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## Annual Report – January to December 2023

Former Hamilton Industries Facility  
Two Rivers, Wisconsin  
BRRTS Activity #02-36-578316

May 2024

Environmental Resources Management

7311 W Greenfield Ave

West Allis, Wisconsin 53214

Project No.: 0383990

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## Annual Report – January to December 2023

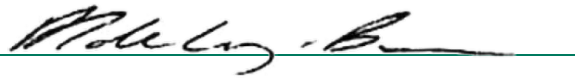
Former Hamilton Industries Facility  
Two Rivers, Wisconsin  
BRRTS Activity #02-36-578316



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# 1. INTRODUCTION

Environmental Resources Management, Inc. (ERM) was retained by Thermo Fisher Scientific (Thermo Fisher) to perform quarterly groundwater monitoring at the Former Hamilton Industries Facility, located at 1316 18th Street in Two Rivers, Wisconsin (Site). The Site is located east of Jefferson Street, along the western bank of the East Twin River, between 15th and 19th Street (**Figure 1**). A network of 36 groundwater monitoring wells is used to help define the extent of groundwater impacts related to historical Site activities (**Table 1** and **Figure 2**). This report discusses the results of four (4) rounds of quarterly groundwater monitoring events conducted in 2023 and provides conclusions/recommendations based on temporal groundwater chlorinated organic compound (CVOC) data, and 1,4-Dioxane concentration data, and quarterly field parameter data. Quarterly groundwater sampling and gauging data collected during 2022 is also provided.

The groundwater monitoring performed supports the current understanding of CVOC and 1,4-Dioxane concentrations and compares groundwater concentrations to the Wisconsin Administrative Code (WAC) chapter (ch.) NR 140 Preventive Action Limit (PAL) or Enforcement Standard (ES).

## 1.1 Site Contacts and Location

The following contact information is provided for the facility and environmental consultant:

Responsible Party	Fisher Scientific International, LLC A wholly owned subsidiary of Thermo Fisher Scientific, Inc.
Facility Representatives:	Robert Fetter Thermo Fisher Scientific 168 Third Avenue Waltham, MA 02451 781-622-1176 248-943-8487 (mobile) 781-622-1338 (fax) robert.fetter@thermofisher.com  Rick Podlaski Thermo Fisher Scientific P.O. Box 17340 Stamford, CT 06907 (203) 526-7072 (office/mobile) (203) 536-7092 (mobile) rick.podlaski@thermofisher.com
Environmental Consultant:	David de Courcy-Bower, P.E. Environmental Resources Management, Inc. 7311 W Greenfield Avenue West Allis, WI 53214 414-977-4705 (telephone) 414-335-0877 (Mobile) david.decourcybower@erm.com

Site Address: 1316 18th Street, Two Rivers, Wisconsin.

Site Coordinates (WTM): x: 714709.8 y: 411274.5

Site Location: East half of Section 1, Township 19 North, Range 24 East in Manitowoc County. The location of the Site is shown on Figure 1, developed from the United States Geological Survey (USGS) 7.5-minute quadrangle for Two Rivers, Wisconsin, dated 1978.

## 1.2 Overview

Previous investigation activities determined that CVOC concentrations, primarily TCE, exceeded both the PAL and ES in Site groundwater. Distinct areas with groundwater CVOC exceedances of the PAL and ES were previously designated the North, Central, and South plumes. Based on these designations, ERM has performed quarterly sampling (Q1, Q3, and Q4) of a subset of Site monitoring wells with an annual (Q2) sampling of all active and accessible site monitoring wells for CVOCs and 1,4-dioxane. **Table 1** provides a listing of monitoring well geometry and sampling schedule (annual vs quarterly). Wells that are within a known TCE plume, or which are down-gradient from a plume, have been continued to be monitored quarterly while wells that have consistently shown non-detect results, and which are up-gradient delineation wells, are monitored annually. Additionally, MW-6, MW-7, MW-10 and MW-22 have been abandoned. Quarterly groundwater elevations and field parameter data from 2022 and 2023 are provided on **Tables 2 and 3**, respectively. Samples collected from the monitoring wells during 2022 and 2023 were submitted to Pace Analytical of Green Bay, WI for analysis. **Table 4** provides a summary of the 2022 and 2023 sample results reported for these constituents. June 2022 1,4-Dioxane results have been omitted due to laboratory quality control errors resulting in low validity data. An ERM chemist who specializes in laboratory data overview, reviewed the data and laboratory report, the 1,4-dioxane analytical results from the report were regarded as erroneous due to the poor QA/QC results and the perceived low validity of the 1,4-Dioxane analytical data. Therefore, the June 2022 1,4-Dioxane data are not further discussed in this report. Subsequent sampling also confirmed that the June 2022 1,4-Dioxane results were erroneous.

## 2. GROUNDWATER MONITORING

This submittal summarizes and discusses the results of groundwater monitoring events conducted from March through November 2023. The investigation methods used during the 2022 and 2023 quarterly and annual monitoring were consistent with previously submitted work plans.

### 2.1 Monitoring Well Network

The network of groundwater monitoring wells used during the Site investigation are located both on-Site and off-Site. Beginning in the 3<sup>rd</sup> quarter (Q3) of 2020, quarterly groundwater sampling has been reduced to a shortened list of 14 wells, with one annual sampling event in which all 29 existing and accessible groundwater monitoring wells are sampled. **Table 1** includes the gauging, sampling, and monitoring frequency of each well. Additionally:

- Monitoring wells MW-6, MW-7, MW-10, and MW-22S were abandoned during August 2019 due to property redevelopment.
- Monitoring well MW-11S was initially constructed to investigate groundwater quality associated with an up-gradient fuel-oil underground storage tank. Previous reports indicated that no VOCs were detected in MW-11S, and the well was therefore deemed unnecessary to be included in the routine monitoring network.
- Due to the presence of LNAPL, groundwater samples were not collected from MW-02.

### 2.2 Monitoring Well Gauging

Depth to groundwater measurements were taken at the wells specified in **Table 1** during each sampling event to determine the groundwater flow direction on Site. A summary of water level measurements is included in **Table 2**. Shallow and deep groundwater contour maps from the June 2023 annual sampling event are presented as **Figure 3** and **Figure 4**, respectively. Groundwater in the shallow aquifer generally flows eastward towards the East Twin River, with a south-easterly component identified in the southern portion of the Site. The deep aquifer also indicates an eastward to southeast flow direction beneath the central portion of the Site.

No evidence of LNAPL, odor, or sheen was observed in any monitoring well during these events except in MW-02, where the in-well measured thickness of LNAPL was 1.30 feet in June 2023. The LNAPL in MW-02 is an off-Site concern that is being addressed by the City of Two Rivers under a separate BRRTs case (#02-36-585219).

### 2.3 Groundwater Sampling

Groundwater samples were collected during 2022 (April, June, September, and November) and 2023 (March, June, August, and November). Groundwater samples and field parameters were collected in accordance with previously submitted work plans. The field parameters collected include temperature, specific conductivity, pH, dissolved oxygen (DO), and oxidation-reduction potential (ORP).

Groundwater field parameters are provided in **Table 3**. Field parameters were obtained using a Yellow Springs Instruments (YSI) flow-through cell. Turbidity was measured during well purging using a Geotech turbidity meter. Groundwater samples were collected after field parameters stabilized and/or 4 well volumes had been purged. Field logs of stabilizing field parameter measurements for each monitoring event are provided in **Appendix A**.

Groundwater samples for laboratory analysis were placed on ice immediately after collection and submitted to Pace Labs of Green Bay, Wisconsin with full chain of custody tracking documentation.

The groundwater samples collected during each monitoring event were submitted for laboratory analysis of CVOCs using EPA Method 8260B. Groundwater samples collected for analysis of 1,4-dioxane were analysed with either EPA method 8270E SIM or 8270D SIM. Groundwater analytical results are presented in **Table 4**. The extent of the TCE plume as indicated by the June 2023 annual groundwater sampling event and vertical aquifer sampling (VAS) investigations conducted in 2017 and 2020 is shown in **Figure 5**. Copies of the laboratory analytical reports for each monitoring event are included in **Appendix B**.

### 2.3.1 Quarterly Groundwater Monitoring Results

Several CVOCs were detected in monitoring well samples (**Table 4**). The only CVOCs exceeding an ES during the 2023 monitoring events were TCE, vinyl chloride, and 1,4-Dioxane and details are discussed below. CVOCs exceeding the PAL but not the ES included 1,1-Dichloroethene (1,1-DCE), cis-1,2-Dichloroethene (cis-1,2-DCE), trans-1,2-Dichloroethene (trans-1,2-DCE), and PCE.

#### Plume(s) Geometry

Three distinct areas of groundwater impacted with CVOCs that exceed a PAL and/or ES include:

- The North plume, located to the north of 18th Street and to the west of East River Street.
- The Central Plume located to the south of 17th Street and east of Jefferson Street extending to the East Twin River.
- The South plume, which is primarily located south of 16th Street and east of Jefferson Street and extending to the confluence of the East Twin and West Twin rivers.

#### *Trichloroethene*

The North plume TCE concentrations in 2023 were all non-detect (MW-19S, MW-24S, MW-25S, and MW-26S) except for MW-23S, which exceeds the PAL of 0.5 ug/L, but is below the ES of 5 ug/L. TCE concentrations at MW-23S during 2023 ranged from 2.3 ug/L to 0.64 ug/L.

The Central Plume TCE concentrations in 2023 ranged from non-detect (MW-8S, MW-10D, MW-12S, MW-13D, MW-16S, MW-18S) to 845 ug/L at MW-15I. Locations that exceed the PAL but not the ES include MW-9S (0.69 ug/L), MW-10S (2.0 ug/L), MW-14S (1.4 ug/L), MW-17S (2.0 ug/L), MW-15D (1.8 ug/L), and MW-15S (1.9 ug/L). Locations that exceed the ES include MW-13S (240 ug/L) and MW-15I.

The South Plume TCE concentrations in 2023 ranged from non-detect (MW-08, MW-09, and MW-21S) to 289 ug/L at MW-04. MW-03 (0.55 ug/L) is the only well that exceeded the PAL, but not the ES. Locations that exceed the ES include MW-20S (9.6 ug/L), MW-6S (32.2 ug/L), MW-7S (17.4 ug/L), MW-01 (29.4 ug/L), and MW-04.

#### *Vinyl Chloride*

Vinyl chloride was only detected at MW-04 (0.31 ug/L), which exceeds the ES (0.2 ug/L). No other monitoring well across the Site had detectable concentrations of vinyl chloride. The occurrence of vinyl chloride in the Southern Plume may indicate reductive dichlorination is occurring in the Southern Plume.

#### *1,4-Dioxane*

1,4-Dioxane was not detected in groundwater in the North Plume or the South Plume during 2023 at concentrations exceeding either the ES or PAL.

1,4-Dioxane concentrations in the Central Plume ranged from non-detect at MW-15S to 75.0 ug/L at MW-15I in November 2023. Other Central Plume locations where sample concentrations of 1,4-Dioxane exceeded the ES include MW-15D (7.9 ug/L) and MW-13S (33.7 ug/L). Detected concentrations of 1,4-Dioxane at MW-13D ranged from non-detect in September 2022 to 0.64 ug/L in June 2023 which exceeds the PAL (0.3 ug/L) but is below the ES.

### 3. CONCLUSIONS AND RECOMMENDATIONS

All groundwater monitoring efforts followed the procedures outlined in previously submitted work plans. In the North Plume and Central Plume areas, groundwater flows to the east toward the East Twin River, consistent with previous reports. In the South plume area, groundwater flows to the south and southeast, which is also consistent with previous reports. The only monitoring well having LNAPL was MW-02 and is not associated with the Site.

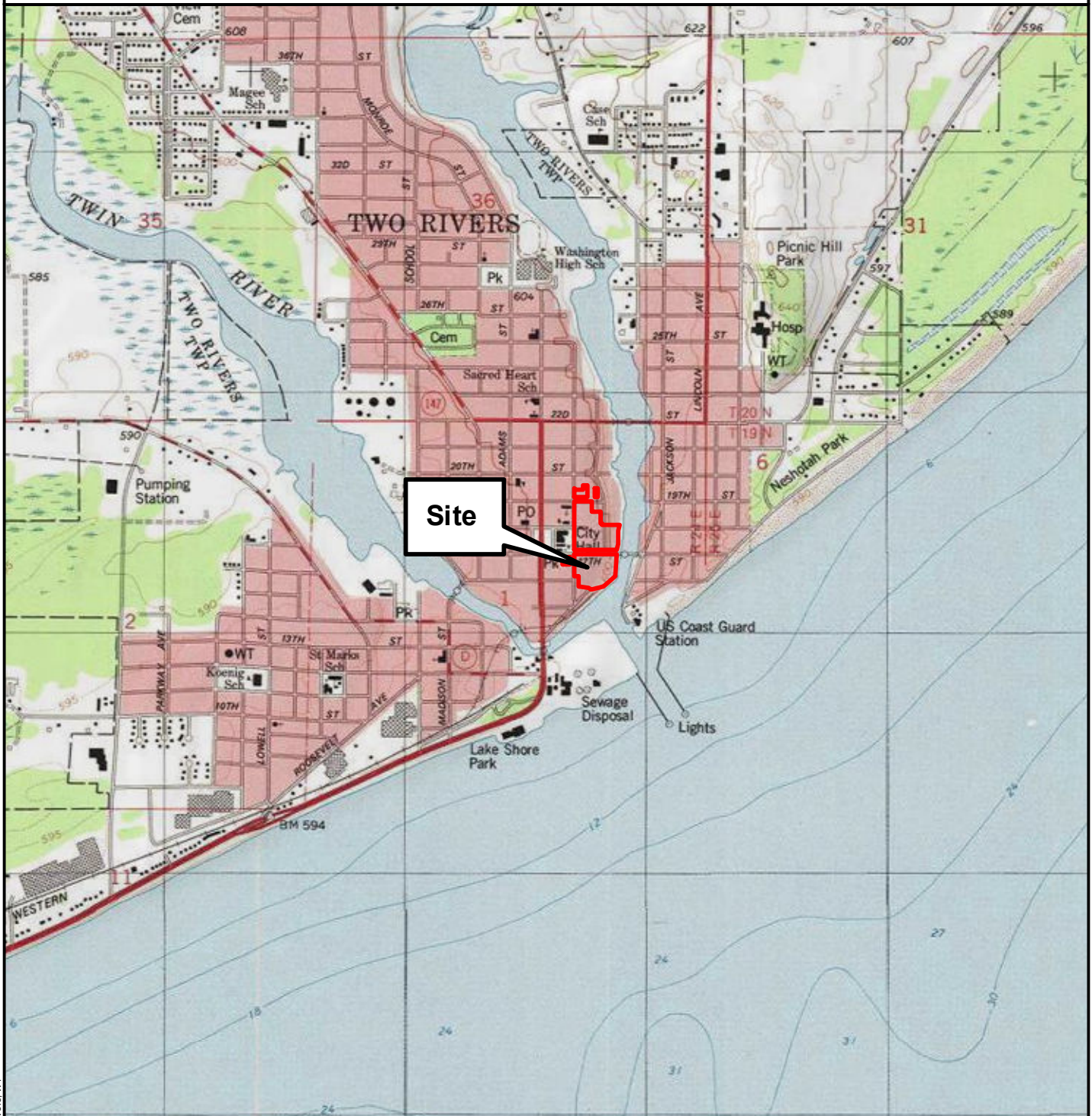
The primary contaminant of concern at the Site is TCE in groundwater and is the focus of remedial actions at the Site. The highest concentrations of TCE are observed in the Central Plume with lower concentrations in the North and South Plumes. Concentrations of TCE do not exceed the ES in the North Plume.

The following conclusions and recommendations are based on the results and analysis of the observed groundwater results:


- Active remediation is not required for the North and South Plumes, groundwater will be monitored in these areas to maintain current data until Site closure is recommended.
- Conduct an in-situ pilot test program to test effectiveness of in-situ chemical oxidation (ISCO) and in-situ chemical reduction (ISCR) as described in the *Pilot Test Work Plan for In-Situ Remediation* submitted to WDNR on December 21, 2023.



