

Prepared for:

**Marquette University**  
517 North 14<sup>th</sup> Street  
Milwaukee, Wisconsin

Date:

**January 2023**

Project Number:

**1690005819**

# **FORMER ONE-HOUR VALET DRYCLEANER (TAXMAN) SITE**

**1214-1222 WEST WELLS STREET  
MILWAUKEE, WISCONSIN**

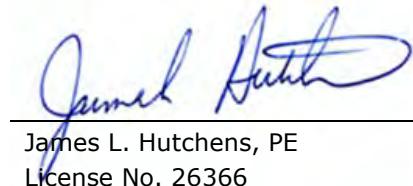
**BRRTS NO. 02-41-152248  
FID NO. 241086120**

## **SEMI-ANNUAL PROGRESS REPORT**

**JULY 1, 2022 TO DECEMBER 31, 2022**

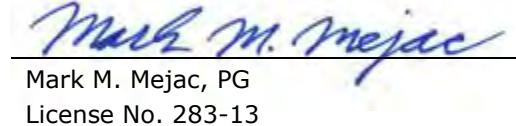
## CERTIFICATIONS

I, James Hutchens, 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 NR 726, Wis. Adm. Code.

  
\_\_\_\_\_  
James L. Hutchens, PE  
License No. 26366



I, Mark Mejac, hereby certify that I am a hydrogeologist as that term is defined in 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 NR 726, Wis. Adm. Code.

  
\_\_\_\_\_  
Mark M. Mejac, PG  
License No. 283-13      January 10, 2023  
Date

## CONTENTS

<b>1.</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Site Location and Description	1
1.2	Previous Remediation Activities	2
1.3	Purpose of Report	2
<b>2.</b>	<b>SUPPLEMENTAL <i>IN-SITU</i> ERD ACTIVITIES</b>	<b>2</b>
2.1	Subcontractor Identification	3
2.2	Supplemental Injection Activities	3
<b>3.</b>	<b>OCTOBER 2022 GROUNDWATER MONITORING ACTIVITIES</b>	<b>3</b>
3.1	Groundwater Monitoring	4
3.2	Groundwater Elevation Measurements	4
3.3	Field Parameter Results	5
3.4	Groundwater Laboratory Analytical Results	5
<b>4.</b>	<b>CONCLUSIONS AND RECOMMENDATIONS</b>	<b>7</b>
<b>5.</b>	<b>REFERENCES</b>	<b>8</b>

## TABLES

- Table 1: Groundwater Elevation Summary  
Table 2: Vertical and Horizontal Gradients  
Table 3: Groundwater Field Parameter Results  
Table 4: MNA Parameter Groundwater Sampling Results  
Table 5: Groundwater Analytical Results – Summary of Detected Constituents

## FIGURES

- Figure 1: Site Location Map  
Figure 2: Site Layout  
Figure 3: Groundwater Potentiometric Surface Map (October 2022)  
Figure 4: CVOC Concentrations in Groundwater (October 2022)

## APPENDICES

- Appendix A: Laboratory Analytical Report  
Appendix B: Investigation Derived Waste Disposal Documentation

## 1. INTRODUCTION

Ramboll US Consulting, Inc. (Ramboll), on behalf of Marquette University (Marquette), has prepared this *Semi-Annual Progress Report: July 1, 2022 to December 31, 2022* (the "report") for the former Taxman/One-Hour Valet Drycleaner Site (the "site") located in Milwaukee, Wisconsin. The Wisconsin Department of Natural Resources (WDNR) Bureau of Remediation and Redevelopment Tracking System (BRRTS) has assigned case number 02-41-152248 to the site. This report has been prepared in accordance with Wisconsin Administrative Code (WAC) Chapter NR 724 and documents the methodology and results of post-remedial action monitoring activities conducted at the site. Parties currently involved with the project include the following:

Responsible Party/Site Owner:	Marquette University Mr. Joel Smullen, AIA 517 North 14th Street Milwaukee, WI 53233 (414) 288-4620
Regulatory Agency/Project Manager:	WDNR Mr. Greg Michael 141 Northwest Barstow Street Waukesha, WI 53188-3789 (414) 405-1203
Environmental Consultant:	Ramboll US Consulting, Inc. Ms. Jeanne Tarvin, PG, CPG 234 West Florida Street, Fifth Floor Milwaukee, WI 53204 (262) 901-0085

### 1.1 Site Location and Description

The site is located at 1214-1222 West Wells Street in the southwest ¼ of the northwest ¼ of Section 29, Township 7 North, Range 22 East, City of Milwaukee, Milwaukee County, Wisconsin (Figure 1). The geographic position of the site in Wisconsin Transverse Mercator (WTM) 91 (x,y) coordinates obtained from the WDNR Remediation and Redevelopment (RR) interaction site map (<http://dnrmmaps.wi.gov>) is 688795, 287401. The site includes two tax parcels in the City of Milwaukee, identified as 3910218000 and 3910219100.

The site is bounded on the west by a Marquette parking structure, on the north by a hospital parking structure, on the east by North 12<sup>th</sup> Street, and on the south by West Wells Street, as shown on Figure 2. The site is currently owned by Marquette and is enrolled in the WDNR-administered Drycleaner Environmental Response Fund (DERF) Program. The former site buildings were demolished in 2018 in advance of the remedial action implementation activities and all associated utilities were disconnected. The balance of the paved surfaces was also removed in 2018 following implementation of the remedial actions. Following completion of the remedial activities, Marquette developed the site as asphalt paved surface parking lot.

The site slopes from the northwest to the east and south, resulting in storm water drainage toward North 12<sup>th</sup> Street and West Wells Street. The nearest surface water body is the Menomonee River,

which is located approximately one-half mile to the south of the site. Potable water for the area is provided by the City of Milwaukee municipal water supply, the source of which is Lake Michigan.

## 1.2 Previous Remediation Activities

The site has been subjected to several subsurface investigations since 1999. Following source area soil and groundwater investigation activities, a *Remedial Design Report* including evaluation of remedial action options (Ramboll, 2018) was prepared to document the technical basis, design, and implementation approach for the selected remedial option (*in-situ* enhanced reductive dechlorination [ERD]). The *Remedial Design Report* was approved by the WDNR in a correspondence dated March 28, 2018, and soil and groundwater remediation activities were conducted in July 2018. Approximately 1,940 cubic yards of chlorinated volatile organic compound (CVOC) impacted soil and groundwater were treated using *in-situ* ERD soil blending by incorporating zerovalent iron (ZVI) and an organic carbon amendment (commercially known as Anaerobic BioChem [ABC®]). The soil blending was primarily focused on treating saturated soil and groundwater at depth below the former dry cleaner's basement floor. Following completion of the soil blending activities, the former basement was backfilled with crushed concrete from the former site buildings. A *Remedial Action Documentation Report* (Ramboll, 2019) was submitted to the WDNR which documented the remediation activities and described the planned post-remediation monitoring including routine groundwater sampling and soil confirmation sampling.

A *Post-Remedial Action Documentation Report* (Ramboll, 2020) was submitted to the WDNR which documented the post-remedial action activities, including site redevelopment and post remedial action activities (e.g., soil confirmation sampling, soil vapor sampling, and groundwater monitoring). Based on the residual CVOC concentrations reported in a subset of the post-remedial action soil and groundwater samples collected, supplemental remedial actions were proposed in the *Post-Remedial Action Documentation Report* to further enhance reductive dechlorination of CVOC-impacted groundwater at the site. The first supplemental *in-situ* ERD injection activities were completed in August/September 2020 and documented in the *Supplemental Remediation Documentation and Progress Report* along with results of the October 2020 semi-annual groundwater monitoring event (Ramboll, 2021a). Based on the results of the April 2021 semi-annual groundwater monitoring (Ramboll, 2021b), a second supplemental *in-situ* ERD injection was completed in July 2021 to further support the existing reducing conditions and continued microbial activity within the target groundwater treatment zone. The supplemental *in-situ* ERD activities and subsequent October 2021 semi-annual groundwater monitoring event were documented in the March 2022 *Semi-Annual Progress Report* (Ramboll, 2022).

## 1.3 Purpose of Report

The purpose of this report is to document site activities completed from July 1 to December 31, 2022. Specific objectives include the following:

- Document the third supplemental *in-situ* ERD activities completed in July 2022.
- Summarize the results of the October 2022 semi-annual groundwater monitoring event.

## 2. SUPPLEMENTAL IN-SITU ERD ACTIVITIES

The following section documents the field activities that were completed as part of the supplemental *in-situ* ERD activities completed on July 7, 2022. The supplemental *in-situ* ERD

activities were completed under an approved extension of the Infiltration/Injection Temporary Exemption issued by the WDNR on June 9, 2022 (WDNR, 2022).

## **2.1 Subcontractor Identification**

The following remediation contractor conducted the supplemental carbon amendment injection activities under Ramboll oversight:

Redox Tech, LLC (Redox Tech)

2800 Centre Circle Drive

Downers Grove, IL 60515

## **2.2 Supplemental Injection Activities**

A supplemental carbon amendment injection took place on July 7, 2022. The objective of the additional injection was to further support the existing reducing conditions and continued microbial activity within the target groundwater treatment zone. The work was performed in accordance with the WDNR approved extension of the Temporary Injection Exemption received on June 9, 2022 (WDNR, 2022). Notification of the planned injection was provided to the WDNR on June 28, 2022, via e-mail.

### **2.2.1 Potable Water Source and Use**

Approximately 242 gallons of potable water was used to create the aqueous ABC® solution for the July 2022 injection. The potable water was obtained from the City of Milwaukee public supply via a faucet located in the adjacent Marquette parking structure immediately west of the injection area.

### **2.2.2 Injection Monitoring Activities**

Surface materials (e.g., asphalt and vegetation) were visually monitored during the injection activities, and no daylighting of the injected amendments was observed. Groundwater elevations collected immediately before and after completion of the injection activities on July 7, 2022, are shown in Table 1.

Approximately 296 gallons of organic carbon amendment solution at a ratio of approximately 18% by volume ABC® product was introduced into the previously constructed injection wells (IW-1 through IW-8). The carbon amendment solution was injected at a rate of approximately 4 to 8 gallons per minute at each of the injection wells. The injection well locations are shown on Figure 2. An evaluation of groundwater quality in response to the supplemental amendment injection was subsequently conducted based on the results the October 2022 semi-annual groundwater monitoring event.

## **3. OCTOBER 2022 GROUNDWATER MONITORING ACTIVITIES**

The groundwater sampling activities were conducted utilizing the procedures and methodologies specified in the *Remedial Design Report* (Ramboll, 2018), *Remedial Action Documentation Report* (Ramboll, 2019), and *Post-Remedial Action Documentation Report* (Ramboll, 2020). The following sections document the semi-annual post remedial action groundwater monitoring completed in October 2022.

### **3.1 Groundwater Monitoring**

Six monitoring wells (MW-4, MW-5, MW-6, PZ-1R, PZ-2R, and PZ-4) were sampled on October 12, 2022, as part of the ongoing post-remediation low-flow groundwater monitoring program.

Monitoring well PZ-1R is a source area well and is located within the boundaries of the *in-situ* ERD soil blending and supplemental *in-situ* ERD injection activities. Monitoring well MW-4 is an upgradient monitoring well. The remaining monitoring wells are located downgradient of the source area. The groundwater monitoring well locations are included on Figure 2.

Groundwater samples collected from the six monitoring wells were submitted to a Wisconsin-certified laboratory for analysis of volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method 8260. Monitoring well PZ-1R was also sampled for the following monitored natural attenuation (MNA) parameters: ethane/ethene/methane (USEPA Method 8015B Modified), ferrous iron (USEPA Method 3500 and 6020B), total organic carbon (Standard Method 5310C), and sulfate (USEPA Method 300.0).

One quality assurance/quality control (QA/QC) duplicate groundwater sample and QA/QC laboratory trip blank sample were submitted for laboratory analysis as part of the groundwater sampling event. Field parameter measurements including dissolved oxygen (DO), oxidation-reduction potential (ORP), pH, specific conductivity, and temperature were also measured and recorded at each well during the sampling event.

### **3.2 Groundwater Elevation Measurements**

To evaluate groundwater flow directions and hydraulic gradients, groundwater elevations were measured during the October 2022 groundwater sampling event. A summary of historical groundwater elevations is presented in Table 1.

October 2022 groundwater elevations varied slightly when compared to the previous site-wide groundwater measurement event completed in April 2022. A groundwater potentiometric surface map is provided as Figure 3. The inferred direction of groundwater flow is generally toward the east across the site, with the highest groundwater elevation observed in well MW-2 (near the northwest corner of the property) and the lowest groundwater elevation observed in MW-9 (northeastern portion of the property). This interpretation of local groundwater flow direction is generally consistent with previous observations.

Horizontal and vertical gradients were evaluated as part of each groundwater sampling event beginning in November 2017, with the exception of May 2019. The measured horizontal hydraulic gradient between monitoring wells MW-2 and MW-5 has ranged from 0.036 foot per foot (ft/ft) (April 2022) to 0.059 ft/ft (August 2019). The measured October 2022 horizontal hydraulic gradient between MW-2 and MW-5 was 0.038 ft/ft.

Vertical hydraulic gradients were evaluated between monitoring wells MW-5 and PZ-4. Measured historical vertical gradients have all been downward and ranged from 0.51 ft/ft (October 2021) to 0.59 ft/ft (April 2022). The October 2022 vertical horizontal gradient between MW-5 and PZ-4 was downward at a measured value of 0.56 ft/ft. The vertical hydraulic gradients have apparently not been affected by the site redevelopment or performance of the July 2018 remedial action and supplemental injection activities. The horizontal and vertical hydraulic gradients will continue to be monitored over the duration of the groundwater monitoring program. The calculated horizontal and vertical gradients are shown in Table 2.

### **3.3 Field Parameter Results**

Field parameters consisting of specific conductivity, DO, ORP, pH, and temperature were collected from the monitoring wells sampled during the October 2022 groundwater sampling event. The measured specific conductivity values varied from 2,387 micro-Siemens per centimeter ( $\mu\text{S}/\text{cm}$ ) in MW-5 to 17,566  $\mu\text{S}/\text{cm}$  in MW-6.

Measured October 2022 DO levels outside of the July 2022 area of carbon amendment injection ranged from 0.59 milligrams per liter (mg/L) at well MW-6 to 0.98 mg/L at well PZ-4, which is indicative of anaerobic conditions.

The October 2022 ORP measurements were consistent with historical ranges of values. Negative ORP values (indicative of reducing conditions) were measured in monitoring wells within and hydraulically downgradient of the *in-situ* organic carbon amendment injection area (PZ-1R, PZ-2R, PZ-4, MW-5 and MW-6) ranging from -312.7 millivolts (mV) (PZ-1R) to -27.2 mV (MW-5).

The pH values measured as part of the October 2022 sampling event ranged from 5.71 (MW-6) to 7.54 (MW-5) standard units. This measured range in pH values is generally within the optimal pH range of 6.0 to 8.0 that is favorable for anaerobic dechlorination to occur. The field parameter measurement results are shown in Table 3.

### **3.4 Groundwater Laboratory Analytical Results**

The October 2022 groundwater samples were collected from six monitoring wells and submitted for laboratory analysis in accordance with the approved sampling plans identified above. A copy of the October 2022 laboratory analytical report is provided in Appendix A. Estimated concentrations above the detection limit but below the quantification limit were qualified with a "J" in the laboratory report.

#### **3.4.1 Geochemical Analytical Results**

Monitoring well PZ-1R was sampled for MNA parameters in October 2022. Table 4 provides a summary of the geochemical analytical results.

Total organic carbon (TOC) concentrations in groundwater are an indicator of distribution of the organic carbon amendment introduced to the subsurface via the 2018 soil blending event and subsequent supplemental amendment injection events completed in August/September 2020, July 2021, and July 2022. The detected TOC concentration in the October 2022 groundwater sample from source area well PZ-1R was 241 mg/L. This TOC concentration exceeds the minimum TOC concentration of 20 mg/L which is desirable within an anaerobic treatment zone (AFCEE, 2004).

Ferrous iron is produced by the reduction of ferric iron and is also produced via corrosion of ZVI which was introduced during the 2018 soil blending event and the August/September 2020 *in-situ* ERD injection event. The detected concentration of ferrous iron in the October 2022 groundwater sample from well PZ-1R was 7.2 mg/L. This continued high ferrous iron concentration value compared with the pre-soil blending value of 0.060 mg/L in the November 2017 groundwater sample from nearby previous monitoring well PZ-1 is indicative of iron-reducing conditions necessary for anaerobic dechlorination to occur.

Sulfate is an alternative electron acceptor for microbial respiration in the absence of oxygen. Sulfate concentrations less than 20 mg/L are desirable but not required for anaerobic

dechlorination to occur. At monitoring well PZ-1R within the treatment zone, sulfate concentrations have decreased from 66.2 mg/L in April 2022 to non-detect (<2.2 mg/L) in October 2022, which is indicative of sulfate-reducing conditions that are favorable for continued reductive dechlorination of CVOCs.

Elevated methane concentrations indicate that fermentation is occurring in a highly anaerobic environment and reducing conditions are appropriate for anaerobic dechlorination of CVOCs to occur. At treatment zone monitoring well PZ-1R, methane concentrations increased from a value of 5,650 micrograms per liter ( $\mu\text{g}/\text{L}$ ) in the April 2022 groundwater sample to 13,900 mg/L in the October 2022 groundwater sample indicating favorable reducing conditions for continued anaerobic dechlorination of CVOCs.

Concentrations of ethene and ethane can be used to infer that anaerobic dechlorination of CVOCs is occurring. Between April 2022 and October 2022, the detected concentrations of ethane and ethene in groundwater samples from PZ-1R have increased from 683  $\mu\text{g}/\text{L}$  and 3,570  $\mu\text{g}/\text{L}$ , respectively, to 1,040  $\mu\text{g}/\text{L}$  and 7,090  $\mu\text{g}/\text{L}$ , respectively. The approximate two-fold increase in the ethene concentration and 50% increase in the ethane concentration are encouraging indications of accelerated complete reductive dechlorination of PCE in response to the additional organic carbon injection substrate injection event completed in July 2022.

### **3.4.2 VOC Analytical Results**

Concentrations of VOCs were detected above laboratory detection limits in all six monitoring wells (MW-4, MW-5, MW-6, PZ-1R, PZ-2R, and PZ-4) sampled in October 2022. Three of the six monitoring wells (MW-4, MW-5, and PZ-1R) had detections of PCE above the WAC NR 140 Enforcement Standard (ES) of 5  $\mu\text{g}/\text{L}$  at concentrations of 26.8  $\mu\text{g}/\text{L}$ , 18.6  $\mu\text{g}/\text{L}$ , and 20,200  $\mu\text{g}/\text{L}$ , respectively. Trichloroethene (TCE) was detected above the WAC NR 140 ES of 5.0  $\mu\text{g}/\text{L}$  at PZ-1R with a concentration of 3,350  $\mu\text{g}/\text{L}$ , and above the WAC NR 140 Preventive Action Limit (PAL) (0.5  $\mu\text{g}/\text{L}$ ) at MW-5 with a concentration of 3.6  $\mu\text{g}/\text{L}$ . Groundwater samples from PZ-1R and PZ-2R had detections of cis-1,2-dichloroethene (cis-1,2-DCE) above the WAC NR 140 ES of 70  $\mu\text{g}/\text{L}$ , at concentrations of 92,600  $\mu\text{g}/\text{L}$  and 121  $\mu\text{g}/\text{L}$ , respectively. Detections of cis-1,2-DCE were above the WAC NR 140 PAL of 7.0  $\mu\text{g}/\text{L}$  but below the ES of 70  $\mu\text{g}/\text{L}$  in MW-5 at a concentration of 10.6  $\mu\text{g}/\text{L}$ .

Five of the six monitoring wells sampled (all except for MW-4) in October 2022 had detections of vinyl chloride above the WAC NR 140 ES of 0.2  $\mu\text{g}/\text{L}$  at concentrations ranging from 0.26  $\mu\text{g}/\text{L}$  (MW-5) to 21,900  $\mu\text{g}/\text{L}$  (PZ-1R). No other VOCs were detected above WAC NR 140 criteria.

The detected concentrations of PCE in groundwater samples from monitoring well PZ-1R are consistent with continued back-diffusion of PCE from the fine-grained silty clay soils within the treatment zone in response to the groundwater remedial action. A summary of VOC analytical results is provided in Table 5. The CVOC analytical results from the October 2022 groundwater sampling event are shown on Figure 4.

### **3.4.3 Waste Disposal**

Purge water and decontamination fluids from the October 2022 groundwater sampling activities were containerized in a 5-gallon closed head polyethylene container and transported to Marquette's centralized waste storage area by Veolia North America (Veolia) on October 12, 2022. Veolia

transported the containers off-site for disposal on October 25, 2022. Disposal documentation is provided in Appendix B.

## 4. CONCLUSIONS AND RECOMMENDATIONS

Scheduled groundwater monitoring following the supplemental injection of organic carbon substrate conducted in July 2022 continues to show reducing conditions through fermentation of the applied carbon substrate. These reducing conditions are evident based on the following observations related to the October 2022 groundwater sample results from treatment zone monitoring well PZ-1R:

- Low ORP reading of -312.7 mV and low DO reading of 0.48 mg/L.
- Continued elevated TOC concentration at PZ-1R (241 mg/L) which is greater than the desired minimum value of 20 mg/L for reductive dechlorination to be enhanced.
- The detected methane concentration in the October 2022 groundwater sample from monitoring well PZ-1R is consistent with continued reducing conditions and is the highest detected to date.
- Ethene concentrations continue to increase above background levels and are indicative of complete dechlorination (AFCEE, 2004), and the October 2022 ethene value of 7,090 ug/L at PZ-1R meets that threshold when compared with the <0.52 µg/L to 0.48 µg/L range of ethene concentrations in groundwater samples from nearby previous well PZ-1 that were obtained prior to the 2018 soil blending event and subsequent supplemental injections.

As indicated in Table 5, PCE was detected in the October 2022 groundwater sample from monitoring well PZ-1R at a concentration of 20,200 µg/L. The PCE concentration detected in the October 2022 sample is less than in the April 2022 sample (64,600 µg/L). However, the relatively high PCE concentrations detected in the groundwater samples from monitoring well PZ-1R continue to be indicative of back-diffusion of PCE from the fine-grained silty clay soils within the treatment zone in response to the groundwater remedial action. An encouraging observation is the continued presence of PCE degradation products (including end-product ethene) which confirm that substantial reductive dechlorination is taking place and is expected to continue based on the October 2022 geochemical data. Further downgradient, the following observations of CVOC concentration trends are consistent with CVOC source remediation:

- PCE and TCE have not been detected in groundwater samples from well PZ-2R since August 2019.
- Exceedances of WAC NR 140 ES values for TCE or cDCE have not occurred in groundwater samples from well MW-6 since October 2020.
- Exceedances of the WAC NR 140 ES for PCE have not occurred in groundwater samples from well PZ-4 since October 2020.

While the October 2022 TOC results do not indicate that an additional organic carbon substrate injection event is required, Ramboll will continue to evaluate the results of future groundwater monitoring events to determine if such injection events may be warranted. The next semi-annual groundwater sampling event is scheduled to be conducted in April 2023.

## 5. REFERENCES

- Air Force Center for Environmental Excellence (AFCEE). 2004. "Principles and Practices of Enhanced Anaerobic Bioremediation of Chlorinated Solvents." Environmental Security Technology Certification Program, Arlington, Virginia.
- Ramboll. 2018. *Remedial Design Report*. Former One-Hour Valet Dry Cleaners, Milwaukee, Wisconsin. February 12.
- Ramboll. 2019. *Remedial Action Documentation Report*. Former One-Hour Valet Dry Cleaners, Milwaukee, Wisconsin. April 1.
- Ramboll. 2020. *Post-Remedial Action Documentation Report*. Former One-Hour Valet Dry Cleaners, Milwaukee, Wisconsin. May 26.
- Ramboll. 2021a. *Supplemental Remediation Documentation and Progress Report*. Former One-Hour Valet Dry Cleaners, Milwaukee, Wisconsin. February 26.
- Ramboll. 2021b. *Semi-Annual Progress Report*. Former One-Hour Valet Dry Cleaners, Milwaukee, Wisconsin. June 24.
- Ramboll. 2022. *Semi-Annual Progress Report*. Former One-Hour Valet Dry Cleaners, Milwaukee, Wisconsin. March 16.
- WDNR. 2020. *Infiltration/Injection Temporary Exemption Request*. July 24.
- WDNR. 2022. *Extension of Infiltration Temporary Exemption Request*. June 9.

