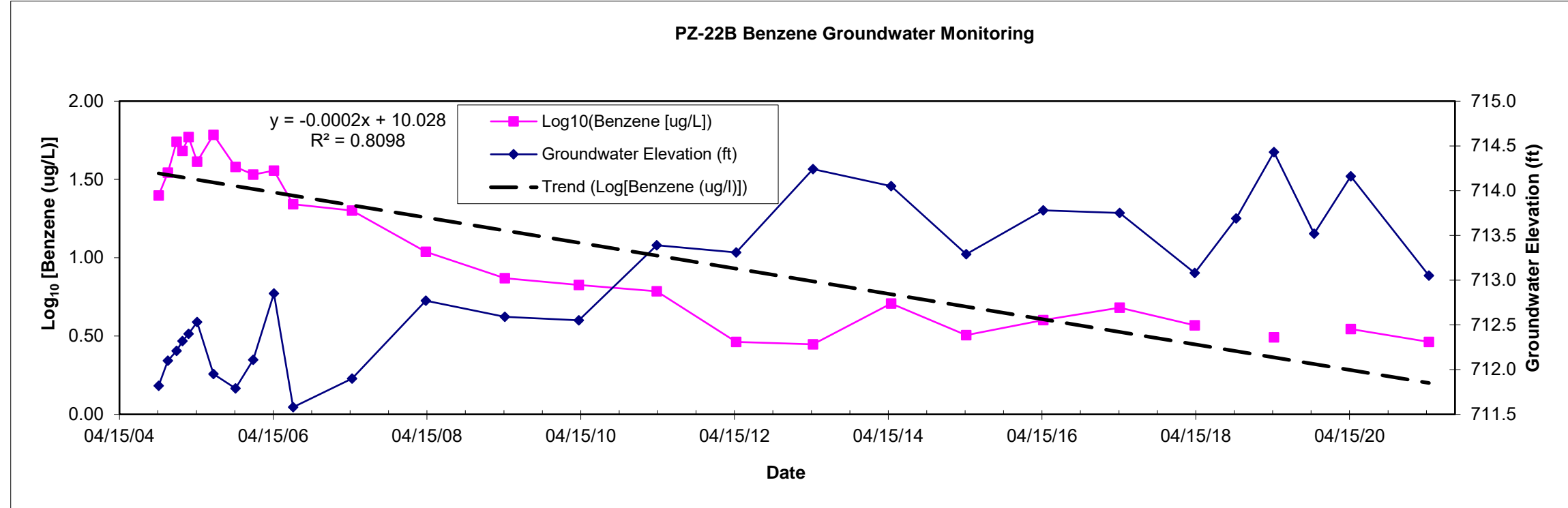


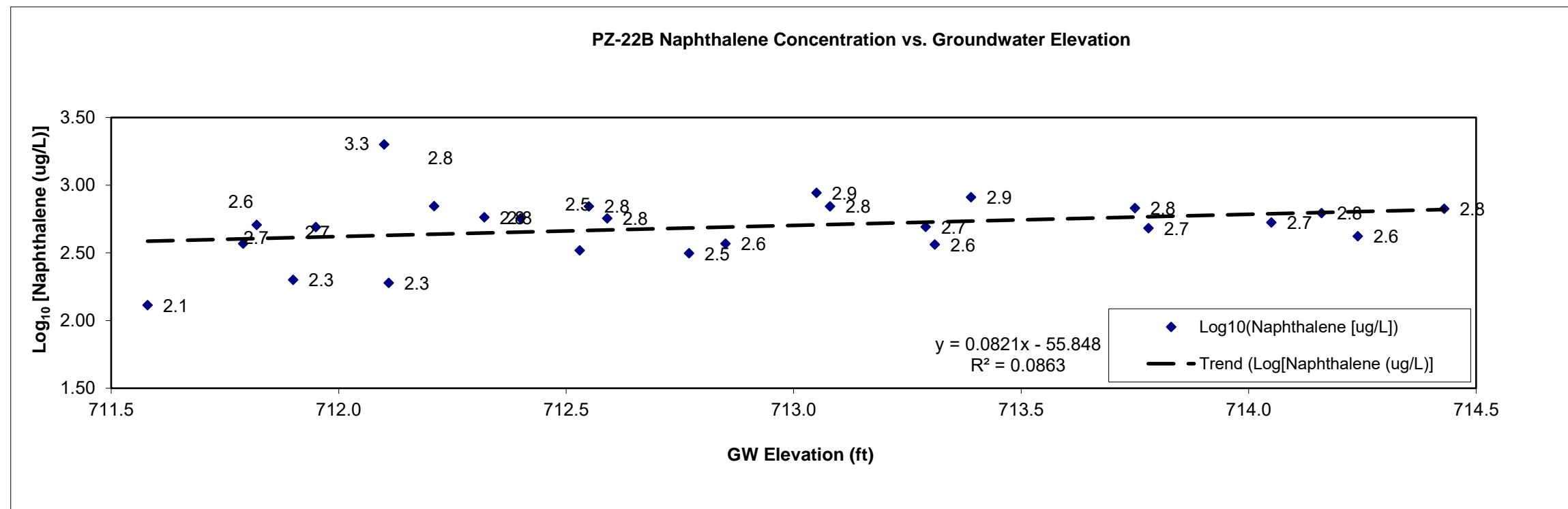