# SITE LOCATION MAP



## Legend

 Property Boundary



0 2,700 5,400  
Feet

## Figure 1

**Former Hamilton Industries  
1316 18th Street  
Two Rivers, WI**



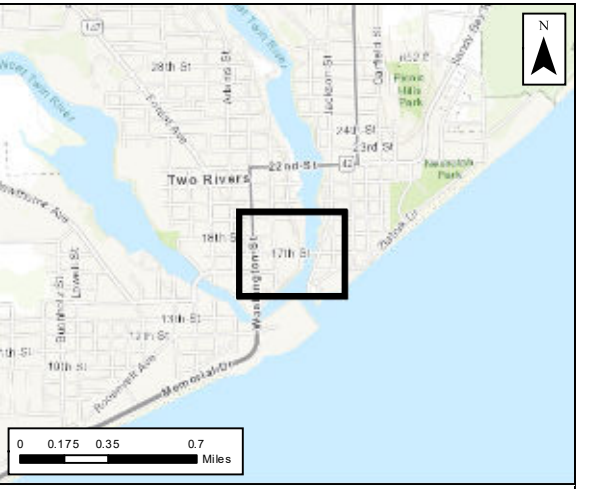
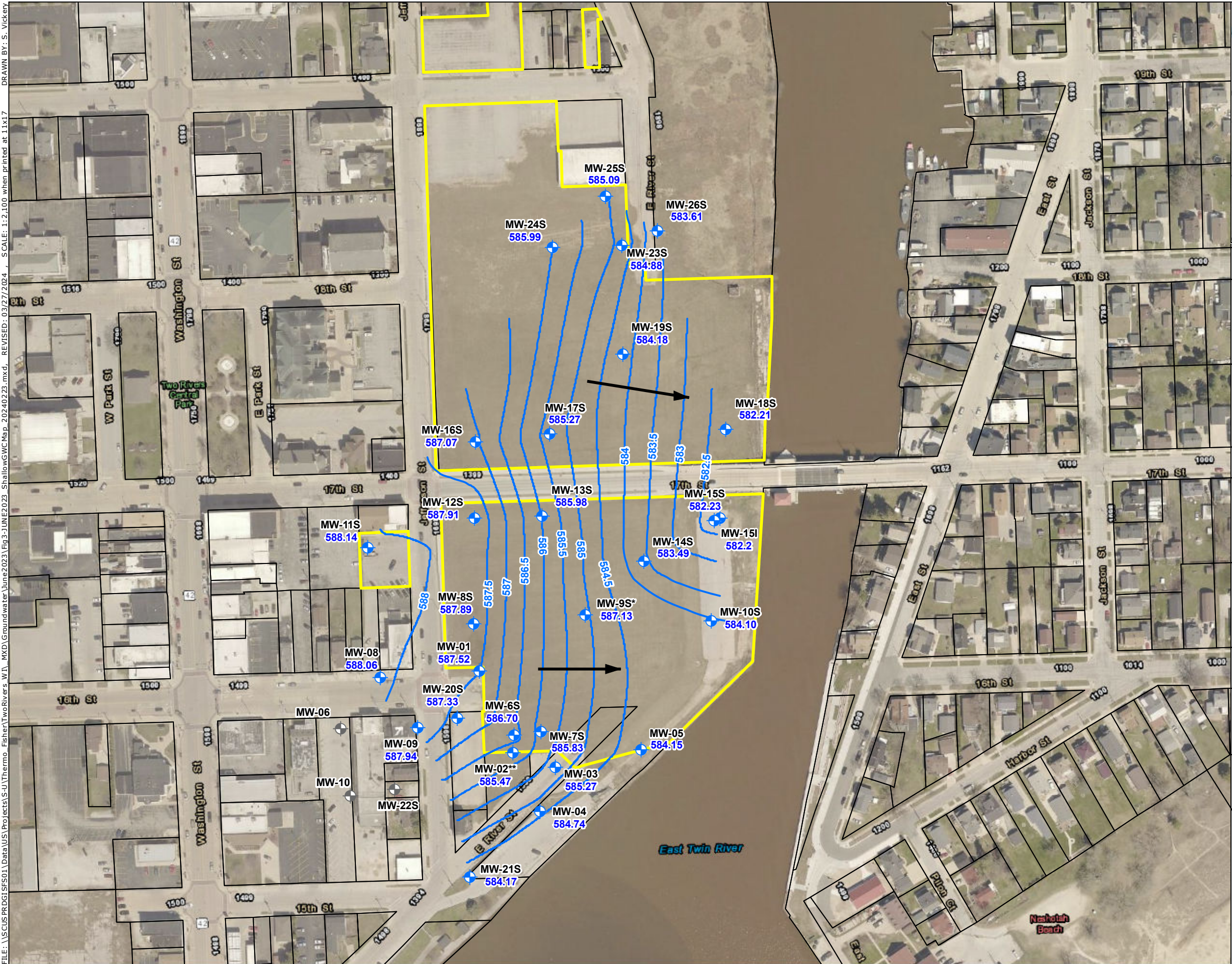
*This information is for environmental review purposes only.*





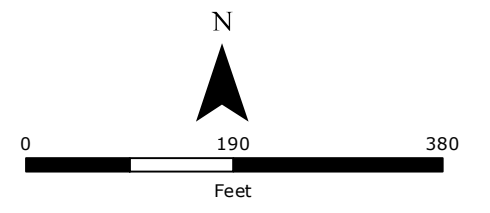


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- Legend**
- Monitoring Well Location
  - June 2023 Groundwater Contour (0.5 Ft. Interval)
  - Abandoned Monitoring Well Location
  - Property Boundary (Approximate)
  - Parcel Boundary

- Notes:**
1. Elevations are in Feet Above Mean Sea Level (MSL)
  2. Date of gauging June 19, 2023
  - 3: \* - Monitoring well not used in contouring due to suspected heaving
  - 4: \*\* - Monitoring well not used in contouring due to the presence of NAPL.

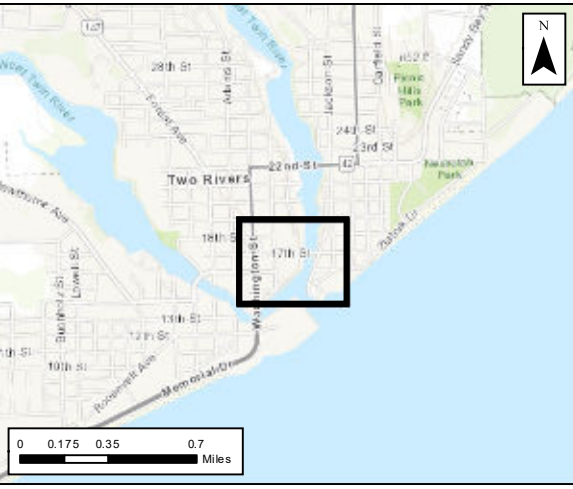
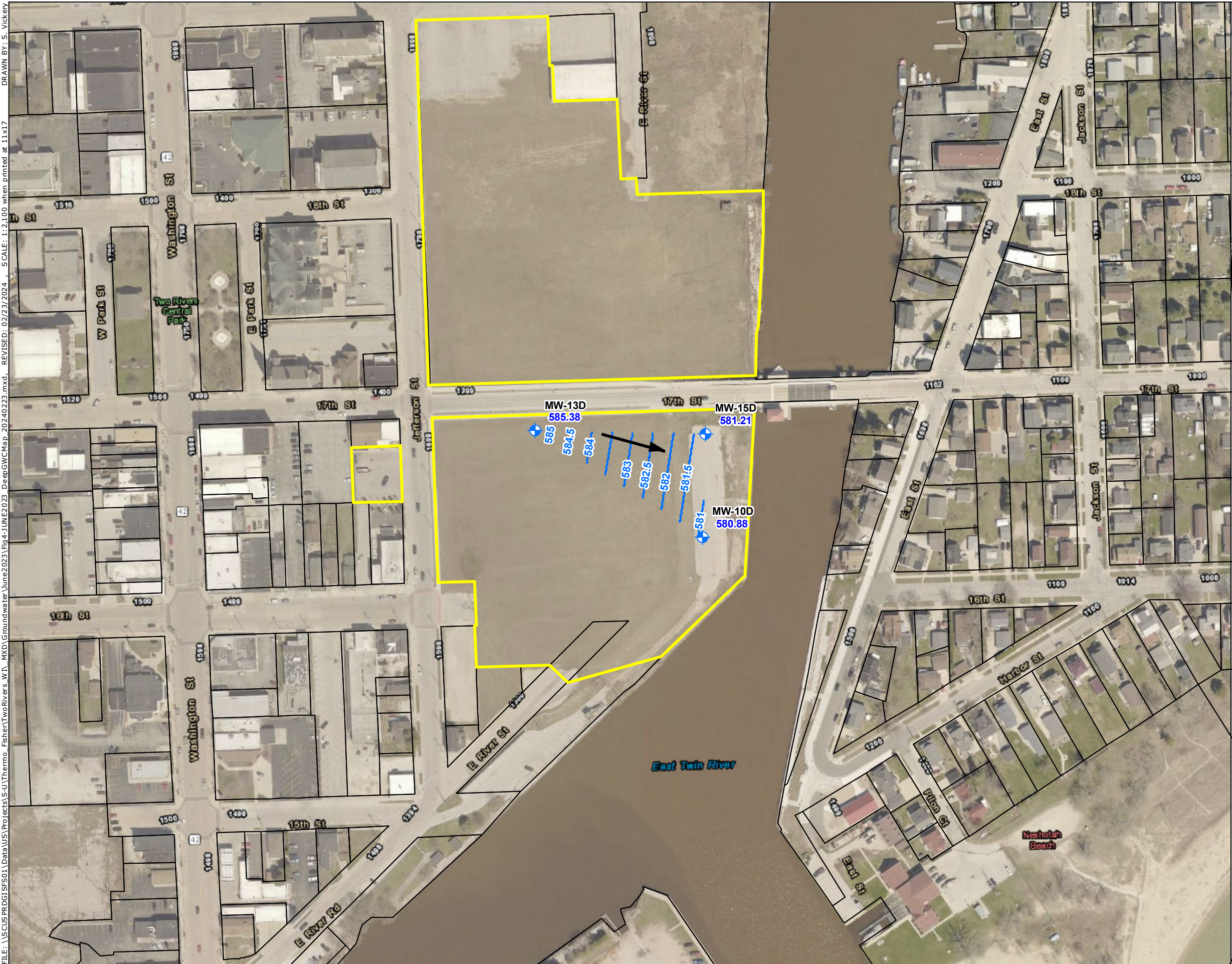


**Figure 3**  
**Shallow Groundwater Contour Map - June 2023**  
 Former Hamilton Industries  
 1316 18th Street  
 Two Rivers, Wisconsin



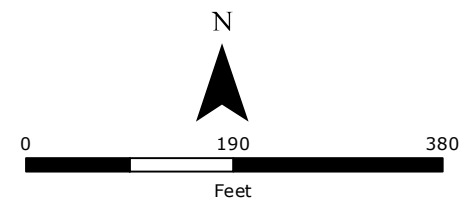


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- Legend**
- Monitoring Well Location
  - June 2023 Groundwater Contour (0.5 Ft. Interval)
  - Property Boundary (Approximate)
  - Parcel Boundary

- Notes:**
- Elevations are in Feet Above Mean Sea Level (MSL)
  - Date of gauging June 19, 2023

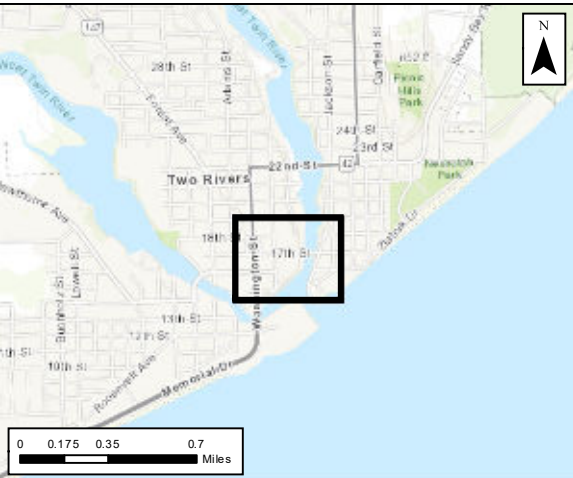
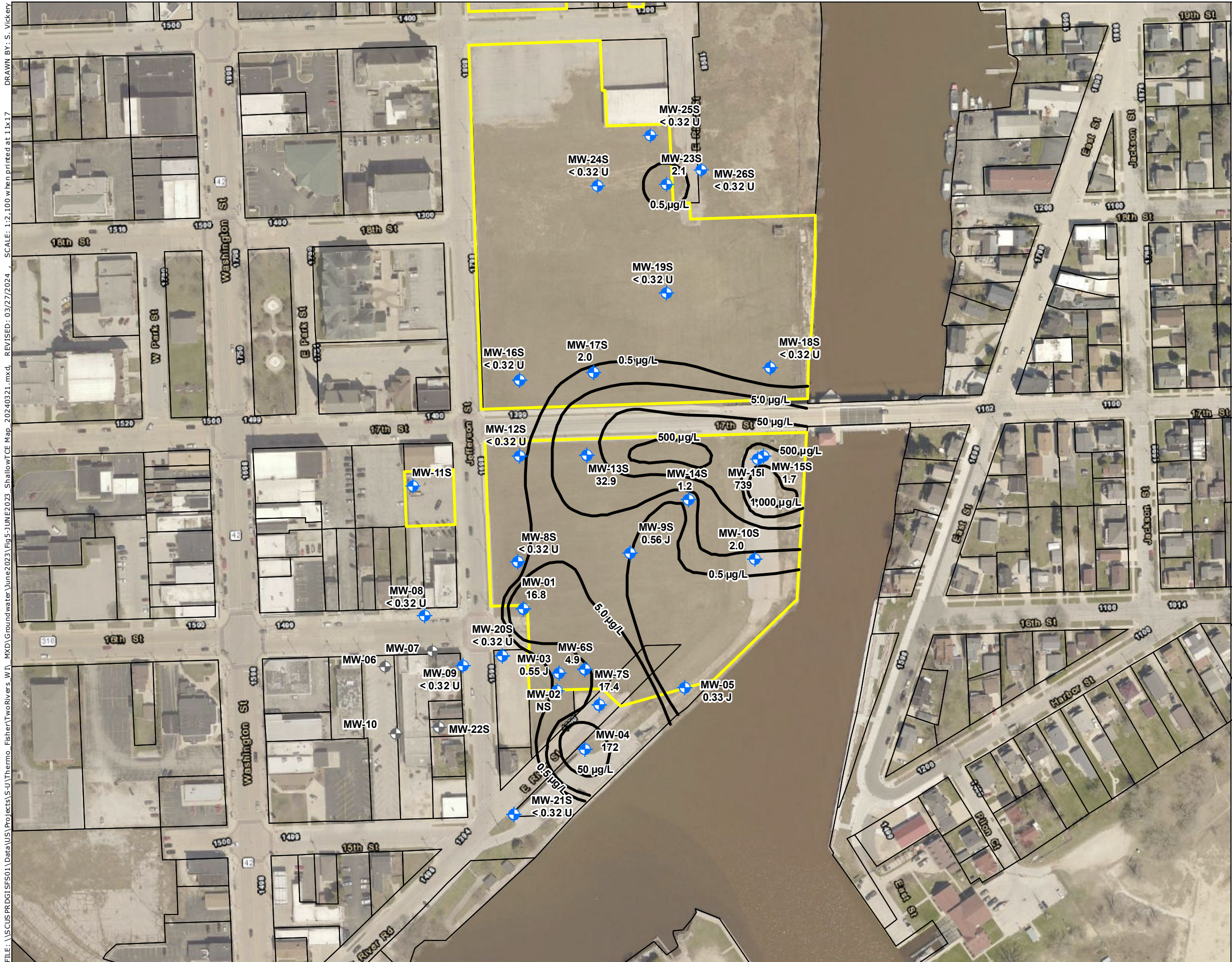


**Figure 4**  
**Deep Groundwater Contour Map**  
**June 2023**  
Former Hamilton Industries  
1316 18th Street  
Two Rivers, Wisconsin



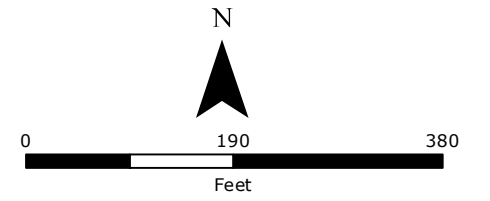


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- Legend**
- ◆ Monitoring Well Location
  - ◆ Abandoned Monitoring Well Location
  - June 2023 Shallow TCE Contour (µg/L)
  - Property Boundary (Approximate)
  - Parcel Boundary

- Notes:**
1. TCE - Trichloroethylene
  2. NS - Not Sampled
  3. TCE Concentrations are in micrograms per liter (µg/L)
  4. J - Estimated Lab Value
  5. U - Non-Detect
  6. Shallow TCE contours developed based on June 2023 monitoring well data and VAS data collected in 2017 and 2020
  7. Monitoring well data collected on June 19-22, 2023.



**Figure 5**  
**TCE Isoconcentration**  
**Map in Shallow Groundwater**  
**June 2023**  
 Former Hamilton Industries  
 1316 18th Street  
 Two Rivers, Wisconsin





**TABLE 1: Monitoring Well Geometry**

Former Hamilton Industries Site
1316 18th St, Two Rivers, WI
BRRTS #02-36-578316

Well	Installation Date	Top of Casing Elevation (ft. AMSL)	Top of Screen Elevation (ft. AMSL)	Bottom of Screen Elevation (ft. AMSL)	Screen Interval (ft. BGS)	Plume/Location	Interval	Annual Sampling	Quarterly Sampling
MW-01	11/22/2016	603.74	597.74	587.74	6-16 ft.	South	Shallow	X	X
MW-02	11/22/2016	602.44	594.44	584.44	8-18 ft.	South	Shallow	LNAPL	
MW-03	11/22/2016	597.5	587.5	577.5	10-20 ft.	South	Shallow	X	X
MW-04	11/22/2016	590.45	587.45	577.45	3-13 ft.	South	Shallow	X	X
MW-05	11/22/2023	585.88	582.88	572.88	3-13 ft.	South	Shallow	X	
<del>MW-06</del>	<del>1/29/2018</del>	<del>600.86</del>	<del>592.36</del>	<del>582.36</del>	<del>8.5-18.5ft.</del>	South/Upgradient	Shallow	Abandoned August 2019	
<del>MW-07</del>	<del>1/29/2018</del>	<del>601.06</del>	<del>592.06</del>	<del>582.06</del>	<del>9-19ft.</del>	South/Upgradient	Shallow	Abandoned August 2019	
MW-08	1/29/2018	601.18	592.18	582.18	12-22 ft.	South/Upgradient	Shallow	X	
MW-09	1/29/2018	601.44	589.44	579.44	12-22 ft.	South	Shallow	X	X
<del>MW-10</del>	<del>5/5/2018</del>	<del>601.00</del>	<del>589</del>	<del>579</del>	<del>12-22 ft.</del>	South/Upgradient	Shallow	Abandoned August 2019	
MW-6S	8/28/2017	602.72	594.72	584.72	8-18 ft.	South	Shallow	X	X
MW-7S	8/28/2017	602.28	590.28	580.28	12-22 ft.	South	Shallow	X	X
MW-8S	10/16/2017	604.00	594.00	584.00	10-20 ft.	South	Shallow	X	
MW-9S	10/16/2017	601.16	591.16	581.16	10-20 ft.	Central	Shallow	X	
MW-10D	10/18/2017	588.9	549.9	544.9	39-44 ft.	Central	Deep	X	
MW-10S	10/18/2017	589.91	586.91	576.91	3-13 ft.	Central	Shallow	X	
MW-11S	10/17/2017	603.49	592.49	582.49	11-21 ft.	Central/Upgradient	Shallow	Discontinue Sampling	
MW-12S	10/17/2017	603.93	593.93	583.93	10-20 ft.	Central	Shallow	X	
MW-13D	10/19/2017	601.54	556.54	551.54	45-50 ft.	Central	Deep	X	X
MW-13S	10/16/2017	601.78	591.78	581.78	10-20 ft.	Central	Shallow	X	X
MW-14S	10/10/2017	597.42	591.42	581.42	6-16 ft.	Central	Shallow	X	
MW-15D	10/18/2017	589.75	550.75	545.75	39-44 ft.	Central	Deep	X	X
MW-15I	10/7/2020	589.27	571.27	566.27	18-23ft.	Central	Intermediate	X	X
MW-15S	10/18/2017	589.16	586.16	576.16	3-13 ft.	Central	Shallow	X	X
MW-16S	10/19/2017	604.17	594.17	584.17	10-20 ft.	Central/Upgradient	Shallow	X	
MW-17S	10/19/2017	601.02	591.02	581.02	10-20 ft.	Central	Shallow	X	
MW-18S	10/17/2017	592.46	587.46	577.46	5-15 ft.	Central	Shallow	X	
MW-19S	10/17/2017	596.18	591.18	581.18	5-15 ft.	North	Shallow	X	
MW-20S	11/21/2017	601.27	591.27	581.27	10-20 ft.	South	Shallow	X	X
MW-21S	11/21/2017	591.41	583.41	573.41	8-18 ft.	South	Shallow	X	

**TABLE 1: Monitoring Well Geometry**

Former Hamilton Industries Site
1316 18th St, Two Rivers, WI
BRRTS #02-36-578316

Well	Installation Date	Top of Casing Elevation (ft. AMSL)	Top of Screen Elevation (ft. AMSL)	Bottom of Screen Elevation (ft. AMSL)	Screen Interval (ft. BGS)	Plume/Location	Interval	Annual Sampling	Quarterly Sampling
MW-22S	11/21/2017				10-20 ft.		Shallow	Abandoned August 2019	
MW-23S	6/7/2018	595.01	590.01	575.01	5-20 ft.	North	Shallow	X	X
MW-24S	6/5/2019	599.93	592.93	577.93	7-22 ft.	North/Upgradient	Shallow	X	
MW-25S	6/6//19	595.83	588.83	573.83	7-22 ft.	North	Shallow	X	
MW-26S	6/5/2019	589.92	582.92	567.92	7-22 ft.	North	Shallow	X	X
MW-27S	8/30/2022	597.97	587.97	577.97	10-20 ft.	central	shallow	Performance Monitoring Only	
MW-28S	8/29/2022	595.59	588.59	578.59	7-17 ft.	Central	Shallow	Performance Monitoring Only	
MW-29I	8/30/2022	593.45	586.45	576.45	7-17 ft.	central	Intermediate	Performance Monitoring Only	
MW-30I	8/30/2022	587.72	581.72	581.72	6-16	Central	Intermediate	Performance Monitoring Only	
MW-31S	8/31/2022	586.66	582.66	572.66	4-14 ft.	Central	shallow	Performance Monitoring Only	
<b>Totals</b>								<b>29</b>	<b>14</b>

**Notes:**

- All accessible on and off-site monitoring well levels will be gauged during both annual and semi-annual monitoring events.
- Off-site City monitoring well MW-02 contains LNAPL and is not sampled.
- LNAPL =Light Non-Aqueous Liquid
- Monitoring wells listed are existing. New monitoring wells will be evaluated for periodic sampling based on initial sampling results.
- Blanks indicate well will not be sampled during the semi-annual monitoring event.
- Groundwater samples will be analyzed for volatile organic compounds.