SEMI-ANNUAL PROGRESS REPORT  
JULY 1, 2022 TO DECEMBER 31, 2022

## TABLES

**TABLE 1**  
**Groundwater Elevations Summary**  
Former One-Hour Valet Dry Cleaners  
1614 West Wells Street, Milwaukee, Wisconsin  
Ramboll Project No. 1690005819

Well ID	MW-1	MW-2	MW-3	MW-4	MW-5
<b>Top of Casing Elevation (TOC ft msl)<sup>(A)</sup></b>	647.95	655.74	649.54	652.32	653.26
<b>Ground Surface Elevation (ft)<sup>(A,B)</sup></b>	648.30	656.00	649.70	652.70	650.40
<b>Top of Well Screen Elevation (ft msl)<sup>(A)</sup></b>	640.10	645.50	639.50	644.40	641.80
<b>Bottom of Well Screen Elevation (ft msl)<sup>(A)</sup></b>	630.10	635.50	629.50	634.40	631.80
<b>October 2019 Top of Casing Elevation (ft amsl)</b>	647.75	654.70	649.28	651.98	649.23
<b>October 2019 Ground Surface (ft amsl)</b>	648.16	655.47	649.65	652.33	649.75
Sample Date	Depth to Water (ft)	GW Elevation (ft msl)	Depth to Water (ft)	GW Elevation (ft msl)	Depth to Water (ft)
<b>5/8/2002</b>	10.50	637.45	7.20	648.54	11.38
<b>7/11/2003</b>	11.14	636.81	9.87	645.87	11.20
<b>8/7/2003</b>	11.92	636.03	10.43	645.31	12.31
<b>10/7/2004</b>	12.35	635.60	11.15	644.59	12.39
<b>8/25/2009</b>	10.80	637.15	10.85	644.89	9.62
<b>11/2/2011</b>	10.68	637.27	13.13	642.61	11.17
<b>11/1/2017 &amp; 11/9/2017*</b>	10.52	637.43	10.74	645.00	10.22
<b>5/2/2019</b>	NM	NM	NM	NM	9.32
<b>8/14/2019<sup>(3)</sup></b>	9.85	637.90	6.90	647.80	8.87
<b>10/23/2019<sup>(3)</sup></b>	8.83	638.92	7.35	647.35	8.75
<b>3/10/2020<sup>(3)</sup></b>	9.10	638.65	7.34	647.36	9.04
<b>8/31/2020<sup>(3)</sup></b>	8.70	639.05	8.56	646.14	8.30
<b>9/3/2020<sup>(3)</sup></b>	8.70	639.05	7.12	647.58	8.26
<b>10/28/2020<sup>(3)</sup></b>	9.21	638.54	8.41	646.29	9.25
<b>4/20/2021<sup>(3)</sup></b>	9.15	638.60	8.96	645.74	9.40
<b>7/14/2021<sup>(3)</sup> AM</b>	9.46	638.29	9.24	645.46	9.29
<b>7/14/2021<sup>(3)</sup> PM</b>	9.51	638.24	9.11	645.59	9.35
<b>10/27/2021<sup>(3)</sup></b>	10.90	636.85	9.73	644.97	10.43
<b>4/12/2022<sup>(3)</sup></b>	9.15	638.60	10.92	643.78	10.60
<b>7/7/2022<sup>(3)</sup> AM</b>	9.46	638.29	10.59	644.11	10.04
<b>7/7/2022<sup>(3)</sup> PM</b>	9.48	638.27	10.11	644.59	10.03
<b>10/11/2022</b>	8.56	639.19	10.21	644.49	9.31

**Notes:**

Data collected prior to 2017 presented in a Site Investigation Report prepared by GZA GeoEnvironmental, Inc. dated February 24, 2012.

<sup>(A)</sup> Top of casing elevations, ground surface elevations, and screen intervals presented in GZA GeoEnvironmental, Inc.'s February 24, 2012 Site Investigation Report.

<sup>(B)</sup> Relative to mean sea level<sup>1</sup>

<sup>(1)</sup> PZ-1 and PZ-3 abandoned on 1/11/2018

<sup>(2)</sup> PZ-2 abandoned and replaced on 7/19/2019

<sup>(3)</sup> Groundwater elevation calculated using October 2019 Survey data.

\* Groundwater elevation measurements for MW-6, MW-7, MW-8, and MW-9 collected on November 9, 2017.

ASML = Above Mean Sea Level

MSL = Mean Sea Level

NI = Not installed at the time of the water level measurement

NM = Not Measured

TOC = Top of Casing

**TABLE 1**  
**Groundwater Elevations Summary**  
Former One-Hour Valet Dry Cleaners  
1614 West Wells Street, Milwaukee, Wisconsin  
Ramboll Project No. 1690005819

Well ID	MW-6	MW-7	MW-8	MW-9	PZ-1 <sup>(1)</sup>					
<b>Top of Casing Elevation (TOC ft msl)<sup>(A)</sup></b>	648.11	649.74	649.80	650.27	653.10					
<b>Ground Surface Elevation (ft)<sup>(A,B)</sup></b>	648.50	649.90	650.00	650.40	653.70					
<b>Top of Well Screen Elevation (ft msl)<sup>(A)</sup></b>	640.30	648.20	648.40	643.50	623.80					
<b>Bottom of Well Screen Elevation (ft msl)<sup>(A)</sup></b>	630.30	638.20	638.40	633.50	618.80					
<b>October 2019 Top of Casing Elevation (ft amsl)</b>	648.26	649.56	649.63	650.73	NM					
<b>October 2019 Ground Surface (ft amsl)</b>	648.51	649.75	649.77	651.39	NM					
Sample Date	Depth to Water (ft)	GW Elevation (ft msl)	Depth to Water (ft)	GW Elevation (ft msl)	Depth to Water (ft)	GW Elevation (ft msl)	Depth to Water (ft)	GW Elevation (ft msl)	Depth to Water (ft)	GW Elevation (ft msl)
<b>5/8/2002</b>	NI	NI	NI	NI	NI	NI	NI	NI	18.20	634.90
<b>7/11/2003</b>	NI	NI	NI	NI	NI	NI	NI	NI	19.59	633.51
<b>8/7/2003</b>	NI	NI	NI	NI	NI	NI	NI	NI	20.10	633.00
<b>10/7/2004</b>	NI	NI	NI	NI	NI	NI	NI	NI	20.82	632.28
<b>8/25/2009</b>	10.85	637.26	7.16	642.58	7.18	642.62	13.05	637.22	21.52	631.58
<b>11/2/2011</b>	10.79	637.32	9.01	640.73	9.09	640.71	13.19	637.08	NM	NM
<b>11/1/2017 &amp; 11/9/2017*</b>	10.30	637.81	8.98	640.76	9.39	640.41	13.30	636.97	22.97	630.13
<b>5/2/2019</b>	8.76	639.35	NM	NM	NM	NM	NM	NM	--	--
<b>8/14/2019<sup>(3)</sup></b>	9.34	638.92	7.60	641.96	7.89	641.74	13.90	636.83	--	--
<b>10/23/2019<sup>(3)</sup></b>	8.19	640.07	7.85	641.71	7.72	641.91	12.95	637.78	--	--
<b>3/10/2020<sup>(3)</sup></b>	8.30	639.96	8.00	641.56	6.78	642.85	13.95	636.78	--	--
<b>8/31/2020<sup>(3)</sup></b>	7.04	641.22	7.43	642.13	7.37	642.26	13.25	637.48	--	--
<b>9/3/2020<sup>(3)</sup></b>	7.10	641.16	7.43	642.13	7.21	642.42	13.17	637.56	--	--
<b>10/28/2020<sup>(3)</sup></b>	8.67	639.59	8.23	641.33	8.35	641.28	14.10	636.63	--	--
<b>4/20/2021<sup>(3)</sup></b>	9.63	638.63	8.21	641.35	8.23	641.40	14.15	636.58	--	--
<b>7/14/2021<sup>(3)</sup> AM</b>	10.45	637.81	8.43	641.13	8.19	641.44	14.67	636.06	--	--
<b>7/14/2021<sup>(3)</sup> PM</b>	10.46	637.80	8.45	641.11	8.26	641.37	14.69	636.04	--	--
<b>10/27/2021<sup>(3)</sup></b>	10.90	637.36	9.53	640.03	8.70	640.93	16.92	633.81	--	--
<b>4/12/2022<sup>(3)</sup></b>	9.73	638.53	9.55	640.01	9.36	640.27	16.93	633.80	--	--
<b>7/7/2022<sup>(3)</sup> AM</b>	10.21	638.05	8.37	641.19	7.68	641.95	14.87	635.86	--	--
<b>7/7/2022<sup>(3)</sup> PM</b>	9.88	638.38	8.24	641.32	7.76	641.87	14.87	635.86	--	--
<b>10/11/2022</b>	9.76	638.50	8.45	641.11	8.70	640.93	13.70	637.03	--	--

**Notes:**

Data collected prior to 2017 presented in a Site Investigation Report prepared by GZA GeoEnvironmental, Inc. dated February 24, 2012.

<sup>(A)</sup> Top of casing elevations, ground surface elevations, and screen intervals presented in GZA GeoEnvironmental, Inc.'s February 24, 2012 Site Investigation Report.

<sup>(B)</sup> Relative to mean sea level<sup>1</sup>

<sup>(1)</sup> PZ-1 and PZ-3 abandoned on 1/11/2018

<sup>(2)</sup> PZ-2 abandoned and replaced on 7/19/2019

<sup>(3)</sup> Groundwater elevation calculated using October 2019 Survey data.

\* Groundwater elevation measurements for MW-6, MW-7, MW-8, and MW-9 collected on November 9, 2017.

ASML = Above Mean Sea Level

MSL = Mean Sea Level

NI = Not installed at the time of the water level measurement

NM = Not Measured

TOC = Top of Casing

**TABLE 1**  
**Groundwater Elevations Summary**  
Former One-Hour Valet Dry Cleaners  
1614 West Wells Street, Milwaukee, Wisconsin  
Ramboll Project No. 1690005819

Well ID	PZ-1R	PZ-2 <sup>(2)</sup>	PZ-2R	PZ-3 <sup>(1)</sup>	PZ-4
<b>Top of Casing Elevation (TOC ft msl)<sup>(A)</sup></b>	--	648.74	--	653.41	649.78
<b>Ground Surface Elevation (ft)<sup>(A,B)</sup></b>	--	649.10	--	653.70	650.30
<b>Top of Well Screen Elevation (ft msl)<sup>(A)</sup></b>	622.18	624.00	623.04	608.00	609.80
<b>Bottom of Well Screen Elevation (ft msl)<sup>(A)</sup></b>	617.18	619.00	618.04	603.00	604.80
<b>October 2019 Top of Casing Elevation (ft amsl)</b>	652.18	NM	649.539	NM	649.56
<b>October 2019 Ground Surface (ft amsl)</b>	652.69	NM	650.002	NM	650.20
Sample Date	Depth to Water (ft)	GW Elevation (ft msl)	Depth to Water (ft)	GW Elevation (ft msl)	Depth to Water (ft)
5/8/2002	NI	NI	NI	NI	NI
7/11/2003	NI	NI	NI	NI	NI
8/7/2003	NI	NI	25.54	623.20	NI
10/7/2004	NI	NI	24.93	623.81	NI
8/25/2009	NI	NI	23.42	625.32	NI
11/2/2011	NI	NI	23.74	625.00	NI
11/1/2017 & 11/9/2017*	NI	NI	23.22	625.52	NI
5/2/2019	27.41	--	--	NI	NI
8/14/2019 <sup>(3)</sup>	29.80	622.38	--	25.29	624.25
10/23/2019 <sup>(3)</sup>	29.01	623.17	--	25.00	624.54
3/10/2020 <sup>(3)</sup>	29.40	622.78	--	25.40	624.14
8/31/2020 <sup>(3)</sup>	28.96	623.22	--	24.90	624.64
9/3/2020 <sup>(3)</sup>	28.80	623.38	--	24.72	624.82
10/28/2020 <sup>(3)</sup>	27.55	624.63	--	24.94	624.60
4/20/2021 <sup>(3)</sup>	29.37	622.81	--	25.43	624.11
7/14/2021 <sup>(3)</sup> AM	28.60	623.58	--	25.76	623.78
7/14/2021 <sup>(3)</sup> PM	28.81	623.37	--	25.71	623.83
10/27/2021 <sup>(3)</sup>	30.00	622.18	--	25.98	623.56
4/12/2022 <sup>(3)</sup>	29.51	622.67	--	26.50	623.04
7/7/2022 <sup>(3)</sup> AM	28.83	623.35	--	25.81	623.73
7/7/2022 <sup>(3)</sup> PM	28.42	623.76	--	25.77	623.77
10/11/2022	28.54	623.64	--	25.17	624.37

**Notes:**

Data collected prior to 2017 presented in a Site Investigation Report prepared by GZA GeoEnvironmental, Inc. dated February 24, 2012.

<sup>(A)</sup> Top of casing elevations, ground surface elevations, and screen intervals presented in GZA GeoEnvironmental, Inc.'s February 24, 2012 Site Investigation Report.

<sup>(B)</sup> Relative to mean sea level'

<sup>(1)</sup> PZ-1 and PZ-3 abandoned on 1/11/2018

<sup>(2)</sup> PZ-2 abandoned and replaced on 7/19/2019

<sup>(3)</sup> Groundwater elevation calculated using October 2019 Survey data.

\* Groundwater elevation measurements for MW-6, MW-7, MW-8, and MW-9 collected on November 9, 2017.

ASML = Above Mean Sea Level

MSL = Mean Sea Level

NI = Not installed at the time of the water level measurement

NM = Not Measured

TOC = Top of Casing

**Table 2: Vertical and Horizontal Gradients**

Former One-Hour Valet Dry Cleaners  
 1214 West Wells Street, Milwaukee, Wisconsin  
 Ramboll Project No. 1690005819

Well ID	Measurement Date	Top of Casing Elevation (ft-amsl)	Water Level Measurement (ft btoc)	Ground-water Elevation (ft-amsl)	Screen Length (ft)	Top of Well Screen Elevation (ft-amsl)	Bottom of Well Screen Elevation (ft-amsl)	Mid-Point of Well Screen Elevation (ft-amsl)	Vertical Gradient Calculation Value (ft-amsl)	Head Difference (ft)	Vertical Gradient (ft/ft)/Direction
MW-5	11/1/2017	653.26	16.11	637.15	10.00	641.80	631.80	636.80	634.5	-15.20	-0.56
PZ-4	11/1/2017	649.78	27.83	621.95	5.00	609.80	604.80	607.30	607.3		Downward
MW-5	8/14/2019	649.23	12.34	636.89	10.00	641.80	631.80	636.80	634.3	-14.48	-0.54
PZ-4	8/14/2019	649.56	27.15	622.41	5.00	609.80	604.80	607.30	607.3		Downward
MW-5	10/23/2019	649.23	11.41	637.82	10.00	641.80	631.80	636.80	634.8	-15.16	-0.55
PZ-4	10/23/2019	649.56	26.90	622.66	5.00	609.80	604.80	607.30	607.3		Downward
MW-5	3/10/2020	649.23	11.57	637.66	10.00	641.80	631.80	636.80	634.7	-15.20	-0.55
PZ-4	3/10/2020	649.56	27.10	622.46	5.00	609.80	604.80	607.30	607.3		Downward
MW-5	10/28/2020	649.23	11.82	637.41	10.00	641.80	631.80	636.80	634.6		
PZ-4	10/28/2020	649.56	26.85	622.71	5.00	609.80	604.80	607.30	607.3	-14.70	-0.54
MW-5	4/21/2021	649.23	11.80	637.43	10.00	641.80	631.80	636.80	634.6		
PZ-4	4/21/2021	649.56	27.25	622.31	5.00	609.80	604.80	607.30	607.3	-15.12	-0.55
MW-5	10/27/2021	649.23	13.96	635.27	10.00	641.80	631.80	636.80	633.5	-13.26	-0.51
PZ-4	10/27/2021	649.56	27.55	622.01	5.00	609.80	604.80	607.30	607.3		Downward
MW-5	4/12/2022	649.23	12.01	637.22	10.00	641.80	631.80	636.80	634.5		
PZ-4	4/12/2022	649.56	28.27	621.29	5.00	609.80	604.80	607.30	607.3	-15.93	-0.59
MW-5	10/12/2022	649.23	11.64	637.59	10.00	641.80	631.80	636.80	634.7	-15.24	-0.56
PZ-4	10/12/2022	649.56	27.21	622.35	5.00	609.80	604.80	607.30	607.3		Downward

Well ID	Measurement Date	Top of Casing Elevation (ft-amsl)	Water Level Measurement (ft btoc)	Ground-water Elevation (ft-amsl)	Distance Between Monitoring Wells (ft)	Groundwater Elevation Difference (ft)	Horizontal Gradient (ft/ft)
MW-2	11/1/2017	655.74	10.74	645.00			
MW-5	11/1/2017	653.26	16.11	637.15	184	7.9	0.043
MW-2	8/14/2019	654.70	6.90	647.80			
MW-5	8/14/2019	649.23	12.34	636.89	184	10.9	0.059
MW-2	10/23/2019	654.70	7.35	647.35	184	9.5	0.052
MW-5	10/23/2019	649.23	11.41	637.82			
MW-2	3/10/2020	654.70	7.34	647.36	184	9.7	0.053
MW-5	3/10/2020	649.23	11.57	637.66			
MW-2	10/28/2020	654.70	8.41	646.29	184	8.9	0.048
MW-5	10/28/2020	649.23	11.82	637.41			
MW-2	4/21/2021	654.70	8.96	645.74	184	8.3	0.045
MW-5	4/21/2021	649.23	11.80	637.43			
MW-2	10/27/2021	654.70	9.73	644.97	184	9.4	0.051
MW-5	10/27/2021	649.23	13.69	635.54			
MW-2	4/12/2022	654.70	10.92	643.78	184	6.6	0.036
MW-5	4/12/2022	649.23	12.01	637.22			
MW-2	10/12/2022	654.70	10.21	644.49	184	6.9	0.038
MW-5	10/12/2022	649.23	11.64	637.59			

Notes:

ft - feet

amsl - above mean sea level

btoc - below top of casing

Table 3: Groundwater Field Parameter Results

Former One-Hour Valet Dry Cleaners  
 1214 West Wells Street, Milwaukee, Wisconsin  
 Ramboll Project No. 1690005819

Parameter		pH	Dissolved oxygen	Oxidation Reduction Potential	Turbidity	Specific Conductivity	Temperature
Units		S.U.	mg/L	mV	NTU	uS/cm	°C
Monitoring Well ID	Sample Date						
MW-1	1/14/2002	NR	10.39	-37	NR	NR	NR
	5/8/2002	NR	3.57	287.1	NR	NR	NR
	8/7/2003	NR	0.22	161.3	NR	NR	NR
	10/7/2003	NR	1.05	396.8	NR	NR	NR
	8/25/2009	NR	0.69	95	NR	NR	NR
	11/1/2017	7.31	1.69	57.7	2.03	16.08	17.53
MW-2	1/14/2002	NR	6.42	168	NR	NR	NR
	5/8/2002	NR	1.07	257	NR	NR	NR
	8/7/2003	NR	0.10	2.30	NR	NR	NR
	10/7/2003	NR	4.43	364	NR	NR	NR
	8/27/2009	NR	0.98	86.0	NR	NR	NR
	11/1/2017	7.70	1.71	-74.3	2.53	6,370	14.21
MW-3	8/7/2003	NR	0.15	68.0	NR	NR	NR
	10/7/2003	NR	5.74	327.8	NR	NR	NR
	8/27/2009	NR	1.01	16.0	NR	NR	NR
	11/1/2017	7.56	0.73	-125.6	2.00	16,100	14.53
	8/7/2003	NR	5.83	139	NR	NR	NR
MW-4	10/7/2003	NR	3.44	383.4	NR	NR	NR
	8/25/2009	NR	2.55	77.0	NR	NR	NR
	11/2/2017	7.80	0.88	-19.8	1.40	11,680	14.86
	5/2/2019	7.34	8.40	140.7	3.04	5,184	9.64
	8/14/2019	7.11	1.82	79.4	0.82	7,485	15.06
	3/10/2020	7.15	8.53	81.6	2.26	4,717	8.60
	10/28/2020	6.65	1.45	116	3.62	11,460	14.50
	4/21/2021	7.88	5.40	53.9	0.00	6,396	9.19
	10/27/2021	6.82	2.13	64.6	0.00	8,298	15.43
	4/13/2022	7.14	0.85	72.6	9.23	6,484	12.64
	10/12/2022	7.30	0.96	74.4	0.00	5,012	17.62
	8/7/2003	NR	0.86	190.5	NR	NR	NR
MW-5	10/7/2003	NR	1.05	396.8	NR	NR	NR
	8/27/2009	NR	0.99	98.0	NR	NR	NR
	11/2/2017	8.10	2.04	18.6	2.16	6,544	15.49
	5/2/2019	7.49	2.01	159.1	4.99	3,070	9.92
	8/14/2019	7.53	0.18	63.4	4.23	4,120	17.45
	3/10/2020	7.80	0.00	21.1	8.24	7,140	11.00
	10/28/2020	7.31	0.29	47.2	2.86	4,895	15.50
	4/21/2021	7.85	0.19	-18.0	0.00	6,948	11.40
	10/27/2021	7.40	0.52	15.4	0.00	3,886	18.70
	4/13/2022	7.22	5.55	63.1	5.20	4,693	13.32
	10/12/2022	7.54	0.70	-27.2	0.00	2,387	18.81
	8/25/2009	NR	NR	-50.0	NR	NR	NR
MW-6	11/9/2017	7.39	0.62	-112.7	NR	6,787	14.81
	5/2/2019	9.31	11.4	94.8	5.91	501	7.66
	8/14/2019	6.82	0.83	3.10	15.5	7,265	17.13
	3/10/2020	7.62	0.01	-154.3	25.4	16,558	11.50
	10/28/2020	7.08	0.26	-137.5	0.78	10,037	12.60
	4/21/2021	7.36	0.41	-98.1	0.00	14,419	9.67
	10/27/2021	6.97	0.44	-50.4	3.74	13,947	15.31
	4/13/2022	6.89	0.41	-65.1	9.24	17,023	15.97
	10/12/2022	5.71	0.59	-52.3	0.16	17,566	16.47
MW-7	11/9/2017	7.72	7.49	-50.7	58.9	5,026	10.72
MW-8	11/9/2017	7.28	4.03	-28.7	NR	5,666	11.71

Table 3: Groundwater Field Parameter Results

Former One-Hour Valet Dry Cleaners  
 1214 West Wells Street, Milwaukee, Wisconsin  
 Ramboll Project No. 1690005819

Parameter		pH	Dissolved oxygen	Oxidation Reduction Potential	Turbidity	Specific Conductivity	Temperature
Units		S.U.	mg/L	mV	NTU	uS/cm	°C
Monitoring Well ID	Sample Date						
MW-9	11/9/2017	7.75	6.40	-42.6	2.00	3,573	11.78
PZ-1	1/15/2002	NR	0.66	-65.3	NR	NR	NR
	5/8/2003	NR	1.31	-18.3	NR	NR	NR
	8/8/2003	NR	0.12	-93.7	NR	NR	NR
	10/7/2003	NR	0.09	-97.1	NR	NR	NR
	8/25/2009	NR	0.83	-73.0	NR	NR	NR
	11/25/2017	8.14	0.64	38.5	20.3	15,260	13.09
	PZ-1 abandoned on 1/11/2018. PZ-1R installed on 4/18/2019.						
PZ-1R	5/2/2019	7.05	1.01	-102.6	3.02	3,351	12.25
	8/14/2019	6.97	0.21	-138.4	11.2	4,930	14.36
	3/10/2020	7.58	0.00	-270.1	5.21	3,818	11.10
	10/28/2020	6.47	0.21	-126.9	3.48	11,394	13.80
	4/21/2021	7.35	0.19	-487.7	4.01	6,890	10.28
	10/27/2021	6.43	0.18	-58.6	4.45	7,106	15.49
	4/13/2022	6.62	0.36	-244.8	9.83	8,583	14.71
	10/12/2022	6.47	0.48	-312.7	9.47	4,987	16.81
	PZ-2 abandoned on 7/19/2019. PZ-2R installed on 7/19/2019.						
PZ-2	8/8/2003	NR	0.19	-41.3	NR	NR	NR
	10/6/2003	NR	0.15	-35.1	NR	NR	NR
	8/27/2009	NR	0.78	-16.0	NR	NR	NR
	11/1/2017	7.64	2.67	-100.3	51.2	5,405	13.52
	PZ-2 abandoned on 7/19/2019. PZ-2R installed on 7/19/2019.						
PZ-2R	8/14/2019	7.15	0.13	-36.8	4.72	7,977	13.85
	3/10/2020	7.29	0.10	-68.3	8.35	7,762	10.20
	10/28/2020	6.99	0.35	-80.6	3.48	9,724	12.90
	4/21/2021	7.65	0.47	-81.7	0.00	5,292	11.08
	10/27/2021	7.19	0.38	-45.8	3.33	6,184	15.34
	4/13/2022	7.11	0.57	-40.0	0.00	6,562	14.12
	10/12/2022	6.90	0.81	-65.8	0.00	7,252	16.46
PZ-3	8/25/2009	NR	0.72	-53.0	NR	NR	NR
	11/2/2017	7.98	1.34	-103.8	17.8	6,042	12.18
PZ-3 abandoned on 1/11/2018							
PZ-4	8/25/2009	NR	0.72	-55.0	NR	NR	NR
	11/2/2017	7.76	1.47	-111.8	8.75	10,580	12.94
	5/2/2019	7.02	2.99	48.2	5.56	2,193	11.39
	8/14/2019	6.95	0.24	-40.0	6.87	6,714	16.55
	3/10/2020	6.98	0.24	-61.7	9.25	5,098	11.60
	10/28/2020	8.77	7.72	12.4	4.46	366	13.40
	4/21/2021	7.44	0.54	-88.1	0.00	7,498	12.68
	10/27/2021	7.09	0.31	-36.9	1.21	7,280	15.57
	4/13/2022	6.89	0.56	-35.5	8.36	7,873	15.68
	10/12/2022	6.92	0.98	-110.9	2.45	7,667	17.95

**Notes:**

S.U. = Standard Units

mg/L = milligrams per Liter

mV = millivolts

umhos/cm = micromhos per centimeter

°C = Celsius

NR - Not Recorded

**TABLE 4**  
**MNA Parameter Groundwater Sampling Results**  
Former One-Hour Valet Dry Cleaners  
1214 West Wells Street, Milwaukee, Wisconsin  
Ramboll Project No. 1690005819