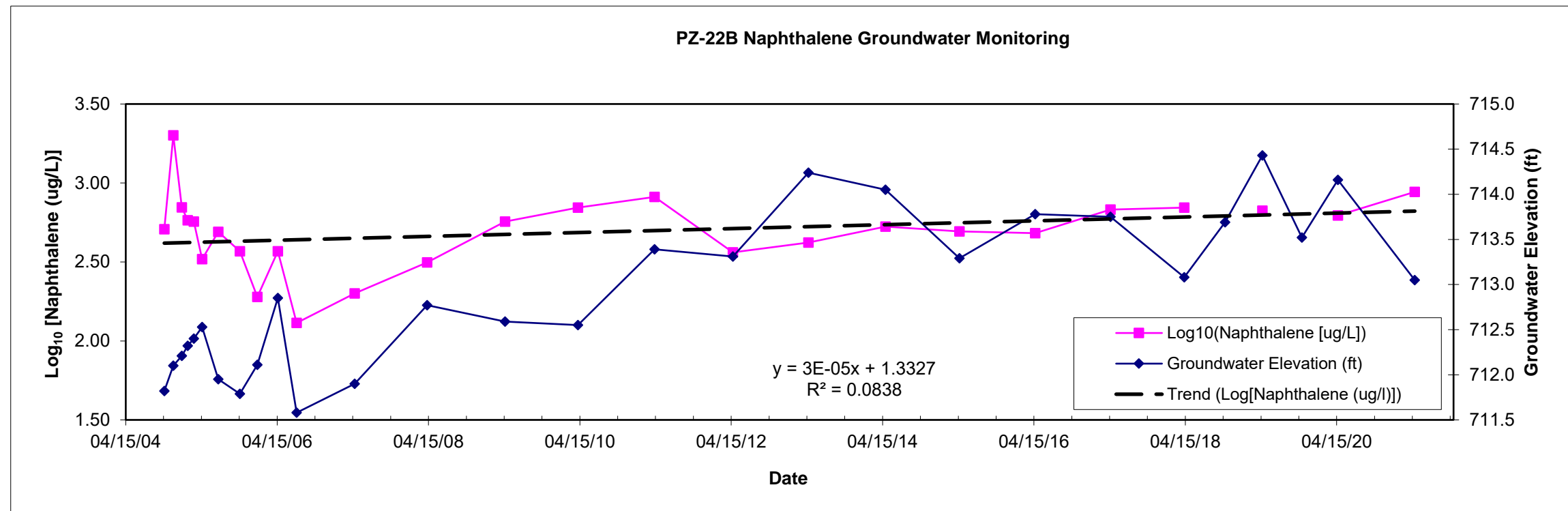