**Table 2: Groundwater Gauging Summary**  
**Former Hamilton Industries Site**  
**1316 18th St, Two Rivers, WI**  
**BRRTS #02-36-578316**

Well ID	Date	Depth to Groundwater (feet)	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
MW-01	4/5/2022	16.11	601.88	603.74	587.63
	6/27/2022	15.84	601.88	603.74	587.90
	9/6/2022	16.69	601.88	603.74	587.05
	11/16/2022	16.74	601.88	603.74	587.00
	3/13/2023	15.27	601.88	603.74	588.47
	6/19/2023	16.22	601.88	603.74	587.52
	8/28/2023	16.77	601.88	603.74	586.97
MW-02	11/13/2023	17.44	601.88	603.74	586.30
	6/29/2022	15.22	600.68	602.44	587.22
	9/6/2022	16.31	600.68	602.44	586.13
	11/16/2022	17.24	600.68	602.44	585.20
	3/13/2023	12.52	600.68	602.44	589.92
	6/20/2023	15.93	600.68	602.44	586.51
	8/28/2023	16.41	600.68	602.44	586.03
MW-03	11/13/2023	16.97	600.68	602.44	585.47
	4/5/2022	12.69	597.85	597.50	584.81
	6/27/2022	12.15	597.85	597.50	585.35
	9/6/2022	12.70	597.85	597.50	584.80
	11/16/2022	13.20	597.85	597.50	584.30
	6/19/2023	12.23	597.85	597.50	585.27
	8/28/2023	12.82	597.85	597.50	584.68
MW-04	11/13/2023	13.35	597.85	597.50	584.15
	4/5/2022	4.34	588.56	590.45	586.11
	6/27/2022	5.26	588.56	590.45	585.19
	9/6/2022	6.00	588.56	590.45	584.45
	11/16/2022	6.19	588.56	590.45	584.26
	3/13/2023	4.61	588.56	590.45	585.84
	6/19/2023	5.71	588.56	590.45	584.74
MW-05	8/28/2023	5.98	588.56	590.45	584.47
	11/13/2023	16.39	588.56	590.45	574.06
	4/5/2022	2.56	586.26	585.88	583.32
	6/27/2022	1.87	586.26	585.88	584.01
	9/6/2022	2.26	586.26	585.88	583.62
	11/16/2022	2.82	586.26	585.88	583.06
	3/13/2023	2.07	586.26	585.88	583.81
MW-05	6/19/2023	1.73	586.26	585.88	584.15
	8/28/2023	2.29	586.26	585.88	583.59
	11/13/2023	3.02	586.26	585.88	582.86

**Table 2: Groundwater Gauging Summary  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRS #02-36-578316**

Well ID	Date	Depth to Groundwater (feet)	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
MW-07	4/5/2022	12.98	601.35	601.06	588.08
	6/27/2022	12.77	601.35	601.06	588.29
MW-08	4/5/2022	12.68	601.58	601.18	588.50
	6/27/2022	12.39	601.58	601.18	588.79
	9/6/2022	13.38	601.58	601.18	587.80
	11/16/2022	13.95	601.58	601.18	587.23
	3/13/2023	12.18	601.58	601.18	589.00
	6/19/2023	13.12	601.58	601.18	588.06
	8/28/2023	13.03	601.58	601.18	588.15
	11/13/2023	13.80	601.58	601.18	587.38
MW-09	4/5/2022	13.31	601.76	601.44	588.13
	6/27/2022	13.04	601.76	601.44	588.40
	9/6/2022	13.79	601.76	601.44	587.65
	11/16/2022	15.00	601.76	601.44	586.44
	3/13/2023	12.29	601.76	601.44	589.15
	6/19/2023	13.50	601.76	601.44	587.94
	8/28/2023	14.17	601.76	601.44	587.27
	11/13/2023	14.42	601.76	601.44	587.02
MW-10D	4/5/2022	5.13	587.45	588.90	583.77
	6/27/2022	8.10	587.45	588.90	580.80
	9/6/2022	8.00	587.45	588.90	580.90
	11/16/2022	7.05	587.45	588.90	581.85
	3/13/2023	7.65	587.45	588.90	581.25
	6/19/2023	8.02	587.45	588.90	580.88
	8/28/2023	8.48	587.45	588.90	580.42
	11/13/2023	7.15	587.45	588.90	581.75
MW-10S	4/5/2022	7.64	587.49	589.91	582.27
	6/27/2022	5.45	587.49	589.91	584.46
	9/6/2022	6.07	587.49	589.91	583.84
	11/16/2022	6.35	587.49	589.91	583.56
	3/13/2023	5.16	587.49	589.91	584.75
	6/19/2023	5.81	587.49	589.91	584.10
	8/28/2023	6.14	587.49	589.91	583.77
	11/13/2023	6.56	587.49	589.91	583.35
MW-11S	4/5/2022	15.37	603.86	603.49	588.12
	6/27/2022	14.64	603.86	603.49	588.85
	3/13/2023	15.17	603.86	603.49	588.32
	6/19/2023	15.35	603.86	603.49	588.14
	8/28/2023	15.17	603.86	603.49	588.32
	11/13/2023	15.96	603.86	603.49	587.53

**Table 2: Groundwater Gauging Summary  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

Well ID	Date	Depth to Groundwater (feet)	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
MW-12S	4/5/2022	17.11	601.88	603.93	586.82
	6/27/2022	15.97	601.88	603.93	587.96
	9/6/2022	16.42	601.88	603.93	587.51
	11/16/2022	16.99	601.88	603.93	586.94
	3/13/2023	16.79	601.88	603.93	587.14
	6/19/2023	16.02	601.88	603.93	587.91
	8/28/2023	16.61	601.88	603.93	587.32
MW-13D	11/13/2023	17.07	601.88	603.93	586.86
	4/5/2022	17.17	599.44	601.54	584.37
	6/27/2022	16.48	599.44	601.54	585.06
	9/6/2022	16.62	599.44	601.54	584.92
	11/16/2022	17.04	599.44	601.54	584.50
	3/13/2023	17.36	599.44	601.54	584.18
	6/19/2023	16.16	599.44	601.54	585.38
MW-13S	8/28/2023	16.72	599.44	601.54	584.82
	11/13/2023	17.19	599.44	601.54	584.35
	4/5/2022	17.52	599.50	601.78	584.26
	6/27/2022	15.97	599.50	601.78	585.81
	9/6/2022	16.54	599.50	601.78	585.24
	11/16/2022	17.32	599.50	601.78	584.46
	3/13/2023	17.16	599.50	601.78	584.62
MW-14S	6/19/2023	15.80	599.50	601.78	585.98
	8/28/2023	16.79	599.50	601.78	584.99
	11/13/2023	17.55	599.50	601.78	584.23
	4/5/2022	14.09	595.61	597.42	583.33
	6/27/2022	13.81	595.61	597.42	583.61
	9/6/2022	14.30	595.61	597.42	583.12
	11/16/2022	14.78	595.61	597.42	582.64
MW-15D	3/13/2023	13.84	595.61	597.42	583.58
	6/19/2023	13.93	595.61	597.42	583.49
	8/28/2023	14.45	595.61	597.42	582.97
	11/13/2023	14.85	595.61	597.42	582.57
	4/5/2022	7.92	587.42	589.75	581.83
	6/27/2022	8.48	587.42	589.75	581.27
	9/6/2022	8.54	587.42	589.75	581.21
MW-15D	11/16/2022	8.99	587.42	589.75	580.76
	3/13/2023	8.05	587.42	589.75	581.70
	6/19/2023	8.54	587.42	589.75	581.21
	8/28/2023	9.17	587.42	589.75	580.58
	11/13/2023	8.59	587.42	589.75	581.16

**Table 2: Groundwater Gauging Summary**  
**Former Hamilton Industries Site**  
**1316 18th St, Two Rivers, WI**  
**BRRTS #02-36-578316**

Well ID	Date	Depth to Groundwater (feet)	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
MW-15I	4/5/2022	6.80	587.64	589.27	582.47
	6/27/2022	6.88	587.64	589.27	582.39
	9/6/2022	7.14	587.64	589.27	582.13
	11/16/2022	7.41	587.64	589.27	581.86
	3/13/2023	6.96	587.64	589.27	582.31
	6/19/2023	7.07	587.64	589.27	582.20
	8/28/2023	7.21	587.64	589.27	582.06
MW-15S	11/13/2023	7.51	587.64	589.27	581.76
	4/5/2022	6.67	587.36	589.16	582.49
	6/27/2022	6.76	587.36	589.16	582.40
	9/6/2022	7.06	587.36	589.16	582.10
	11/16/2022	7.32	587.36	589.16	581.84
	3/13/2023	6.78	587.36	589.16	582.38
	6/19/2023	6.93	587.36	589.16	582.23
MW-16S	8/28/2023	7.14	587.36	589.16	582.02
	11/13/2023	7.42	587.36	589.16	581.74
	4/5/2022	17.80	601.96	604.17	586.37
	6/27/2022	17.02	601.96	604.17	587.15
	9/6/2022	17.46	601.96	604.17	586.71
	11/16/2022	18.04	601.96	604.17	586.13
	3/13/2023	17.64	601.96	604.17	586.53
MW-17S	6/19/2023	17.10	601.96	604.17	587.07
	8/28/2023	17.62	601.96	604.17	586.55
	11/13/2023	18.14	601.96	604.17	586.03
	4/5/2022	16.52	599.20	601.02	584.50
	6/27/2022	15.77	599.20	601.02	585.25
	9/6/2022	16.19	599.20	601.02	584.83
	11/16/2022	16.70	599.20	601.02	584.32
MW-18S	3/13/2023	16.26	599.20	601.02	584.76
	6/19/2023	15.75	599.20	601.02	585.27
	8/28/2023	16.35	599.20	601.02	584.67
	11/13/2023	16.79	599.20	601.02	584.23
	4/5/2022	9.88	590.40	592.46	582.58
	6/27/2022	10.08	590.40	592.46	582.38
	9/6/2022	10.31	590.40	592.46	582.15
MW-18S	11/16/2022	10.65	590.40	592.46	581.81
	3/13/2023	10.09	590.40	592.46	582.37
	6/19/2023	10.25	590.40	592.46	582.21
	8/28/2023	10.43	590.40	592.46	582.03
	11/13/2023	5.70	590.40	592.46	586.76



**Table 2: Groundwater Gauging Summary**  
**Former Hamilton Industries Site**  
**1316 18th St, Two Rivers, WI**  
**BRRTS #02-36-578316**

Well ID	Date	Depth to Groundwater (feet)	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
MW-19S	4/5/2022	11.90	594.42	596.18	584.28
	6/27/2022	11.88	594.42	596.18	584.30
	9/6/2022	12.20	594.42	596.18	583.98
	11/16/2022	12.57	594.42	596.18	583.61
	3/13/2023	11.99	594.42	596.18	584.19
	6/19/2023	12.00	594.42	596.18	584.18
	8/28/2023	12.37	594.42	596.18	583.81
MW-20S	11/13/2023	12.68	594.42	596.18	583.50
	4/5/2022	13.01	601.72	601.27	588.26
	6/27/2022	13.19	601.72	601.27	588.08
	9/6/2022	14.31	601.72	601.27	586.96
	11/16/2022	15.02	601.72	601.27	586.25
	3/14/2023	11.67	601.72	601.27	589.60
	6/19/2023	13.94	601.72	601.27	587.33
MW-21S	8/28/2023	14.29	601.72	601.27	586.98
	11/13/2023	14.91	601.72	601.27	586.36
	4/5/2022	5.99	591.70	591.41	585.42
	6/27/2022	6.50	591.70	591.41	584.91
	9/6/2022	7.25	591.70	591.41	584.16
	11/16/2022	7.53	591.70	591.41	583.88
	3/13/2023	6.43	591.70	591.41	584.98
MW-23S	6/19/2023	7.24	591.70	591.41	584.17
	8/28/2023	7.26	591.70	591.41	584.15
	11/13/2023	7.64	591.70	591.41	583.77
	4/5/2022	9.79	592.97	595.01	585.22
	6/27/2022	9.99	592.97	595.01	585.02
	9/6/2022	11.28	592.97	595.01	583.73
	11/16/2022	10.53	592.97	595.01	584.48
MW-24S	3/13/2023	10.02	592.97	595.01	584.99
	6/19/2023	10.13	592.97	595.01	584.88
	8/28/2023	10.35	592.97	595.01	584.66
	11/13/2023	11.56	592.97	595.01	583.45
	4/5/2022	14.28	597.72	599.93	585.65
	6/27/2022	13.84	597.72	599.93	586.09
	9/6/2022	14.15	597.72	599.93	585.78
MW-24S	11/16/2022	14.54	597.72	599.93	585.39
	3/13/2023	14.20	597.72	599.93	585.73
	6/19/2023	13.94	597.72	599.93	585.99
	8/28/2023	14.29	597.72	599.93	585.64
	11/13/2023	14.60	597.72	599.93	585.33

**Table 2: Groundwater Gauging Summary  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

Well ID	Date	Depth to Groundwater (feet)	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
MW-25S	4/5/2022	10.51	593.83	595.83	585.32
	6/27/2022	10.55	593.83	595.83	585.28
	9/6/2022	10.86	593.83	595.83	584.97
	11/16/2022	11.16	593.83	595.83	584.67
	3/13/2023	10.72	593.83	595.83	585.11
	6/19/2023	10.74	593.83	595.83	585.09
	8/28/2023	10.94	593.83	595.83	584.89
MW-26S	11/13/2023	11.23	593.83	595.83	584.60
	4/6/2022	4.84	590.39	589.92	585.08
	6/27/2022	6.23	590.39	589.92	583.69
	9/6/2022	8.40	590.39	589.92	581.52
	11/16/2022	6.54	590.39	589.92	583.38
	3/13/2023	6.19	590.39	589.92	583.73
	6/19/2023	6.31	590.39	589.92	583.61
MW-27S	8/28/2023	6.36	590.39	589.92	583.56
	11/13/2023	6.48	590.39	589.92	583.44
	9/6/2022	15.52	597.97	599.96	584.44
	3/13/2023	15.60	597.97	599.96	584.36
MW-28S	11/13/2023	16.24	597.97	599.96	583.72
	9/6/2022	13.86	595.59	597.39	583.53
	3/13/2023	13.79	595.59	597.39	583.60
MW-29I	11/13/2023	14.35	595.59	597.39	583.04
	9/6/2022	12.92	593.45	595.87	582.95
	3/13/2023	13.67	593.45	595.87	582.20
MW-30I	11/13/2023	13.32	593.45	595.87	582.55
	9/6/2022	6.85	587.72	589.59	582.74
	3/13/2023	6.34	587.72	589.59	583.25
MW-31S	11/13/2023	7.28	587.72	589.59	582.31
	9/6/2022	6.75	586.66	588.78	582.03
	3/13/2023	6.25	586.66	588.78	582.53
MW-6S	11/13/2023	7.12	586.66	588.78	581.66
	4/5/2022	14.85	601.11	602.72	587.87
	6/27/2022	15.47	601.11	602.72	587.25
	9/6/2022	16.50	601.11	602.72	586.22
	11/16/2022	17.20	601.11	602.72	585.52
	3/13/2023	13.87	601.11	602.72	588.85
	6/19/2023	16.02	601.11	602.72	586.70
8/28/2023	16.64	601.11	602.72	586.08	
11/13/2023	17.22	601.11	602.72	585.50	

**Table 2: Groundwater Gauging Summary  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

Well ID	Date	Depth to Groundwater (feet)	Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Groundwater Elevation (feet)
MW-7S	4/5/2022	15.97	600.28	602.28	586.31
	6/27/2022	16.10	600.28	602.28	586.18
	9/6/2022	16.94	600.28	602.28	585.34
	11/16/2022	18.60	600.28	602.28	583.68
	3/13/2023	15.18	600.28	602.28	587.10
	6/19/2023	16.45	600.28	602.28	585.83
	11/13/2023	17.66	600.28	602.28	584.62
MW-8S	4/5/2022	17.13	601.98	604.00	586.87
	6/27/2022	16.04	601.98	604.00	587.96
	9/6/2022	16.61	601.98	604.00	587.39
	11/16/2022	17.27	601.98	604.00	586.73
	3/13/2023	16.76	601.98	604.00	587.24
	6/19/2023	16.11	601.98	604.00	587.89
	8/28/2023	16.82	601.98	604.00	587.18
11/13/2023	17.35	601.98	604.00	586.65	
MW-9S	4/5/2022	15.09	598.90	601.16	586.07
	6/27/2022	14.14	598.90	601.16	587.02
	9/6/2022	14.71	598.90	601.16	586.45
	11/16/2022	15.39	598.90	601.16	585.77
	3/13/2023	14.09	598.90	601.16	587.07
	6/19/2023	14.03	598.90	601.16	587.13
	8/28/2023	14.97	598.90	601.16	586.19
11/13/2023	15.64	598.90	601.16	585.52	