Well ID	Sample Date	Dissolved Oxygen (mg/L)	Ethane (µg/L)	Ethene (µg/L)	pH	Iron, Dissolved (mg/L)	Iron, Ferric (mg/L)	Iron, Ferrous (mg/L)	Methane (µg/L)	Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub> (mg/L)	ORP (mV)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
MW-1	1/14/2002	10.39	NA	NR	NA	NA	NA	NA	NA	-37.0	NA	NA	
	5/8/2002	3.57	NA	NR	NA	NA	NA	NA	NA	287.1	NA	NA	
	8/7/2003	0.22	NA	NR	NA	NA	NA	NA	NA	161.3	NA	NA	
	10/7/2003	1.05	0.028	0.049	NR	NA	NA	NA	14	NA	396.8	NA	
	8/25/2009	0.69	<10	<10	NR	NA	NA	NA	<10	NA	95.0	NA	1.26
	11/1/2017	1.69	<0.58	<0.52	7.31	0.0126 J	0.00 J	<0.017	<1.4	<0.095	57.7	<100	<0.25
MW-2	1/14/2002	6.42	NA	NR	NA	NA	NA	NA	NA	168.4	NA	NA	
	5/8/2002	1.07	NA	NR	NA	NA	NA	NA	NA	256.9	NA	NA	
	8/7/2003	0.10	NA	NR	NA	NA	NA	NA	NA	2.3	NA	NA	
	10/7/2003	4.43	0.018	0.021	NR	NA	NA	NA	22	NA	364.0	NA	
	8/27/2009	0.98	NA	NR	NA	NA	NA	NA	NA	86.0	NA	NA	
	11/1/2017	1.71	<0.58	<0.52	7.70	1.77	0.54	1.2 H3	<1.4	<0.095	-74.3	93.5	<0.25
MW-3	8/7/2003	0.15	NA	NR	NA	NA	NA	NA	NA	68.0	NA	NA	
	10/7/2003	5.74	0.16	0.056	NR	NA	NA	NA	45	NA	327.8	NA	
	8/27/2009	1.01	NA	NR	NA	NA	NA	NA	NA	16.0	NA	NA	
	11/1/2017 <sup>1</sup>	0.73	NA	NA	7.56	NA	NA	NA	NA	NA	-125.6	NA	
MW-4	8/7/2003	5.83	NA	NR	NA	NA	NA	NA	NA	139.0	NA	NA	
	10/7/2003	3.44	0.021	0.033	NR	NA	NA	NA	22	NA	383.4	NA	
	8/25/2009	2.55	NA	NR	NA	NA	NA	NA	NA	77.0	NA	NA	
	11/2/2017	0.88	NA	NA	7.80	NA	NA	NA	NA	-19.8	NA	NA	
	5/2/2019	8.40	NA	NA	7.34	NA	NA	NA	NA	140.7	NA	NA	
	8/14/2019	1.82	NA	NA	7.11	NA	NA	NA	NA	79.4	NA	NA	
	3/10/2020	8.53	NA	NA	7.15	NA	NA	NA	NA	81.6	NA	NA	
	10/28/2020	1.45	NA	NA	6.65	NA	NA	NA	NA	116.0	NA	NA	
	4/21/2021	5.40	NA	NA	7.88	NA	NA	NA	NA	53.9	NA	NA	
	10/27/2021	2.13	NA	NA	6.82	NA	NA	NA	NA	64.6	NA	NA	
	4/13/2022	0.85	NA	NA	7.14	NA	NA	NA	NA	72.6	NA	NA	
	10/12/2022	0.96	NA	NA	7.30	NA	NA	NA	NA	74.4	NA	NA	
MW-5	8/7/2003	0.86	NA	NA	NR	NA	NA	NA	NA	190.5	NA	NA	
	10/7/2003	1.05	0.041	0.0097	NR	NA	NA	NA	0.99	NA	396.8	NA	
	8/27/2009	0.99	<10	<10	NR	NA	NA	NA	136	NA	98.0	NA	1.82
	11/2/2017	2.04	NA	NA	8.10	NA	NA	NA	NA	18.6	NA	NA	
	5/2/2019	2.01	NA	NA	7.49	NA	NA	NA	NA	159.1	NA	NA	
	8/14/2019	0.18	NA	NA	7.53	NA	NA	NA	NA	63.4	NA	NA	
	3/10/2020	0.00	NA	NA	7.80	NA	NA	NA	NA	21.1	NA	NA	
	10/28/2020	0.29	NA	NA	7.31	NA	NA	NA	NA	47.2	NA	NA	
	4/21/2021	0.19	NA	NA	7.85	NA	NA	NA	NA	-18.0	NA	NA	
	10/27/2021	0.52	NA	NA	7.40	NA	NA	NA	NA	15.4	NA	NA	
	4/13/2022	5.55	NA	NA	7.22	NA	NA	NA	NA	63.1	NA	NA	
	10/12/2022	0.70	NA	NA	7.54	NA	NA	NA	NA	-27.2	NA	NA	
MW-6	8/25/2009	1.0	NA	NR	NA	NA	NA	NA	NA	-50.0	NA	NA	
	11/9/2017 <sup>1</sup>	0.62	<0.58	<0.52	7.39	13.6	8.3	5.2 H3	<1.4	<0.095	-112.7	82.4	<0.25
	5/2/2019	11.38	<0.58	<0.52	9.31	103	1,030	<0.20	<1.4	0.25 J	94.8	41.8	6.0
	8/14/2019	0.83	<0.58	<0.52	6.82	1.7	<0.20	2.1 H3	<1.4	<0.0	3.1	95.6	0.57 J
	3/10/2020	0.01	<1.2	<1.2	7.62	6.68	<0.20	7.4 H3	75.2	<0.059	-154.3	87 J	1.8
	10/28/2020	0.26	NA	NA	7.08	NA	NA	NA	NA	NA	-137.5	NA	NA
	4/21/2021	0.41	NA	NA	7.36	NA	NA	NA	NA	NA	-98.1	NA	NA
	10/27/2021	0.44	NA	NA	6.97	NA	NA	NA	NA	NA	-50.4	NA	NA
	4/13/2022	0.41	NA	NA	6.89	NA	NA	NA	NA	NA	-65.1	NA	NA
	10/12/2022	0.59	NA	NA	5.71	NA	NA	NA	NA	NA	-52.3	NA	NA

**TABLE 4**  
**MNA Parameter Groundwater Sampling Results**  
Former One-Hour Valet Dry Cleaners  
1214 West Wells Street, Milwaukee, Wisconsin  
Ramboll Project No. 1690005819

Well ID	Sample Date	Dissolved Oxygen (mg/L)	Ethane (µg/L)	Ethene (µg/L)	pH	Iron, Dissolved (mg/L)	Iron, Ferric (mg/L)	Iron, Ferrous (mg/L)	Methane (µg/L)	Nitrogen, NO <sub>2</sub> plus NO <sub>3</sub> (mg/L)	ORP (mV)	Sulfate (mg/L)	Total Organic Carbon (mg/L)
MW-7	8/26/2009	NA	NA	NA	NR	NA	NA	NA	NA	NA	NA	NA	NA
	11/9/2017 <sup>2</sup>	7.49	NA	NA	7.72	NA	NA	NA	NA	-50.7	NA	NA	NA
MW-8	8/26/2009	NA	NA	NA	NR	NA	NA	NA	NA	NA	NA	NA	NA
	11/9/2017 <sup>3</sup>	4.03	NA	NA	7.28	NA	NA	NA	NA	-28.7	NA	NA	NA
MW-9	8/27/2009	NA	<10	<10	NR	NA	NA	NA	<10	NA	NA	NA	1.27
	11/9/2017	6.40	NA	NA	7.75	NA	NA	NA	NA	-42.6	NA	NA	NA
PZ-1	1/15/2002	0.66	NA	NA	NR	NA	NA	NA	NA	-65.3	NA	NA	NA
	5/8/2003	1.31	NA	NA	NR	NA	NA	NA	NA	-18.3	NA	NA	NA
	8/8/2003	0.12	NA	NA	NR	NA	NA	NA	NA	-93.7	NA	NA	NA
	10/7/2003	0.09	1.7	0.48	NR	NA	NA	NA	7	-97.1	NA	NA	NA
	8/25/2009	0.83	<10	<10	NR	NA	NA	NA	<10	-73.0	NA	NA	2.04
	11/2/2017	0.64	<0.58	<0.52	8.14	2.29	2.2	0.060	H3	<1.4	0.33	38.5	155
PZ-1R	5/2/2019	1.01	337	32.4	7.05	5.88	<0.20	5.8	H3	23.1	<0.095	-102.6	101
	8/14/2019	0.21	3,060	87.2	6.97	5.70	<0.20	6.5	H3	129	<0.095	-138.4	93.1
	3/10/2020	0.00	2,130	974	7.58	4.60	<0.20	5.1	H3	162	<0.059	-270.1	85.9
	10/28/2020	0.21	1,560	1,320	6.47	NA	NA	168	C4, H3	1510	NA	-126.9	4.9 J, D3
	4/21/2021	0.19	1,540	1,090	7.35	NA	NA	19.7	H3	2,680	NA	-487.7	<2.2
	10/27/2021	0.18	2.7 J	21.9	6.43	17.1	<0.0281	H3	19.0	H3	1,820	-58.6	<2.2 D3
	4/13/2022	0.36	683	3,570	6.62	3.74	<0.058	3.9	H3	5,650	NA	-244.8	66.2
	10/12/2022	0.48	1,040 J	7,090	6.47	5.80	<0.50	7.2	H3	13,900	NA	-312.7	<2.2 D3
PZ-2	8/8/2003	0.19	NA	NA	NR	NA	NA	NA	NA	NA	-41.3	NA	NA
	10/6/2003	0.15	1.3	0.79	NR	NA	NA	NA	NA	60	NA	-35.1	NA
	8/27/2009	0.78	NA	NA	NR	NA	NA	NA	NA	NA	-16.0	NA	NA
	11/1/2017 <sup>1</sup>	2.67	<0.58	<0.52	7.64	8.82	5.7	3.1	23.1	<0.095	-100.3	178	<0.25
PZ-2R	8/14/2019	0.13	0.82 J	<0.52	7.15	3.20	<0.20	3.6	H3	22	<0.095	-36.8	164
	3/10/2020	0.10	<1.2	<1.2	7.29	2.80	<0.20	2.9	H3, M1	10.3	<0.059	-68.3	140
	10/28/2020	0.35	NA	NA	6.99	NA	NA	NA	NA	NA	-80.6	NA	NA
	4/21/2021	0.47	NA	NA	7.65	NA	NA	NA	NA	NA	-81.7	NA	NA
	10/27/2021	0.38	NA	NA	7.19	NA	NA	NA	NA	NA	-45.8	NA	NA
	4/13/2022	0.57	NA	NA	7.11	NA	NA	NA	NA	NA	-40.0	NA	NA
	10/12/2022	0.81	NA	NA	6.9	NA	NA	NA	NA	NA	-65.8	NA	NA
PZ-3	8/25/2009	0.72	NA	NA	NR	NA	NA	NA	NA	NA	-53.0	NA	NA
	11/2/2017	1.34	NA	NA	7.98	NA	NA	NA	NA	NA	-103.8	NA	NA
PZ-4	8/25/2009	0.72	NA	NA	NR	NA	NA	NA	NA	NA	-55.0	NA	NA
	11/2/2017	1.47	NA	NA	7.76	NA	NA	NA	NA	NA	-111.8	NA	NA
	5/2/2019	2.99	NA	NA	7.02	NA	NA	NA	NA	NA	48.2	NA	NA
	8/14/2019	0.24	NA	NA	6.95	NA	NA	NA	NA	NA	-40.0	NA	NA
	3/10/2020	0.24	NA	NA	6.98	NA	NA	NA	NA	NA	-61.7	NA	NA
	10/28/2020	7.72	NA	NA	8.77	NA	NA	NA	NA	NA	12.4	NA	NA
	4/21/2021	0.54	NA	NA	7.44	NA	NA	NA	NA	NA	-88.1	NA	NA
	10/27/2021	0.31	NA	NA	7.09	NA	NA	NA	NA	NA	-36.9	NA	NA
	4/13/2022	0.56	NA	NA	6.89	NA	NA	NA	NA	NA	-35.5	NA	NA
	10/12/2022	0.98	NA	NA	6.92	NA	NA	NA	NA	NA	-110.9	NA	NA

**Notes:**

J = Estimated concentration at or above the level of detection and below the level of quantification.

mg/L = milligrams per liter

mV = millivolts

NA = Data was not collected or not able to be collected.

NS = Not sampled.

ORP = Oxidation-reduction potential; measured in the field.

ug/L = micrograms per liter

All sampling results prior to 2017 obtained from a Site Investigation Report prepared by GZA GeoEnvironmental, Inc. dated February 24, 2012.

(<sup>1</sup>) Well cap either missing or not plugged at time of inspection; potential for water and other constituents to have entered the well.

(<sup>2</sup>) Monitoring well purged dry after first stabilization parameter reading. Well sampled later in day without collecting new stabilization parameters.

(<sup>3</sup>) Monitoring well purged dry before water passed completely through flow-through cell. Stabilization parameters collected from flow-through cell approximately 4/5 of the way full.

(<sup>4</sup>) Monitoring well was damaged during site redevelopment activities and was not sampled.

C4 = Sample container did not meet EPA or method requirements

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

H3 = Sample was received or analysis requested beyond the recognized method holding time.

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.

**TABLE 5**  
**Groundwater Analytical Results - Summary of Detected Constituents**  
Former One-Hour Valet Dry Cleaners  
1214 West Wells Street, Milwaukee, Wisconsin  
Ramboll Project No. 1690005819

		Benzene	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	1,2,4-Trimethylbenzene <sup>3</sup>	Vinyl chloride	Xylenes, total <sup>4</sup>
Analyte <sup>1,2</sup>		71-43-2	67-66-3	75-35-4	156-59-2	156-60-5	100-41-4	75-09-2	127-18-4	108-88-3	79-01-6	95-63-6	75-01-4	1330-20-7
CAS		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5	6	7	70	100	700	5	5	800	5	480	0.2	2000
NR 140 PAL		0.5	0.6	0.7	7	20	140	0.5	0.5	160	0.5	96	0.02	400
MW-1	1/14/2002	ND	<0.23	<0.27	<0.21	<0.25	<0.22	<0.24	<0.22	<0.41	0.46 J	<0.15	44	#N/A
	5/8/2002	ND	<0.1	<0.11	<0.11	<0.11	<0.08	<0.24	<0.15	<0.08	<0.13	<0.11	<0.16	#N/A
	8/7/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.9	0.3 J	<0.25	<0.25	<0.5
	10/7/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.25	<0.25	<0.25	<0.25	<0.5
	8/25/2009	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
	11/1/2017	<0.50	<2.5	<0.41	<0.26	<0.26	<0.50	<0.23	<0.50	<0.50	<0.33	<0.50	<0.18	<1.5
MW-2	1/14/2002	ND	<0.23	<0.21	<0.21	<0.25	<0.22	<0.22	<0.22	<0.41	<0.24	<0.26	<0.25	#N/A
	5/8/2002	ND	<0.1	<0.11	<0.11	<0.11	<0.08	<0.24	<0.15	<0.08	<0.13	<0.11	<0.16	#N/A
	8/7/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.32 J	<0.25	<0.25	<0.25	<0.5
	10/7/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.25	<0.25	<0.25	<0.25	<0.5
	8/27/2009	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
	11/1/2017	<0.50	<2.5	<0.41	<0.26	<0.26	<0.50	<0.23	<0.50	<0.50	<0.33	<0.50	<0.18	<1.5
MW-3	1/15/2002	ND	<0.23	<0.27	<0.21	<0.25	<0.22	<0.22	<0.22	<0.41	<0.24	<0.26	<0.25	#N/A
	5/8/2002	ND	<0.1	<0.11	<0.11	<0.11	<0.08	<0.24	<0.15	<0.08	<0.13	<0.11	<0.16	#N/A
	8/7/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.32 J	<0.25	<0.25	<0.25	<0.5
	10/7/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.25	<0.25	<0.25	<0.25	<0.5
	8/27/2009	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
	11/1/2017	<0.50	<2.5	<0.41	<0.26	<0.26	<0.50	<0.23	<0.50	<0.50	<0.33	<0.50	<0.18	<1.5
MW-4	8/7/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	0.88 J	0.9	0.71 J	0.34 J	<0.25	<0.5
	10/7/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	0.57 J	<0.25	<0.25	<0.25	<0.25	<0.5
	8/25/2009	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<1	7	<0.5	<0.2	<0.2	<0.2	<0.5
	11/2/2017	<0.50	<2.5	<0.41	<0.26	<0.26	<0.50	<0.23	7.8	<0.50	<0.33	<0.50	<0.18	<1.5
	5/2/2019	<0.49	<2.5	<0.49	23.0	<2.2	<0.44	<1.2	850	<0.34	5.0	<1.7	<0.35	<3.0
	8/14/2019	<0.25	<1.3	<0.24	0.43 J	<1.1	<0.22	<0.58	79.1	<0.17	0.99 J	<0.84	<0.17	<1.5
	3/10/2020	<0.25	<1.3	<0.24	<0.27	<1.1	<0.32	<0.58	57	<0.27	0.47 J	<0.84	<0.17	<1.5
	10/28/2020	<0.25	<1.3	<0.24	<0.27	<0.46	<0.32	<0.58	24.0	<0.27	0.26 J	<0.84	<0.17	<1.5
	4/21/2021	<0.30	<1.2	<0.58	<0.47	<0.53	<0.33	<0.32	31.8	<0.29	<0.32	<0.45	<0.17	<1.0
	10/27/2021	<0.30	<1.2	<0.58	<0.47	<0.53	<0.33	<0.32	26.8	<0.29	<0.32	<0.45	<0.17	<1.0
	4/13/2022	<0.30	<1.2	<0.58	<0.47	<0.53	<0.33	<0.32	13.7	<0.29	<0.32	<0.45	<0.17	<1.0
	10/12/2022	<0.30	<1.2	<0.58	<0.47	<0.53	<0.33	<0.32	26.8	<0.29	<0.32	<0.45	<0.17	<1.0
MW-5	8/7/2003	ND	<0.25	<0.5	11	<0.5	<0.5	<1	80	0.9	7.9	0.34 J	<0.25	<0.5
	10/7/2003	ND	<0.25	<0.5	150	1.2	<0.5	<1	93	<0.25	6.4	<0.25	<0.5	<0.5
	8/27/2009	<0.2	<0.2	<0.5	110	1.2	<0.5	<1	140	<0.5	<0.2	32	22	<0.5
	11/2/2017	<0.50	<2.5	<0.41	73.6	1.5	<0.50	<0.23	30.3	<0.50	3.2	<0.50	0.45 J	<1.5
	5/2/2019	<0.25	<1.3	<0.24	11.3	<1.1	<0.22	<0.58	20.5	<0.17	3.8	<0.84	2.1	<1.5
	8/14/2019	<0.25	<1.3	<0.24	31.2	<1.1	<0.22	<0.58	29.1	<0.17	5.9	<0.84	0.73 J	<1.5
	3/10/2020	<0.25	<1.3	<0.24	14.1	<1.1	<0.32	<0.58	23.8	<0.27	5.0	<0.84	2.2	<1.5
	10/28/2020	<0.25	<1.3	<0.24	11.3	0.72 J	<0.32	<0.58	21.7	<0.27	5.2	<0.84	1.5	<1.5
	4/21/2021	<0.30	<1.2	<0.58	7.6	0.59 J	<0.33	<0.32	20.9	<0.29	4.2	<0.45	1.5	<1.0
	10/27/2021	<0.30	<1.2	<0.58	12.3	1.7	<0.33	<0.32	24.0	<0.29	5.6	<0.45	1.1	<1.0
	4/13/2022	<0.30	<1.2	<0.58	47.8	0.93 J	<0.33	<0.32	18.0	<0.29	3.7	<0.45	<0.17	<1.0
	10/12/2022	<0.30	<1.2	<0.58	10.6	<0.53	<0.33	<0.32	18.6	<0.29	3.6	<0.45	0.26 J	<1.0

**TABLE 5**  
**Groundwater Analytical Results - Summary of Detected Constituents**  
Former One-Hour Valet Dry Cleaners  
1214 West Wells Street, Milwaukee, Wisconsin  
Ramboll Project No. 1690005819

		Benzene	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	1,2,4-Trimethylbenzene <sup>3</sup>	Vinyl chloride	Xylenes, total <sup>4</sup>
Analyte <sup>1,2</sup>		71-43-2	67-66-3	75-35-4	156-59-2	156-60-5	100-41-4	75-09-2	127-18-4	108-88-3	79-01-6	95-63-6	75-01-4	1330-20-7
CAS	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NR 140 ES		5	6	7	70	100	700	5	5	800	5	480	0.2	2000
NR 140 PAL		0.5	0.6	0.7	7	20	140	0.5	0.5	160	0.5	96	0.02	400
MW-6	8/25/2009	<0.2	<2	<5	<b>980</b>	<5	<5	<10	<5	<5	<b>18</b>	<2	<b>57</b>	<5
	11/9/2017	<0.50	<2.5	<0.41	<b>4.5</b>	<0.26	<0.50	<0.23	<0.50	<0.50	<0.33	<0.50	<b>1.0</b>	<1.5
	5/2/2019	<0.25	<1.3	<0.24	<0.27	<1.1	<0.22	<0.58	<0.33	<0.17	<0.26	<0.84	<0.17	<1.5
	8/14/2019	<0.25	<1.3	<0.24	<b>14.7 M1</b>	<1.1	<0.22	<0.58	<b>1.3</b>	<0.17	<b>0.37 J</b>	<0.84	<b>1.6</b>	<1.5
	3/10/2020	<0.25	<1.3	<0.24	<b>239</b>	<b>6.8</b>	<0.32	<0.58	<0.33	<0.27	<b>13.5</b>	<0.84	<b>11.5</b>	<1.5
	10/28/2020	<0.25	<1.3	<0.24	<b>172</b>	<b>5.4</b>	<0.32	<0.58	<0.33	<0.27	<b>15.6</b>	<0.84	<b>8.4</b>	<1.5
	4/21/2021	<0.30	<1.2	<0.58	<b>1.9</b>	<0.53	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>0.32 J</b>	<1.0
	10/27/2021	<0.30	<1.2	<0.58	<b>1.3</b>	<0.53	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>0.19 J</b>	<1.0
	4/13/2022	<0.30	<1.2	<0.58	<b>1.5</b>	<0.53	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>0.36 J</b>	<1.0
	10/12/2022	<0.30	<1.2	<0.58	<b>1.3</b>	<0.53	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>0.42 J</b>	<1.0
MW-7	8/26/2009	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.2	<0.2	<0.5
	11/9/2017	<0.50	<2.5	<0.41	<0.26	<0.26	<0.50	<0.23	<0.50	<0.50	<0.33	<0.50	<0.18	<1.5
MW-8	8/26/2009	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.2	<0.2	<0.2	<0.5
	11/9/2017 <sup>5</sup>	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-9	8/27/2009	<b>0.28</b>	<0.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>0.64</b>	<0.2	<0.2	<0.2	<0.5
	11/9/2017	<0.50	<2.5	<0.41	<0.26	<0.26	<0.50	<0.23	<0.50	<b>0.59 J</b>	<0.33	<0.50	<0.18	<1.5
PZ-1	1/15/2002	ND	<1.2	<1.4	<b>400</b>	<b>4 J</b>	<1.1	<1.1	<1.1	<1.1	<2.1	<1.2	<0.75	<1.3
	5/8/2003	ND	<5	<5.5	<b>3,000</b>	<b>22</b>	<4	<b>23 J</b>	<b>8,500</b>	<4	<b>2,800</b>	<5.5	<b>22 J</b>	#N/A
	8/8/2003	ND	<b>0.3 J</b>	<b>8.4</b>	<b>2,600</b>	<b>18.0</b>	<b>1.8</b>	<1	<b>27,000</b>	<b>4.8</b>	<b>2,500</b>	<0.25	<b>11</b>	1.2
	10/7/2003	ND	<120	<250	<b>2,600</b>	<250	<250	<500	<b>36,000</b>	<120	<b>2,600</b>	<120	<120	<250
	8/25/2009	<32	<32	<80	<b>2,000</b>	<80	<80	<160	<b>61,000</b>	<80	<b>1,600</b>	<32	<32	<80
	11/2/2017	<125	<625	<103	<b>414</b>	<64.1	<125	<58.1	<b>16,200</b>	<125	<b>435</b>	<125	<43.9	<375
PZ-1 abandoned on 1/11/2018. PZ-1R was installed on 4/18/2019.														
PZ-1R	5/2/2019	<123	<637	<122	<b>30,000</b>	<545	<109	<290	<b>60,300</b>	<86.1	<b>3,310</b>	<420	<87.3	<750
	8/14/2019	<123	<637	<b>140 J</b>	<b>108,000</b>	<545	<109	<290	<b>83,700</b>	<86.1	<b>5,450</b>	<420	<b>1,110</b>	<750
	3/10/2020	<123	<637	<122	<b>36,400</b>	<545	<159	<290	<b>23,200</b>	<135	<b>9,060</b>	<420	<b>2,630</b>	<750
	10/28/2020	<123	<637	<122	<b>6,500</b>	<232	<159	<290	<b>28,800</b>	<135	<b>2,280</b>	<420	<b>822</b>	<750
	4/21/2021	<148	<591	<291	<b>98,200</b>	<264	<163	<160	<b>64,500</b>	<144	<b>26,000</b>	<224	<b>10,800</b>	<524
	10/27/2021	<148	<591	<291	<b>69,500</b>	<264	<163	<160	<b>21,800</b>	<144	<b>10,800</b>	<224	<b>14,200</b>	<524
	4/13/2022	<148	<591	<291	<b>47,800</b>	<264	<163	<160	<b>64,600</b>	<144	<b>11,800</b>	<224	<b>12,300</b>	<524
	10/12/2022	<148	<591	<291	<b>92,600</b>	<264	<163	<160	<b>20,200</b>	<144	<b>3,350</b>	<224	<b>21,900</b>	<524
PZ-2	8/8/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>0.43 J</b>	<0.25	<0.25	<b>5.8</b>	<0.5
	10/6/2003	ND	<0.25	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.25	<0.25	<0.25	<b>8.9</b>	<0.5
	8/27/2009	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.2	<0.2	<b>14</b>	<0.5
	11/1/2017	<0.50	<2.5	<0.41	<b>4.1</b>	<0.26	<0.50	<0.23	<0.50	<0.50	<0.33	<0.50	<b>11.0</b>	<1.5
	5/2/2019 <sup>6</sup>	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
PZ-2 abandoned on 7/19/2019. PZ-2R was installed on 7/19/2019.														
PZ-2R	8/14/2019	<0.25	<1.3	<0.24	<b>26.9</b>	<1.1	<0.22	<0.58	<b>12.7</b>	<0.17	<b>0.39 J</b>	<0.84	<b>15.5</b>	<1.5
	3/10/2020	<0.25	<1.3	<0.24	<b>33.9</b>	<1.1	<0.32	<0.58	<0.33	<0.27	<0.26	<0.84	<b>11.3</b>	<1.5
	10/28/2020	<0.25	<1.3	<0.24	<b>90.2</b>	<b>1.1 J</b>	<0.32	<0.58	<0.33	<0.27	<0.26	<0.84	<b>10.8</b>	<1.5
	4/21/2021	<0.30	<1.2	<0.58	<b>109</b>	<b>1.5</b>	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>14.1</b>	<1.0
	10/27/2021	<0.30	<1.2	<0.58	<b>104</b>	<b>1.3</b>	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>12.6</b>	<1.0
	4/13/2022	<0.30	<1.2	<0.58	<b>91.5</b>	<b>1.4</b>	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>11.1</b>	<1.0
	10/12/2022	<0.30	<1.2	<0.58	<b>121</b>	<b>1.7</b>	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>11.1</b>	<1.0