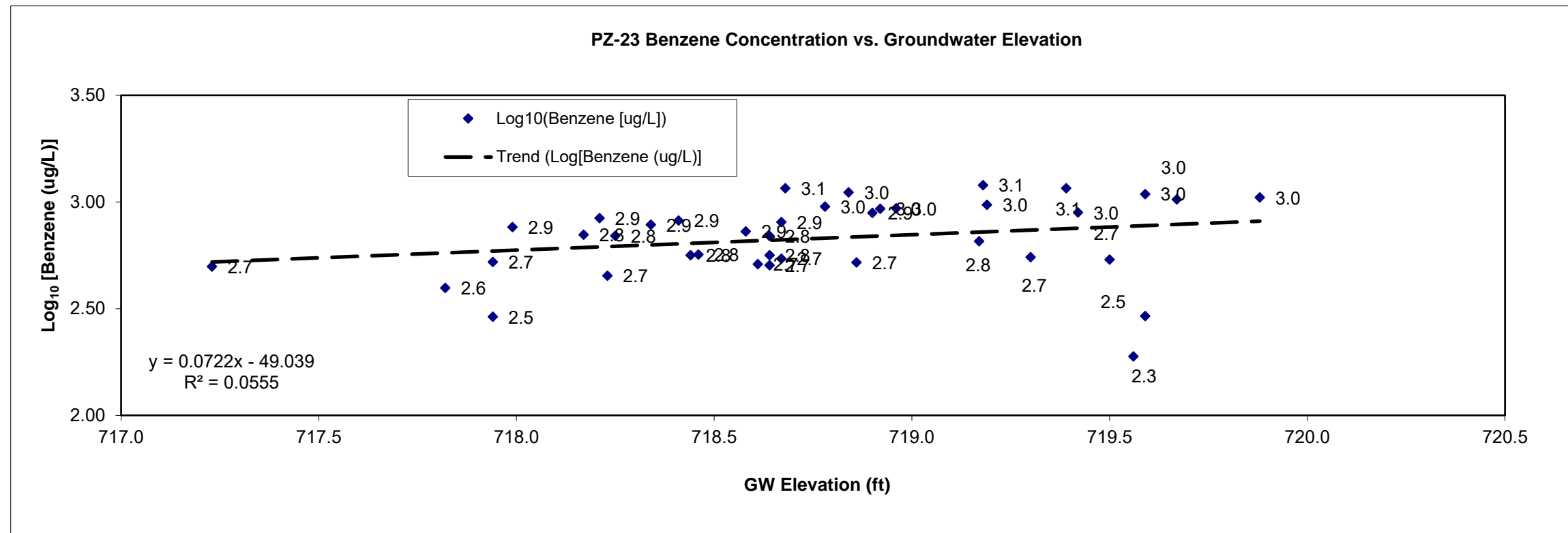
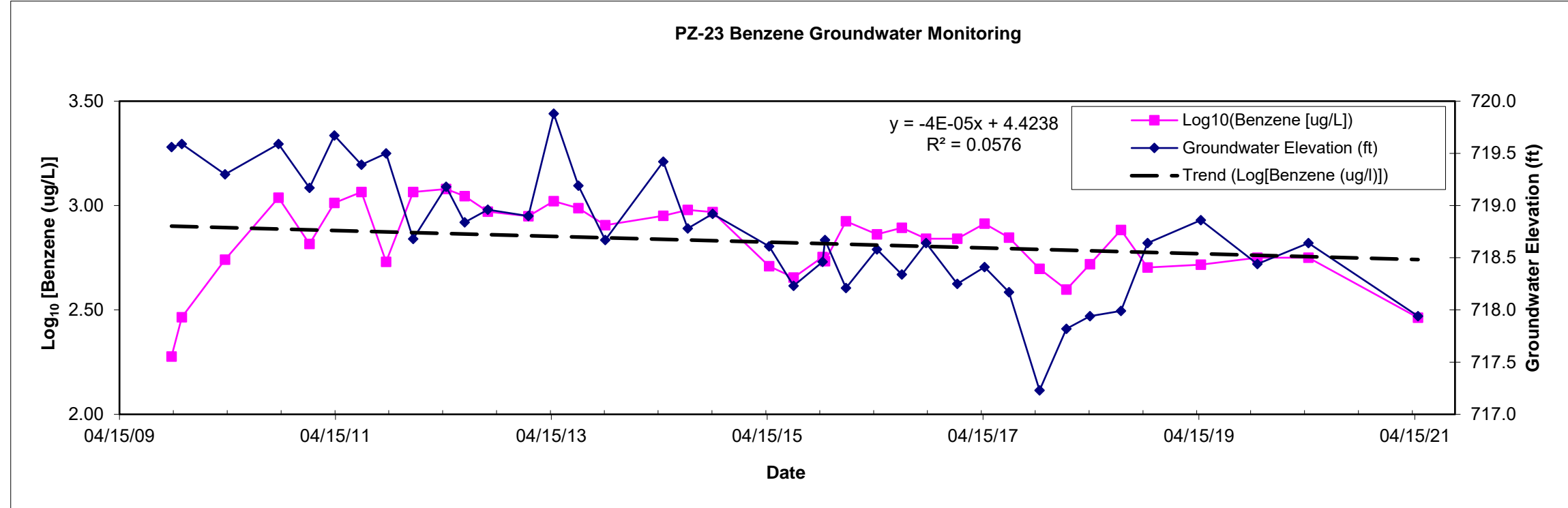