Notes:

MW = Monitoring Well

Depth to groundwater measurements measured from top of casing

Well locations surveyed according to: State Plane NAD83 Wisconsin South 4803 Feet

**Table 3: Summary of Field Sampling Parameters  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

Field Measure Unit		Temperature, Field C	pH, Field pH units	Specific Conductivity uS/cm	Oxidation-Reduction Potential, Field mV	Turbidity, Field NTU	Dissolved Oxygen, Field mg/L	
Location ID	Sample Date	Well Screen Interval						
MW-01	04/06/2022	6-16 ft	8.9	7.48	4454	122.7	1.19	6.8
	06/30/2022	6-16 ft	12.1	7.86	1765	24.5	0.02	0.91
	09/06/2022	6-16 ft	14.6	7.82	2.527	190.5	2	0.56
	03/14/2023	6-16 ft	6.7	7.6	1519	152.9	23.1	9.76
	08/29/2023	6-16 ft	13.6	7.75	2140	59.6	10.1	0.37
MW-03	04/05/2022	10-20 ft	7.5	7.49	2023	-59.4	32	0.36
	06/28/2022	10-20 ft	13.1	7.26	1486	-71.3	8.31	0.16
	09/07/2022	10-20 ft	15.1	7.38	2050	-127.8	7.99	0.6
	11/17/2022	10-20 ft	10.1	7.48	1899	5.1	25.4	0.49
	03/14/2023	10-20 ft	8.3	7.26	1673	-210.9	6.43	0.23
	06/19/2023	10-20 ft	12.9	7.43	2258	-47.8	7.57	3.53
	08/29/2023	10-20 ft	14.8	7.44	1892	-119.7	2.57	0.12
MW-04	11/14/2023	10-20 ft	13	7.42	1798	-136.6	4.73	-0.09
	04/07/2022	3-13 ft	6.4	7.31	1257	100.3	6.44	3.13
	06/30/2022	3-13 ft	14.1	7.15	917	116.3	3.53	0.31
	09/07/2022	3-13 ft	17.7	7.08	1182	54.1	2.41	1.54
	11/17/2022	3-13 ft	9.5	7.24	1013	53.7	2.29	3.45
	03/14/2023	3-13 ft	4.1	7.07	993	-68.6	1.58	7.8
MW-05	11/15/2023	3-13 ft	13.9	7.11	1237	48	5.36	0.59
	06/29/2022	3-13 ft	15.9	7.46	844	-117.6	40.6	0.01
	06/21/2023	3-13 ft	15.3	7.5	872	57.8	8.36	0.18
MW-08	06/29/2022	9-19 ft	14.2	7.37	799	-56.3	2.9	0.21
	06/21/2023	9-19 ft	13	7.37	948	138.8	5.7	0.3

**Table 3: Summary of Field Sampling Parameters  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

Field Measure Unit		Temperature, Field C	pH, Field pH units	Specific Conductivity uS/cm	Oxidation-Reduction Potential, Field mV	Turbidity, Field NTU	Dissolved Oxygen, Field mg/L	
Location ID	Sample Date	Well Screen Interval						
MW-09	04/05/2022	12-22 ft	7.9	7.41	1059	77.1	1.59	2.22
	06/29/2022	12-22 ft	12.9	7.42	1422	120.1	2.46	5.89
	09/07/2022	12-22 ft	13.9	7.22	1484	118.2	7.54	3.81
	11/16/2022	12-22 ft	10.9	7.36	1402	157	0.02	25.6
	03/14/2023	12-22 ft	7.2	7.3	953	-56.6	1.11	8.59
	06/22/2023	12-22 ft	11.3	7.4	1511	117.7	1.79	5.85
	08/29/2023	12-22 ft	13.1	7.32	1591	83	0.53	4.71
	11/14/2023	12-22 ft	12.6	7.39	1395	37.4	0.02	3.92
MW-10D	06/28/2022	39-44 ft	15.1	7.66	250	-128.7	11.7	0
	06/21/2023	39-44 ft	14.3	7.81	299.5	78.8	3.3	0.23
MW-10S	06/28/2022	3-13 ft	15.8	7.36	850	80.1	1.17	2.41
	06/20/2023	3-13 ft	14.8	7.32	1891	142.8	0.41	1.74
MW-12S	06/28/2022	10-20 ft	14.7	7.52	1711	107.6	1.47	5.5
	06/21/2023	10-20 ft	12.5	7.42	1971	148.8	0.25	7.19
MW-13D	04/05/2022	45-50 ft	9.1	7.89	370.1	-126.7	0.65	0.31
	06/29/2022	45-50 ft	13.6	8.01	221.1	-135.7	0.36	0.27
	09/07/2022	45-50 ft	18.2	7.91	0.364	-221.9	3.16	0.14
	11/17/2022	45-50 ft	9.4	8.19	488.7	-166.9	0.02	1.6
	03/15/2023	45-50 ft	7.1	8.02	305.3	-83.9	0.97	0.38
	06/20/2023	45-50 ft	13.9	7.73	383.9	133.9	4.56	0.15
	11/14/2023	45-50 ft	12.1	7.81	331.2	-172.6	3.44	-0.05
MW-13S	04/05/2022	10-20 ft	8.6	7.48	1703	59.3	2.81	1.82
	06/30/2022	10-20 ft	12.9	7.95	561	59	0.02	9.48
	09/06/2022	10-20 ft	15	7.76	1.084	198.9	1.11	8.77
	11/17/2022	10-20 ft	9.8	7.83	2730	110.4	1.73	31.2
	03/14/2023	10-20 ft	8.6	7.65	1275	178.6	1.95	6.4
	06/20/2023	10-20 ft	12.4	7.87	793	174.1	0.47	9.36
	11/15/2023	10-20 ft	14.4	7.5	1753	52.9	0.02	4.12

**Table 3: Summary of Field Sampling Parameters  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

Field Measure Unit		Temperature, Field C	pH, Field pH units	Specific Conductivity uS/cm	Oxidation-Reduction Potential, Field mV	Turbidity, Field NTU	Dissolved Oxygen, Field mg/L	
Location ID	Sample Date	Well Screen Interval						
MW-14S	06/29/2022	6-16 ft	13.1	7.37	1455	130.4	2.51	5.73
MW-15D	04/06/2022	39-44 ft	6.5	7.84	334.6	-34	1.05	0.31
	06/29/2022	39-44 ft	13.5	8.11	199.7	-130.2	0.02	0.26
	09/07/2022	39-44 ft	14.9	7.83	325.3	-154.6	7.86	0.44
	11/17/2022	39-44 ft	10.3	7.85	287.1	-10.9	0.02	0.44
	03/15/2023	39-44 ft	5.5	8.04	279.6	-20.7	1.88	0.43
	06/22/2023	39-44 ft	14.6	7.81	311.1	77.5	3.16	0.18
	08/30/2023	39-44 ft	13.5	7.92	286.2	-148.8	1.01	0.09
MW-15I	11/15/2023	39-44 ft	13.1	8.04	284.2	-155.3	2.19	0.39
	04/06/2022	18-23 ft	8.5	7.6	1297	76.2	6.72	1.02
	06/30/2022	18-23 ft	14.4	7.57	1138	135.1	18.6	0
	09/07/2022	18-23 ft	18.1	7.5	1333	81.4	5.64	1.79
	11/17/2022	18-23 ft	10.3	7.74	1188	65.8	0.74	3.78
	03/15/2023	18-23 ft	7.1	7.46	1228	-132.6	1.73	1.97
	06/23/2023	18-23 ft	12.1	7.51	2613	33	12.9	0.17
MW-15S	08/30/2023	18-23 ft	13.8	7.48	1310	54	3.39	0.28
	11/15/2023	18-23 ft	14.4	7.4	1286	84.3	5.55	0.17
	04/06/2022	3-13 ft	5.1	7.62	854	77.4	1.5	7.17
	06/29/2022	3-13 ft	17.2	7.35	671	103.3	2.39	1.85
	09/07/2022	3-13 ft	20.4	7.19	839	16.9	0.74	2.29
	11/17/2022	3-13 ft	9.6	7.46	665	65.1	0.02	3.81
	03/15/2023	3-13 ft	4.7	7.43	745	-78.8	0.41	6.39
	06/22/2023	3-13 ft	15.1	7.35	812	136.9	0.43	2.35
08/30/2023	3-13 ft	19.7	7.29	781	33.3	0.75	3.43	
	11/14/2023	3-13 ft	13.8	7.36	977	75.6	4.32	4.97

**Table 3: Summary of Field Sampling Parameters  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

Field Measure Unit		Temperature, Field C	pH, Field pH units	Specific Conductivity uS/cm	Oxidation-Reduction Potential, Field mV	Turbidity, Field NTU	Dissolved Oxygen, Field mg/L	
Location ID	Sample Date	Well Screen Interval						
MW-16S	06/27/2022	10-20 ft	17.8	6.99	2.7	198.5	4.51	8.61
MW-17S	06/29/2022	10-20 ft	14.9	7.97	1836	134.8	3.27	6.22
MW-18S	06/27/2022	5-15 ft	12.9	7.41	1014	114.1	20.9	0.02
MW-19S	06/22/2022	5-15 ft	18.2	7.95	3.4	130.6	0.29	8.34
MW-20S	04/06/2022	10-20 ft	8.7	7.43	1902	118.6	2.86	5.28
	06/29/2022	10-20 ft	12.4	7.65	1056	70.5	3.95	6.8
	09/07/2022	10-20 ft	16.7	7.48	1.849	204.9	9	5.65
	11/16/2022	10-20 ft	11.1	7.37	1845	185.7	8.19	40.6
	03/14/2023	10-20 ft	7.7	7.47	1658	151.27	9.79	8.44
	06/22/2023	10-20 ft	10.7	7.43	1861	146.6	7.5	7.22
MW-21S	11/15/2023	10-20 ft	12.7	7.4	2256	39	20.9	2.3
	06/28/2022	8-18 ft	13.1	7.41	983	4.6	0.18	0.5
MW-23S	06/20/2023	8-18 ft	13.1	7.46	1351	144.5	6.42	0.3
	04/06/2022	5-20 ft	7	7.53	943	111.1	3.61	7.53
	06/29/2022	5-20 ft	13.1	7.8	493.9	51	2.48	7.59
	09/06/2022	5-20 ft	16.3	7.29	937	86	1.22	7.47
	11/16/2022	5-20 ft	11.4	7.48	958	113.5	4.09	7.56
	03/14/2023	5-20 ft	6.9	7.46	727	-35.6	1.21	8.69
MW-24S	11/14/2023	5-20 ft	13.3	7.43	1048	94.1	3.12	7.3
MW-24S	06/22/2022	7-22 ft	13.9	7.81	600	72.5	2.25	6.38

**Table 3: Summary of Field Sampling Parameters  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

Field Measure Unit		Temperature, Field C	pH, Field pH units	Specific Conductivity uS/cm	Oxidation-Reduction Potential, Field mV	Turbidity, Field NTU	Dissolved Oxygen, Field mg/L	
Location ID	Sample Date	Well Screen Interval						
MW-25S	06/29/2022	7-22 ft	14.2	7.69	857	99.1	1.89	7.24
MW-26S	04/06/2022	7-22 ft	6.8	6.91	778	-52.3	12.7	0.2
	06/28/2022	7-22 ft	13.9	7.63	1135	62.4	4.37	0.26
	09/06/2022	7-22 ft	15.6	7.27	1861	70.3	6.21	0.5
	11/16/2022	7-22 ft	11.8	7.5	1644	77.4	20.7	0.38
	03/14/2023	7-22 ft	7.5	7.38	1612	-311.2	2.28	0.09
	11/14/2023	7-22 ft	13.9	7.49	1479	9.9	39.6	0.35
MW-27S	09/07/2022	10-20 ft	16.3	7.71	0.805	201.9	0.76	7.92
MW-28S	09/07/2022	7-17 ft	16.3	7.54	1.579	119.2	24.7	2.32
MW-29I	09/07/2022	7-17 ft	15.7	7.13	1644	54.6	4.68	6.44
MW-30I	09/07/2022	6-16 ft	19	7.22	1232	71.9	9.42	2.11
MW-31S	09/07/2022	4-14 ft	16.9	6.99	914	-151.4	6.98	0.43
MW-6S	04/06/2022	8-18 ft	8.8	7.17	1048	128.2	2.32	7.37
	06/29/2022	8-18 ft	12	7.27	716	71.2	0.02	5.56
	09/07/2022	8-18 ft	14.1	7.11	1.479	199.9	0.7	4.43
	11/17/2022	8-18 ft	9.9	7.27	2645	212.6	1.72	17
	03/14/2023	8-18 ft	7.5	7.22	1041	174.7	4.63	8.27
	08/28/2023	8-18 ft	12.9	6.99	1905	83	10.2	2.67
	11/14/2023	8-18 ft	12.1	6.99	1829	97	8.22	1.98
MW-7S	04/07/2022	12-22 ft	8.2	7.18	4203	-3	0.78	0.58
	06/29/2022	12-22 ft	12	7.4	2538	-23.4	0.02	0.65
	09/07/2022	12-22 ft	15.6	7.29	3.441	-40.2	18.1	0.42
	11/17/2022	12-22 ft	9.8	7.56	5138	-79.2	1.51	3.4
	03/14/2023	12-22 ft	7	7.18	2724	-164.2	0.42	0.51
	11/15/2023	12-22 ft	12.6	7.12	3726	-55.6	0.71	0.58
MW-8S	06/29/2022	10-20 ft	12.3	7.54	2355	43	0.27	1.96
	06/21/2023	10-20 ft	12.1	7.4	2606	161.9	0.02	3.55
MW-9S	06/28/2022	10-20 ft	11.9	7.45	1119	127.3	4.54	5.5



**Table 3: Summary of Field Sampling Parameters  
Former Hamilton Industries Site  
1316 18th St, Two Rivers, WI  
BRRTS #02-36-578316**

**Notes:**

Empty cells = not analyzed

°C = Celsius

SU = standard units

uS/cm = microSiemens per centimeter

mV = millivolts

NTU = nephelometric turbidity units

mg/L = milligrams per liter

ORP = Oxidation Reduction Potential

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Well ID	Sample Date	Sample ID	Analyte	1,1,1- Trichloroethane	1,1,2- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethene	1,2- Dichloroethane
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L
			WI NR 140 PAL	40	0.5	85	0.7	0.5
			WI NR 140 ES	200	5	850	7	5
MW-01	04/06/2022	MW-01-WG-20220406		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/30/2022	MW-01-WG-20220630		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/06/2022	MW-01-WG-20220906		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/17/2022	MW-01-WG-20221117		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/14/2023	MW-01-WG-20230314		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/20/2023	MW-01-WG-20230620		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/29/2023	MW-01-WG-20230829		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-03	04/05/2022	MW-03-WG-20220405		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/28/2022	MW-03-WG-20220628		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/07/2022	MW-03-WG-20220907		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/17/2022	MW-03-WG-20221117		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/14/2023	MW-03-WG-20230314		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/19/2023	MW-03-WG-20230619		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/29/2023	MW-03-WG-20230829		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-04	11/14/2023	MW-03-WG-20231114		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	04/07/2022	MW-04-WG-20220407		< 0.30	< 0.34	< 0.30	<u>1.3</u>	< 0.29
	06/30/2022	MW-04-WG-20220630		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/07/2022	MW-04-WG-20220907		< 0.30	< 0.34	< 0.30	<u>0.88 J</u>	< 0.29
	11/17/2022	MW-04-WG-20221117		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/14/2023	MW-04-WG-20230314		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/22/2023	MW-04-WG-20230622		< 0.30	< 0.34	< 0.30	<u>1.0</u>	< 0.29
	06/22/2023	DUP-02-WG-20230622		< 0.30	< 0.34	< 0.30	<u>0.99 J</u>	< 0.29
	08/29/2023	MW-04-WG-20230829		< 0.30	< 0.34	< 0.30	<u>0.66 J</u>	< 0.29
MW-05	11/15/2023	MW-04-WG-20231115		< 0.30	< 0.34	< 0.30	<u>1.4</u>	< 0.29
	11/15/2023	DUP-01-WG-20231115		< 0.30	< 0.34	< 0.30	<u>1.4</u>	< 0.29
	06/29/2022	MW-05-WG-20220629		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-08	06/21/2023	MW-05-WG-20230621		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	MW-08-WG-20220629		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/21/2023	MW-08-WG-20230621		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Well ID	Sample Date	Sample ID	Analyte	1,1,1-	1,1,2-	1,1-	1,1-	1,2-
			Unit	Trichloroethane	Trichloroethane	Dichloroethane	Dichloroethene	Dichloroethane
			WI NR 140 PAL	ug/L	ug/L	ug/L	ug/L	ug/L
			WI NR 140 ES	40	0.5	85	0.7	0.5
				200	5	850	7	5
MW-09	04/05/2022	MW-09-WG-20220405	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	06/29/2022	MW-09-WG-20220629	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	09/07/2022	MW-09-WG-20220907	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	11/16/2022	MW-09-WG-20221116	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	03/14/2023	MW-09-WG-20230314	< 0.30	< 0.34	< 0.30	< 0.58 M1	< 0.29	
	06/22/2023	MW-09-WG-20230622	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	08/29/2023	MW-09-WG-20230829	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
MW-10D	11/14/2023	MW-09-WG-20231114	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	06/28/2022	MW-10D-WG-20220628	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
MW-10S	06/21/2023	MW-10D-WG-20230621	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	06/28/2022	MW-10S-WG-20220628	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
MW-12S	06/20/2023	MW-10S-WG-20230620	<u>0.45 J</u>	< 0.34	< 0.30	< 0.58	< 0.29	
	06/28/2022	DUP-01-WG-20220628	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
MW-13D	06/28/2022	MW-12S-WG-20220628	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	06/21/2023	MW-12S-WG-20230621	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	04/05/2022	MW-13D-WG-20220405	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	06/29/2022	MW-13D-WG-20220629	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	09/07/2022	MW-13D-WG-20220907	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	09/07/2022	DUP-01-WG-20220907	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	11/17/2022	MW-13D-WG-20221117	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
MW-13S	11/17/2022	DUP-02-WG-20221117	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	03/15/2023	MW-13D-WG-20230315	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	06/20/2023	MW-13D-WG-20230620	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	08/29/2023	MW-13D-WG-20230829	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	08/29/2023	DUP-01-WG-20230829	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	11/14/2023	MW-13D-WG-20231114	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
	04/05/2022	MW-13S-WG-20220405	<u>3.6</u>	< 0.34	<u>2.3</u>	<u>0.74 J</u>	< 0.29	
MW-13S	06/30/2022	MW-13S-WG-20220630	<u>0.73 J</u>	< 0.34	<u>0.33 J</u>	< 0.58	< 0.29	
	09/06/2022	MW-13S-WG-20220906	<u>1.2</u>	< 0.34	<u>0.60 J</u>	< 0.58	< 0.29	
	11/17/2022	MW-13S-WG-20221117	<u>3.9</u>	< 0.34	<u>1.7</u>	<u>0.62 J</u>	< 0.29	
	03/14/2023	MW-13S-WG-20230314	<u>1.8</u>	< 0.34	<u>0.98 J</u>	< 0.58	< 0.29	
	06/20/2023	MW-13S-WG-20230620	<u>0.41 J</u>	< 0.34	<u>0.60 J</u>	< 0.58	< 0.29	
	08/29/2023	MW-13S-WG-20230829	<u>2.2</u>	< 0.34	<u>0.84 J</u>	< 0.58	< 0.29	
	11/15/2023	MW-13S-WG-20231115	<u>4.1</u>	< 0.34	<u>1.8</u>	< 0.58	< 0.29	