**TABLE 5**  
**Groundwater Analytical Results - Summary of Detected Constituents**  
Former One-Hour Valet Dry Cleaners  
1214 West Wells Street, Milwaukee, Wisconsin  
Ramboll Project No. 1690005819

		Benzene	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene	Methylene chloride	Tetrachloroethene	Toluene	Trichloroethene	1,2,4-Trimethylbenzene <sup>3</sup>	Vinyl chloride	Xylenes, total <sup>4</sup>	
Analyte <sup>1,2</sup>		71-43-2	67-66-3	75-35-4	156-59-2	156-60-5	100-41-4	75-09-2	127-18-4	108-88-3	79-01-6	95-63-6	75-01-4	1330-20-7	
CAS		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
Units															
NR 140 ES		5	6	7	70	100	700	5	5	800	5	480	0.2	2000	
NR 140 PAL		0.5	0.6	0.7	7	20	140	0.5	0.5	160	0.5	96	0.02	400	
PZ-3	8/26/2004	ND	<2	<5	<b>440</b>	<5	<5	<10	<b>56</b>	<2	<2	<2	<2	<5	
	10/7/2004	ND	<1	<2.5	<b>300</b>	<2.5	<2.5	<5	<b>73</b>	<1	<1	<1	<1	<2.5	
	8/25/2009	<2	<2	<5	<b>1,100</b>	11.0	<5	<10	<b>5.6</b>	<5	<b>7.1</b>	<2	<b>3.9</b>	<5	
	11/2/2017	<25.0	<125	<20.5	<b>2,060</b>	<b>22.4</b>	J	<25.0	<11.6	<25.0	<b>144</b>	<25.0	<8.8	<75.0	
PZ-3 abandoned on 1/11/2018.															
PZ-4	8/25/2009	<0.20	<0.2	<0.5	<b>4.4</b>	<0.5	<0.5	<1	<b>0.84</b>	<0.5	<b>0.56</b>	<0.2	<0.2	<0.5	
	11/2/2017	<0.50	<2.5	<0.41	<0.26	<0.26	<0.50	<0.23	<0.50	<0.50	<0.33	<0.50	<b>1.3</b>	<1.5	
	5/2/2019	<0.49	<2.5	<0.49	<b>20.8</b>	<2.2	<0.44	<1.2	<b>351</b>	<0.34	<b>3</b>	<1.7	<b>1</b>	<b>J</b>	<3.0
	8/14/2019	<0.25	<1.3	<0.24	<0.27	<1.1	<0.22	<0.58	<b>15.8</b>	<0.17	<0.26	<0.84	<b>1.8</b>	<1.5	
	3/10/2020	<0.25	<1.3	<0.24	<b>1.4</b>	<1.1	<0.32	<0.58	<b>16</b>	<0.27	<0.26	<0.84	<b>1.7</b>	<1.5	
	10/28/2020	<0.25	<1.3	<0.24	<b>0.42</b>	J	<0.46	<0.32	<0.58	<b>23.5</b>	<0.27	<b>0.37</b>	J	<0.84	<0.17
	4/21/2021	<0.30	<1.2	<0.58	<0.47	<0.53	<0.33	<0.32	<b>0.94</b>	J	<0.29	<0.32	<0.45	<b>3.1</b>	<1.0
	10/27/2021	<0.30	<1.2	<0.58	<0.47	<0.53	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>3.2</b>	<1.0	
	4/13/2022	<0.30	<1.2	<0.58	<0.47	<0.53	<0.33	<0.32	<b>0.45</b>	J	<0.29	<0.32	<0.45	<b>3.3</b>	<1.0
	10/12/2022	<0.30	<1.2	<0.58	<0.47	<0.53	<0.33	<0.32	<0.41	<0.29	<0.32	<0.45	<b>1.4</b>	<1.0	

**Notes:**

All results reported in micrograms per Liter (ug/L)

ES = Enforcement Standard

PAI = Preventive Action Limit

**Bold value** = NR 140 ES Exceedance

*Italic Value* = NR 140 PAL Exceedance

#N/A = Not analyzed

NS = Not sampled

J = Estimated concentration. Laboratory results reported between the limit of detection and limit of quantification.

<sup>1</sup> Analytical results are displayed for detected parameters only.

<sup>2</sup> All sampling results prior to 2017 obtained from a Site Investigation Report prepared by GZA GeoEnvironmental, Inc. on February 24, 2012.

<sup>3</sup> Standards are for 1,2,4- and 1,3,5-Trimethylbenzene

<sup>4</sup> Standards are for Total Xylenes (-m, -p, and -o).

<sup>5</sup> MW-8 not sampled during the November 2017 groundwater sampling event because well did not recharge sufficiently.

<sup>6</sup> PZ-2 was not sampled during the May 2019 groundwater sampling event because well was damaged during site redevelopment activities.

ND = Not detected at or above limit of detection.

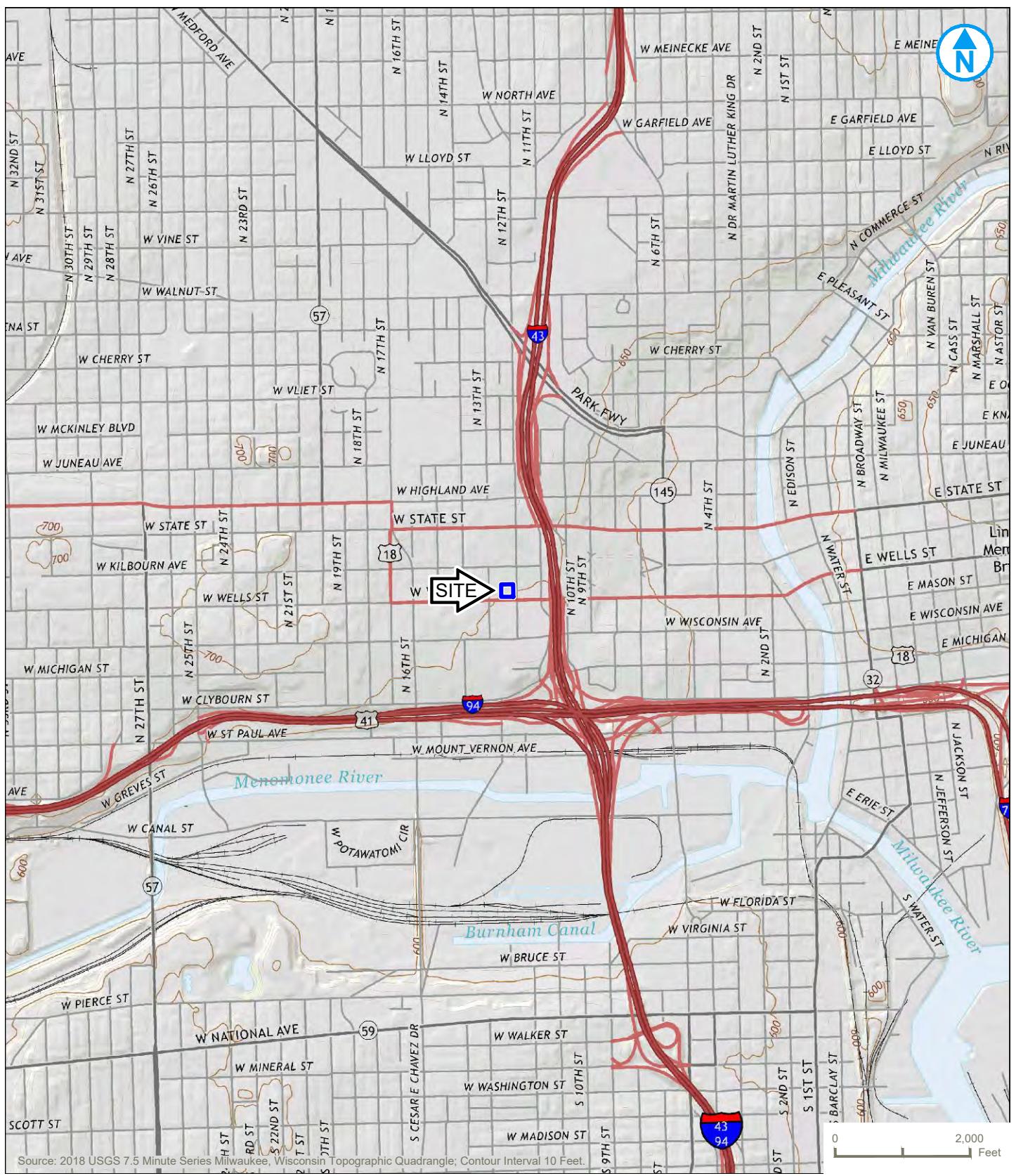
M1 = Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

C4 = Sample container did not meet EPA or method requirements.

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

SEMI-ANNUAL PROGRESS REPORT  
JULY 1, 2022 TO DECEMBER 31, 2022

## FIGURES



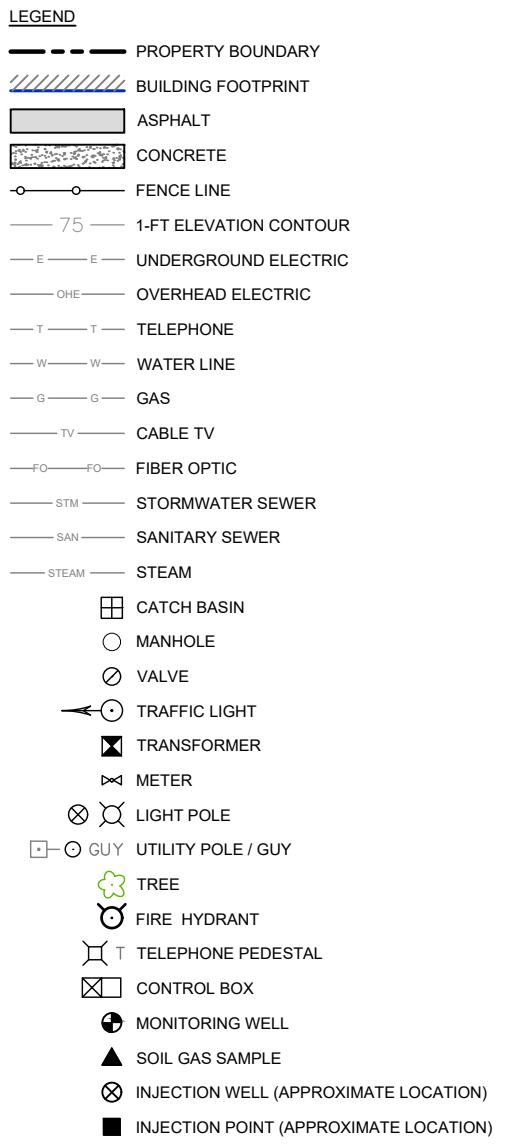
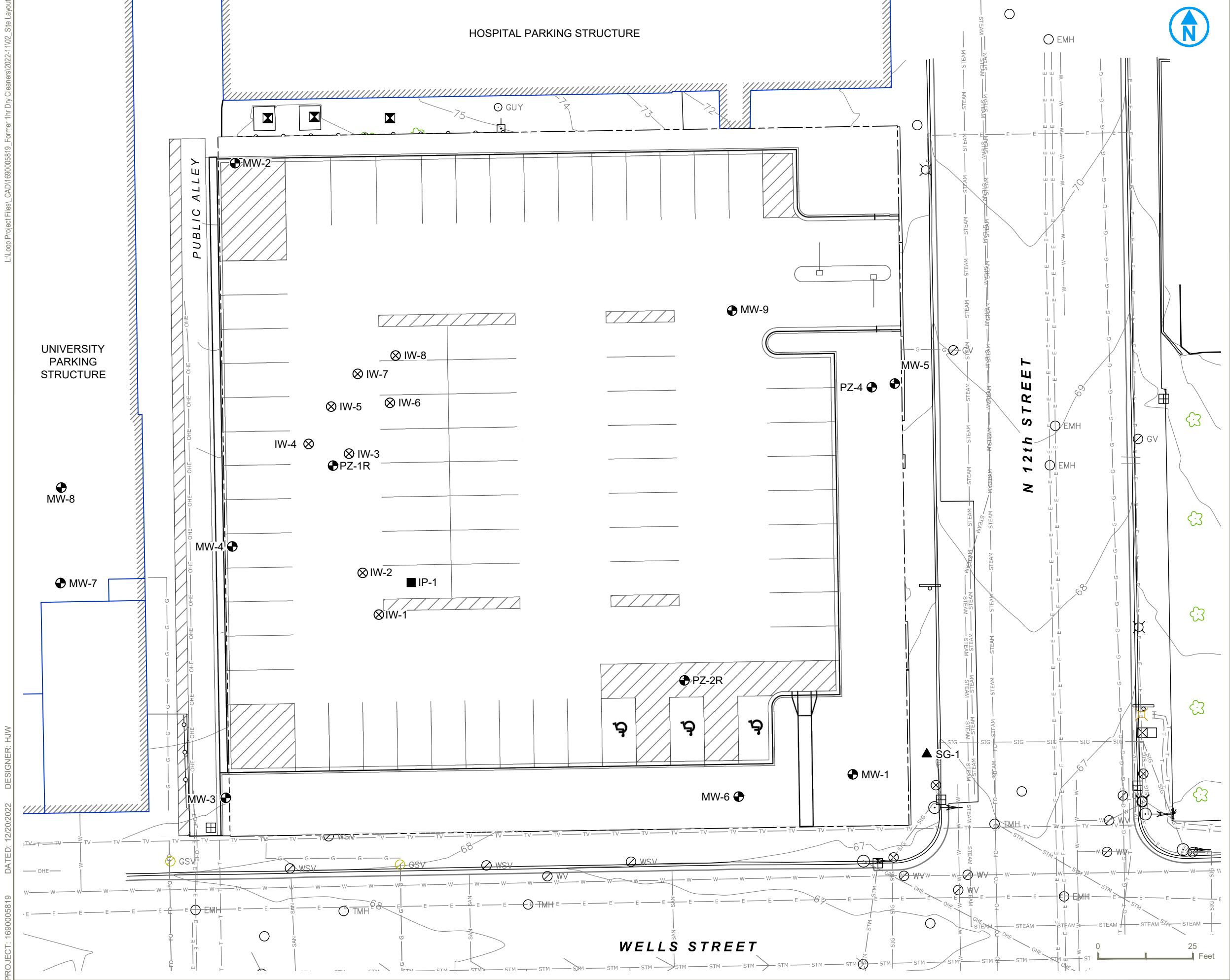
## FORMER ONE-HOUR VALET DRY CLEANERS

1214 WEST WELLS STREET  
MILWAUKEE, WISCONSIN

**FIGURE 1**

RAMBOLL US CONSULTING, INC.  
A RAMBOLL COMPANY

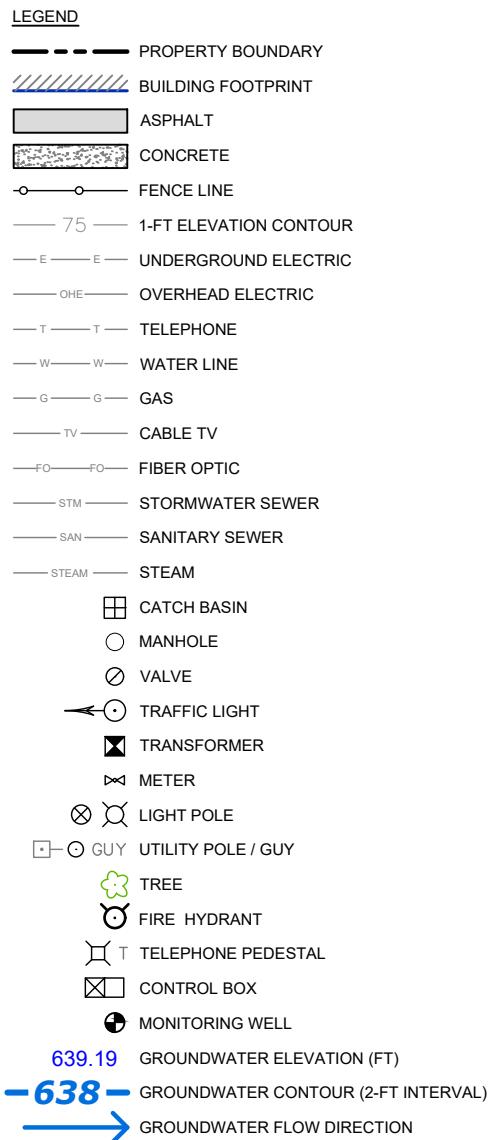
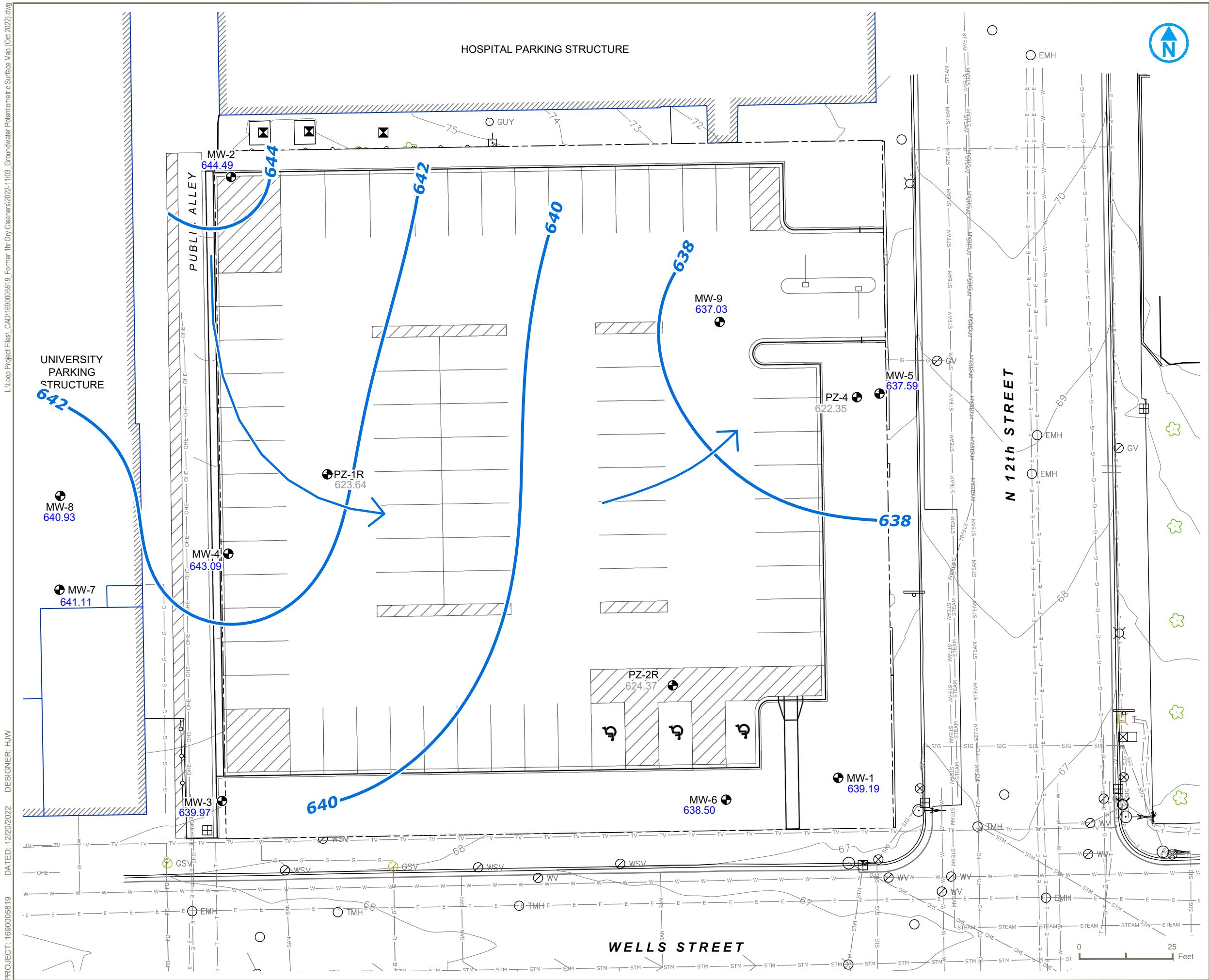
RAMBOLL

**SITE LAYOUT**

**FORMER ONE-HOUR VALET DRY CLEANERS**  
1214 WEST WELLS STREET  
MILWAUKEE, WISCONSIN

**FIGURE 2**

RAMBOLL US CONSULTING, INC.  
A RAMBOLL COMPANY



NOTE: GROUNDWATER MEASUREMENTS TAKEN AT PZ-1R, PZ-2R, AND PZ-4 WERE NOT INCLUDED IN CONTOURING CALCULATIONS.

## GROUNDWATER POTENTIOMETRIC SURFACE MAP (OCTOBER 2022)

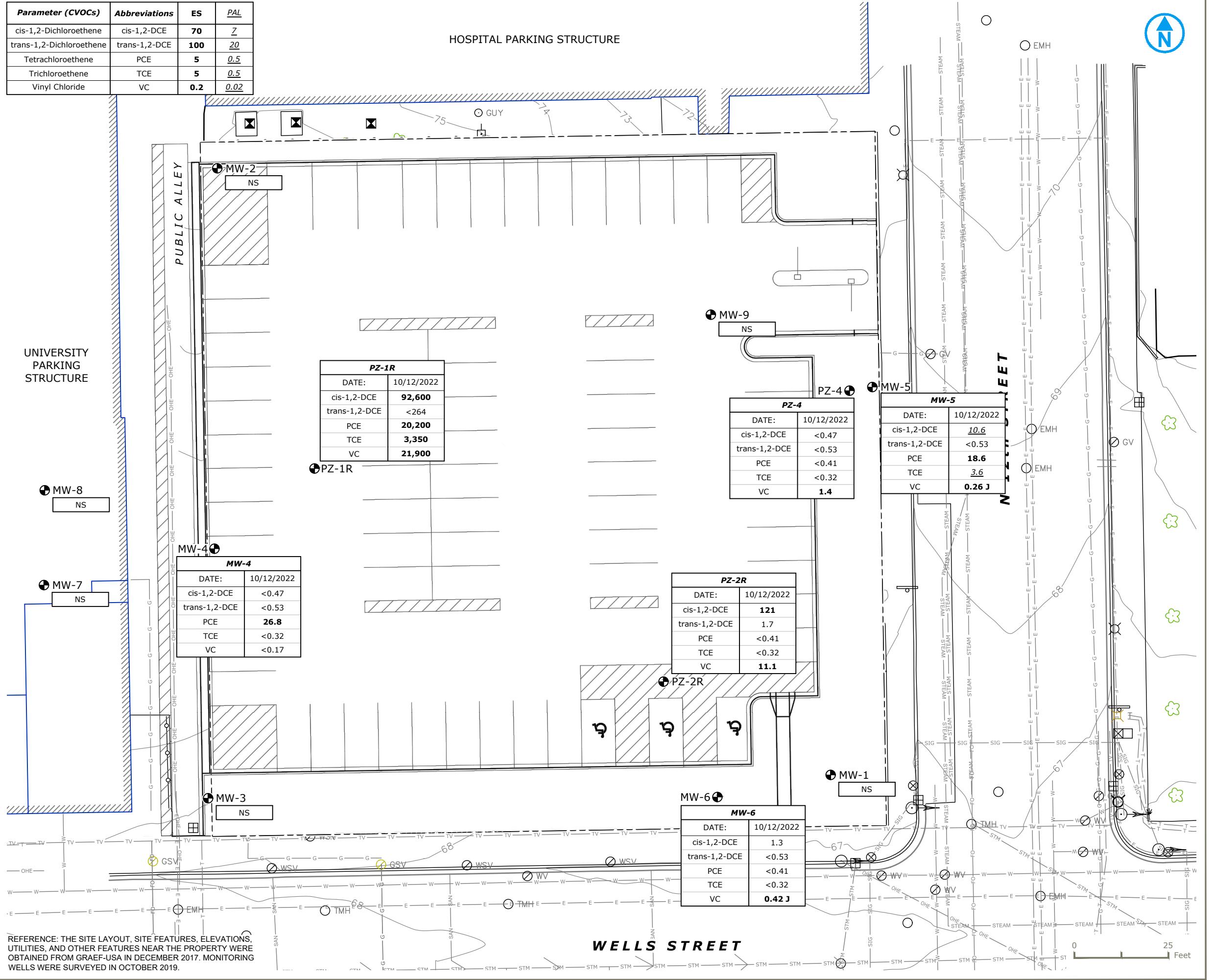
FORMER ONE-HOUR VALET DRY CLEANERS

1214 WEST WELLS STREET  
MILWAUKEE, WISCONSIN

**FIGURE 3**

RAMBOLL US CONSULTING, INC.  
A RAMBOLL COMPANY

RAMBOLL



SEMI-ANNUAL PROGRESS REPORT  
JULY 1, 2022 TO DECEMBER 31, 2022

**APPENDIX A**  
**LABORATORY ANALYTICAL REPORTS**

November 15, 2022

Susan Petrofske  
Ramboll US Consulting, Inc.  
234 W. Florida Street  
Fifth Floor  
Milwaukee, WI 53204

RE: Project: 1690005819  
Pace Project No.: 40253092

Dear Susan Petrofske:

Enclosed are the analytical results for sample(s) received by the laboratory on October 13, 2022. 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,



Steven Mleczko  
steve.mleczko@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Kyle Heimstead, Ramboll US Consulting, Inc.  
Michelle Peters, Ramboll



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: 1690005819

Pace Project No.: 40253092

---

### **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

South Carolina Certification #: 83006001  
Texas Certification #: T104704529-21-8  
Virginia VELAP Certification ID: 11873  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-21-00008  
Federal Fish & Wildlife Permit #: 51774A

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: 1690005819  
 Pace Project No.: 40253092

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40253092001	PZ-2R	Water	10/12/22 07:53	10/13/22 08:00
40253092002	MW-6	Water	10/12/22 08:30	10/13/22 08:00
40253092003	MW-6 DUP	Water	10/12/22 08:35	10/13/22 08:00
40253092004	PZ-4	Water	10/12/22 09:10	10/13/22 08:00
40253092005	MW-5	Water	10/12/22 09:50	10/13/22 08:00
40253092006	MW-4	Water	10/12/22 10:30	10/13/22 08:00
40253092007	PZ-1R	Water	10/12/22 11:55	10/13/22 08:00
40253092008	TRIP BLANK	Water		10/13/22 08:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, LLC.