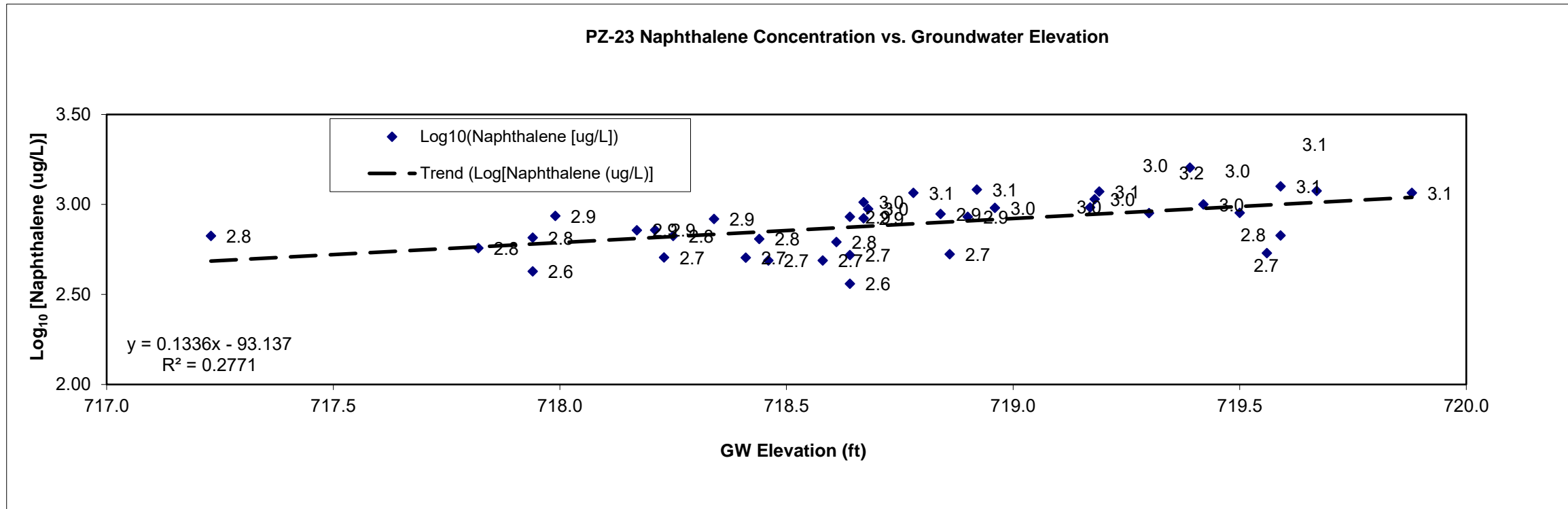
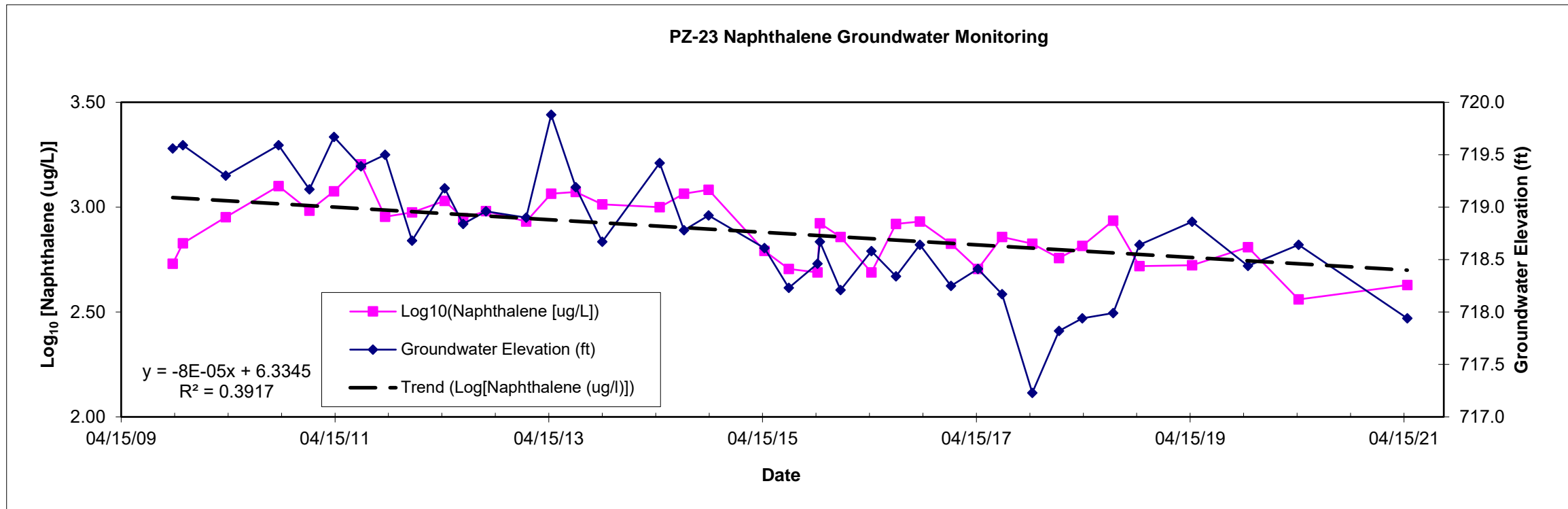