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Analyte Unit			1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane
WI NR 140 PAL			40	0.5	85	0.7	0.5
WI NR 140 ES			200	5	850	7	5
Well ID	Sample Date	Sample ID					
MW-14S	06/29/2022	MW-14S-WG-20220629	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/22/2023	MW-14S-WG-20230622	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-15D	04/06/2022	MW-15D-WG-20220406	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	MW-15D-WG-20220629	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/07/2022	MW-15D-WG-20220907	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/17/2022	MW-15D-WG-20221117	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/17/2022	DUP-01-WG-20221117	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/15/2023	MW-15D-WG-20230315	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/15/2023	DUP-02-WG-20230315	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/22/2023	MW-15D-WG-20230622	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/22/2023	DUP-01-WG-20230622	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/30/2023	MW-15D-WG-20230830	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/30/2023	DUP-02-WG-20230830	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
11/15/2023	MW-15D-WG-20231115	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29	
MW-15I	04/06/2022	DUP-02-WG-20220406	<u>2.3</u>	< 0.34	<u>1.1</u>	<u>0.89 J</u>	< 0.29
	04/06/2022	MW-15I-WG-20220406	<u>3.1 J</u>	< 3.4	< 3.0	< 5.8	< 2.9
	06/30/2022	DUP-03-WG-20220630	<u>3.0 J</u>	< 1.7	< 1.5	< 2.9	< 1.5
	06/30/2022	MW-15I-WG-20220630	< 3.0	< 3.4	< 3.0	< 5.8	< 2.9
	09/07/2022	MW-15I-WG-20220907	< 3.0	< 3.4	< 3.0	< 5.8	< 2.9
	11/17/2022	MW-15I-WG-20221117	< 0.76	< 0.86	< 0.74	< 1.5	< 0.73
	03/15/2023	MW-15I-WG-20230315	< 3.0	< 3.4	< 3.0	< 5.8	< 2.9
	03/15/2023	DUP-01-WG-20230315	<u>1.6</u>	< 0.34	<u>1.0</u>	<u>0.80 J</u>	< 0.29
	06/23/2023	MW-15I-WG-20230623	< 3.0	< 3.4	< 3.0	< 5.8	< 2.9
	06/23/2023	DUP-03-WG-20230623	<u>2.9</u>	< 0.34	<u>1.1</u>	<u>0.91 J</u>	< 0.29
	08/30/2023	MW-15I-WG-20230830	< 3.0	< 3.4	< 3.0	< 5.8	< 2.9
11/15/2023	MW-15I-WG-20231115	< 3.0	< 3.4	< 3.0	< 5.8	< 2.9	
11/15/2023	DUP-02-WG-20231115	<u>3.1</u>	< 0.34	<u>0.94 J</u>	<u>1.1</u>	< 0.29	

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Well ID	Sample Date	Sample ID	Analyte	1,1,1-	1,1,2-	1,1-	1,1-	1,2-
			Unit	Trichloroethane	Trichloroethane	Dichloroethane	Dichloroethene	Dichloroethane
			WI NR 140 PAL	ug/L	ug/L	ug/L	ug/L	ug/L
			WI NR 140 ES	40	0.5	85	0.7	0.5
				200	5	850	7	5
MW-15S	04/06/2022	MW-15S-WG-20220406		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	DUP-02-WG-20220629		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	MW-15S-WG-20220629		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/07/2022	MW-15S-WG-20220907		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/17/2022	MW-15S-WG-20221117		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/15/2023	MW-15S-WG-20230315		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/22/2023	MW-15S-WG-20230622		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/30/2023	MW-15S-WG-20230830		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-16S	11/14/2023	MW-15S-WG-20231114		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/27/2022	MW-16S-WG-20220627		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-17S	06/20/2023	MW-16-WG-20230620		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	MW-17S-WG-20220629		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-18S	06/22/2023	MW-17S-WG-20230622		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/27/2022	MW-18S-WG-20220627		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-19S	06/20/2023	MW-18S-WG-20230620		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/28/2022	MW-19S-WG-20220628		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-20S	06/21/2023	MW-19S-WG-20230621		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	04/06/2022	DUP-01-WG-20220406		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	04/06/2022	MW-20S-WG-20220406		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	MW-20S-WG-20220629		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/07/2022	MW-20S-WG-20220907		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/16/2022	MW-20S-WG-20221116		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/14/2023	MW-20S-WG-20230314		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/22/2023	MW-20S-WG-20230622		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-21S	08/29/2023	MW-20S-WG-20230829		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/15/2023	MW-20S-WG-20231115		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-23S	06/28/2022	MW-21S-WG-20220628		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/20/2023	MW-21S-WG-20230620		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-23S	04/06/2022	MW-23S-WG-20220406		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	MW-23S-WG-20220629		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/06/2022	MW-23S-WG-20220906		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/16/2022	MW-23S-WG-20221116		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/14/2023	MW-23S-WG-20230314		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/21/2023	MW-23S-WG-20230621		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/30/2023	MW-23S-WG-20230830		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/14/2023	MW-23S-WG-20231114		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-24S	06/28/2022	MW-24S-WG-20220628		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/21/2023	MW-24S-WG-20230621		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-25S	06/29/2022	MW-25S-WG-20220629		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/21/2023	MW-25S-WG-20230621		< 0.30	< 0.34	< 0.30	< 0.58	< 0.29

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Analyte Unit			1,1,1- Trichloroethane	1,1,2- Trichloroethane	1,1- Dichloroethane	1,1- Dichloroethene	1,2- Dichloroethane
WI NR 140 PAL			40	0.5	85	0.7	0.5
WI NR 140 ES			200	5	850	7	5
Well ID	Sample Date	Sample ID					
MW-26S	04/06/2022	MW-26S-WG-20220406	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/28/2022	MW-26S-WG-20220628	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/06/2022	MW-26S-WG-20220906	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/16/2022	MW-26S-WG-20221116	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/14/2023	MW-26S-WG-20230314	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/20/2023	MW-26S-WG-20230620	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/30/2023	MW-26S-WG-20230830	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/14/2023	MW-26S-WG-20231114	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-27S	09/07/2022	MW-27S-WG-20220907	0.41 J	< 0.34	0.31 J	< 0.58	< 0.29
MW-28S	09/07/2022	MW-28S-WG-20220907	2.5 J	< 0.86	1.9 J	< 1.5	< 0.73
	09/07/2022	DUP-02-WG-20220907	2.7 J	< 1.4	1.9 J	< 2.3	< 1.2
MW-29I	09/07/2022	MW-29I-WG-20220907	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-30I	09/07/2022	MW-30I-WG-20220907	0.35 J	< 0.34	< 0.30	< 0.58	< 0.29
MW-31S	09/07/2022	MW-31S-WG-20220907	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-6S	04/06/2022	MW-6S-WG-20220406	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	MW-6S-WG-20220629	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/07/2022	MW-6S-WG-20220907	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/17/2022	MW-6S-WG-20221117	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/14/2023	MW-6S-WG-20230314	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/22/2023	MW-6S-WG-20230622	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/28/2023	MW-6S-WG-20230828	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/14/2023	MW-6S-WG-20231114	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-7S	04/07/2022	MW-7S-WG-20220407	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/29/2022	MW-7S-WG-20220629	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	09/07/2022	MW-7S-WG-20220907	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/17/2022	MW-7S-WG-20221117	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	03/14/2023	MW-7S-WG-20230314	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/22/2023	MW-7S-WG-20230622	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	08/28/2023	MW-7S-WG-20230828	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	11/15/2023	MW-7S-WG-20231115	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-8S	06/28/2022	MW-8S-WG-20220628	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/21/2023	MW-8S-WG-20230621	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
MW-9S	06/28/2022	MW-9S-WG-20220628	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29
	06/21/2023	MW-9S-WG-20230621	< 0.30	< 0.34	< 0.30	< 0.58	< 0.29

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Analyte Unit			1,4-Dioxane	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
WI NR 140 PAL			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WI NR 140 ES			0.3	7	0.5	20	0.5	0.02
			3	70	5	100	5	0.2
Well ID	Sample Date	Sample ID						
MW-01	04/06/2022	MW-01-WG-20220406	-	<u>0.73 J</u>	< 0.41	<u>0.59 J</u>	<b><u>67.6</u></b>	< 0.17
	06/30/2022	MW-01-WG-20220630	-	<u>2.1</u>	< 0.41	<u>2.7</u>	<b><u>26.7</u></b>	< 0.17
	09/06/2022	MW-01-WG-20220906	< 0.11	<u>1.6</u>	< 0.41	<u>1.2</u>	<b><u>16.2</u></b>	< 0.17
	11/17/2022	MW-01-WG-20221117	< 0.11	<u>0.86 J</u>	< 0.41	<u>0.64 J</u>	<b><u>47.1</u></b>	< 0.17
	03/14/2023	MW-01-WG-20230314	< 0.10	< 0.47	< 0.41	< 0.53	<b><u>29.4</u></b>	< 0.17
	06/20/2023	MW-01-WG-20230620	< 0.057	<u>1.6</u>	< 0.41	<u>1.6</u>	<b><u>16.8</u></b>	< 0.17
	08/29/2023	MW-01-WG-20230829	< 0.057	<u>0.67 J</u>	< 0.41	< 0.53	<b><u>6.6</u></b>	< 0.17
MW-03	04/05/2022	MW-03-WG-20220405	-	<u>0.71 J</u>	< 0.41	< 0.53	< 0.32	< 0.17
	06/28/2022	MW-03-WG-20220628	-	<u>1.3</u>	< 0.41	< 0.53 L1	<u>1.1</u>	< 0.17
	09/07/2022	MW-03-WG-20220907	< 0.11	<u>1.6</u>	< 0.41	< 0.53	< 0.32	< 0.17
	11/17/2022	MW-03-WG-20221117	< 0.11	<u>1.6</u>	< 0.41	< 0.53	< 0.32	< 0.17
	03/14/2023	MW-03-WG-20230314	< 0.11	<u>1.2</u>	< 0.41	< 0.53	< 0.32	< 0.17
	06/19/2023	MW-03-WG-20230619	< 0.057	<u>0.85 J</u>	< 0.41	< 0.53	<u>0.55 J</u>	< 0.17
	08/29/2023	MW-03-WG-20230829	<u>0.12 J</u>	<u>1.7</u>	< 0.41	< 0.53	< 0.32	< 0.17
11/14/2023	MW-03-WG-20231114	< 0.057	<u>2.6</u>	< 0.41	< 0.53	< 0.32	< 0.17	
MW-04	04/07/2022	MW-04-WG-20220407	-	<u>30.0</u>	< 0.41	<u>14.3</u>	<b><u>122</u></b>	< 0.17
	06/30/2022	MW-04-WG-20220630	-	<u>8.8</u>	< 0.41	<u>5.9</u>	<b><u>88.6</u></b>	< 0.17
	09/07/2022	MW-04-WG-20220907	< 0.11	<u>24.5</u>	< 0.41	<u>16.2</u>	<b><u>152</u></b>	< 0.17
	11/17/2022	MW-04-WG-20221117	< 0.11	<u>6.0</u>	< 0.41	<u>5.2</u>	<b><u>77.5</u></b>	< 0.17
	03/14/2023	MW-04-WG-20230314	< 0.11	<u>2.8</u>	< 0.41	<u>2.5</u>	<b><u>44.0</u></b>	< 0.17
	06/22/2023	MW-04-WG-20230622	< 0.28	<u>29.8</u>	< 0.41	<u>20.4</u>	<b><u>172</u></b>	< 0.17
	06/22/2023	DUP-02-WG-20230622	< 0.28	<u>31.4</u>	< 0.41	<u>22.4</u>	<b><u>213</u></b>	<b><u>0.25 J</u></b>
	08/29/2023	MW-04-WG-20230829	< 0.057	<u>22.7</u>	< 0.41	<u>17.7</u>	<b><u>199</u></b>	< 0.17
11/15/2023	MW-04-WG-20231115	< 0.28 D3	<u>48.5</u>	< 0.41	<u>32.9</u>	<b><u>285</u></b>	<b><u>0.31 J</u></b>	
11/15/2023	DUP-01-WG-20231115	< 0.28 D3	<u>47.0</u>	< 0.41	<u>33.2</u>	<b><u>289</u></b>	< 0.17	
MW-05	06/29/2022	MW-05-WG-20220629	-	< 0.47	< 0.41	< 0.53 L1	<u>0.35 J</u>	< 0.17
	06/21/2023	MW-05-WG-20230621	<u>0.19 J</u>	< 0.47	< 0.41	< 0.53	<u>0.33 J</u>	< 0.17
MW-08	06/29/2022	MW-08-WG-20220629	-	< 0.47	< 0.41	< 0.53 L1	< 0.32	< 0.17
	06/21/2023	MW-08-WG-20230621	< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Well ID	Sample Date	Sample ID	Analyte	1,4-Dioxane	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
			WI NR 140 PAL	0.3	7	5	20	0.5	0.02
			WI NR 140 ES	3	70	5	100	5	0.2
MW-09	04/05/2022	MW-09-WG-20220405	-	< 0.47	< 0.47	0.41 J	< 0.53	0.55 J	< 0.17
	06/29/2022	MW-09-WG-20220629	-	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	09/07/2022	MW-09-WG-20220907	< 0.11	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	11/16/2022	MW-09-WG-20221116	< 0.11	< 0.47	< 0.47	< 0.41	< 0.53	0.35 J	< 0.17
	03/14/2023	MW-09-WG-20230314	< 0.12	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	06/22/2023	MW-09-WG-20230622	0.080 J	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	08/29/2023	MW-09-WG-20230829	< 0.057	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	11/14/2023	MW-09-WG-20231114	< 0.057	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
MW-10D	06/28/2022	MW-10D-WG-20220628	-	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	06/21/2023	MW-10D-WG-20230621	< 0.057	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
MW-10S	06/28/2022	MW-10S-WG-20220628	-	< 0.47	< 0.47	< 0.41	< 0.53	0.82 J	< 0.17
	06/20/2023	MW-10S-WG-20230620	< 0.057	< 0.47	< 0.47	< 0.41	< 0.53	2.0	< 0.17
MW-12S	06/28/2022	DUP-01-WG-20220628	-	< 0.47	< 0.47	< 0.41	< 0.53 L1	< 0.32	< 0.17
	06/28/2022	MW-12S-WG-20220628	-	< 0.47	< 0.47	< 0.41	< 0.53 M0,L1	< 0.32	< 0.17
	06/21/2023	MW-12S-WG-20230621	< 0.057	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
MW-13D	04/05/2022	MW-13D-WG-20220405	-	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	06/29/2022	MW-13D-WG-20220629	-	< 0.47	< 0.47	< 0.41	< 0.53 L1	< 0.32	< 0.17
	09/07/2022	MW-13D-WG-20220907	< 0.096	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	09/07/2022	DUP-01-WG-20220907	0.27	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	11/17/2022	MW-13D-WG-20221117	< 0.11	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	11/17/2022	DUP-02-WG-20221117	< 0.11	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	03/15/2023	MW-13D-WG-20230315	0.23 J	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	06/20/2023	MW-13D-WG-20230620	0.64	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	08/29/2023	MW-13D-WG-20230829	0.46	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	08/29/2023	DUP-01-WG-20230829	0.57	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	11/14/2023	MW-13D-WG-20231114	0.34	< 0.47	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
MW-13S	04/05/2022	MW-13S-WG-20220405	-	2.3	< 0.47	< 0.41	< 0.53	351	< 0.17
	06/30/2022	MW-13S-WG-20220630	-	< 0.47	< 0.47	< 0.41	< 0.53	39.1	< 0.17
	09/06/2022	MW-13S-WG-20220906	10.2	< 0.47	< 0.47	< 0.41	< 0.53	57.0	< 0.17
	11/17/2022	MW-13S-WG-20221117	33.7	1.4	< 0.47	0.45 J	< 0.53	218	< 0.17
	03/14/2023	MW-13S-WG-20230314	19.9	0.53 J	< 0.47	< 0.41	< 0.53	183	< 0.17
	06/20/2023	MW-13S-WG-20230620	11.5	< 0.47	< 0.47	< 0.41	< 0.53	32.9	< 0.17
	08/29/2023	MW-13S-WG-20230829	11.8	< 0.47	< 0.47	< 0.41	< 0.53	80.2	< 0.17
	11/15/2023	MW-13S-WG-20231115	31.8	1.1	< 0.47	< 0.41	< 0.53	240	< 0.17