## SAMPLE ANALYTE COUNT

Project: 1690005819  
Pace Project No.: 40253092

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40253092001	PZ-2R	EPA 8260	EIB	65
40253092002	MW-6	EPA 8260	EIB	65
40253092003	MW-6 DUP	EPA 8260	EIB	65
40253092004	PZ-4	EPA 8260	JAV	65
40253092005	MW-5	EPA 8260	JAV	65
40253092006	MW-4	EPA 8260	JAV	65
40253092007	PZ-1R	EPA 8015B Modified EPA 6020B EPA 8260 HACH 8146 EPA 300.0 SM 5310C	KHB KXS JAV DAW HMB TJJ	3 1 65 1 1 1
40253092008	TRIP BLANK	EPA 8260	EIB	65

PASI-G = Pace Analytical Services - Green Bay

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SUMMARY OF DETECTION

Project: 1690005819

Pace Project No.: 40253092

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
<b>40253092001</b>	<b>PZ-2R</b>						
EPA 8260	cis-1,2-Dichloroethene	121	ug/L	1.0	10/17/22 17:51		
EPA 8260	trans-1,2-Dichloroethene	1.7	ug/L	1.0	10/17/22 17:51		
EPA 8260	Vinyl chloride	11.1	ug/L	1.0	10/17/22 17:51		
<b>40253092002</b>	<b>MW-6</b>						
EPA 8260	cis-1,2-Dichloroethene	1.3	ug/L	1.0	10/18/22 09:35		
EPA 8260	Vinyl chloride	0.42J	ug/L	1.0	10/18/22 09:35		
<b>40253092003</b>	<b>MW-6 DUP</b>						
EPA 8260	cis-1,2-Dichloroethene	1.1	ug/L	1.0	10/18/22 09:56		
EPA 8260	Vinyl chloride	0.30J	ug/L	1.0	10/18/22 09:56		
<b>40253092004</b>	<b>PZ-4</b>						
EPA 8260	Vinyl chloride	1.4	ug/L	1.0	10/24/22 19:17		
<b>40253092005</b>	<b>MW-5</b>						
EPA 8260	cis-1,2-Dichloroethene	10.6	ug/L	1.0	10/24/22 19:34		
EPA 8260	Tetrachloroethene	18.6	ug/L	1.0	10/24/22 19:34		
EPA 8260	Trichloroethene	3.6	ug/L	1.0	10/24/22 19:34		
EPA 8260	Vinyl chloride	0.26J	ug/L	1.0	10/24/22 19:34		
<b>40253092006</b>	<b>MW-4</b>						
EPA 8260	Tetrachloroethene	26.8	ug/L	1.0	10/24/22 19:51		
<b>40253092007</b>	<b>PZ-1R</b>						
EPA 8015B Modified	Ethane	1040J	ug/L	1120	10/14/22 14:51		
EPA 8015B Modified	Ethene	7090	ug/L	1000	10/14/22 14:51		
EPA 8015B Modified	Methane	13900	ug/L	560	10/14/22 14:51		
EPA 6020B	Iron	5800	ug/L	250	11/11/22 11:27		
EPA 8260	cis-1,2-Dichloroethene	92600	ug/L	500	10/24/22 22:25		
EPA 8260	Tetrachloroethene	20200	ug/L	500	10/24/22 22:25		
EPA 8260	Trichloroethene	3350	ug/L	500	10/24/22 22:25		
EPA 8260	Vinyl chloride	21900	ug/L	500	10/24/22 22:25		
SM 5310C	Total Organic Carbon	241	mg/L	75.0	10/25/22 10:35		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: PZ-2R**      **Lab ID: 40253092001**      Collected: 10/12/22 07:53      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Benzene	<0.30	ug/L	1.0	0.30	1		10/17/22 17:51	71-43-2	
Bromobenzene	<0.36	ug/L	1.0	0.36	1		10/17/22 17:51	108-86-1	
Bromoform	<3.8	ug/L	5.0	0.36	1		10/17/22 17:51	74-97-5	
Bromochloromethane	<0.42	ug/L	1.0	0.42	1		10/17/22 17:51	75-27-4	
Bromodichloromethane	<0.42	ug/L	5.0	3.8	1		10/17/22 17:51	75-25-2	
Bromoform	<1.2	ug/L	5.0	1.2	1		10/17/22 17:51	74-83-9	
Bromomethane	<0.86	ug/L	1.0	0.86	1		10/17/22 17:51	104-51-8	
n-Butylbenzene	<0.42	ug/L	1.0	0.42	1		10/17/22 17:51	135-98-8	
sec-Butylbenzene	<0.59	ug/L	1.0	0.59	1		10/17/22 17:51	98-06-6	
Carbon tetrachloride	<0.37	ug/L	1.0	0.37	1		10/17/22 17:51	56-23-5	
Chlorobenzene	<0.86	ug/L	1.0	0.86	1		10/17/22 17:51	108-90-7	
Chloroethane	<1.4	ug/L	5.0	1.4	1		10/17/22 17:51	75-00-3	
Chloroform	<1.2	ug/L	5.0	1.2	1		10/17/22 17:51	67-66-3	
Chloromethane	<1.6	ug/L	5.0	1.6	1		10/17/22 17:51	74-87-3	
2-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/17/22 17:51	95-49-8	
4-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/17/22 17:51	106-43-4	
1,2-Dibromo-3-chloropropane	<2.4	ug/L	5.0	2.4	1		10/17/22 17:51	96-12-8	
Dibromochloromethane	<2.6	ug/L	5.0	2.6	1		10/17/22 17:51	124-48-1	
1,2-Dibromoethane (EDB)	<0.31	ug/L	1.0	0.31	1		10/17/22 17:51	106-93-4	
Dibromomethane	<0.99	ug/L	5.0	0.99	1		10/17/22 17:51	74-95-3	
1,2-Dichlorobenzene	<0.33	ug/L	1.0	0.33	1		10/17/22 17:51	95-50-1	
1,3-Dichlorobenzene	<0.35	ug/L	1.0	0.35	1		10/17/22 17:51	541-73-1	
1,4-Dichlorobenzene	<0.89	ug/L	1.0	0.89	1		10/17/22 17:51	106-46-7	
Dichlorodifluoromethane	<0.46	ug/L	5.0	0.46	1		10/17/22 17:51	75-71-8	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		10/17/22 17:51	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		10/17/22 17:51	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		10/17/22 17:51	75-35-4	
cis-1,2-Dichloroethene	121	ug/L	1.0	0.47	1		10/17/22 17:51	156-59-2	
trans-1,2-Dichloroethene	1.7	ug/L	1.0	0.53	1		10/17/22 17:51	156-60-5	
1,2-Dichloropropane	<0.45	ug/L	1.0	0.45	1		10/17/22 17:51	78-87-5	
1,3-Dichloropropane	<0.30	ug/L	1.0	0.30	1		10/17/22 17:51	142-28-9	
2,2-Dichloropropane	<4.2	ug/L	5.0	4.2	1		10/17/22 17:51	594-20-7	
1,1-Dichloropropene	<0.41	ug/L	1.0	0.41	1		10/17/22 17:51	563-58-6	
cis-1,3-Dichloropropene	<0.36	ug/L	1.0	0.36	1		10/17/22 17:51	10061-01-5	
trans-1,3-Dichloropropene	<3.5	ug/L	5.0	3.5	1		10/17/22 17:51	10061-02-6	
Diisopropyl ether	<1.1	ug/L	5.0	1.1	1		10/17/22 17:51	108-20-3	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		10/17/22 17:51	100-41-4	
Hexachloro-1,3-butadiene	<2.7	ug/L	5.0	2.7	1		10/17/22 17:51	87-68-3	
Isopropylbenzene (Cumene)	<1.0	ug/L	5.0	1.0	1		10/17/22 17:51	98-82-8	
p-Isopropyltoluene	<1.0	ug/L	5.0	1.0	1		10/17/22 17:51	99-87-6	
Methylene Chloride	<0.32	ug/L	5.0	0.32	1		10/17/22 17:51	75-09-2	
Methyl-tert-butyl ether	<1.1	ug/L	5.0	1.1	1		10/17/22 17:51	1634-04-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		10/17/22 17:51	91-20-3	
n-Propylbenzene	<0.35	ug/L	1.0	0.35	1		10/17/22 17:51	103-65-1	
Styrene	<0.36	ug/L	1.0	0.36	1		10/17/22 17:51	100-42-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: PZ-2R**      **Lab ID: 40253092001**      Collected: 10/12/22 07:53      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	<0.36	ug/L	1.0	0.36	1		10/17/22 17:51	630-20-6	
1,1,2,2-Tetrachloroethane	<0.38	ug/L	1.0	0.38	1		10/17/22 17:51	79-34-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		10/17/22 17:51	127-18-4	
Toluene	<0.29	ug/L	1.0	0.29	1		10/17/22 17:51	108-88-3	
1,2,3-Trichlorobenzene	<1.0	ug/L	5.0	1.0	1		10/17/22 17:51	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		10/17/22 17:51	120-82-1	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		10/17/22 17:51	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		10/17/22 17:51	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		10/17/22 17:51	79-01-6	
Trichlorofluoromethane	<0.42	ug/L	1.0	0.42	1		10/17/22 17:51	75-69-4	
1,2,3-Trichloropropane	<0.56	ug/L	5.0	0.56	1		10/17/22 17:51	96-18-4	
1,2,4-Trimethylbenzene	<0.45	ug/L	1.0	0.45	1		10/17/22 17:51	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		10/17/22 17:51	108-67-8	
Vinyl chloride	11.1	ug/L	1.0	0.17	1		10/17/22 17:51	75-01-4	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		10/17/22 17:51	1330-20-7	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		10/17/22 17:51	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		10/17/22 17:51	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	70-130		1		10/17/22 17:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		10/17/22 17:51	2199-69-1	
Toluene-d8 (S)	95	%	70-130		1		10/17/22 17:51	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: MW-6**      **Lab ID: 40253092002**      Collected: 10/12/22 08:30      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Benzene	<0.30	ug/L	1.0	0.30	1		10/18/22 09:35	71-43-2	
Bromobenzene	<0.36	ug/L	1.0	0.36	1		10/18/22 09:35	108-86-1	
Bromoform	<3.8	ug/L	5.0	0.36	1		10/18/22 09:35	74-97-5	
Bromochloromethane	<0.42	ug/L	1.0	0.42	1		10/18/22 09:35	75-27-4	
Bromodichloromethane	<0.42	ug/L	5.0	3.8	1		10/18/22 09:35	75-25-2	
Bromoform	<1.2	ug/L	5.0	1.2	1		10/18/22 09:35	74-83-9	
Bromomethane	<0.86	ug/L	1.0	0.86	1		10/18/22 09:35	104-51-8	
n-Butylbenzene	<0.42	ug/L	1.0	0.42	1		10/18/22 09:35	135-98-8	
sec-Butylbenzene	<0.59	ug/L	1.0	0.59	1		10/18/22 09:35	98-06-6	
Carbon tetrachloride	<0.37	ug/L	1.0	0.37	1		10/18/22 09:35	56-23-5	
Chlorobenzene	<0.86	ug/L	1.0	0.86	1		10/18/22 09:35	108-90-7	
Chloroethane	<1.4	ug/L	5.0	1.4	1		10/18/22 09:35	75-00-3	
Chloroform	<1.2	ug/L	5.0	1.2	1		10/18/22 09:35	67-66-3	
Chloromethane	<1.6	ug/L	5.0	1.6	1		10/18/22 09:35	74-87-3	
2-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/18/22 09:35	95-49-8	
4-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/18/22 09:35	106-43-4	
1,2-Dibromo-3-chloropropane	<2.4	ug/L	5.0	2.4	1		10/18/22 09:35	96-12-8	
Dibromochloromethane	<2.6	ug/L	5.0	2.6	1		10/18/22 09:35	124-48-1	
1,2-Dibromoethane (EDB)	<0.31	ug/L	1.0	0.31	1		10/18/22 09:35	106-93-4	
Dibromomethane	<0.99	ug/L	5.0	0.99	1		10/18/22 09:35	74-95-3	
1,2-Dichlorobenzene	<0.33	ug/L	1.0	0.33	1		10/18/22 09:35	95-50-1	
1,3-Dichlorobenzene	<0.35	ug/L	1.0	0.35	1		10/18/22 09:35	541-73-1	
1,4-Dichlorobenzene	<0.89	ug/L	1.0	0.89	1		10/18/22 09:35	106-46-7	
Dichlorodifluoromethane	<0.46	ug/L	5.0	0.46	1		10/18/22 09:35	75-71-8	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		10/18/22 09:35	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		10/18/22 09:35	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		10/18/22 09:35	75-35-4	
cis-1,2-Dichloroethene	1.3	ug/L	1.0	0.47	1		10/18/22 09:35	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		10/18/22 09:35	156-60-5	
1,2-Dichloropropane	<0.45	ug/L	1.0	0.45	1		10/18/22 09:35	78-87-5	
1,3-Dichloropropane	<0.30	ug/L	1.0	0.30	1		10/18/22 09:35	142-28-9	
2,2-Dichloropropane	<4.2	ug/L	5.0	4.2	1		10/18/22 09:35	594-20-7	
1,1-Dichloropropene	<0.41	ug/L	1.0	0.41	1		10/18/22 09:35	563-58-6	
cis-1,3-Dichloropropene	<0.36	ug/L	1.0	0.36	1		10/18/22 09:35	10061-01-5	
trans-1,3-Dichloropropene	<3.5	ug/L	5.0	3.5	1		10/18/22 09:35	10061-02-6	
Diisopropyl ether	<1.1	ug/L	5.0	1.1	1		10/18/22 09:35	108-20-3	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		10/18/22 09:35	100-41-4	
Hexachloro-1,3-butadiene	<2.7	ug/L	5.0	2.7	1		10/18/22 09:35	87-68-3	
Isopropylbenzene (Cumene)	<1.0	ug/L	5.0	1.0	1		10/18/22 09:35	98-82-8	
p-Isopropyltoluene	<1.0	ug/L	5.0	1.0	1		10/18/22 09:35	99-87-6	
Methylene Chloride	<0.32	ug/L	5.0	0.32	1		10/18/22 09:35	75-09-2	
Methyl-tert-butyl ether	<1.1	ug/L	5.0	1.1	1		10/18/22 09:35	1634-04-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		10/18/22 09:35	91-20-3	
n-Propylbenzene	<0.35	ug/L	1.0	0.35	1		10/18/22 09:35	103-65-1	
Styrene	<0.36	ug/L	1.0	0.36	1		10/18/22 09:35	100-42-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: MW-6**      **Lab ID: 40253092002**      Collected: 10/12/22 08:30      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	<0.36	ug/L	1.0	0.36	1		10/18/22 09:35	630-20-6	
1,1,2,2-Tetrachloroethane	<0.38	ug/L	1.0	0.38	1		10/18/22 09:35	79-34-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		10/18/22 09:35	127-18-4	
Toluene	<0.29	ug/L	1.0	0.29	1		10/18/22 09:35	108-88-3	
1,2,3-Trichlorobenzene	<1.0	ug/L	5.0	1.0	1		10/18/22 09:35	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		10/18/22 09:35	120-82-1	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		10/18/22 09:35	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		10/18/22 09:35	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		10/18/22 09:35	79-01-6	
Trichlorofluoromethane	<0.42	ug/L	1.0	0.42	1		10/18/22 09:35	75-69-4	
1,2,3-Trichloropropane	<0.56	ug/L	5.0	0.56	1		10/18/22 09:35	96-18-4	
1,2,4-Trimethylbenzene	<0.45	ug/L	1.0	0.45	1		10/18/22 09:35	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		10/18/22 09:35	108-67-8	
Vinyl chloride	0.42J	ug/L	1.0	0.17	1		10/18/22 09:35	75-01-4	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		10/18/22 09:35	1330-20-7	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		10/18/22 09:35	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		10/18/22 09:35	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		10/18/22 09:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		10/18/22 09:35	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		10/18/22 09:35	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: MW-6 DUP      Lab ID: 40253092003      Collected: 10/12/22 08:35      Received: 10/13/22 08:00      Matrix: Water**


---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Benzene	<0.30	ug/L	1.0	0.30	1		10/18/22 09:56	71-43-2	
Bromobenzene	<0.36	ug/L	1.0	0.36	1		10/18/22 09:56	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		10/18/22 09:56	74-97-5	
Bromodichloromethane	<0.42	ug/L	1.0	0.42	1		10/18/22 09:56	75-27-4	
Bromoform	<3.8	ug/L	5.0	3.8	1		10/18/22 09:56	75-25-2	
Bromomethane	<1.2	ug/L	5.0	1.2	1		10/18/22 09:56	74-83-9	
n-Butylbenzene	<0.86	ug/L	1.0	0.86	1		10/18/22 09:56	104-51-8	
sec-Butylbenzene	<0.42	ug/L	1.0	0.42	1		10/18/22 09:56	135-98-8	
tert-Butylbenzene	<0.59	ug/L	1.0	0.59	1		10/18/22 09:56	98-06-6	
Carbon tetrachloride	<0.37	ug/L	1.0	0.37	1		10/18/22 09:56	56-23-5	
Chlorobenzene	<0.86	ug/L	1.0	0.86	1		10/18/22 09:56	108-90-7	
Chloroethane	<1.4	ug/L	5.0	1.4	1		10/18/22 09:56	75-00-3	
Chloroform	<1.2	ug/L	5.0	1.2	1		10/18/22 09:56	67-66-3	
Chloromethane	<1.6	ug/L	5.0	1.6	1		10/18/22 09:56	74-87-3	
2-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/18/22 09:56	95-49-8	
4-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/18/22 09:56	106-43-4	
1,2-Dibromo-3-chloropropane	<2.4	ug/L	5.0	2.4	1		10/18/22 09:56	96-12-8	
Dibromochloromethane	<2.6	ug/L	5.0	2.6	1		10/18/22 09:56	124-48-1	
1,2-Dibromoethane (EDB)	<0.31	ug/L	1.0	0.31	1		10/18/22 09:56	106-93-4	
Dibromomethane	<0.99	ug/L	5.0	0.99	1		10/18/22 09:56	74-95-3	
1,2-Dichlorobenzene	<0.33	ug/L	1.0	0.33	1		10/18/22 09:56	95-50-1	
1,3-Dichlorobenzene	<0.35	ug/L	1.0	0.35	1		10/18/22 09:56	541-73-1	
1,4-Dichlorobenzene	<0.89	ug/L	1.0	0.89	1		10/18/22 09:56	106-46-7	
Dichlorodifluoromethane	<0.46	ug/L	5.0	0.46	1		10/18/22 09:56	75-71-8	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		10/18/22 09:56	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		10/18/22 09:56	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		10/18/22 09:56	75-35-4	
cis-1,2-Dichloroethene	1.1	ug/L	1.0	0.47	1		10/18/22 09:56	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		10/18/22 09:56	156-60-5	
1,2-Dichloropropane	<0.45	ug/L	1.0	0.45	1		10/18/22 09:56	78-87-5	
1,3-Dichloropropane	<0.30	ug/L	1.0	0.30	1		10/18/22 09:56	142-28-9	
2,2-Dichloropropane	<4.2	ug/L	5.0	4.2	1		10/18/22 09:56	594-20-7	
1,1-Dichloropropene	<0.41	ug/L	1.0	0.41	1		10/18/22 09:56	563-58-6	
cis-1,3-Dichloropropene	<0.36	ug/L	1.0	0.36	1		10/18/22 09:56	10061-01-5	
trans-1,3-Dichloropropene	<3.5	ug/L	5.0	3.5	1		10/18/22 09:56	10061-02-6	
Diisopropyl ether	<1.1	ug/L	5.0	1.1	1		10/18/22 09:56	108-20-3	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		10/18/22 09:56	100-41-4	
Hexachloro-1,3-butadiene	<2.7	ug/L	5.0	2.7	1		10/18/22 09:56	87-68-3	
Isopropylbenzene (Cumene)	<1.0	ug/L	5.0	1.0	1		10/18/22 09:56	98-82-8	
p-Isopropyltoluene	<1.0	ug/L	5.0	1.0	1		10/18/22 09:56	99-87-6	
Methylene Chloride	<0.32	ug/L	5.0	0.32	1		10/18/22 09:56	75-09-2	
Methyl-tert-butyl ether	<1.1	ug/L	5.0	1.1	1		10/18/22 09:56	1634-04-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		10/18/22 09:56	91-20-3	
n-Propylbenzene	<0.35	ug/L	1.0	0.35	1		10/18/22 09:56	103-65-1	
Styrene	<0.36	ug/L	1.0	0.36	1		10/18/22 09:56	100-42-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: MW-6 DUP      Lab ID: 40253092003      Collected: 10/12/22 08:35      Received: 10/13/22 08:00      Matrix: Water**