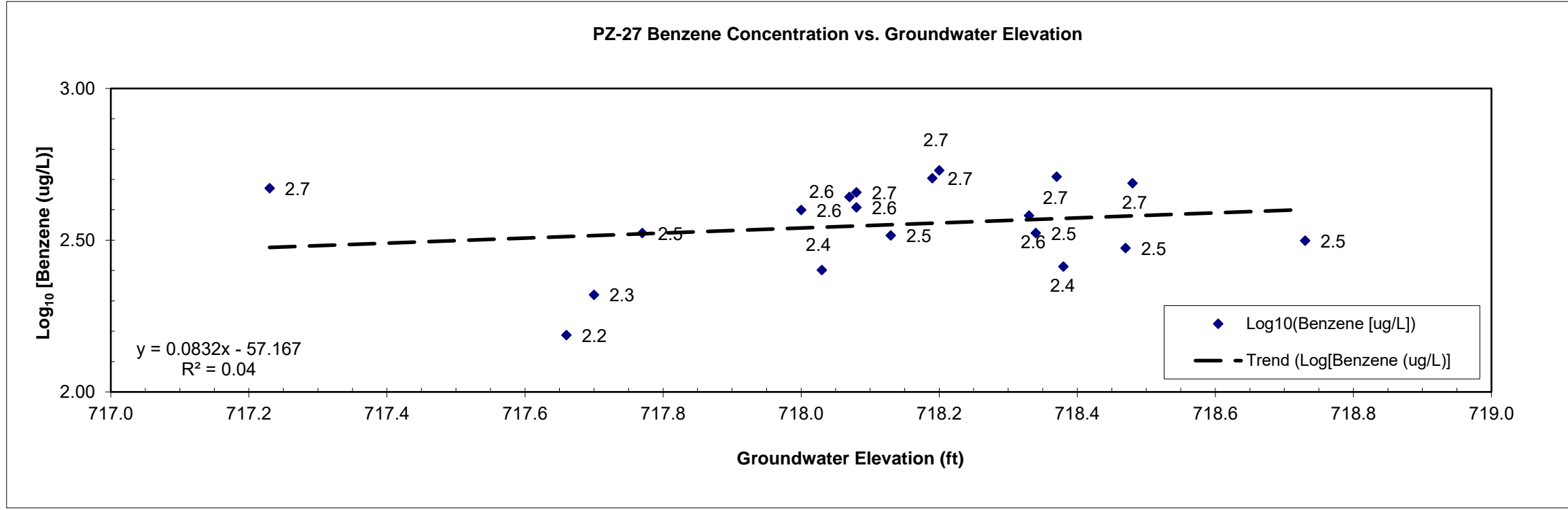
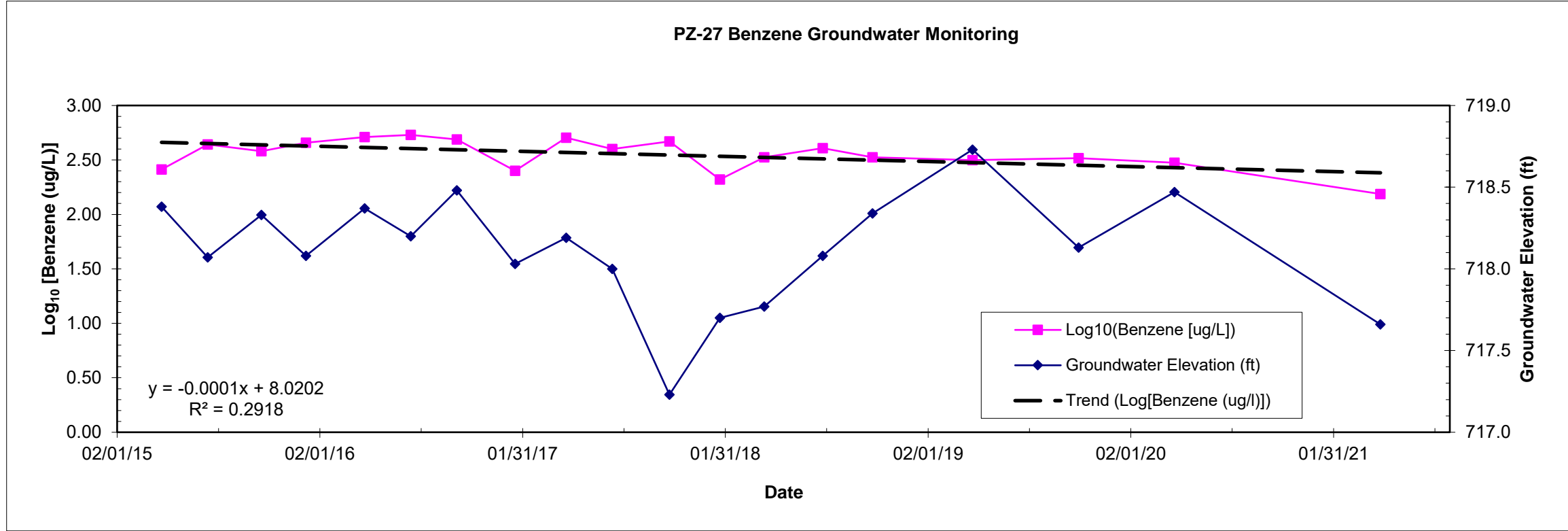