**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Analyte Unit			1,4-Dioxane	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
WI NR 140 PAL			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WI NR 140 ES			0.3	7	0.5	20	0.5	0.02
			3	70	5	100	5	0.2
Well ID	Sample Date	Sample ID						
MW-14S	06/29/2022	MW-14S-WG-20220629	-	< 0.47	< 0.41	< 0.53	<u>1.4</u>	< 0.17
	06/22/2023	MW-14S-WG-20230622	< 0.057	< 0.47	< 0.41	< 0.53	<u>1.2</u>	< 0.17
MW-15D	04/06/2022	MW-15D-WG-20220406	-	< 0.47	< 0.41	< 0.53	<u>2.3</u>	< 0.17
	06/29/2022	MW-15D-WG-20220629	-	< 0.47	< 0.41	< 0.53	<u>2.4</u>	< 0.17
	09/07/2022	MW-15D-WG-20220907	<u>7.8</u>	< 0.47	< 0.41	< 0.53	<u>2.2</u>	< 0.17
	11/17/2022	MW-15D-WG-20221117	<u>7.9</u>	< 0.47	< 0.41	< 0.53	<u>2.0</u>	< 0.17
	11/17/2022	DUP-01-WG-20221117	<u>7.7</u>	< 0.47	< 0.41	< 0.53	<u>1.9</u>	< 0.17
	03/15/2023	MW-15D-WG-20230315	<u>6.0</u>	< 0.47	< 0.41	< 0.53	<u>1.8</u>	< 0.17
	03/15/2023	DUP-02-WG-20230315	<u>5.5</u>	< 0.47	< 0.41	< 0.53	<u>1.7</u>	< 0.17
	06/22/2023	MW-15D-WG-20230622	<u>5.3</u>	< 0.47	< 0.41	< 0.53	<u>1.6</u>	< 0.17
	06/22/2023	DUP-01-WG-20230622	<u>5.5</u>	< 0.47	< 0.41	< 0.53	<u>1.6</u>	< 0.17
	08/30/2023	MW-15D-WG-20230830	<u>4.4</u>	< 0.47	< 0.41	< 0.53	<u>1.6</u>	< 0.17
	08/30/2023	DUP-02-WG-20230830	<u>4.9</u>	< 0.47	< 0.41	< 0.53	<u>1.6</u>	< 0.17
11/15/2023	MW-15D-WG-20231115	<u>4.4</u>	< 0.47	< 0.41	< 0.53	<u>1.6</u>	< 0.17	
MW-15I	04/06/2022	DUP-02-WG-20220406	-	<u>9.4</u>	< 0.41	<u>1.5</u>	<u>701</u>	< 0.17
	04/06/2022	MW-15I-WG-20220406	-	<u>10.1</u>	< 4.1	< 5.3	<u>740</u>	< 1.7
	06/30/2022	DUP-03-WG-20220630	-	<u>8.8</u>	< 2.0	< 2.6	<u>900</u>	< 0.87
	06/30/2022	MW-15I-WG-20220630	-	<u>10.6</u>	< 4.1	< 5.3	<u>950</u>	< 1.7
	09/07/2022	MW-15I-WG-20220907	<u>75.0 E</u>	<u>12.6</u>	< 4.1	< 5.3	<u>539</u>	< 1.7
	11/17/2022	MW-15I-WG-20221117	<u>74.5</u>	<u>7.2</u>	< 1.0	< 1.3	<u>235</u>	< 0.44
	03/15/2023	MW-15I-WG-20230315	<u>67.0</u>	<u>14.6</u>	< 4.1	< 5.3	<u>684</u>	< 1.7
	03/15/2023	DUP-01-WG-20230315	<u>51.8</u>	<u>13.0</u>	< 0.41	<u>2.2</u>	<u>589</u>	< 0.17
	06/23/2023	MW-15I-WG-20230623	<u>27.8</u>	<u>8.7 J</u>	< 4.1	< 5.3	<u>739</u>	< 1.7
	06/23/2023	DUP-03-WG-20230623	<u>30.1</u>	<u>9.5</u>	<u>0.56 J</u>	<u>1.6</u>	<u>691</u>	< 0.17
	08/30/2023	MW-15I-WG-20230830	<u>33.5</u>	<u>11.4</u>	< 4.1	< 5.3	<u>845</u>	< 1.7
11/15/2023	MW-15I-WG-20231115	<u>34.2</u>	<u>11.7</u>	< 4.1	< 5.3	<u>833</u>	< 1.7	
11/15/2023	DUP-02-WG-20231115	<u>33.2</u>	<u>12.1</u>	<u>0.41 J</u>	<u>1.7</u>	<u>659</u>	< 0.17	

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Well ID	Sample Date	Sample ID	Analyte	1,4-Dioxane	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
			WI NR 140 PAL	0.3	7	0.5	20	0.5	0.02
			WI NR 140 ES	3	70	5	100	5	0.2
MW-15S	04/06/2022	MW-15S-WG-20220406	-	< 0.47	< 0.41	< 0.53	<u>1.8</u>	< 0.17	
	06/29/2022	DUP-02-WG-20220629	-	< 0.47	< 0.41	< 0.53	<u>2.0</u>	< 0.17	
	06/29/2022	MW-15S-WG-20220629	-	< 0.47	< 0.41	< 0.53	<u>2.0</u>	< 0.17	
	09/07/2022	MW-15S-WG-20220907	< 0.11	< 0.47	< 0.41	< 0.53	<u>1.8</u>	< 0.17	
	11/17/2022	MW-15S-WG-20221117	< 0.11	< 0.47	< 0.41	< 0.53	<u>1.8</u>	< 0.17	
	03/15/2023	MW-15S-WG-20230315	< 0.11	< 0.47	< 0.41	< 0.53	<u>1.4</u>	< 0.17	
	06/22/2023	MW-15S-WG-20230622	< 0.057	< 0.47	< 0.41	< 0.53	<u>1.7</u>	< 0.17	
	08/30/2023	MW-15S-WG-20230830	< 0.057	< 0.47	< 0.41	< 0.53	<u>1.9</u>	< 0.17	
	11/14/2023	MW-15S-WG-20231114	< 0.057	< 0.47	< 0.41	< 0.53	<u>1.5</u>	< 0.17	
MW-16S	06/27/2022	MW-16S-WG-20220627	-	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
	06/20/2023	MW-16-WG-20230620	< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
MW-17S	06/29/2022	MW-17S-WG-20220629	-	< 0.47	< 0.41	< 0.53	<u>1.9</u>	< 0.17	
	06/22/2023	MW-17S-WG-20230622	< 0.057	< 0.47	< 0.41	< 0.53	<u>2.0</u>	< 0.17	
MW-18S	06/27/2022	MW-18S-WG-20220627	-	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
	06/20/2023	MW-18S-WG-20230620	< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
MW-19S	06/28/2022	MW-19S-WG-20220628	-	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
	06/21/2023	MW-19S-WG-20230621	< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
MW-20S	04/06/2022	DUP-01-WG-20220406	-	< 0.47	< 0.41	< 0.53	<u>5.7</u>	< 0.17	
	04/06/2022	MW-20S-WG-20220406	-	< 0.47	< 0.41	< 0.53	<u>5.0</u>	< 0.17	
	06/29/2022	MW-20S-WG-20220629	-	< 0.47	< 0.41	< 0.53	<u>0.40 J</u>	< 0.17	
	09/07/2022	MW-20S-WG-20220907	< 0.11	< 0.47	< 0.41	< 0.53	<u>1.5</u>	< 0.17	
	11/16/2022	MW-20S-WG-20221116	< 0.11	< 0.47	< 0.41	< 0.53	<u>2.8</u>	< 0.17	
	03/14/2023	MW-20S-WG-20230314	< 0.10	< 0.47	< 0.41	< 0.53	<u>0.33 J</u>	< 0.17	
	06/22/2023	MW-20S-WG-20230622	< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
	08/29/2023	MW-20S-WG-20230829	< 0.057	< 0.47	< 0.41	< 0.53	<u>1.5</u>	< 0.17	
	11/15/2023	MW-20S-WG-20231115	< 0.057	< 0.47	< 0.41	< 0.53	<u>9.6</u>	< 0.17	
MW-21S	06/28/2022	MW-21S-WG-20220628	-	< 0.47	< 0.41	< 0.53 L1	< 0.32	< 0.17	
	06/20/2023	MW-21S-WG-20230620	< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
MW-23S	04/06/2022	MW-23S-WG-20220406	-	< 0.47	< 0.41	< 0.53	<u>2.9</u>	< 0.17	
	06/29/2022	MW-23S-WG-20220629	-	< 0.47	< 0.41	< 0.53 L1	<u>1.2</u>	< 0.17	
	09/06/2022	MW-23S-WG-20220906	< 0.11	< 0.47	< 0.41	< 0.53	<u>1.2</u>	< 0.17	
	11/16/2022	MW-23S-WG-20221116	< 0.11	< 0.47	< 0.41	< 0.53	<u>0.41 J</u>	< 0.17	
	03/14/2023	MW-23S-WG-20230314	< 0.11	< 0.47	< 0.41	< 0.53	<u>2.3</u>	< 0.17	
	06/21/2023	MW-23S-WG-20230621	< 0.057	< 0.47	< 0.41	< 0.53	<u>2.1</u>	< 0.17	
	08/30/2023	MW-23S-WG-20230830	< 0.057	< 0.47	< 0.41	< 0.53	<u>0.81 J</u>	< 0.17	
	11/14/2023	MW-23S-WG-20231114	< 0.057	< 0.47	< 0.41	< 0.53	<u>0.64 J</u>	< 0.17	
MW-24S	06/28/2022	MW-24S-WG-20220628	-	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
	06/21/2023	MW-24S-WG-20230621	< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	
MW-25S	06/29/2022	MW-25S-WG-20220629	-	< 0.47	< 0.41	< 0.53 L1	<u>1.5</u>	< 0.17	
	06/21/2023	MW-25S-WG-20230621	< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17	

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Well ID	Sample Date	Sample ID	Analyte	1,4-Dioxane	cis-1,2-Dichloroethene	Tetrachloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl chloride
			Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
			WI NR 140 PAL	0.3	7	0.5	20	0.5	0.02
			WI NR 140 ES	3	70	5	100	5	0.2
MW-26S	04/06/2022	MW-26S-WG-20220406		-	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	06/28/2022	MW-26S-WG-20220628		-	< 0.47	< 0.41	< 0.53 L1	<u>0.68 J</u>	< 0.17
	09/06/2022	MW-26S-WG-20220906		< 0.11	< 0.47	< 0.41	< 0.53	<u>0.53 J</u>	< 0.17
	11/16/2022	MW-26S-WG-20221116		< 0.11	< 0.47	< 0.41	< 0.53	<u>0.48 J</u>	< 0.17
	03/14/2023	MW-26S-WG-20230314		< 0.11	< 0.47	< 0.41	< 0.53	<u>0.39 J</u>	< 0.17
	06/20/2023	MW-26-WG-20230620		< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	08/30/2023	MW-26S-WG-20230830		< 0.057	< 0.47	< 0.41	< 0.53	<u>0.39 J</u>	< 0.17
	11/14/2023	MW-26S-WG-20231114		< 0.057	< 0.47	< 0.41	< 0.53	<u>0.40 J</u>	< 0.17
MW-27S	09/07/2022	MW-27S-WG-20220907		<u>1.1</u>	< 0.47	< 0.41	< 0.53	<u>128</u>	< 0.17
MW-28S	09/07/2022	MW-28S-WG-20220907		<u>21.0</u>	< 1.2	< 1.0	< 1.3	<u>487</u>	< 0.44
	09/07/2022	DUP-02-WG-20220907		<u>17.1</u>	< 1.9	< 1.6	< 2.1	<u>433</u>	< 0.70
MW-29I	09/07/2022	MW-29I-WG-20220907		< 0.096	< 0.47	< 0.41	< 0.53	<u>20.8</u>	< 0.17
MW-30I	09/07/2022	MW-30I-WG-20220907		<u>3.2</u>	<u>1.3</u>	< 0.41	< 0.53	<u>110</u>	< 0.17
MW-31S	09/07/2022	MW-31S-WG-20220907		<u>1.2</u>	<u>1.6</u>	< 0.41	<u>0.62 J</u>	< 0.32	<u>0.64 J</u>
MW-6S	04/06/2022	MW-6S-WG-20220406		-	< 0.47	< 0.41	< 0.53	<u>0.56 J</u>	< 0.17
	06/29/2022	MW-6S-WG-20220629		-	< 0.47	< 0.41	< 0.53 L1	<u>5.8</u>	< 0.17
	09/07/2022	MW-6S-WG-20220907		< 0.11	< 0.47	< 0.41	< 0.53	<u>8.1</u>	< 0.17
	11/17/2022	MW-6S-WG-20221117		< 0.11	< 0.47	< 0.41	< 0.53	<u>4.1</u>	< 0.17
	03/14/2023	MW-6S-WG-20230314		< 0.096	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
	06/22/2023	MW-6S-WG-20230622		< 0.057	< 0.47	< 0.41	< 0.53	<u>4.9</u>	< 0.17
	08/28/2023	MW-6S-WG-20230828		< 0.057	< 0.47	< 0.41	< 0.53	<u>11.7</u>	< 0.17
	11/14/2023	MW-6S-WG-20231114		< 0.057	< 0.47	< 0.41	< 0.53	<u>32.2</u>	< 0.17
MW-7S	04/07/2022	MW-7S-WG-20220407		-	< 0.47	< 0.41	< 0.53	<u>17.4</u>	< 0.17
	06/29/2022	MW-7S-WG-20220629		-	< 0.47	< 0.41	< 0.53	<u>13.8</u>	< 0.17
	09/07/2022	MW-7S-WG-20220907		< 0.11	< 0.47	< 0.41	< 0.53	<u>15.8</u>	< 0.17
	11/17/2022	MW-7S-WG-20221117		< 0.11	<u>0.50 J</u>	< 0.41	< 0.53	<u>17.2</u>	< 0.17
	03/14/2023	MW-7S-WG-20230314		< 0.11	< 0.47	< 0.41	< 0.53	<u>14.5</u>	< 0.17
	06/22/2023	MW-7S-WG-20230622		< 0.057	< 0.47	< 0.41	< 0.53	<u>17.4</u>	< 0.17
	08/28/2023	MW-7S-WG-20230828		< 0.057	< 0.47	< 0.41	< 0.53	<u>14.1</u>	< 0.17
	11/15/2023	MW-7S-WG-20231115		< 0.057	< 0.47	< 0.41	< 0.53	<u>16.1</u>	< 0.17
MW-8S	06/28/2022	MW-8S-WG-20220628		-	< 0.47	< 0.41	< 0.53 L1	< 0.32	< 0.17
	06/21/2023	MW-8S-WG-20230621		< 0.057	< 0.47	< 0.41	< 0.53	< 0.32	< 0.17
MW-9S	06/28/2022	MW-9S-WG-20220628		-	< 0.47	< 0.41	< 0.53 L1	<u>0.69 J</u>	< 0.17
	06/21/2023	MW-9S-WG-20230621		< 0.057	< 0.47	< 0.41	< 0.53	<u>0.56 J</u>	< 0.17

**Table 4: Groundwater Analytical Results**  
**Project Title: Thermo Fisher Two Rivers**  
**Site Address: 1316 18th St, Two Rivers, WI**  
**BRRTS # 02-36-578316**

Notes:

Underlined Value = Analyte detected

**Bold Value** = NR 140 Enforcement Standard Exceedance

*Italicized Value* = NR 140 Preventive Action Limit Exceedance

- = Not Analyzed

PAL = Preventive Action Limit (WAC NR140)

ES = Enforcement Standard (WAC NR140)

µg/L = micrograms per liter

< = Compound not detected at concentrations above the laboratory detection limit.

Qualifiers - Organic:

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

L1 = Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.

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

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

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

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

# APPENDIX A      GROUNDWATER SAMPLING FORMS



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-01**  
**Well Permit No:**

**Date: 2022/04/06**  
**40 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 603.74 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.98 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 150 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.15 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:52	16.15	200	0.25	8.8	7.52	3842	NM	8.07	126.5	4.93	NM	
11:57	16.2	140	0.5	8.8	7.5	4013	NM	7.71	125.3	3.52	NM	
12:02	16.22	140	0.6	8.9	7.48	4266	NM	7.23	123.9	8.9	NM	
12:12	16.24	140	0.85	8.8	7.47	4491	NM	6.84	123.5	2.51	NM	
12:17	16.24	140	1	8.9	7.47	4475	NM	6.83	123.2	1.87	NM	
12:22	16.24	140	1.15	8.9	7.48	4454	NM	6.8	122.7	1.19	NM	

<b>Sample ID(s):</b> MW-01-WG-20220406	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath	04/06/2022 17:26



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-03**  
**Well Permit No:**

**Date: 2022/04/05**  
**35 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 16 (ft)	<b>Reference Elevation</b> 597.5 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.69 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 160 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.7 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
17:23	12.84	160	0.15	7.5	7.52	2045	NM	0.66	-54.3	55.5	NM	
17:28	12.83	160	0.25	7.3	7.52	2034	NM	0.42	-61	51.9	NM	
17:33	12.83	160	0.4	7.4	7.49	2031	NM	0.46	-57.5	38.2	NM	
17:38	12.83	160	0.5	7.3	7.49	2030	NM	0.4	-59.8	35.3	NM	
17:43	12.83	160	0.7	7.5	7.49	2023	NM	0.36	-59.4	32	NM	

<b>Sample ID(s):</b> MW-03-WG-20220405	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	04/05/2022 22:47



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-04**  
**Well Permit No:**

**Date: 2022/04/07**  
**40 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 590.45 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 4.09 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 231.8 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 3.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:20	4.64	250	0.1	5.9	7.31	1247	NM	5.34	90.1	2.49	NM	
09:25	4.95	250	0.5	5.7	7.28	1240	NM	5.45	91.7	1.96	NM	
09:35	4.95	250	1.25	5.8	7.28	1234	NM	5.3	95.4	1.85	NM	
09:45	4.95	250	2	6	7.28	1233	NM	6.1	98.1	2.62	NM	
09:50	4.95	250	2.25	6.1	7.29	1239	NM	4.38	98.3	4.75	NM	
09:55	5.28	250	2.5	6.1	7.29	1243	NM	4.28	99.1	5.66	NM	
10:00	5.16	250	2.65	6	7.3	1245	NM	3.62	99.2	6.01	NM	
10:05	4.99	250	2.75	6	7.32	1253	NM	3.24	99	4.94	NM	
10:10	4.88	250	2.9	6.1	7.31	1248	NM	3.34	99.4	5.11	NM	
10:15	4.78	150	3	6.3	7.3	1246	NM	3.32	100	5.85	NM	
10:20	4.73	150	3.25	6.4	7.31	1257	NM	3.13	100.3	6.44	NM	

<b>Sample ID(s):</b> MW-04-WG-20220407	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	04/07/2022 15:27





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-09**  
**Well Permit No:**

**Date: 2022/04/05**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 19 (ft)	<b>Reference Elevation</b> 601.44 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
18:20	13.19	200	0.1	7.5	7.46	1058	NM	2.69	74.2	5.06	NM	
18:25	13.28	200	0.25	7.6	7.41	1060	NM	2.47	73.7	2.4	NM	
18:30	13.33	200	0.5	7.8	7.41	1059	NM	2.4	74.2	1.82	NM	
18:35	13.35	200	0.75	8.1	7.41	1058	NM	2.34	75.1	1.71	NM	
18:40	13.35	200	1	8	7.41	1058	NM	2.29	76.1	1.73	NM	
18:45	13.35	200	1.25	7.9	7.41	1059	NM	2.22	77.1	1.59	NM	

<b>Sample ID(s):</b> MW-09-WG-20220405	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	04/05/2022 23:47



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-13D**  
**Well Permit No:**

**Date: 2022/04/05**  
**37 F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 47.5 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.93 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 120 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:30	17.78	120	0.1	8.1	7.91	370.1	NM	0.95	-115.7	1.39	NM	
15:35	18.79	120	0.25	8.5	7.9	369.1	NM	0.52	-124.8	1.15	NM	
15:40	19.46	120	0.4	8.6	7.9	368.9	NM	0.44	-125	1.27	NM	
15:45	20.05	120	0.5	9	7.89	368.9	NM	0.38	-126.3	0.78	NM	
15:50	20.79	120	0.7	9.1	7.89	369.2	NM	0.33	-125.8	1.03	NM	
15:55	21.4	120	0.75	9.1	7.89	370.1	NM	0.31	-126.7	0.65	NM	