---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	<0.36	ug/L	1.0	0.36	1		10/18/22 09:56	630-20-6	
1,1,2,2-Tetrachloroethane	<0.38	ug/L	1.0	0.38	1		10/18/22 09:56	79-34-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		10/18/22 09:56	127-18-4	
Toluene	<0.29	ug/L	1.0	0.29	1		10/18/22 09:56	108-88-3	
1,2,3-Trichlorobenzene	<1.0	ug/L	5.0	1.0	1		10/18/22 09:56	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		10/18/22 09:56	120-82-1	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		10/18/22 09:56	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		10/18/22 09:56	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		10/18/22 09:56	79-01-6	
Trichlorofluoromethane	<0.42	ug/L	1.0	0.42	1		10/18/22 09:56	75-69-4	
1,2,3-Trichloropropane	<0.56	ug/L	5.0	0.56	1		10/18/22 09:56	96-18-4	
1,2,4-Trimethylbenzene	<0.45	ug/L	1.0	0.45	1		10/18/22 09:56	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		10/18/22 09:56	108-67-8	
Vinyl chloride	0.30J	ug/L	1.0	0.17	1		10/18/22 09:56	75-01-4	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		10/18/22 09:56	1330-20-7	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		10/18/22 09:56	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		10/18/22 09:56	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		10/18/22 09:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		10/18/22 09:56	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/18/22 09:56	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: PZ-4**      **Lab ID: 40253092004**      Collected: 10/12/22 09:10      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Benzene	<0.30	ug/L	1.0	0.30	1		10/24/22 19:17	71-43-2	
Bromobenzene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:17	108-86-1	
Bromo(chloromethane)	<0.36	ug/L	5.0	0.36	1		10/24/22 19:17	74-97-5	
Bromodichloromethane	<0.42	ug/L	1.0	0.42	1		10/24/22 19:17	75-27-4	
Bromoform	<3.8	ug/L	5.0	3.8	1		10/24/22 19:17	75-25-2	
Bromomethane	<1.2	ug/L	5.0	1.2	1		10/24/22 19:17	74-83-9	
n-Butylbenzene	<0.86	ug/L	1.0	0.86	1		10/24/22 19:17	104-51-8	
sec-Butylbenzene	<0.42	ug/L	1.0	0.42	1		10/24/22 19:17	135-98-8	
tert-Butylbenzene	<0.59	ug/L	1.0	0.59	1		10/24/22 19:17	98-06-6	
Carbon tetrachloride	<0.37	ug/L	1.0	0.37	1		10/24/22 19:17	56-23-5	
Chlorobenzene	<0.86	ug/L	1.0	0.86	1		10/24/22 19:17	108-90-7	
Chloroethane	<1.4	ug/L	5.0	1.4	1		10/24/22 19:17	75-00-3	
Chloroform	<1.2	ug/L	5.0	1.2	1		10/24/22 19:17	67-66-3	
Chloromethane	<1.6	ug/L	5.0	1.6	1		10/24/22 19:17	74-87-3	
2-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/24/22 19:17	95-49-8	
4-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/24/22 19:17	106-43-4	
1,2-Dibromo-3-chloropropane	<2.4	ug/L	5.0	2.4	1		10/24/22 19:17	96-12-8	
Dibromochloromethane	<2.6	ug/L	5.0	2.6	1		10/24/22 19:17	124-48-1	
1,2-Dibromoethane (EDB)	<0.31	ug/L	1.0	0.31	1		10/24/22 19:17	106-93-4	
Dibromomethane	<0.99	ug/L	5.0	0.99	1		10/24/22 19:17	74-95-3	
1,2-Dichlorobenzene	<0.33	ug/L	1.0	0.33	1		10/24/22 19:17	95-50-1	
1,3-Dichlorobenzene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:17	541-73-1	
1,4-Dichlorobenzene	<0.89	ug/L	1.0	0.89	1		10/24/22 19:17	106-46-7	
Dichlorodifluoromethane	<0.46	ug/L	5.0	0.46	1		10/24/22 19:17	75-71-8	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:17	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		10/24/22 19:17	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		10/24/22 19:17	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		10/24/22 19:17	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		10/24/22 19:17	156-60-5	
1,2-Dichloropropane	<0.45	ug/L	1.0	0.45	1		10/24/22 19:17	78-87-5	
1,3-Dichloropropane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:17	142-28-9	
2,2-Dichloropropane	<4.2	ug/L	5.0	4.2	1		10/24/22 19:17	594-20-7	
1,1-Dichloropropene	<0.41	ug/L	1.0	0.41	1		10/24/22 19:17	563-58-6	
cis-1,3-Dichloropropene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:17	10061-01-5	
trans-1,3-Dichloropropene	<3.5	ug/L	5.0	3.5	1		10/24/22 19:17	10061-02-6	
Diisopropyl ether	<1.1	ug/L	5.0	1.1	1		10/24/22 19:17	108-20-3	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		10/24/22 19:17	100-41-4	
Hexachloro-1,3-butadiene	<2.7	ug/L	5.0	2.7	1		10/24/22 19:17	87-68-3	
Isopropylbenzene (Cumene)	<1.0	ug/L	5.0	1.0	1		10/24/22 19:17	98-82-8	
p-Isopropyltoluene	<1.0	ug/L	5.0	1.0	1		10/24/22 19:17	99-87-6	
Methylene Chloride	<0.32	ug/L	5.0	0.32	1		10/24/22 19:17	75-09-2	
Methyl-tert-butyl ether	<1.1	ug/L	5.0	1.1	1		10/24/22 19:17	1634-04-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		10/24/22 19:17	91-20-3	
n-Propylbenzene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:17	103-65-1	
Styrene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:17	100-42-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: PZ-4**      **Lab ID: 40253092004**      Collected: 10/12/22 09:10      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	<0.36	ug/L	1.0	0.36	1		10/24/22 19:17	630-20-6	
1,1,2,2-Tetrachloroethane	<0.38	ug/L	1.0	0.38	1		10/24/22 19:17	79-34-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		10/24/22 19:17	127-18-4	
Toluene	<0.29	ug/L	1.0	0.29	1		10/24/22 19:17	108-88-3	
1,2,3-Trichlorobenzene	<1.0	ug/L	5.0	1.0	1		10/24/22 19:17	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		10/24/22 19:17	120-82-1	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:17	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		10/24/22 19:17	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		10/24/22 19:17	79-01-6	
Trichlorofluoromethane	<0.42	ug/L	1.0	0.42	1		10/24/22 19:17	75-69-4	
1,2,3-Trichloropropane	<0.56	ug/L	5.0	0.56	1		10/24/22 19:17	96-18-4	
1,2,4-Trimethylbenzene	<0.45	ug/L	1.0	0.45	1		10/24/22 19:17	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:17	108-67-8	
Vinyl chloride	1.4	ug/L	1.0	0.17	1		10/24/22 19:17	75-01-4	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		10/24/22 19:17	1330-20-7	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		10/24/22 19:17	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:17	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		1		10/24/22 19:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		10/24/22 19:17	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		10/24/22 19:17	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: MW-5**      **Lab ID: 40253092005**      Collected: 10/12/22 09:50      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Benzene	<0.30	ug/L	1.0	0.30	1		10/24/22 19:34	71-43-2	
Bromobenzene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:34	108-86-1	
Bromo(chloromethane)	<0.36	ug/L	5.0	0.36	1		10/24/22 19:34	74-97-5	
Bromodichloromethane	<0.42	ug/L	1.0	0.42	1		10/24/22 19:34	75-27-4	
Bromoform	<3.8	ug/L	5.0	3.8	1		10/24/22 19:34	75-25-2	
Bromomethane	<1.2	ug/L	5.0	1.2	1		10/24/22 19:34	74-83-9	
n-Butylbenzene	<0.86	ug/L	1.0	0.86	1		10/24/22 19:34	104-51-8	
sec-Butylbenzene	<0.42	ug/L	1.0	0.42	1		10/24/22 19:34	135-98-8	
tert-Butylbenzene	<0.59	ug/L	1.0	0.59	1		10/24/22 19:34	98-06-6	
Carbon tetrachloride	<0.37	ug/L	1.0	0.37	1		10/24/22 19:34	56-23-5	
Chlorobenzene	<0.86	ug/L	1.0	0.86	1		10/24/22 19:34	108-90-7	
Chloroethane	<1.4	ug/L	5.0	1.4	1		10/24/22 19:34	75-00-3	
Chloroform	<1.2	ug/L	5.0	1.2	1		10/24/22 19:34	67-66-3	
Chloromethane	<1.6	ug/L	5.0	1.6	1		10/24/22 19:34	74-87-3	
2-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/24/22 19:34	95-49-8	
4-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/24/22 19:34	106-43-4	
1,2-Dibromo-3-chloropropane	<2.4	ug/L	5.0	2.4	1		10/24/22 19:34	96-12-8	
Dibromochloromethane	<2.6	ug/L	5.0	2.6	1		10/24/22 19:34	124-48-1	
1,2-Dibromoethane (EDB)	<0.31	ug/L	1.0	0.31	1		10/24/22 19:34	106-93-4	
Dibromomethane	<0.99	ug/L	5.0	0.99	1		10/24/22 19:34	74-95-3	
1,2-Dichlorobenzene	<0.33	ug/L	1.0	0.33	1		10/24/22 19:34	95-50-1	
1,3-Dichlorobenzene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:34	541-73-1	
1,4-Dichlorobenzene	<0.89	ug/L	1.0	0.89	1		10/24/22 19:34	106-46-7	
Dichlorodifluoromethane	<0.46	ug/L	5.0	0.46	1		10/24/22 19:34	75-71-8	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:34	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		10/24/22 19:34	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		10/24/22 19:34	75-35-4	
cis-1,2-Dichloroethene	10.6	ug/L	1.0	0.47	1		10/24/22 19:34	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		10/24/22 19:34	156-60-5	
1,2-Dichloropropane	<0.45	ug/L	1.0	0.45	1		10/24/22 19:34	78-87-5	
1,3-Dichloropropane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:34	142-28-9	
2,2-Dichloropropane	<4.2	ug/L	5.0	4.2	1		10/24/22 19:34	594-20-7	
1,1-Dichloropropene	<0.41	ug/L	1.0	0.41	1		10/24/22 19:34	563-58-6	
cis-1,3-Dichloropropene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:34	10061-01-5	
trans-1,3-Dichloropropene	<3.5	ug/L	5.0	3.5	1		10/24/22 19:34	10061-02-6	
Diisopropyl ether	<1.1	ug/L	5.0	1.1	1		10/24/22 19:34	108-20-3	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		10/24/22 19:34	100-41-4	
Hexachloro-1,3-butadiene	<2.7	ug/L	5.0	2.7	1		10/24/22 19:34	87-68-3	
Isopropylbenzene (Cumene)	<1.0	ug/L	5.0	1.0	1		10/24/22 19:34	98-82-8	
p-Isopropyltoluene	<1.0	ug/L	5.0	1.0	1		10/24/22 19:34	99-87-6	
Methylene Chloride	<0.32	ug/L	5.0	0.32	1		10/24/22 19:34	75-09-2	
Methyl-tert-butyl ether	<1.1	ug/L	5.0	1.1	1		10/24/22 19:34	1634-04-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		10/24/22 19:34	91-20-3	
n-Propylbenzene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:34	103-65-1	
Styrene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:34	100-42-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: MW-5**      **Lab ID: 40253092005**      Collected: 10/12/22 09:50      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	<0.36	ug/L	1.0	0.36	1		10/24/22 19:34	630-20-6	
1,1,2,2-Tetrachloroethane	<0.38	ug/L	1.0	0.38	1		10/24/22 19:34	79-34-5	
Tetrachloroethene	18.6	ug/L	1.0	0.41	1		10/24/22 19:34	127-18-4	
Toluene	<0.29	ug/L	1.0	0.29	1		10/24/22 19:34	108-88-3	
1,2,3-Trichlorobenzene	<1.0	ug/L	5.0	1.0	1		10/24/22 19:34	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		10/24/22 19:34	120-82-1	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:34	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		10/24/22 19:34	79-00-5	
Trichloroethene	3.6	ug/L	1.0	0.32	1		10/24/22 19:34	79-01-6	
Trichlorofluoromethane	<0.42	ug/L	1.0	0.42	1		10/24/22 19:34	75-69-4	
1,2,3-Trichloropropane	<0.56	ug/L	5.0	0.56	1		10/24/22 19:34	96-18-4	
1,2,4-Trimethylbenzene	<0.45	ug/L	1.0	0.45	1		10/24/22 19:34	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:34	108-67-8	
Vinyl chloride	0.26J	ug/L	1.0	0.17	1		10/24/22 19:34	75-01-4	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		10/24/22 19:34	1330-20-7	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		10/24/22 19:34	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:34	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		10/24/22 19:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		10/24/22 19:34	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		10/24/22 19:34	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: MW-4**      **Lab ID: 40253092006**      Collected: 10/12/22 10:30      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Benzene	<0.30	ug/L	1.0	0.30	1		10/24/22 19:51	71-43-2	
Bromobenzene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:51	108-86-1	
Bromoform	<3.8	ug/L	5.0	0.36	1		10/24/22 19:51	74-97-5	
Bromochloromethane	<0.42	ug/L	1.0	0.42	1		10/24/22 19:51	75-27-4	
Bromodichloromethane	<0.42	ug/L	5.0	3.8	1		10/24/22 19:51	75-25-2	
Bromoform	<1.2	ug/L	5.0	1.2	1		10/24/22 19:51	74-83-9	
Bromomethane	<0.86	ug/L	1.0	0.86	1		10/24/22 19:51	104-51-8	
n-Butylbenzene	<0.42	ug/L	1.0	0.42	1		10/24/22 19:51	135-98-8	
sec-Butylbenzene	<0.59	ug/L	1.0	0.59	1		10/24/22 19:51	98-06-6	
Carbon tetrachloride	<0.37	ug/L	1.0	0.37	1		10/24/22 19:51	56-23-5	
Chlorobenzene	<0.86	ug/L	1.0	0.86	1		10/24/22 19:51	108-90-7	
Chloroethane	<1.4	ug/L	5.0	1.4	1		10/24/22 19:51	75-00-3	
Chloroform	<1.2	ug/L	5.0	1.2	1		10/24/22 19:51	67-66-3	
Chloromethane	<1.6	ug/L	5.0	1.6	1		10/24/22 19:51	74-87-3	
2-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/24/22 19:51	95-49-8	
4-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/24/22 19:51	106-43-4	
1,2-Dibromo-3-chloropropane	<2.4	ug/L	5.0	2.4	1		10/24/22 19:51	96-12-8	
Dibromochloromethane	<2.6	ug/L	5.0	2.6	1		10/24/22 19:51	124-48-1	
1,2-Dibromoethane (EDB)	<0.31	ug/L	1.0	0.31	1		10/24/22 19:51	106-93-4	
Dibromomethane	<0.99	ug/L	5.0	0.99	1		10/24/22 19:51	74-95-3	
1,2-Dichlorobenzene	<0.33	ug/L	1.0	0.33	1		10/24/22 19:51	95-50-1	
1,3-Dichlorobenzene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:51	541-73-1	
1,4-Dichlorobenzene	<0.89	ug/L	1.0	0.89	1		10/24/22 19:51	106-46-7	
Dichlorodifluoromethane	<0.46	ug/L	5.0	0.46	1		10/24/22 19:51	75-71-8	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:51	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		10/24/22 19:51	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		10/24/22 19:51	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		10/24/22 19:51	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		10/24/22 19:51	156-60-5	
1,2-Dichloropropane	<0.45	ug/L	1.0	0.45	1		10/24/22 19:51	78-87-5	
1,3-Dichloropropane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:51	142-28-9	
2,2-Dichloropropane	<4.2	ug/L	5.0	4.2	1		10/24/22 19:51	594-20-7	
1,1-Dichloropropene	<0.41	ug/L	1.0	0.41	1		10/24/22 19:51	563-58-6	
cis-1,3-Dichloropropene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:51	10061-01-5	
trans-1,3-Dichloropropene	<3.5	ug/L	5.0	3.5	1		10/24/22 19:51	10061-02-6	
Diisopropyl ether	<1.1	ug/L	5.0	1.1	1		10/24/22 19:51	108-20-3	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		10/24/22 19:51	100-41-4	
Hexachloro-1,3-butadiene	<2.7	ug/L	5.0	2.7	1		10/24/22 19:51	87-68-3	
Isopropylbenzene (Cumene)	<1.0	ug/L	5.0	1.0	1		10/24/22 19:51	98-82-8	
p-Isopropyltoluene	<1.0	ug/L	5.0	1.0	1		10/24/22 19:51	99-87-6	
Methylene Chloride	<0.32	ug/L	5.0	0.32	1		10/24/22 19:51	75-09-2	
Methyl-tert-butyl ether	<1.1	ug/L	5.0	1.1	1		10/24/22 19:51	1634-04-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		10/24/22 19:51	91-20-3	
n-Propylbenzene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:51	103-65-1	
Styrene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:51	100-42-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

---

**Sample: MW-4**      **Lab ID: 40253092006**      Collected: 10/12/22 10:30      Received: 10/13/22 08:00      Matrix: Water

---

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	<0.36	ug/L	1.0	0.36	1		10/24/22 19:51	630-20-6	
1,1,2,2-Tetrachloroethane	<0.38	ug/L	1.0	0.38	1		10/24/22 19:51	79-34-5	
Tetrachloroethene	26.8	ug/L	1.0	0.41	1		10/24/22 19:51	127-18-4	
Toluene	<0.29	ug/L	1.0	0.29	1		10/24/22 19:51	108-88-3	
1,2,3-Trichlorobenzene	<1.0	ug/L	5.0	1.0	1		10/24/22 19:51	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		10/24/22 19:51	120-82-1	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		10/24/22 19:51	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		10/24/22 19:51	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		10/24/22 19:51	79-01-6	
Trichlorofluoromethane	<0.42	ug/L	1.0	0.42	1		10/24/22 19:51	75-69-4	
1,2,3-Trichloropropane	<0.56	ug/L	5.0	0.56	1		10/24/22 19:51	96-18-4	
1,2,4-Trimethylbenzene	<0.45	ug/L	1.0	0.45	1		10/24/22 19:51	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		10/24/22 19:51	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		10/24/22 19:51	75-01-4	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		10/24/22 19:51	1330-20-7	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		10/24/22 19:51	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		10/24/22 19:51	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		10/24/22 19:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		10/24/22 19:51	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		10/24/22 19:51	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819  
Pace Project No.: 40253092

Sample: PZ-1R	Lab ID: 40253092007	Collected: 10/12/22 11:55	Received: 10/13/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Methane, Ethane, Ethene GCV</b>	Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay								
Ethane	1040J	ug/L	1120	78.6	200		10/14/22 14:51	74-84-0	
Ethene	7090	ug/L	1000	50.4	200		10/14/22 14:51	74-85-1	
Methane	13900	ug/L	560	115	200		10/14/22 14:51	74-82-8	
<b>6020B MET ICPMS</b>	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Iron	5800	ug/L	250	58.0	1	11/01/22 05:13	11/11/22 11:27	7439-89-6	
<b>8260 MSV</b>	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Benzene	<148	ug/L	500	148	500		10/24/22 22:25	71-43-2	
Bromobenzene	<180	ug/L	500	180	500		10/24/22 22:25	108-86-1	
Bromochloromethane	<179	ug/L	2500	179	500		10/24/22 22:25	74-97-5	
Bromodichloromethane	<208	ug/L	500	208	500		10/24/22 22:25	75-27-4	
Bromoform	<1900	ug/L	2500	1900	500		10/24/22 22:25	75-25-2	
Bromomethane	<596	ug/L	2500	596	500		10/24/22 22:25	74-83-9	
n-Butylbenzene	<429	ug/L	500	429	500		10/24/22 22:25	104-51-8	
sec-Butylbenzene	<212	ug/L	500	212	500		10/24/22 22:25	135-98-8	
tert-Butylbenzene	<293	ug/L	500	293	500		10/24/22 22:25	98-06-6	
Carbon tetrachloride	<185	ug/L	500	185	500		10/24/22 22:25	56-23-5	
Chlorobenzene	<428	ug/L	500	428	500		10/24/22 22:25	108-90-7	
Chloroethane	<690	ug/L	2500	690	500		10/24/22 22:25	75-00-3	
Chloroform	<591	ug/L	2500	591	500		10/24/22 22:25	67-66-3	
Chloromethane	<818	ug/L	2500	818	500		10/24/22 22:25	74-87-3	
2-Chlorotoluene	<445	ug/L	2500	445	500		10/24/22 22:25	95-49-8	
4-Chlorotoluene	<447	ug/L	2500	447	500		10/24/22 22:25	106-43-4	
1,2-Dibromo-3-chloropropane	<1180	ug/L	2500	1180	500		10/24/22 22:25	96-12-8	
Dibromochloromethane	<1320	ug/L	2500	1320	500		10/24/22 22:25	124-48-1	
1,2-Dibromoethane (EDB)	<155	ug/L	500	155	500		10/24/22 22:25	106-93-4	
Dibromomethane	<495	ug/L	2500	495	500		10/24/22 22:25	74-95-3	
1,2-Dichlorobenzene	<163	ug/L	500	163	500		10/24/22 22:25	95-50-1	
1,3-Dichlorobenzene	<176	ug/L	500	176	500		10/24/22 22:25	541-73-1	
1,4-Dichlorobenzene	<446	ug/L	500	446	500		10/24/22 22:25	106-46-7	
Dichlorodifluoromethane	<228	ug/L	2500	228	500		10/24/22 22:25	75-71-8	
1,1-Dichloroethane	<148	ug/L	500	148	500		10/24/22 22:25	75-34-3	
1,2-Dichloroethane	<146	ug/L	500	146	500		10/24/22 22:25	107-06-2	
1,1-Dichloroethene	<291	ug/L	500	291	500		10/24/22 22:25	75-35-4	
cis-1,2-Dichloroethene	92600	ug/L	500	236	500		10/24/22 22:25	156-59-2	
trans-1,2-Dichloroethene	<264	ug/L	500	264	500		10/24/22 22:25	156-60-5	
1,2-Dichloropropane	<224	ug/L	500	224	500		10/24/22 22:25	78-87-5	
1,3-Dichloropropane	<152	ug/L	500	152	500		10/24/22 22:25	142-28-9	
2,2-Dichloropropane	<2090	ug/L	2500	2090	500		10/24/22 22:25	594-20-7	
1,1-Dichloropropene	<205	ug/L	500	205	500		10/24/22 22:25	563-58-6	
cis-1,3-Dichloropropene	<179	ug/L	500	179	500		10/24/22 22:25	10061-01-5	
trans-1,3-Dichloropropene	<1730	ug/L	2500	1730	500		10/24/22 22:25	10061-02-6	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819  
Pace Project No.: 40253092

Sample: PZ-1R	Lab ID: 40253092007	Collected: 10/12/22 11:55	Received: 10/13/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Diisopropyl ether	<550	ug/L	2500	550	500		10/24/22 22:25	108-20-3	
Ethylbenzene	<163	ug/L	500	163	500		10/24/22 22:25	100-41-4	
Hexachloro-1,3-butadiene	<1370	ug/L	2500	1370	500		10/24/22 22:25	87-68-3	
Isopropylbenzene (Cumene)	<500	ug/L	2500	500	500		10/24/22 22:25	98-82-8	
p-Isopropyltoluene	<522	ug/L	2500	522	500		10/24/22 22:25	99-87-6	
Methylene Chloride	<160	ug/L	2500	160	500		10/24/22 22:25	75-09-2	
Methyl-tert-butyl ether	<565	ug/L	2500	565	500		10/24/22 22:25	1634-04-4	
Naphthalene	<565	ug/L	2500	565	500		10/24/22 22:25	91-20-3	
n-Propylbenzene	<173	ug/L	500	173	500		10/24/22 22:25	103-65-1	
Styrene	<178	ug/L	500	178	500		10/24/22 22:25	100-42-5	
1,1,1,2-Tetrachloroethane	<178	ug/L	500	178	500		10/24/22 22:25	630-20-6	
1,1,2,2-Tetrachloroethane	<189	ug/L	500	189	500		10/24/22 22:25	79-34-5	
Tetrachloroethene	20200	ug/L	500	204	500		10/24/22 22:25	127-18-4	
Toluene	<144	ug/L	500	144	500		10/24/22 22:25	108-88-3	
1,2,3-Trichlorobenzene	<509	ug/L	2500	509	500		10/24/22 22:25	87-61-6	
1,2,4-Trichlorobenzene	<475	ug/L	2500	475	500		10/24/22 22:25	120-82-1	
1,1,1-Trichloroethane	<151	ug/L	500	151	500		10/24/22 22:25	71-55-6	
1,1,2-Trichloroethane	<172	ug/L	2500	172	500		10/24/22 22:25	79-00-5	
Trichloroethene	3350	ug/L	500	160	500		10/24/22 22:25	79-01-6	
Trichlorofluoromethane	<209	ug/L	500	209	500		10/24/22 22:25	75-69-4	
1,2,3-Trichloropropane	<278	ug/L	2500	278	500		10/24/22 22:25	96-18-4	
1,2,4-Trimethylbenzene	<224	ug/L	500	224	500		10/24/22 22:25	95-63-6	
1,3,5-Trimethylbenzene	<179	ug/L	500	179	500		10/24/22 22:25	108-67-8	
Vinyl chloride	21900	ug/L	500	87.2	500		10/24/22 22:25	75-01-4	
Xylene (Total)	<524	ug/L	1500	524	500		10/24/22 22:25	1330-20-7	
m&p-Xylene	<350	ug/L	1000	350	500		10/24/22 22:25	179601-23-1	
o-Xylene	<174	ug/L	500	174	500		10/24/22 22:25	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		500		10/24/22 22:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		500		10/24/22 22:25	2199-69-1	
Toluene-d8 (S)	97	%	70-130		500		10/24/22 22:25	2037-26-5	
<b>Iron, Ferric Calculation</b>	Analytical Method: HACH 8146 Pace Analytical Services - Green Bay								
Iron, Ferric	<0.50	mg/L	0.50	0.50	1		11/15/22 15:26	20074-52-6	1q
<b>300.0 IC Anions</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Sulfate	<2.2	mg/L	10.0	2.2	5		10/26/22 01:11	14808-79-8	D3
<b>5310C TOC</b>	Analytical Method: SM 5310C Pace Analytical Services - Green Bay								
Total Organic Carbon	241	mg/L	75.0	20.8	150		10/25/22 10:35	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

Sample: TRIP BLANK	Lab ID: 40253092008	Collected:	Received: 10/13/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Benzene	<0.30	ug/L	1.0	0.30	1		10/17/22 16:21	71-43-2	
Bromobenzene	<0.36	ug/L	1.0	0.36	1		10/17/22 16:21	108-86-1	
Bromoform	<3.8	ug/L	5.0	0.36	1		10/17/22 16:21	74-97-5	
Bromochloromethane	<0.42	ug/L	1.0	0.42	1		10/17/22 16:21	75-27-4	
Bromodichloromethane	<0.42	ug/L	5.0	3.8	1		10/17/22 16:21	75-25-2	
Bromoform	<1.2	ug/L	5.0	1.2	1		10/17/22 16:21	74-83-9	
Bromomethane	<0.86	ug/L	1.0	0.86	1		10/17/22 16:21	104-51-8	
n-Butylbenzene	<0.42	ug/L	1.0	0.42	1		10/17/22 16:21	135-98-8	
sec-Butylbenzene	<0.59	ug/L	1.0	0.59	1		10/17/22 16:21	98-06-6	
Carbon tetrachloride	<0.37	ug/L	1.0	0.37	1		10/17/22 16:21	56-23-5	
Chlorobenzene	<0.86	ug/L	1.0	0.86	1		10/17/22 16:21	108-90-7	
Chloroethane	<1.4	ug/L	5.0	1.4	1		10/17/22 16:21	75-00-3	
Chloroform	<1.2	ug/L	5.0	1.2	1		10/17/22 16:21	67-66-3	
Chloromethane	<1.6	ug/L	5.0	1.6	1		10/17/22 16:21	74-87-3	
2-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/17/22 16:21	95-49-8	
4-Chlorotoluene	<0.89	ug/L	5.0	0.89	1		10/17/22 16:21	106-43-4	
1,2-Dibromo-3-chloropropane	<2.4	ug/L	5.0	2.4	1		10/17/22 16:21	96-12-8	
Dibromochloromethane	<2.6	ug/L	5.0	2.6	1		10/17/22 16:21	124-48-1	
1,2-Dibromoethane (EDB)	<0.31	ug/L	1.0	0.31	1		10/17/22 16:21	106-93-4	
Dibromomethane	<0.99	ug/L	5.0	0.99	1		10/17/22 16:21	74-95-3	
1,2-Dichlorobenzene	<0.33	ug/L	1.0	0.33	1		10/17/22 16:21	95-50-1	
1,3-Dichlorobenzene	<0.35	ug/L	1.0	0.35	1		10/17/22 16:21	541-73-1	
1,4-Dichlorobenzene	<0.89	ug/L	1.0	0.89	1		10/17/22 16:21	106-46-7	
Dichlorodifluoromethane	<0.46	ug/L	5.0	0.46	1		10/17/22 16:21	75-71-8	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		10/17/22 16:21	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		10/17/22 16:21	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		10/17/22 16:21	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		10/17/22 16:21	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		10/17/22 16:21	156-60-5	
1,2-Dichloropropane	<0.45	ug/L	1.0	0.45	1		10/17/22 16:21	78-87-5	
1,3-Dichloropropane	<0.30	ug/L	1.0	0.30	1		10/17/22 16:21	142-28-9	
2,2-Dichloropropane	<4.2	ug/L	5.0	4.2	1		10/17/22 16:21	594-20-7	
1,1-Dichloropropene	<0.41	ug/L	1.0	0.41	1		10/17/22 16:21	563-58-6	
cis-1,3-Dichloropropene	<0.36	ug/L	1.0	0.36	1		10/17/22 16:21	10061-01-5	
trans-1,3-Dichloropropene	<3.5	ug/L	5.0	3.5	1		10/17/22 16:21	10061-02-6	
Diisopropyl ether	<1.1	ug/L	5.0	1.1	1		10/17/22 16:21	108-20-3	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		10/17/22 16:21	100-41-4	
Hexachloro-1,3-butadiene	<2.7	ug/L	5.0	2.7	1		10/17/22 16:21	87-68-3	
Isopropylbenzene (Cumene)	<1.0	ug/L	5.0	1.0	1		10/17/22 16:21	98-82-8	
p-Isopropyltoluene	<1.0	ug/L	5.0	1.0	1		10/17/22 16:21	99-87-6	
Methylene Chloride	<0.32	ug/L	5.0	0.32	1		10/17/22 16:21	75-09-2	
Methyl-tert-butyl ether	<1.1	ug/L	5.0	1.1	1		10/17/22 16:21	1634-04-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		10/17/22 16:21	91-20-3	
n-Propylbenzene	<0.35	ug/L	1.0	0.35	1		10/17/22 16:21	103-65-1	
Styrene	<0.36	ug/L	1.0	0.36	1		10/17/22 16:21	100-42-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: 1690005819