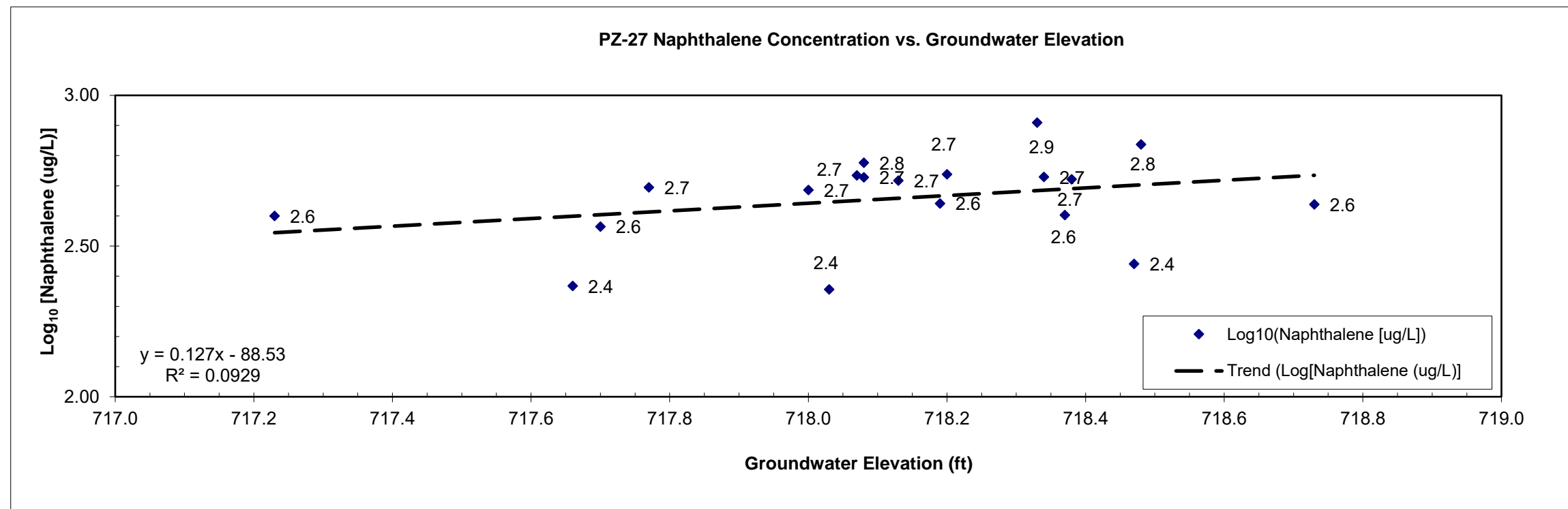