<b>Sample ID(s):</b> MW-13D-WG-20220405	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  04/05/2022 20:57
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13S**  
**Well Permit No:**


**Date: 2022/04/05**  
**35 F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 19 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.49 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 130 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.5 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:30	17.68	130	0.15	8.5	7.5	1702	NM	1.95	57.7	5.24	NM	
16:35	17.66	130	0.25	8.5	7.5	1705	NM	1.76	57.6	3.49	NM	
16:40	17.76	130	0.35	8.6	7.49	1698	NM	1.76	57.8	3.71	NM	
16:45	17.76	130	0.5	8.6	7.48	1703	NM	1.82	59.3	2.81	NM	

<b>Sample ID(s):</b> MW-13S-WG-20220405	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	04/05/2022 21:48



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-15D**  
**Well Permit No:**

**Date: 2022/04/06**  
**40 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 47.5 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.7 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 120 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:31	8.5	120	0.1	6.8	7.89	353	NM	0.99	-7	2.77	NM	
16:36	9.36	120	0.25	6.5	7.86	336	NM	0.52	-27.9	1.66	NM	
16:41	9.77	120	0.3	6.5	7.85	335.1	NM	0.43	-32	0.75	NM	
16:46	10.59	120	0.5	6.6	7.84	334.3	NM	0.35	-34.8	1.34	NM	
16:51	11.1	120	0.6	6.5	7.84	334.6	NM	0.31	-34	1.05	NM	

<b>Sample ID(s):</b> MW-15D-WG-20220406	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  04/06/2022 21:55
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-151**  
**Well Permit No:**

**Date: 2022/04/06**  
**35 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20.5 (ft)	<b>Reference Elevation</b> 589.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.65 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 150 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 18 - 23 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
17:17	7.42	150	0.15	6.9	7.59	1291	NM	2.67	68.8	28	NM	
17:22	7.95	150	0.5	7.4	7.6	1289	NM	2.26	66.5	11.4	NM	
17:27	8.32	150	0.6	7.8	7.61	1295	NM	1.98	66.7	11.5	NM	
17:32	8.55	150	0.7	7.9	7.6	1296	NM	1.56	67.2	7.69	NM	
17:37	8.75	150	0.75	8	7.6	1297	NM	1.41	67.9	5.89	NM	
17:42	8.786	150	0.9	8.1	7.6	1298	NM	1.41	68.5	7.86	NM	
17:47	8.95	150	1	8.1	7.6	1297	NM	1.34	69.9	5.7	NM	
17:52	9.05	150	1.25	8.2	7.6	1297	NM	1.28	72.1	6.41	NM	
17:57	9.12	150	1.4	8.3	7.6	1297	NM	1.19	72.3	6.84	NM	
18:02	9.18	150	1.5	8.3	7.6	1298	NM	1.08	73.2	7.77	NM	
18:07	9.2	150	1.75	8.4	7.6	1297	NM	1.06	74.3	5.84	NM	
18:12	9.22	150	1.9	8.4	7.6	1298	NM	1.06	75.5	6.04	NM	
18:17	9.24	150	2.25	8.5	7.6	1297	NM	1.02	76.2	6.72	NM	

<b>Sample ID(s):</b> DUP-02-WG-20220406,MW-151-WG-20220406	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  04/06/2022 23:20
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-15S**  
**Well Permit No:**

**Date: 2022/04/06**  
**40 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 589.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.67 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:52	6.67	200	0.15	5.3	7.63	883	NM	7.47	71.7	4.8	NM	
15:57	6.7	200	0.25	5.2	7.62	857	NM	7.28	74.7	4.72	NM	
16:02	6.7	200	0.5	5.1	7.62	854	NM	7.17	77.4	1.5	NM	

<b>Sample ID(s):</b> MW-15S-WG-20220406	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	04/06/2022 21:06



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-23S**  
**Well Permit No:**

**Date: 2022/04/06**  
**40 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 16 (ft)	<b>Reference Elevation</b> 595.01 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 9.76 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 160 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:43	9.77	160	0.1	7.2	7.56	964	NM	7.53	106.1	40.5	NM	
09:48	9.77	160	0.25	7.1	7.56	968	NM	7.43	106.9	9.29	NM	
09:53	9.77	160	0.4	7.1	7.56	972	NM	7.35	107.5	6.79	NM	
09:58	9.77	160	0.5	7	7.55	967	NM	7.37	108.4	5.85	NM	
10:03	9.77	160	0.75	7.1	7.54	962	NM	7.4	109.2	5.81	NM	
10:08	9.77	160	1	7	7.54	949	NM	7.52	110.2	4.52	NM	
10:13	9.77	160	1.25	6.8	7.54	944	NM	7.53	110.7	4.21	NM	
10:18	9.77	160	1.5	7	7.53	943	NM	7.53	111.1	3.61	NM	

<b>Sample ID(s):</b> MW-23S-WG-20220406	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	04/06/2022 15:20



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-26S**  
**Well Permit No:**


**Date: 2022/04/06**  
**40 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 4.84 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 150 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:16	5.11	150	0.15	7	6.93	775	NM	0.55	-50.5	60.9	NM	
14:41	5.14	150	0.8	6.7	6.91	782	NM	0.26	-55.3	31.6	NM	
14:46	5.12	150	1	6.8	6.91	781	NM	0.24	-54.3	27.5	NM	
14:51	5.12	150	1.25	7	6.91	781	NM	0.23	-54	24.4	NM	
14:56	5.12	150	1.4	6.9	6.91	781	NM	0.22	-52.5	19.6	NM	
15:01	5.12	150	1.5	7.5	6.9	781	NM	0.22	-53.4	18.7	NM	
15:06	5.12	150	1.75	7	6.91	780	NM	0.21	-52.8	13.8	NM	
15:11	5.12	150	1.8	7	6.91	779	NM	0.2	-52.3	14.7	NM	
15:16	5.12	150	2	6.8	6.91	778	NM	0.2	-52.3	12.7	NM	

<b>Sample ID(s):</b> MW-26S-WG-20220406	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  04/06/2022 20:18
<b>Analysis:</b>			





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**

**Date: 2022/04/07**  
**35 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 19 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.76 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 3 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
07:42	15.93	200	0.1	7.3	7.17	1468	NM	NM	118.8	5.76	NM	
07:47	16.05	200	0.25	7.5	7.22	1448	NM	5.54	118.7	4.45	NM	
07:52	16.1	200	0.4	7.7	7.2	1491	NM	4.84	119.1	3.76	NM	
07:57	16.16	200	0.5	7.8	7.18	1563	NM	3.85	119.5	3	NM	
08:07	16.16	200	1.25	8	7.23	2358	NM	2.27	116.1	2.03	NM	
08:12	16.27	200	1.5	8	7.22	2737	NM	2.04	98.8	2.01	NM	
08:22	16.3	200	1.8	8.2	7.19	3540	NM	1.52	37.6	1.72	NM	
08:27	16.31	200	2	8.2	7.19	3754	NM	1.37	23.1	1.44	NM	
08:32	16.31	200	2.25	8.3	7.19	3877	NM	1.34	15.1	1.02	NM	
08:47	16.25	200	3	8.2	7.18	4203	NM	0.58	-3	0.78	NM	

<b>Sample ID(s):</b> MW-7S-WG-20220407	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath	<b>Date Time</b>  04/07/2022 13:51
<b>Analysis:</b>			





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-20S**  
**Well Permit No:**

**Date: 2022/04/06**  
**40 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.76 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 160 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.9 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:00	12.98	160	0.15	8.3	7.45	1770	NM	6.44	132	4.93	NM	
13:05	13.09	160	0.25	8.6	7.42	1778	NM	6.36	125.8	3.41	NM	
13:10	13.18	160	0.5	9.4	7.4	1790	NM	6.29	121	3.3	NM	
13:15	13.18	160	0.65	8.9	7.41	1804	NM	6.15	120.5	3.58	NM	
13:20	13.28	160	0.75	9.1	7.42	1856	NM	5.7	119	2.88	NM	
13:25	13.33	160	0.9	8.7	7.43	1902	NM	5.28	118.6	2.86	NM	

<b>Sample ID(s):</b> DUP-01-WG-20220406,MW-20S-WG-20220406	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	04/06/2022 18:30



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-6S**  
**Well Permit No:**

**Date: 2022/04/06**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> ( )
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.62 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220404-GWMonitor	<b>Average Purge Rate</b> 140 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) /
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.8 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:00	15.03	140	0.4	8.8	7.18	1021	NM	7.65	127	2.7	NM	
11:05	15.03	140	0.5	8.6	7.18	1031	NM	7.51	127	4.41	NM	
11:10	15.08	140	0.75	8.6	7.18	1038	NM	7.44	127.5	3.49	NM	
11:15	15.09	140	0.8	8.8	7.17	1048	NM	7.37	128.2	2.32	NM	

<b>Sample ID(s):</b> MW-6S-WG-20220406	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath	04/07/2022 13:07



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-03**  
**Well Permit No:**

**Date: 2022/06/28**  
**70 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 16 (ft)	<b>Reference Elevation</b> 597.5 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.12 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 180 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:45	12.39	180	0.4	13.5	7.35	1594	NM	0.33	NM	83.1	NM	
14:50	12.35	180	0.6	13.4	7.33	1572	NM	0.23	-80.8	43.2	NM	
14:55	12.35	180	0.75	13.2	7.29	1557	NM	0.14	-77.1	26.6	NM	
15:00	12.35	180	1	13	7.3	1570	NM	0.08	-80.4	20.5	NM	
15:15	12.35	180	1.5	13.3	7.28	1540	NM	0.09	-79	12.6	NM	
15:20	12.35	180	1.75	13.4	7.28	1474	NM	0.33	-75.8	12.3	NM	
15:25	12.35	180	2	13.3	7.26	1473	NM	0.29	-70.7	9.8	NM	
15:30	12.35	180	2.15	13.3	7.26	1487	NM	0.23	-70.6	9.14	NM	
15:35	12.35	180	2.25	13.1	7.26	1486	NM	0.16	-71.3	8.31	NM	

<b>Sample ID(s):</b> MW-03-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  06/28/2022 20:39
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-04**  
**Well Permit No:**

**Date: 2022/06/30**  
**65 F and partly sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 590.45 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 5.13 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:13	5.44	200	0.15	15.4	7.19	908	NM	0.76	107.7	6.24	NM	
08:18	5.55	200	0.25	15.3	7.15	901	NM	0.77	110.5	5.93	NM	
08:23	5.61	200	0.5	15.1	7.14	900	NM	0.77	111.8	5.33	NM	
08:28	5.67	200	0.65	14.8	7.13	901	NM	0.65	113.1	3.64	NM	
08:33	5.73	200	0.9	14.8	7.13	901	NM	0.58	113.8	3.24	NM	
08:38	5.77	200	1.25	14.6	7.13	902	NM	0.52	114.2	3.36	NM	
08:48	5.83	200	1.5	14.4	7.13	907	NM	0.41	115.5	3.6	NM	
08:53	5.85	200	1.75	14.2	7.14	910	NM	0.36	115.9	4.11	NM	
08:58	5.88	200	2.15	14.1	7.15	917	NM	0.31	116.3	3.53	NM	

<b>Sample ID(s):</b> MW-04-WG-20220630	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath	<b>Date Time</b>  06/30/2022 14:03
<b>Analysis:</b>			



Product: Well-Flow  
Part Number: 200-10-001-001-001



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-05**  
**Well Permit No:**

**Date: 2022/06/29**  
**65 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 8 (ft)	<b>Reference Elevation</b> 585.88 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 1.83 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 190 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:08	1.93	190	0.25	16.2	7.47	847	NM	0.19	-111.7	61.2	NM	
10:13	1.94	190	0.5	16.1	7.46	846	NM	0.09	-115.3	47.2	NM	
10:18	1.93	190	0.75	16	7.46	844	NM	0.02	-117	41.2	NM	
10:23	1.93	190	1	15.9	7.46	844	NM	0.01	-117.6	40.6	NM	

<b>Sample ID(s):</b> MW-05-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	06/29/2022 15:26





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-08**  
**Well Permit No:**

**Date: 2022/06/29**  
**65 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.18 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.35 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 130 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 9 - 19 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:34	12.49	160	0.15	14	7.46	784	NM	0.67	107.2	4.13	NM	
08:39	12.53	160	0.25	13.4	7.42	796	NM	0.73	109.2	5.42	NM	
08:49	12.56	160	0.6	13.5	7.39	794	NM	0.64	10.2	7.53	NM	
08:54	12.55	130	1	13.7	7.38	801	NM	0.54	-31.2	6.21	NM	
08:59	12.55	130	1.15	14	7.37	798	NM	0.4	-50.6	4.73	NM	
09:04	12.55	130	1.25	14.1	7.37	799	NM	0.27	-52.7	3.67	NM	
09:09	12.55	130	1.5	14.2	7.37	799	NM	0.21	-56.3	2.9	NM	

<b>Sample ID(s):</b> MW-08-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		RyanPlath 	06/29/2022 14:14



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-09**  
**Well Permit No:**

**Date: 2022/06/29**  
**70 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.44 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.99 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.6 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:18	13.18	200	0.15	12	7.48	1290	NM	6.08	127.2	4.3	NM	
13:23	13.28	200	0.25	12.9	7.44	1421	NM	5.95	123.1	2.82	NM	
13:28	13.31	200	0.5	12.9	7.43	1424	NM	5.93	120.9	2.37	NM	
13:33	13.34	200	0.6	12.9	7.42	1422	NM	5.89	120.1	2.46	NM	

<b>Sample ID(s):</b> MW-09-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	06/29/2022 18:36



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-10D**  
**Well Permit No:**


**Date: 2022/06/28**  
**65 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 41.5 (ft)	<b>Reference Elevation</b> 588.9 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.8 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 120 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:23	8.87	120	0.15	15.1	7.69	250.4	NM	0.36	-73.9	4.57	NM	
09:28	9.67	120	0.25	14.9	7.67	250	NM	0.13	-94.6	8.47	NM	
09:33	10.28	120	0.4	14.7	7.67	249.6	NM	0.08	-103.5	34.9	NM	
09:38	10.96	120	0.5	14.8	7.66	249.6	NM	0.03	-111.8	21.8	NM	
09:43	11.65	120	0.65	14.9	7.66	250	NM	0.01	-121.5	4.63	NM	
09:48	12.07	120	0.75	15	7.66	249.4	NM	0	-123	12	NM	
09:53	12.74	120	0.85	15.2	7.66	249.8	NM	0	-126.7	9.76	NM	
09:58	13.32	120	1	15.1	7.66	250	NM	0	-128.7	11.7	NM	

<b>Sample ID(s):</b> MW-10D-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  06/28/2022 15:04
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-10S**  
**Well Permit No:**


**Date: 2022/06/28**  
**65 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 9.5 (ft)	<b>Reference Elevation</b> 589.91 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 5.43 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 180 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:47	5.58	180	0.15	15.3	7.38	1050	NM	1.1	82.1	0.58	NM	
10:52	5.66	180	0.5	15.5	7.37	815	NM	2.21	78.3	1.23	NM	
10:57	5.69	180	0.6	15.7	7.37	819	NM	2.45	79	1.56	NM	
11:02	5.7	180	0.75	15.8	7.36	834	NM	2.42	79.4	1.54	NM	
11:07	5.72	180	1	15.8	7.36	850	NM	2.41	80.1	1.17	NM	

<b>Sample ID(s):</b> MW-10S-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  06/28/2022 16:11
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-12S**  
**Well Permit No:**

**Date: 2022/06/28**  
**65 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17.5 (ft)	<b>Reference Elevation</b> 603.93 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.95 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 150 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:29	15.97	150	0.15	14.2	7.46	3231	NM	0.57	113.4	2.76	NM	
12:39	15.97	150	0.35	14.3	7.45	2551	NM	2.45	102.3	2.27	NM	
12:44	15.97	150	0.6	14.4	7.5	1889	NM	4.69	102.6	1.44	NM	
12:49	15.97	150	0.75	14.4	7.51	1756	NM	5.2	104.9	1.3	NM	
12:54	15.97	150	0.9	14.3	7.52	1726	NM	5.38	106.4	1.33	NM	
12:59	15.97	150	1	14.7	7.52	1711	NM	5.5	107.6	1.47	NM	

<b>Sample ID(s):</b> DUP-01-WG-20220628,MW-12S-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	06/28/2022 18:04



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-14S**  
**Well Permit No:**

**Date: 2022/06/29**  
**70 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 14 (ft)	<b>Reference Elevation</b> 597.42 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.78 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 150 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:13	13.9	150	0.15	13.2	7.79	1520	NM	5.46	117	17.6	NM	
14:18	13.93	150	0.25	13.4	7.38	1488	NM	6.04	124.3	5.66	NM	
14:23	13.93	150	0.5	13.2	7.37	1461	NM	6.04	127.3	2.62	NM	
14:28	13.92	150	0.6	13.1	7.37	1456	NM	5.87	129.2	3.12	NM	
14:33	13.92	150	0.75	13.1	7.37	1455	NM	5.73	130.4	2.51	NM	

<b>Sample ID(s):</b> MW-14S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  06/29/2022 19:36
<b>Analysis:</b>			





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-151**  
**Well Permit No:**

**Date: 2022/06/30**  
**70 F and partly cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20.5 (ft)	<b>Reference Elevation</b> 589.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.68 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 150 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 18 - 23 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:38	7.53	150	0.15	15	7.64	1135	NM	0.44	132.9	74.2	NM	
09:43	7.99	150	0.25	14.7	7.61	1136	NM	0.24	132.9	16.8	NM	
09:48	8.23	150	0.4	14.9	7.61	1126	NM	0.11	132.7	20.2	NM	
10:03	8.72	150	1.25	14.3	7.59	1124	NM	0.07	133.1	14	NM	
10:08	8.85	150	1.5	14	7.58	1129	NM	0.05	133.9	26.7	NM	
10:13	8.95	150	1.65	14.2	7.58	1132	NM	0.03	134.5	25	NM	
10:18	9	150	1.75	14.2	7.58	1133	NM	0.02	135	20.4	NM	
10:23	9.02	150	2	14.4	7.57	1135	NM	0.02	134.9	24.1	NM	
10:28	9.04	150	2.25	14.2	7.57	1135	NM	0.01	135.2	20.5	NM	
10:33	9.1	150	2.5	14.3	7.57	1132	NM	0	135.2	19.2	NM	
10:38	9.14	150	2.75	14.4	7.57	1138	NM	0	135.1	18.6	NM	