Pace Project No.: 40253092

Sample: TRIP BLANK	Lab ID: 40253092008	Collected:	Received: 10/13/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	<0.36	ug/L	1.0	0.36	1		10/17/22 16:21	630-20-6	
1,1,2,2-Tetrachloroethane	<0.38	ug/L	1.0	0.38	1		10/17/22 16:21	79-34-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		10/17/22 16:21	127-18-4	
Toluene	<0.29	ug/L	1.0	0.29	1		10/17/22 16:21	108-88-3	
1,2,3-Trichlorobenzene	<1.0	ug/L	5.0	1.0	1		10/17/22 16:21	87-61-6	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		10/17/22 16:21	120-82-1	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		10/17/22 16:21	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		10/17/22 16:21	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		10/17/22 16:21	79-01-6	
Trichlorofluoromethane	<0.42	ug/L	1.0	0.42	1		10/17/22 16:21	75-69-4	
1,2,3-Trichloropropane	<0.56	ug/L	5.0	0.56	1		10/17/22 16:21	96-18-4	
1,2,4-Trimethylbenzene	<0.45	ug/L	1.0	0.45	1		10/17/22 16:21	95-63-6	
1,3,5-Trimethylbenzene	<0.36	ug/L	1.0	0.36	1		10/17/22 16:21	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		10/17/22 16:21	75-01-4	
Xylene (Total)	<1.0	ug/L	3.0	1.0	1		10/17/22 16:21	1330-20-7	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		10/17/22 16:21	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		10/17/22 16:21	95-47-6	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	101	%	70-130		1		10/17/22 16:21	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		10/17/22 16:21	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		10/17/22 16:21	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

QC Batch: 428756

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: 40253092007

METHOD BLANK: 2469489

Matrix: Water

Associated Lab Samples: 40253092007

Parameter	Units	Blank Result	Reporting Limit	Analyzed		Qualifiers
Ethane	ug/L	<0.39	5.6	10/14/22 10:50		
Ethene	ug/L	<0.25	5.0	10/14/22 10:50		
Methane	ug/L	<0.58	2.8	10/14/22 10:50		

LABORATORY CONTROL SAMPLE &amp; LCSD: 2469490

2469491

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Ethane	ug/L	53.6	57.5	55.8	107	104	74-120	3	20	
Ethene	ug/L	50	53.8	52.3	108	105	71-122	3	20	
Methane	ug/L	28.6	32.4	31.2	113	109	73-120	4	20	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2469765

2469766

Parameter	Units	40253075001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethane	ug/L	<0.39	53.6	53.6	55.9	61.0	104	114	70-120	9	20	
Ethene	ug/L	<0.25	50	50	52.2	56.5	104	113	68-122	8	20	
Methane	ug/L	<0.58	28.6	28.6	30.7	33.7	107	118	10-200	9	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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

QC Batch: 430150

Analysis Method: EPA 6020B

QC Batch Method: EPA 3010A

Analysis Description: 6020B MET

Laboratory:

Pace Analytical Services - Green Bay

Associated Lab Samples: 40253092007

METHOD BLANK: 2477380

Matrix: Water

Associated Lab Samples: 40253092007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	<58.0	250	11/11/22 10:28	

LABORATORY CONTROL SAMPLE: 2477381

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10200	102	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2477382 2477383

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	5800	10000	10000	15900	16000	101	102	75-125	1	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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

QC Batch: 428730

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV

Laboratory:

Pace Analytical Services - Green Bay

Associated Lab Samples: 40253092001, 40253092002, 40253092003

METHOD BLANK: 2469423

Matrix: Water

Associated Lab Samples: 40253092001, 40253092002, 40253092003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	1.0	10/17/22 10:39	
1,1,1-Trichloroethane	ug/L	<0.30	1.0	10/17/22 10:39	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	1.0	10/17/22 10:39	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	10/17/22 10:39	
1,1-Dichloroethane	ug/L	<0.30	1.0	10/17/22 10:39	
1,1-Dichloroethene	ug/L	<0.58	1.0	10/17/22 10:39	
1,1-Dichloropropene	ug/L	<0.41	1.0	10/17/22 10:39	
1,2,3-Trichlorobenzene	ug/L	<1.0	5.0	10/17/22 10:39	
1,2,3-Trichloropropane	ug/L	<0.56	5.0	10/17/22 10:39	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	10/17/22 10:39	
1,2,4-Trimethylbenzene	ug/L	<0.45	1.0	10/17/22 10:39	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	5.0	10/17/22 10:39	
1,2-Dibromoethane (EDB)	ug/L	<0.31	1.0	10/17/22 10:39	
1,2-Dichlorobenzene	ug/L	<0.33	1.0	10/17/22 10:39	
1,2-Dichloroethane	ug/L	<0.29	1.0	10/17/22 10:39	
1,2-Dichloropropane	ug/L	<0.45	1.0	10/17/22 10:39	
1,3,5-Trimethylbenzene	ug/L	<0.36	1.0	10/17/22 10:39	
1,3-Dichlorobenzene	ug/L	<0.35	1.0	10/17/22 10:39	
1,3-Dichloropropane	ug/L	<0.30	1.0	10/17/22 10:39	
1,4-Dichlorobenzene	ug/L	<0.89	1.0	10/17/22 10:39	
2,2-Dichloropropane	ug/L	<4.2	5.0	10/17/22 10:39	
2-Chlorotoluene	ug/L	<0.89	5.0	10/17/22 10:39	
4-Chlorotoluene	ug/L	<0.89	5.0	10/17/22 10:39	
Benzene	ug/L	<0.30	1.0	10/17/22 10:39	
Bromobenzene	ug/L	<0.36	1.0	10/17/22 10:39	
Bromochloromethane	ug/L	<0.36	5.0	10/17/22 10:39	
Bromodichloromethane	ug/L	<0.42	1.0	10/17/22 10:39	
Bromoform	ug/L	<3.8	5.0	10/17/22 10:39	
Bromomethane	ug/L	<1.2	5.0	10/17/22 10:39	
Carbon tetrachloride	ug/L	<0.37	1.0	10/17/22 10:39	
Chlorobenzene	ug/L	<0.86	1.0	10/17/22 10:39	
Chloroethane	ug/L	<1.4	5.0	10/17/22 10:39	
Chloroform	ug/L	<1.2	5.0	10/17/22 10:39	
Chloromethane	ug/L	<1.6	5.0	10/17/22 10:39	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	10/17/22 10:39	
cis-1,3-Dichloropropene	ug/L	<0.36	1.0	10/17/22 10:39	
Dibromochloromethane	ug/L	<2.6	5.0	10/17/22 10:39	
Dibromomethane	ug/L	<0.99	5.0	10/17/22 10:39	
Dichlorodifluoromethane	ug/L	<0.46	5.0	10/17/22 10:39	
Diisopropyl ether	ug/L	<1.1	5.0	10/17/22 10:39	

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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

METHOD BLANK: 2469423

Matrix: Water

Associated Lab Samples: 40253092001, 40253092002, 40253092003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.33	1.0	10/17/22 10:39	
Hexachloro-1,3-butadiene	ug/L	<2.7	5.0	10/17/22 10:39	
Isopropylbenzene (Cumene)	ug/L	<1.0	5.0	10/17/22 10:39	
m&p-Xylene	ug/L	<0.70	2.0	10/17/22 10:39	
Methyl-tert-butyl ether	ug/L	<1.1	5.0	10/17/22 10:39	
Methylene Chloride	ug/L	<0.32	5.0	10/17/22 10:39	
n-Butylbenzene	ug/L	<0.86	1.0	10/17/22 10:39	
n-Propylbenzene	ug/L	<0.35	1.0	10/17/22 10:39	
Naphthalene	ug/L	<1.1	5.0	10/17/22 10:39	
o-Xylene	ug/L	<0.35	1.0	10/17/22 10:39	
p-Isopropyltoluene	ug/L	<1.0	5.0	10/17/22 10:39	
sec-Butylbenzene	ug/L	<0.42	1.0	10/17/22 10:39	
Styrene	ug/L	<0.36	1.0	10/17/22 10:39	
tert-Butylbenzene	ug/L	<0.59	1.0	10/17/22 10:39	
Tetrachloroethene	ug/L	<0.41	1.0	10/17/22 10:39	
Toluene	ug/L	<0.29	1.0	10/17/22 10:39	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	10/17/22 10:39	
trans-1,3-Dichloropropene	ug/L	<3.5	5.0	10/17/22 10:39	
Trichloroethene	ug/L	<0.32	1.0	10/17/22 10:39	
Trichlorofluoromethane	ug/L	<0.42	1.0	10/17/22 10:39	
Vinyl chloride	ug/L	<0.17	1.0	10/17/22 10:39	
Xylene (Total)	ug/L	<1.0	3.0	10/17/22 10:39	
1,2-Dichlorobenzene-d4 (S)	%	97	70-130	10/17/22 10:39	
4-Bromofluorobenzene (S)	%	98	70-130	10/17/22 10:39	
Toluene-d8 (S)	%	97	70-130	10/17/22 10:39	

LABORATORY CONTROL SAMPLE: 2469424

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.8	110	70-134	
1,1,2,2-Tetrachloroethane	ug/L	50	45.2	90	69-130	
1,1,2-Trichloroethane	ug/L	50	45.9	92	70-130	
1,1-Dichloroethane	ug/L	50	47.3	95	70-130	
1,1-Dichloroethene	ug/L	50	50.2	100	74-131	
1,2,4-Trichlorobenzene	ug/L	50	49.4	99	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	42.3	85	64-137	
1,2-Dibromoethane (EDB)	ug/L	50	50.7	101	70-130	
1,2-Dichlorobenzene	ug/L	50	49.9	100	70-130	
1,2-Dichloroethane	ug/L	50	50.1	100	70-137	
1,2-Dichloropropane	ug/L	50	49.0	98	80-121	
1,3-Dichlorobenzene	ug/L	50	51.9	104	70-130	
1,4-Dichlorobenzene	ug/L	50	48.0	96	70-130	
Benzene	ug/L	50	49.6	99	70-130	
Bromodichloromethane	ug/L	50	51.9	104	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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

LABORATORY CONTROL SAMPLE: 2469424

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/L	50	52.1	104	70-130	
Bromomethane	ug/L	50	38.1	76	21-147	
Carbon tetrachloride	ug/L	50	57.3	115	80-146	
Chlorobenzene	ug/L	50	49.6	99	70-130	
Chloroethane	ug/L	50	43.0	86	52-165	
Chloroform	ug/L	50	51.7	103	80-123	
Chloromethane	ug/L	50	37.0	74	51-122	
cis-1,2-Dichloroethene	ug/L	50	49.4	99	70-130	
cis-1,3-Dichloropropene	ug/L	50	50.5	101	70-130	
Dibromochloromethane	ug/L	50	51.5	103	70-130	
Dichlorodifluoromethane	ug/L	50	33.5	67	25-121	
Ethylbenzene	ug/L	50	53.0	106	80-120	
Isopropylbenzene (Cumene)	ug/L	50	55.4	111	70-130	
m&p-Xylene	ug/L	100	108	108	70-130	
Methyl-tert-butyl ether	ug/L	50	49.9	100	70-130	
Methylene Chloride	ug/L	50	49.8	100	70-130	
o-Xylene	ug/L	50	53.2	106	70-130	
Styrene	ug/L	50	53.6	107	70-130	
Tetrachloroethene	ug/L	50	51.9	104	70-130	
Toluene	ug/L	50	50.2	100	80-120	
trans-1,2-Dichloroethene	ug/L	50	50.0	100	70-130	
trans-1,3-Dichloropropene	ug/L	50	43.1	86	70-130	
Trichloroethene	ug/L	50	52.0	104	70-130	
Trichlorofluoromethane	ug/L	50	51.4	103	65-160	
Vinyl chloride	ug/L	50	43.3	87	63-134	
Xylene (Total)	ug/L	150	161	108	70-130	
1,2-Dichlorobenzene-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			98	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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

QC Batch: 428853

QC Batch Method: EPA 8260

Analysis Method: EPA 8260

Analysis Description: 8260 MSV

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40253092008

METHOD BLANK: 2470309

Matrix: Water

Associated Lab Samples: 40253092008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	1.0	10/17/22 11:25	
1,1,1-Trichloroethane	ug/L	<0.30	1.0	10/17/22 11:25	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	1.0	10/17/22 11:25	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	10/17/22 11:25	
1,1-Dichloroethane	ug/L	<0.30	1.0	10/17/22 11:25	
1,1-Dichloroethene	ug/L	<0.58	1.0	10/17/22 11:25	
1,1-Dichloropropene	ug/L	<0.41	1.0	10/17/22 11:25	
1,2,3-Trichlorobenzene	ug/L	<1.0	5.0	10/17/22 11:25	
1,2,3-Trichloropropane	ug/L	<0.56	5.0	10/17/22 11:25	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	10/17/22 11:25	
1,2,4-Trimethylbenzene	ug/L	<0.45	1.0	10/17/22 11:25	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	5.0	10/17/22 11:25	
1,2-Dibromoethane (EDB)	ug/L	<0.31	1.0	10/17/22 11:25	
1,2-Dichlorobenzene	ug/L	<0.33	1.0	10/17/22 11:25	
1,2-Dichloroethane	ug/L	<0.29	1.0	10/17/22 11:25	
1,2-Dichloropropane	ug/L	<0.45	1.0	10/17/22 11:25	
1,3,5-Trimethylbenzene	ug/L	<0.36	1.0	10/17/22 11:25	
1,3-Dichlorobenzene	ug/L	<0.35	1.0	10/17/22 11:25	
1,3-Dichloropropane	ug/L	<0.30	1.0	10/17/22 11:25	
1,4-Dichlorobenzene	ug/L	<0.89	1.0	10/17/22 11:25	
2,2-Dichloropropane	ug/L	<4.2	5.0	10/17/22 11:25	
2-Chlorotoluene	ug/L	<0.89	5.0	10/17/22 11:25	
4-Chlorotoluene	ug/L	<0.89	5.0	10/17/22 11:25	
Benzene	ug/L	<0.30	1.0	10/17/22 11:25	
Bromobenzene	ug/L	<0.36	1.0	10/17/22 11:25	
Bromochloromethane	ug/L	<0.36	5.0	10/17/22 11:25	
Bromodichloromethane	ug/L	<0.42	1.0	10/17/22 11:25	
Bromoform	ug/L	<3.8	5.0	10/17/22 11:25	
Bromomethane	ug/L	<1.2	5.0	10/17/22 11:25	
Carbon tetrachloride	ug/L	<0.37	1.0	10/17/22 11:25	
Chlorobenzene	ug/L	<0.86	1.0	10/17/22 11:25	
Chloroethane	ug/L	<1.4	5.0	10/17/22 11:25	
Chloroform	ug/L	<1.2	5.0	10/17/22 11:25	
Chloromethane	ug/L	<1.6	5.0	10/17/22 11:25	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	10/17/22 11:25	
cis-1,3-Dichloropropene	ug/L	<0.36	1.0	10/17/22 11:25	
Dibromochloromethane	ug/L	<2.6	5.0	10/17/22 11:25	
Dibromomethane	ug/L	<0.99	5.0	10/17/22 11:25	
Dichlorodifluoromethane	ug/L	<0.46	5.0	10/17/22 11:25	
Diisopropyl ether	ug/L	<1.1	5.0	10/17/22 11:25	

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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

METHOD BLANK: 2470309

Matrix: Water

Associated Lab Samples: 40253092008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.33	1.0	10/17/22 11:25	
Hexachloro-1,3-butadiene	ug/L	<2.7	5.0	10/17/22 11:25	
Isopropylbenzene (Cumene)	ug/L	<1.0	5.0	10/17/22 11:25	
m&p-Xylene	ug/L	<0.70	2.0	10/17/22 11:25	
Methyl-tert-butyl ether	ug/L	<1.1	5.0	10/17/22 11:25	
Methylene Chloride	ug/L	<0.32	5.0	10/17/22 11:25	
n-Butylbenzene	ug/L	<0.86	1.0	10/17/22 11:25	
n-Propylbenzene	ug/L	<0.35	1.0	10/17/22 11:25	
Naphthalene	ug/L	<1.1	5.0	10/17/22 11:25	
o-Xylene	ug/L	<0.35	1.0	10/17/22 11:25	
p-Isopropyltoluene	ug/L	<1.0	5.0	10/17/22 11:25	
sec-Butylbenzene	ug/L	<0.42	1.0	10/17/22 11:25	
Styrene	ug/L	<0.36	1.0	10/17/22 11:25	
tert-Butylbenzene	ug/L	<0.59	1.0	10/17/22 11:25	
Tetrachloroethene	ug/L	<0.41	1.0	10/17/22 11:25	
Toluene	ug/L	<0.29	1.0	10/17/22 11:25	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	10/17/22 11:25	
trans-1,3-Dichloropropene	ug/L	<3.5	5.0	10/17/22 11:25	
Trichloroethene	ug/L	<0.32	1.0	10/17/22 11:25	
Trichlorofluoromethane	ug/L	<0.42	1.0	10/17/22 11:25	
Vinyl chloride	ug/L	<0.17	1.0	10/17/22 11:25	
Xylene (Total)	ug/L	<1.0	3.0	10/17/22 11:25	
1,2-Dichlorobenzene-d4 (S)	%	99	70-130	10/17/22 11:25	
4-Bromofluorobenzene (S)	%	101	70-130	10/17/22 11:25	
Toluene-d8 (S)	%	100	70-130	10/17/22 11:25	

LABORATORY CONTROL SAMPLE: 2470310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.4	109	70-134	
1,1,2,2-Tetrachloroethane	ug/L	50	48.5	97	69-130	
1,1,2-Trichloroethane	ug/L	50	49.7	99	70-130	
1,1-Dichloroethane	ug/L	50	37.7	75	70-130	
1,1-Dichloroethene	ug/L	50	50.0	100	74-131	
1,2,4-Trichlorobenzene	ug/L	50	41.9	84	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	42.6	85	64-137	
1,2-Dibromoethane (EDB)	ug/L	50	48.6	97	70-130	
1,2-Dichlorobenzene	ug/L	50	49.0	98	70-130	
1,2-Dichloroethane	ug/L	50	49.1	98	70-137	
1,2-Dichloropropane	ug/L	50	50.3	101	80-121	
1,3-Dichlorobenzene	ug/L	50	52.4	105	70-130	
1,4-Dichlorobenzene	ug/L	50	49.6	99	70-130	
Benzene	ug/L	50	52.2	104	70-130	
Bromodichloromethane	ug/L	50	51.3	103	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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

LABORATORY CONTROL SAMPLE: 2470310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/L	50	53.6	107	70-130	
Bromomethane	ug/L	50	22.3	45	21-147	
Carbon tetrachloride	ug/L	50	55.4	111	80-146	
Chlorobenzene	ug/L	50	51.6	103	70-130	
Chloroethane	ug/L	50	34.0	68	52-165	
Chloroform	ug/L	50	55.2	110	80-123	
Chloromethane	ug/L	50	40.4	81	51-122	
cis-1,2-Dichloroethene	ug/L	50	52.4	105	70-130	
cis-1,3-Dichloropropene	ug/L	50	51.3	103	70-130	
Dibromochloromethane	ug/L	50	49.9	100	70-130	
Dichlorodifluoromethane	ug/L	50	30.6	61	25-121	
Ethylbenzene	ug/L	50	53.7	107	80-120	
Isopropylbenzene (Cumene)	ug/L	50	53.7	107	70-130	
m&p-Xylene	ug/L	100	108	108	70-130	
Methyl-tert-butyl ether	ug/L	50	43.5	87	70-130	
Methylene Chloride	ug/L	50	48.3	97	70-130	
o-Xylene	ug/L	50	51.9	104	70-130	
Styrene	ug/L	50	51.4	103	70-130	
Tetrachloroethene	ug/L	50	54.3	109	70-130	
Toluene	ug/L	50	51.8	104	80-120	
trans-1,2-Dichloroethene	ug/L	50	46.9	94	70-130	
trans-1,3-Dichloropropene	ug/L	50	50.4	101	70-130	
Trichloroethene	ug/L	50	54.6	109	70-130	
Trichlorofluoromethane	ug/L	50	46.6	93	65-160	
Vinyl chloride	ug/L	50	40.7	81	63-134	
Xylene (Total)	ug/L	150	159	106	70-130	
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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

QC Batch: 429240

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV

Laboratory:

Pace Analytical Services - Green Bay

Associated Lab Samples: 40253092004, 40253092005, 40253092006, 40253092007

METHOD BLANK: 2472220

Matrix: Water

Associated Lab Samples: 40253092004, 40253092005, 40253092006, 40253092007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	1.0	10/24/22 14:42	
1,1,1-Trichloroethane	ug/L	<0.30	1.0	10/24/22 14:42	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	1.0	10/24/22 14:42	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	10/24/22 14:42	
1,1-Dichloroethane	ug/L	<0.30	1.0	10/24/22 14:42	
1,1-Dichloroethene	ug/L	<0.58	1.0	10/24/22 14:42	
1,1-Dichloropropene	ug/L	<0.41	1.0	10/24/22 14:42	
1,2,3-Trichlorobenzene	ug/L	<1.0	5.0	10/24/22 14:42	
1,2,3-Trichloropropane	ug/L	<0.56	5.0	10/24/22 14:42	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	10/24/22 14:42	
1,2,4-Trimethylbenzene	ug/L	<0.45	1.0	10/24/22 14:42	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	5.0	10/24/22 14:42	
1,2-Dibromoethane (EDB)	ug/L	<0.31	1.0	10/24/22 14:42	
1,2-Dichlorobenzene	ug/L	<0.33	1.0	10/24/22 14:42	
1,2-Dichloroethane	ug/L	<0.29	1.0	10/24/22 14:42	
1,2-Dichloropropane	ug/L	<0.45	1.0	10/24/22 14:42	
1,3,5-Trimethylbenzene	ug/L	<0.36	1.0	10/24/22 14:42	
1,3-Dichlorobenzene	ug/L	<0.35	1.0	10/24/22 14:42	
1,3-Dichloropropane	ug/L	<0.30	1.0	10/24/22 14:42	
1,4-Dichlorobenzene	ug/L	<0.89	1.0	10/24/22 14:42	
2,2-Dichloropropane	ug/L	<4.2	5.0	10/24/22 14:42	
2-Chlorotoluene	ug/L	<0.89	5.0	10/24/22 14:42	
4-Chlorotoluene	ug/L	<0.89	5.0	10/24/22 14:42	
Benzene	ug/L	<0.30	1.0	10/24/22 14:42	
Bromobenzene	ug/L	<0.36	1.0	10/24/22 14:42	
Bromochloromethane	ug/L	<0.36	5.0	10/24/22 14:42	
Bromodichloromethane	ug/L	<0.42	1.0	10/24/22 14:42	
Bromoform	ug/L	<3.8	5.0	10/24/22 14:42	
Bromomethane	ug/L	<1.2	5.0	10/24/22 14:42	
Carbon tetrachloride	ug/L	<0.37	1.0	10/24/22 14:42	
Chlorobenzene	ug/L	<0.86	1.0	10/24/22 14:42	
Chloroethane	ug/L	<1.4	5.0	10/24/22 14:42	
Chloroform	ug/L	<1.2	5.0	10/24/22 14:42	
Chloromethane	ug/L	<1.6	5.0	10/24/22 14:42	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	10/24/22 14:42	
cis-1,3-Dichloropropene	ug/L	<0.36	1.0	10/24/22 14:42	
Dibromochloromethane	ug/L	<2.6	5.0	10/24/22 14:42	
Dibromomethane	ug/L	<0.99	5.0	10/24/22 14:42	
Dichlorodifluoromethane	ug/L	<0.46	5.0	10/24/22 14:42	
Diisopropyl ether	ug/L	<1.1	5.0	10/24/22 14:42	

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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

METHOD BLANK: 2472220

Matrix: Water

Associated Lab Samples: 40253092004, 40253092005, 40253092006, 40253092007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.33	1.0	10/24/22 14:42	
Hexachloro-1,3-butadiene	ug/L	<2.7	5.0	10/24/22 14:42	
Isopropylbenzene (Cumene)	ug/L	<1.0	5.0	10/24/22 14:42	
m&p-Xylene	ug/L	<0.70	2.0	10/24/22 14:42	
Methyl-tert-butyl ether	ug/L	<1.1	5.0	10/24/22 14:42	
Methylene Chloride	ug/L	<0.32	5.0	10/24/22 14:42	
n-Butylbenzene	ug/L	<0.86	1.0	10/24/22 14:42	
n-Propylbenzene	ug/L	<0.35	1.0	10/24/22 14:42	
Naphthalene	ug/L	<1.1	5.0	10/24/22 14:42	
o-Xylene	ug/L	<0.35	1.0	10/24/22 14:42	
p-Isopropyltoluene	ug/L	<1.0	5.0	10/24/22 14:42	
sec-Butylbenzene	ug/L	<0.42	1.0	10/24/22 14:42	
Styrene	ug/L	<0.36	1.0	10/24/22 14:42	
tert-Butylbenzene	ug/L	<0.59	1.0	10/24/22 14:42	
Tetrachloroethene	ug/L	<0.41	1.0	10/24/22 14:42	
Toluene	ug/L	<0.29	1.0	10/24/22 14:42	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	10/24/22 14:42	
trans-1,3-Dichloropropene	ug/L	<3.5	5.0	10/24/22 14:42	
Trichloroethene	ug/L	<0.32	1.0	10/24/22 14:42	
Trichlorofluoromethane	ug/L	<0.42	1.0	10/24/22 14:42	
Vinyl chloride	ug/L	<0.17	1.0	10/24/22 14:42	
Xylene (Total)	ug/L	<1.0	3.0	10/24/22 14:42	
1,2-Dichlorobenzene-d4 (S)	%	103	70-130	10/24/22 14:42	
4-Bromofluorobenzene (S)	%	92	70-130	10/24/22 14:42	
Toluene-d8 (S)	%	98	70-130	10/24/22 14:42	