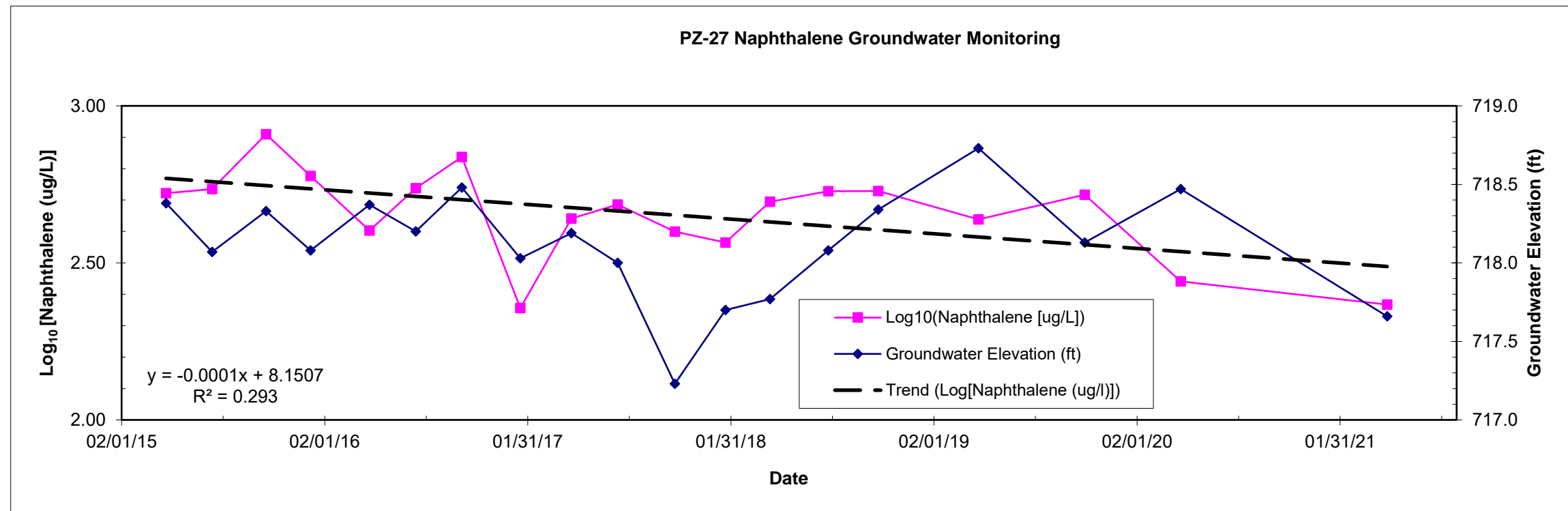












APPENDIX E2
SHORT-TERM TREND GRAPHS