LABORATORY CONTROL SAMPLE: 2472221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.7	99	70-134	
1,1,2,2-Tetrachloroethane	ug/L	50	46.1	92	69-130	
1,1,2-Trichloroethane	ug/L	50	50.8	102	70-130	
1,1-Dichloroethane	ug/L	50	52.0	104	70-130	
1,1-Dichloroethene	ug/L	50	45.1	90	74-131	
1,2,4-Trichlorobenzene	ug/L	50	47.7	95	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	41.7	83	64-137	
1,2-Dibromoethane (EDB)	ug/L	50	48.9	98	70-130	
1,2-Dichlorobenzene	ug/L	50	48.7	97	70-130	
1,2-Dichloroethane	ug/L	50	50.0	100	70-137	
1,2-Dichloropropane	ug/L	50	52.4	105	80-121	
1,3-Dichlorobenzene	ug/L	50	47.6	95	70-130	
1,4-Dichlorobenzene	ug/L	50	47.6	95	70-130	
Benzene	ug/L	50	51.1	102	70-130	
Bromodichloromethane	ug/L	50	49.3	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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

**LABORATORY CONTROL SAMPLE: 2472221**

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/L	50	48.7	97	70-130	
Bromomethane	ug/L	50	26.2	52	21-147	
Carbon tetrachloride	ug/L	50	52.6	105	80-146	
Chlorobenzene	ug/L	50	50.2	100	70-130	
Chloroethane	ug/L	50	42.8	86	52-165	
Chloroform	ug/L	50	51.1	102	80-123	
Chloromethane	ug/L	50	34.0	68	51-122	
cis-1,2-Dichloroethene	ug/L	50	46.8	94	70-130	
cis-1,3-Dichloropropene	ug/L	50	47.0	94	70-130	
Dibromochloromethane	ug/L	50	51.2	102	70-130	
Dichlorodifluoromethane	ug/L	50	23.4	47	25-121	
Ethylbenzene	ug/L	50	51.1	102	80-120	
Isopropylbenzene (Cumene)	ug/L	50	51.5	103	70-130	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	44.0	88	70-130	
Methylene Chloride	ug/L	50	45.0	90	70-130	
o-Xylene	ug/L	50	49.9	100	70-130	
Styrene	ug/L	50	46.1	92	70-130	
Tetrachloroethene	ug/L	50	53.8	108	70-130	
Toluene	ug/L	50	50.4	101	80-120	
trans-1,2-Dichloroethene	ug/L	50	50.5	101	70-130	
trans-1,3-Dichloropropene	ug/L	50	45.2	90	70-130	
Trichloroethene	ug/L	50	50.3	101	70-130	
Trichlorofluoromethane	ug/L	50	42.3	85	65-160	
Vinyl chloride	ug/L	50	42.7	85	63-134	
Xylene (Total)	ug/L	150	151	100	70-130	
1,2-Dichlorobenzene-d4 (S)	%			95	70-130	
4-Bromofluorobenzene (S)	%			95	70-130	
Toluene-d8 (S)	%			100	70-130	

**MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2474474**
**2474475**

Parameter	Units	MS		MSD		MS		MSD		% Rec		Max	
		40253307004	Spike Result	Spike Conc.	Conc.	Result	% Rec	Result	% Rec	Limits	RPD	RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.30	50	50	50.5	50.0	101	100	70-134	1	20		
1,1,2,2-Tetrachloroethane	ug/L	<0.38	50	50	48.4	48.3	97	97	61-135	0	20		
1,1,2-Trichloroethane	ug/L	<0.34	50	50	51.9	52.7	104	105	70-130	1	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	52.7	52.8	105	106	70-130	0	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	44.4	44.3	89	89	71-130	0	20		
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	49.1	48.8	98	98	68-131	1	20		
1,2-Dibromo-3-chloropropane	ug/L	<2.4	50	50	43.2	43.4	86	87	51-141	0	20		
1,2-Dibromoethane (EDB)	ug/L	<0.31	50	50	49.6	50.8	99	102	70-130	2	20		
1,2-Dichlorobenzene	ug/L	<0.33	50	50	49.5	48.9	99	98	70-130	1	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	50.7	51.0	101	102	70-137	1	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		2474474		2474475													
Parameter	Units	MS		MSD		MS		MSD		MS		MSD		% Rec	Limits	Max	
		4025307004	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	RPD	RPD	Qual						
1,2-Dichloropropane	ug/L	<0.45	50	50	53.9	54.1	108	108	80-121	0	20						
1,3-Dichlorobenzene	ug/L	<0.35	50	50	48.5	47.5	97	95	70-130	2	20						
1,4-Dichlorobenzene	ug/L	<0.89	50	50	49.7	49.3	99	99	70-130	1	20						
Benzene	ug/L	<0.30	50	50	52.0	51.5	104	103	70-130	1	20						
Bromodichloromethane	ug/L	<0.42	50	50	50.0	50.1	100	100	70-130	0	20						
Bromoform	ug/L	<3.8	50	50	50.4	49.9	101	100	70-133	1	20						
Bromomethane	ug/L	<1.2	50	50	23.5	24.1	47	48	21-149	3	22						
Carbon tetrachloride	ug/L	<0.37	50	50	53.3	53.4	107	107	80-146	0	20						
Chlorobenzene	ug/L	<0.86	50	50	51.4	51.7	103	103	70-130	0	20						
Chloroethane	ug/L	<1.4	50	50	39.0	37.7	78	75	52-165	3	20						
Chloroform	ug/L	<1.2	50	50	52.1	51.3	104	103	80-123	2	20						
Chloromethane	ug/L	<1.6	50	50	29.5	29.6	59	59	42-125	0	20						
cis-1,2-Dichloroethene	ug/L	0.62J	50	50	48.4	47.8	96	94	70-130	1	20						
cis-1,3-Dichloropropene	ug/L	<0.36	50	50	49.3	49.6	99	99	70-130	1	20						
Dibromochloromethane	ug/L	<2.6	50	50	52.0	52.1	104	104	70-130	0	20						
Dichlorodifluoromethane	ug/L	<0.46	50	50	15.4	15.3	31	31	25-121	0	20						
Ethylbenzene	ug/L	<0.33	50	50	51.8	51.6	104	103	80-121	1	20						
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	52.0	52.2	104	104	70-130	0	20						
m&p-Xylene	ug/L	<0.70	100	100	103	101	103	101	70-130	1	20						
Methyl-tert-butyl ether	ug/L	<1.1	50	50	45.2	45.2	90	90	70-130	0	20						
Methylene Chloride	ug/L	<0.32	50	50	45.5	45.0	91	90	70-130	1	20						
o-Xylene	ug/L	<0.35	50	50	50.8	50.2	102	100	70-130	1	20						
Styrene	ug/L	<0.36	50	50	46.9	47.0	94	94	70-132	0	20						
Tetrachloroethene	ug/L	<0.41	50	50	55.6	54.8	111	110	70-130	1	20						
Toluene	ug/L	<0.29	50	50	51.1	51.2	102	102	80-120	0	20						
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	52.3	51.8	105	104	70-130	1	20						
trans-1,3-Dichloropropene	ug/L	<3.5	50	50	47.1	47.3	94	95	70-130	0	20						
Trichloroethene	ug/L	<0.32	50	50	50.9	51.4	102	103	70-130	1	20						
Trichlorofluoromethane	ug/L	<0.42	50	50	40.6	40.7	81	81	65-160	0	20						
Vinyl chloride	ug/L	0.25J	50	50	38.3	38.5	76	77	60-137	1	20						
Xylene (Total)	ug/L	<1.0	150	150	154	152	102	101	70-130	1	20						
1,2-Dichlorobenzene-d4 (S)	%						97	95	70-130								
4-Bromofluorobenzene (S)	%						97	95	70-130								
Toluene-d8 (S)	%						101	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

QC Batch: 429186

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: 40253092007

METHOD BLANK: 2471891

Matrix: Water

Associated Lab Samples: 40253092007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	10/25/22 17:01	

LABORATORY CONTROL SAMPLE: 2471892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.8	99	90-110	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2471893 2471894

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	40253075005	26.1	100	100	135	134	109	108	90-110	1 15

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2471895 2471896

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	40253075018	60.6J	1000	1000	1090	1080	103	102	90-110	2 15

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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: 1690005819

Pace Project No.: 40253092

QC Batch: 429597

Analysis Method: SM 5310C

QC Batch Method: SM 5310C

Analysis Description: 5310C Total Organic Carbon

Laboratory:

Pace Analytical Services - Green Bay

Associated Lab Samples: 40253092007

METHOD BLANK: 2474382

Matrix: Water

Associated Lab Samples: 40253092007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	<0.14	0.50	10/25/22 09:25	

LABORATORY CONTROL SAMPLE: 2474383

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	12.5	12.6	101	80-120	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2474384 2474385

Parameter	Units	40253142001	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	0.93	6	6	6.8	6.9	98	100	80-120	2	10	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 2474386 2474387

Parameter	Units	40253142002	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	0.58	6	6	6.4	6.5	96	99	80-120	2	10	

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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: 1690005819  
Pace Project No.: 40253092

---

### 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

1q The calculated result of - 1.40 mg/L is greater than the reporting limit.

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 1690005819  
Pace Project No.: 40253092

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40253092007	PZ-1R	EPA 8015B Modified	428756		
40253092007	PZ-1R	EPA 3010A	430150	EPA 6020B	430327
40253092001	PZ-2R	EPA 8260	428730		
40253092002	MW-6	EPA 8260	428730		
40253092003	MW-6 DUP	EPA 8260	428730		
40253092004	PZ-4	EPA 8260	429240		
40253092005	MW-5	EPA 8260	429240		
40253092006	MW-4	EPA 8260	429240		
40253092007	PZ-1R	EPA 8260	429240		
40253092008	TRIP BLANK	EPA 8260	428853		
40253092007	PZ-1R	HACH 8146	431277		
40253092007	PZ-1R	EPA 300.0	429186		
40253092007	PZ-1R	SM 5310C	429597		

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



Client Name: Ramboll

## Sample Preservation Receipt Form

Project #

 Yes    No N/A

10157092

All containers needing preservation have been checked and noted below:

Lab Lot# of pH paper: 10 D0722

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

Initial when completed: 86Date/  
Time:

Pace Lab #	AG1U	BG1U	Glass				BP1U	BP3U	Plastic				VG9C	DG9T	Vials			VG9D	JGFU	JG9U	WG FU	WP FU	SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm)*	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																													2.5 / 5				
002																													2.5 / 5				
003																													2.5 / 5				
004																													2.5 / 5				
005																													2.5 / 5				
006																													2.5 / 5				
007																													2.5 / 5				
008																													2.5 / 5				
009																													2.5 / 5				
010																													2.5 / 5				
011																													2.5 / 5				
012																													2.5 / 5				
013																													2.5 / 5				
014																													2.5 / 5				
015																													2.5 / 5				
016																													2.5 / 5				
017																													2.5 / 5				
018																													2.5 / 5				
019																													2.5 / 5				
020																													2.5 / 5				

Exceptions to preservation check: VOA, California, TOC, TOX, TOH, O&amp;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	VG9C	40 mL clear ascorbic w/ HCl	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	WG FU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WP FU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	250 mL amber glass H2SO4
						GN 2	

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: Ramboll

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

WO# : 40253092



40253092

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 - 9 Type of Ice: Wet Blue Dry None  Meltwater Only

Cooler Temperature Uncorr: 4.5 Corr: S

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: 10/13/22 Initials: SG

Labeled By Initials: MJW

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: - DI VOA Samples frozen upon receipt	<input checked="" 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 type="checkbox"/> Yes <input checked="" 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.
Correct Type: Pace Green Bay, Pace IR, Non-Pace		
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 type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
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):		

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 log!

Page 2 of 2



---

## Report of Analysis

**Pace Analytical Services, LLC**  
1241 Bellevue Street  
Suite 9  
Green Bay, WI 54302  
Attention: Steven Mleczko

Project Name: 1690005819

Project Number: 40253092

Lot Number:**XJ15006**

Date Completed:10/18/2022

A handwritten signature in blue ink, appearing to read "J. S. Holliday".

11/15/2022 9:06 AM

Approved and released by:  
Project Coordinator 1: **Jenna S. Holliday**



The electronic signature above is the equivalent of a handwritten signature.  
This report shall not be reproduced, except in its entirety, without the written approval of Pace Analytical Services, LLC.

# PACE ANALYTICAL SERVICES, LLC

SC DHEC No: 32010001

NELAC No: E87653

NC DENR No: 329

NC Field Parameters No: 5639

## Case Narrative Pace Analytical Services, LLC Lot Number: XJ15006

**Report revision 11/15/2022: This PDF report has been revised to include an updated report format. This report supersedes and replaces any prior reports issued under this lot number.**

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report. Where sampling is conducted by the client, results relate to the accuracy of the information provided, and as the samples are received.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved The NELAC Institute (TNI) standards, the Pace Analytical Services, LLC ("Pace") Laboratory Quality Manual, standard operating procedures (SOPs), and Pace policies. Any exceptions to the TNI standards, the Laboratory Quality Manual, SOPs or policies are qualified on the results page or discussed below.

Pace is a TNI accredited laboratory; however, the following analyses are currently not listed on our TNI scope of accreditation: Drinking Water: VOC (excluding BTEX, MTBE, Naphthalene, & 1,2-dichloroethane) EPA 524.2, E. coli and Total coliforms SM 9223 B-2004, Solid Chemical Material: TOC Walkley-Black, Biological Tissue: All, Non-Potable Water: SGT-HEM EPA 1664B, Silica EPA 200.7, Boron, Calcium, Silicon, Strontium EPA 200.8, Bicarbonate, Carbonate, and Hydroxide Alkalinity SM 2320 B-2011, SM 9221 C E-2006 & SM 9222D-2006, Strontium SW-846 6010D, VOC SM 6200 B-2011, Fecal Coliform Colilert-18.

If you have any questions regarding this report, please contact the Pace Project Manager listed on the cover page.

### Ferrous Iron Analysis

Pre client request, sample XJ15006-001 was received and analyzed outside of holding time.

# PACE ANALYTICAL SERVICES, LLC

---

**Sample Summary**  
**Pace Analytical Services, LLC**  
**Lot Number: XJ15006**  
**Project Name: 1690005819**  
**Project Number: 40253092**

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	PZ-1R	Aqueous	10/12/2022 1155	10/15/2022

(1 sample)

# PACE ANALYTICAL SERVICES, LLC

---

**Detection Summary**  
**Pace Analytical Services, LLC**  
**Lot Number: XJ15006**  
**Project Name: 1690005819**  
**Project Number: 40253092**

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
001	PZ-1R	Aqueous	Ferrous Iron	SM 3500-Fe B-	7.2	H	mg/L	5

(1 detection)

# Inorganic non-metals

Client: Pace Analytical Services, LLC	Laboratory ID: XJ15006-001
Description: PZ-1R	Matrix: Aqueous
Date Sampled: 10/12/2022 1155	Project Name: 1690005819
Date Received: 10/15/2022	Project Number: 40253092

Run	Prep Method	Analytical Method		Dilution	Analysis Date	Analyst	Prep Date	Batch			
1		(Ferrous Iron)	SM 3500-Fe B-2011	10	10/16/2022 1458	TAD		57167			
Parameter		CAS Number		Analytical Method	Result	Q	LOQ	LOD	DL	Units	Run
Ferrous Iron				SM 3500-Fe B-2	7.2	H	0.50	0.50	0.50	mg/L	1

LOQ = Limit of Quantitation

B = Detected in the method blank

E = Quantitation of compound exceeded the calibration range

DL = Detection Limit

Q = Surrogate failure

ND = Not detected at or above the DL

N = Recovery is out of criteria

P = The RPD between two GC columns exceeds 40%

J = Estimated result < LOQ and ≥ DL

L = LCS/LCSD failure

H = Out of holding time

W = Reported on wet weight basis

LOD = Limit of Detection

S = MS/MSD failure

## **QC Summary**

# Inorganic non-metals - MB

Sample ID: XQ57167-001

Matrix: Aqueous

Batch: 57167

Analytical Method: SM 3500-Fe B-2011

Parameter	Result	Q	Dil	LOQ	LOD	DL	Units	Analysis Date
Ferrous Iron	0.050	U	1	0.050	0.050	0.050	mg/L	10/16/2022 1455

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

DL = Detection Limit

J = Estimated result < LOQ and  $\geq$  DL

P = The RPD between two GC columns exceeds 40%

LOD = Limit of Detection

\* = RSD is out of criteria

+ = RPD is out of criteria

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

# Inorganic non-metals - LCS

Sample ID: XQ57167-002

Matrix: Aqueous

Batch: 57167

Analytical Method: SM 3500-Fe B-2011

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Ferrous Iron	1.0	1.0		1	100	90-110	10/16/2022 1456

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

LOD = Limit of Detection

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

# Inorganic non-metals - LCSD

Sample ID: XQ57167-003

Matrix: Aqueous

Batch: 57167

Analytical Method: SM 3500-Fe B-2011

Parameter	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Ferrous Iron	1.0	1.0		1	100	0.30	90-110	20	10/16/2022 1457

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

LOD = Limit of Detection

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

# Inorganic non-metals - MS

Sample ID: XJ15006-001MS

Matrix: Aqueous

Batch: 57167

Analytical Method: SM 3500-Fe B-2011

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
Ferrous Iron	7.2	10	17		10	93	70-130	10/16/2022 1459

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

LOD = Limit of Detection

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

Pace Analytical Services, LLC (formerly Shealy Environmental Services, Inc.)  
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.pacelabs.com

QC Data for Lot Number: XJ15006

Page 50 of 54

# Inorganic non-metals - MSD

Sample ID: XJ15006-001MD

Matrix: Aqueous

Batch: 57167

Analytical Method: SM 3500-Fe B-2011

Parameter	Sample Amount (mg/L)	Spike Amount (mg/L)	Result (mg/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
Ferrous Iron	7.2	10	17		10	100	4.4	70-130	20	10/16/2022 1500

LOQ = Limit of Quantitation

ND = Not detected at or above the LOQ

N = Recovery is out of criteria

LOD = Limit of Detection

\* = RSD is out of criteria

P = The RPD between two GC columns exceeds 40%

**Note: Calculations are performed before rounding to avoid round-off errors in calculated results**

**Chain of Custody  
and  
Miscellaneous Documents**



# PACE ANALYTICAL SERVICES, LLC

DC#\_Title: ENV-FRM-WCOL-0286 v02\_Samples Receipt Checklist (SRC)

Effective Date: 8/2/2022

## Sample Receipt Checklist (SRC)

Client: Pace

Cooler Inspected by/date: JRG2 / 10/15/2022

Lot #: XJ15006

Means of receipt:	<input type="checkbox"/> Pace	<input type="checkbox"/> Client	<input type="checkbox"/> UPS	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	1. Were custody seals present on the cooler?			
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2. If custody seals were present, were they intact and unbroken?			
pH Strip ID: NA		Chlorine Strip ID: NA		Tested by: NA	
Original temperature upon receipt / Derived (Corrected) temperature upon receipt 3.4 / 3.4 °C NA / NA °C NA / NA °C NA / NA °C		%Solid Snap-Cup ID: NA			
Method: <input checked="" type="checkbox"/> Temperature Blank <input type="checkbox"/> Against Bottles IR Gun ID: 8		IR Gun Correction Factor: 0 °C			
Method of coolant: <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Ice Packs <input type="checkbox"/> Dry Ice <input type="checkbox"/> None					

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	3. Were all coolers received at or below 6.0°C? If no, was Project Manager notified? PM was Notified by: phone / email / face-to-face (circle one).		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	4. Is the commercial courier's packing slip attached to this form?		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	5. Were proper custody procedures (relinquished/received) followed?		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	6. Were sample IDs listed on the COC and all sample containers?		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	7. Was collection date & time listed on the COC and all sample containers?		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	8. Did all container label information (ID, date, time) agree with the COC?		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	9. Were tests to be performed listed on the COC?		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	10. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	11. Was adequate sample volume available?		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	12. Were all samples received within ½ the holding time or 48 hours, whichever comes first?		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	13. Were all samples containers accounted for? (No missing/excess)		
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	14. Were VOA, 8015C and RSK-175 samples free of bubbles >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	15. Were all DRO/metals/intrument samples received at a pH of < 2?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	16. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?		
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	17. Were all applicable NH <sub>3</sub> /TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?		
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	18. Was the quote number listed on the container label? If yes, Quote # _____		

### Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H<sub>2</sub>SO<sub>4</sub>, HNO<sub>3</sub>, HCl, NaOH using SR # NA. Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) NA were received with bubbles ≥6 mm in diameter.

Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is no) and were adjusted accordingly in sample receiving with sodium thiosulfate (Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>) with Unique ID: NA.

Comments:

---



---



---



---



---

SEMI-ANNUAL PROGRESS REPORT  
JULY 1, 2022 TO DECEMBER 31, 2022

**APPENDIX B**  
**INVESTIGATION DERIVED WASTE DISPOSAL DOCUMENTATION**



or type.			
UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number W I D N 0 4 3 5 9 8 4 7 8	2. Page 1 of (22) 010-0007
5. Generator's Name and Mailing Address MARQUETTE UNIVERSITY ACADEMIC SUPPORT FACILITY, 110 P.O. BOX 1881 MILWAUKEE, WI 53201 Generator's Phone: 414 286-8411		3. Emergency Response Phone DENNIS DAYE 4. Manifest Tracking Number <b>002161345 VES</b>	
6. Transporter 1 Company Name VEOLIA ES TECHNICAL SOLUTIONS		U.S. EPA ID Number N I D N 0 2 0 6 3 1 3 6 0	
7. Transporter 2 Company Name		U.S. EPA ID Number	
8. Designated Facility Name and Site Address VEOLIA ES TECHNICAL SOLUTIONS, W124 N9451 BOUNDARY MENOMONEE FALLS, WI 53051		U.S. EPA ID Number	
Facility's Phone: 262 255-6555		W I D N 0 2 0 6 7 1 4 9	
9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) X NA3082, HAZARDOUS WASTE, LIQUID, n.o.s., (TETRACHLOROETHYLENE), 9, III, RQ (F002)	10. Containers	
		No.	Type
	1.	D F	41 P
	2.		
	3.		
	4.		
14. Special Handling Instructions and Additional Information HR Service Contracted by VESTS → Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf. MARQUETTE UNIVERSITY OFFERED PLACARDS/ERG REFUSED BY VEOLIA → 1) OU 36190		11. Total Quantity 12. Unit Wt./Vol.	
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.		13. Waste Codes F002	
Generator's/Offeror's Printed/Typed Name <i>Dennis Daye</i>		Signature <i>[Signature]</i> Month Day Year 10 25 2022	
16. International Shipments INT'L	<input type="checkbox"/> Import to U.S.	<input type="checkbox"/> Export from U.S.	Port of entry/exit: Date leaving U.S.:
	Transporter signature (for exports only):		
17. Transporter Acknowledgment of Receipt of Materials TRANSPORTER	Transporter 1 Printed/Typed Name <i>Colin Barrington</i>	Signature <i>[Signature]</i>	Month Day Year 10 25 22
	Transporter 2 Printed/Typed Name	Signature	Month Day Year
18. Discrepancy DESIGNATED FACILITY	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection		
	Manifest Reference Number:		
18b. Alternate Facility (or Generator)	U.S. EPA ID Number		
Facility's Phone:			
18c. Signature of Alternate Facility (or Generator) <i>[Signature]</i>	Month Day Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)			
1.	2.	3.	4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a			
Printed/Typed Name		Signature	
		Month Day Year	

# PACKING SUMMARY

SL Accnt Id (Gen Num): 86727 (649254)

Marquette University  
1214 West Wells Street  
Milwaukee, WI 53233

Attn: DENNIS DAYE  
EPA ID: WID053684478

Manifest Number: 002161345VES  
Field System ID: HH  
Work Order Number: 4068912000  
Date Shipped: 10/25/2022

Container#: HH-4068912000-001

Waste Area:

Manifest Page/Line: 01 / 1

WIP: 555475

DisposalCode: CWDDP108-6G

PHY State: L

Date Accumulated: 10/25/2022

Gen Drum ID:

Shipping Name: NA3082, HAZARDOUS WASTE, LIQUID, n.o.s., (TETRACHLOROETHYLENE), 9, III, RQ (F002)

No. of Commodity: Q1

Outer Container: 051H1-DF

Inner Container:

Primary Waste Codes: F002

PCB Serial #: \_\_\_\_\_

OOS Date: //

Total Crms Wt: 41

SIC: 8221

Source: G19

Form: W219

System: H141

Cubic Ft.: 0.68

Individual Commodity Weights: 1 @ 41 (POUNDS)

Unit	Container Size	Net Weight	Chemical Name	EPA/State Codes
1	5 GAL	1	TETRACHLOROETHYLENE [0-61M] TRICHLOROETHYLENE (TCE) [0-3.3M] WATER [99-100%] RUST, DIRT, SCALE [0-1%]	F002

## Land Disposal Restriction Notification Form

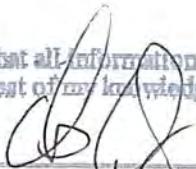
Generator Name Marquette University  
EPA ID Number WID053084470 Manifest 002161345VE8

This notice is being provided in accordance with 40 CFR 268.7 to inform you that this shipment contains waste restricted from land disposal by the USEPA under the land disposal restriction program. Identified below for each container is the designation of the waste as a wastewater or non-wastewater, the Clean Water Act (CWA) permit status associated with the treatment/disposal facility, applicable waste codes and any corresponding subcategories, list of any F001-F005 solvent constituents that are present in the waste, and any underlying hazardous constituents (UHC) that are present.

Container Number: HH-4000012000-001 (1/1)

WTP / Approval Code: 566476 / CWDDPK8-60  
Form Designation / CWA Status: Non-Wastewater / Non-CWA  
Waste Codes (Subcategories): F002  
Constituents (F001 - F005): TETRACHLOROETHYLENE, TRICHLOROETHYLENE (TCE)  
UHCs Present: Not Applicable  
Treatment Requirements: Restricted waste requires treatment to applicable standards.  
Additional Notices:

I hereby certify that all information in this and associated land disposal restriction documents is complete and accurate to the best of my knowledge and information.

Signature  Date 10/25/2003  
Title Director EH&S