<b>Sample ID(s):</b> DUP-03-WG-20220630,MW-151-WG-20220630	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath	<b>Date Time</b>  06/30/2022 15:44
<b>Analysis:</b>			



Product: Field Data  
Version: 06/16/2012 09:00 AM



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15S**  
**Well Permit No:**

**Date: 2022/06/29**  
**70 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 589.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.73 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 150 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:20	6.79	150	0.1	17.2	7.41	675	NM	1.9	107.4	5.62	NM	
15:25	6.79	150	0.25	17.2	7.37	661	NM	1.86	106.5	3.19	NM	
15:30	6.79	150	0.4	17.3	7.35	664	NM	1.84	104.6	2.11	NM	
15:35	6.79	150	0.5	17.2	7.35	671	NM	1.85	103.3	2.39	NM	

<b>Sample ID(s):</b> DUP-02-WG-20220629,MW-15S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	06/29/2022 20:40



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-17S**  
**Well Permit No:**


**Date: 2022/06/29**  
**70 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 19 (ft)	<b>Reference Elevation</b> 601.02 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.75 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 130 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:26	15.77	130	0.1	15.3	7.96	1796	NM	6.41	126.6	12.1	NM	
17:01	15.77	130	1	14.7	7.97	1813	NM	6.31	133.4	3.68	NM	
17:06	15.77	130	1.2	15	7.97	1834	NM	6.22	134.2	2.35	NM	
17:11	15.77	130	1.25	14.9	7.97	1836	NM	6.22	134.8	3.27	NM	

<b>Sample ID(s):</b> MW-17S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  06/29/2022 22:15
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-18S**  
**Well Permit No:**

**Date: 2022/06/27**  
**70 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 12.5 (ft)	<b>Reference Elevation</b> 592.46 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.07 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 142.2 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 15 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:59	10.16	160	0.1	12.6	7.37	654	NM	0.45	164.6	2.17	NM	
17:04	10.17	160	0.25	12.4	7.34	794	NM	0.22	157.2	0.02	NM	
17:09	10.17	160	0.4	12.3	7.37	904	NM	0.14	149.3	8.48	NM	
17:14	10.17	160	0.5	12.2	7.39	949	NM	0.1	143.6	9.08	NM	
17:19	10.17	160	0.75	12.2	7.41	994	NM	0.06	134.6	20.7	NM	
17:24	10.16	120	0.9	12.4	7.41	1001	NM	0.03	131.4	22.6	NM	
17:29	10.16	120	1	12.8	7.41	1025	NM	0	123.5	20.2	NM	
17:34	10.16	120	1.25	13.1	7.41	1016	NM	0.02	117.7	20.7	NM	
17:39	10.16	120	1.4	12.9	7.41	1014	NM	0.02	114.1	20.9	NM	

<b>Sample ID(s):</b> MW-18S-WG-20220627	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	06/27/2022 22:42



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-25S**  
**Well Permit No:**

**Date: 2022/06/29**  
**65 F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15.5 (ft)	<b>Reference Elevation</b> 595.83 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.52 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 190 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (')
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> (') / 1.65 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:09	10.64	180	0.15	14.5	7.78	813	NM	7.57	87.5	3.58	NM	
11:34	10.65	180	1.25	14.2	7.7	856	NM	7.26	96.5	2.94	NM	
11:39	10.65	180	1.5	14.2	7.72	857	NM	7.23	97.8	1.71	NM	
11:44	10.65	180	1.65	14.2	7.69	857	NM	7.24	99.1	1.89	NM	

<b>Sample ID(s):</b> MW-25S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Ryan Plath 	06/29/2022 16:47



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-9S**  
**Well Permit No:**


**Date: 2022/06/28**  
**70 F and overcast**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 14 (ft)	<b>Reference Elevation</b> 601.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.12 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 150 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:21	14.13	150	0.15	12.2	7.49	1162	NM	5.56	118.2	14.1	NM	
16:26	14.13	150	0.25	12	7.46	1155	NM	5.42	120.1	6.22	NM	
16:31	14.13	150	0.5	12.2	7.46	1147	NM	5.43	121.1	4.28	NM	
16:36	14.13	150	0.65	12.2	7.45	1135	NM	5.48	121.7	5.13	NM	
16:41	14.13	150	0.75	12.3	7.45	1131	NM	5.52	123.1	5.19	NM	
16:46	14.13	150	0.9	12.1	7.45	1129	NM	5.51	124.3	4.61	NM	
16:51	14.13	150	1.2	11.9	7.45	1122	NM	5.5	126.4	4.52	NM	
16:56	14.13	150	1.25	11.9	7.45	1119	NM	5.5	127.3	4.54	NM	

<b>Sample ID(s):</b> MW-9S-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Ryan Plath 	<b>Date Time</b>  06/28/2022 21:58
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-01**  
**Well Permit No:**

**Date: 2022/06/30**  
**Cloudy high 60s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 11 (ft)	<b>Reference Elevation</b> 603.74 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 15.81 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 0 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:20	16.06	200	0.25	12.1	7.91	1803	NM	1.25	34	0.47	NM	
08:25	16.08	200	0.5	12	7.89	1786	NM	1.28	31.3	0.02	NM	
08:30	16.09	200	0.75	12.1	7.87	1777	NM	1.15	29.2	0.02	NM	
08:35	16.1	200	1	12.3	7.85	1778	NM	1.22	28	0.02	NM	
08:40	16.11	200	1.25	12.3	7.87	1770	NM	0.98	26.4	0.02	NM	
08:45	16.13	200	1.5	12.1	7.87	1768	NM	0.89	25.4	0.02	NM	
08:50	16.14	200	1.75	12.1	7.86	1765	NM	0.91	24.5	0.02	NM	

<b>Sample ID(s):</b> MW-01-WG-20220630	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/01/2022 13:40





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13S**  
**Well Permit No:**


**Date: 2022/06/30**  
**Cloudy 60s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 15.64 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:30	16	200	0.25	13.2	7.87	960	NM	3.26	50.7	1.84	NM	
09:35	16.01	200	0.5	12	7.97	797	NM	8.37	50	0.02	NM	
09:40	16.01	200	0.75	12.9	7.98	655	NM	9.39	53.5	0.02	NM	
09:45	16.01	200	1.25	12.7	7.97	574	NM	9.63	56.3	0.02	NM	
09:50	16.01	200	1.5	13	7.95	562	NM	9.52	57.6	1.64	NM	
09:55	16.01	200	1.75	12.9	7.95	561	NM	9.48	59	0.02	NM	

<b>Sample ID(s):</b> MW-13S-WG-20220630	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler 	07/01/2022 13:50



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15D**  
**Well Permit No:**

**Date: 2022/06/29**  
**Sunny 70**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 42 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 8.14 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:10	10.3	200	0.25	13.9	8.35	203.4	NM	0.56	-80.7	0.62	NM	
14:15	11.3	200	0.5	13.7	8.22	200.8	NM	0.42	-106.3	0.66	NM	
14:20	12.09	200	0.75	13.8	8.18	200.8	NM	0.35	-114.9	0.07	NM	
14:25	13.08	200	1	13.5	8.15	200.5	NM	0.3	-122.1	0.02	NM	
14:30	14.09	200	1.25	13.5	8.14	200.1	NM	0.28	-126.9	0.11	NM	
14:35	15.2	200	1.5	13.5	8.11	199.7	NM	0.26	-130.2	0.02	NM	

<b>Sample ID(s):</b> MW-15D-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/01/2022 13:52



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-16S**  
**Well Permit No:**

**Date: 2022/06/27**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 604.17 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.02 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:55	17.57	200	0.25	19.8	6.86	2.9	NM	8.25	200.9	5.23	NM	
17:00	17.72	200	0.5	18.8	6.88	2.8	NM	8.42	199.2	3.61	NM	
17:05	17.89	200	0.75	18.3	6.93	2.7	NM	8.53	198.3	4.29	NM	
17:10	18.12	200	1	17.8	6.99	2.7	NM	8.61	198.5	4.51	NM	
17:15	18.14	200	1.25	17.8	7.05	2.6	NM	8.61	198	5.97	NM	
17:20	18.16	200	1.5	18	7.11	2.6	NM	8.57	197.9	4.71	NM	
17:25	18.2	200	1.75	18	7.12	2.6	NM	8.55	198.4	5.3	NM	
17:30	18.25	200	2	18	7.12	2.5	NM	8.55	199	6.43	NM	
17:35	18.28	200	2.25	18	7.13	2.5	NM	8.56	199.5	7.03	NM	
17:40	18.31	200	2.25	18.1	7.11	2.45	NM	8.57	200.2	6.66	NM	

<b>Sample ID(s):</b> MW-16S-WG-20220627	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/02/2022 00:37



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**

**Date: 2022/06/29**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 16.09 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:25	16.43	200	0.25	12.1	7.61	2802	NM	0.39	2.3	6.81	NM	
15:30	16.5	200	0.5	12	7.39	2353	NM	0.32	-0.7	2.02	NM	
15:32	15.57	200	0.75	11.9	7.35	2328	NM	0.31	-3.4	2.43	NM	
15:40	16.5	200	1	12	7.37	2400	NM	0.37	-8.7	1.05	NM	
15:45	16.62	200	1.25	12	7.39	2441	NM	0.5	-14.5	0.02	NM	
15:50	16.66	200	1.5	12	7.4	2463	NM	0.57	-18.1	0.02	NM	
15:55	16.66	200	1.75	12	7.4	2507	NM	0.62	-20.5	0.02	NM	
16:00	16.66	200	2	12	7.4	2538	NM	0.65	-23.4	0.02	NM	

<b>Sample ID(s):</b> MW-7S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Leann grahler 	<b>Date Time</b>  07/01/2022 13:45
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-8S**  
**Well Permit No:**


**Date: 2022/06/28**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 604 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.02 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 0 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> Leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:20	16.1	200	0.25	13	7.59	3525	NM	0.66	55	0.75	NM	
16:25	16.1	200	0.5	12.7	7.58	3363	NM	0.56	4.81	0.49	NM	
16:30	16.1	200	0.75	12.8	7.57	2934	NM	0.88	43.1	0.21	NM	
16:35	16.1	200	1	12.5	7.56	2680	NM	1.09	41.8	0.02	NM	
16:40	16.1	200	1.25	12.9	7.55	2588	NM	1.36	41.3	0.7	NM	
16:45	16.1	200	1.5	12.5	7.55	2472	NM	1.6	41.7	0.68	NM	
16:50	16.1	200	1.75	12.3	7.55	2409	NM	1.78	42.3	0.62	NM	
16:55	16.1	200	2	12.3	7.54	2355	NM	1.96	43	0.27	NM	
17:00	16.1	200	2.25	12.3	7.55	2311	NM	2.11	43.8	0.02	NM	

<b>Sample ID(s):</b> MW-8S-WG-20220707	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Leann grahler 	<b>Date Time</b>  07/07/2022 13:31
<b>Analysis:</b>			





# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-6S**  
**Well Permit No:**

**Date: 2022/06/29**  
**Sunny 70 s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 602.72 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 15.49 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 0 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:30	15.81	200	0.25	12.3	7.44	640	NM	6.26	64.7	0.02	NM	
11:35	15.84	200	0.5	12.2	7.4	633	NM	6.47	65.9	0.02	NM	
11:40	15.95	200	0.75	12.2	7.35	638	NM	6.63	67.5	0.02	NM	
11:45	16.02	200	1	12.1	7.32	659	NM	6.38	69.2	0.02	NM	
11:50	16.06	200	1.25	12.2	7.3	680	NM	6.14	70.2	0.02	NM	
11:55	16.09	200	1.5	12.1	7.28	700	NM	5.76	70.8	0.06	NM	
12:00	16.13	200	1.75	12	7.27	716	NM	5.56	71.2	0.02	NM	

<b>Sample ID(s):</b> MW-6S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Leann grahler 	<b>Date Time</b>  07/01/2022 13:44
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-20S**  
**Well Permit No:**

**Date: 2022/06/29**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 13.1 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:50	13.34	200	0.25	13.1	7.77	1065	NM	6.55	66	7.72	NM	
12:55	13.55	200	0.5	12.7	7.71	1055	NM	6.83	67.8	0.11	NM	
13:00	13.69	200	0.75	12.6	7.68	1051	NM	6.9	68.9	0.67	NM	
13:05	13.87	200	1	12.5	7.67	1053	NM	6.78	69.9	1.27	NM	
13:10	13.99	200	1.25	12.4	7.65	1056	NM	6.8	70.5	3.95	NM	

<b>Sample ID(s):</b> MW-20S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann graher	07/01/2022 13:56



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-08**  
**Well Permit No:**

**Date: 2022/06/28**  
**Cloudy 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.18 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 16.02 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 9 - 19 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 3.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:20	16.1	200	0.25	13	7.59	3525	NM	0.66	55	0.75	NM	
16:25	16.1	200	0.5	12.7	7.58	3363	NM	0.56	48.1	0.49	NM	
16:30	16.1	200	0.75	12.8	7.57	2934	NM	0.88	43.1	0.21	NM	
16:35	16.1	200	1	12.5	7.56	2680	NM	1.09	41.8	0.02	NM	
16:40	16.1	200	1.25	12.9	7.55	2588	NM	1.36	41.3	0.7	NM	
16:45	16.1	200	1.5	12.5	7.55	2472	NM	1.6	41.7	0.68	NM	
16:50	16.1	200	1.75	12.3	7.55	2409	NM	1.78	42.3	0.62	NM	
16:55	16.1	200	3	12.3	7.54	2355	NM	1.96	43	0.27	NM	
17:00	16.11	200	3.25	12.3	7.55	2311	NM	2.11	43.8	0.02	NM	

<b>Sample ID(s):</b> MW-08-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-26S**  
**Well Permit No:**


**Date: 2022/06/28**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.32 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:20	6.36	200	0.25	14.1	7.78	1134	NM	0.54	77.6	35.8	NM	
12:25	6.37	200	0.5	13.8	7.74	1134	NM	0.45	75.8	26.1	NM	
12:30	6.38	200	0.75	13.9	7.7	1133	NM	0.37	73	15.1	NM	
12:35	6.38	200	1	13.8	7.68	1134	NM	0.34	71.8	13.2	NM	
12:40	6.38	200	1.25	14.1	7.66	1136	NM	0.32	70.1	6.8	NM	
12:45	6.38	200	1.5	13.9	7.66	1136	NM	0.3	68.1	6.9	NM	
12:50	6.38	200	1.75	14.1	7.64	1131	NM	0.28	66.2	5.01	NM	
12:55	6.38	178.8	3	14.1	7.64	1133	NM	0.28	64.6	4.19	NM	
13:00	6.38	200	3.25	14.1	7.63	1134	NM	0.27	63.4	4.77	NM	
13:05	6.38	200	3.5	13.9	7.63	1135	NM	0.26	62.4	4.37	NM	

<b>Sample ID(s):</b> MW-26S-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Leann grahler 	<b>Date Time</b>  07/01/2022 14:28
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13D**  
**Well Permit No:**

**Date: 2022/06/29**  
**Cloudy 60s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 48 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 16.25 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.5 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:00	20.32	200	1	13.4	8.02	221.6	NM	0.31	-126.1	0.02	NM	
08:45	17.92	200	0.25	13.4	8.14	224.6	NM	0.59	-76.6	0.4	NM	
08:50	18.82	200	0.5	13.1	8.06	222.3	NM	0.4	-107	0.26	NM	
08:55	19.58	200	0.75	13.2	8.03	221.7	NM	0.34	-118.6	0.02	NM	
09:00	20.64	200	1	13.5	8.02	221.2	NM	0.3	-128.4	0.02	NM	
09:05	21.19	200	1.25	13.6	8.02	221.3	NM	0.29	-131.8	0.02	NM	
09:10	21.78	200	1.5	13.6	8.01	221.1	NM	0.27	-135.7	0.36	NM	

<b>Sample ID(s):</b> MW-13D-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-21S**  
**Well Permit No:**

**Date: 2022/06/28**  
**Cloudy 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 591.41 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 6.56 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> 18 (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> 1.87 (gal) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:05	6.75	200	0.25	13.1	7.96	982	NM	0.75	0.6	0.02	NM	
15:10	7.67	200	0.5	13.2	7.75	981	NM	0.49	3.5	0.7	NM	
15:15	6.77	200	0.76	13.2	7.64	983	NM	0.52	4	0.52	NM	
15:20	6.77	200	1	13.2	7.56	986	NM	0.56	4.4	0.53	NM	
15:25	6.77	200	1.25	13.2	7.5	982	NM	0.51	4.3	0.31	NM	
15:30	6.78	200	1.5	13.1	7.41	983	NM	0.5	4.6	0.18	NM	

<b>Sample ID(s):</b> MW-21S-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/08/2022 14:40





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-01**  
**Well Permit No:**

**Date: 2022/06/30**  
**Cloudy high 60s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 11 (ft)	<b>Reference Elevation</b> 603.74 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 15.81 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 0 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:20	16.06	200	0.25	12.1	7.91	1803	NM	1.25	34	0.47	NM	
08:25	16.08	200	0.5	12	7.89	1786	NM	1.28	31.3	0.02	NM	
08:30	16.09	200	0.75	12.1	7.87	1777	NM	1.15	29.2	0.02	NM	
08:35	16.1	200	1	12.3	7.85	1778	NM	1.22	28	0.02	NM	
08:40	16.11	200	1.25	12.3	7.87	1770	NM	0.98	26.4	0.02	NM	
08:45	16.13	200	1.5	12.1	7.87	1768	NM	0.89	25.4	0.02	NM	
08:50	16.14	200	1.75	12.1	7.86	1765	NM	0.91	24.5	0.02	NM	

<b>Sample ID(s):</b> MW-01-WG-20220630	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/01/2022 13:40



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13S**  
**Well Permit No:**

**Date: 2022/06/30**  
**Cloudy 60s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 15.64 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:30	16	200	0.25	13.2	7.87	960	NM	3.26	50.7	1.84	NM	
09:35	16.01	200	0.5	12	7.97	797	NM	8.37	50	0.02	NM	
09:40	16.01	200	0.75	12.9	7.98	655	NM	9.39	53.5	0.02	NM	
09:45	16.01	200	1.25	12.7	7.97	574	NM	9.63	56.3	0.02	NM	
09:50	16.01	200	1.5	13	7.95	562	NM	9.52	57.6	1.64	NM	
09:55	16.01	200	1.75	12.9	7.95	561	NM	9.48	59	0.02	NM	

<b>Sample ID(s):</b> MW-13S-WG-20220630	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/01/2022 13:50



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15D**  
**Well Permit No:**

**Date: 2022/06/29**  
**Sunny 70**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 42 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 8.14 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:10	10.3	200	0.25	13.9	8.35	203.4	NM	0.56	-80.7	0.62	NM	
14:15	11.3	200	0.5	13.7	8.22	200.8	NM	0.42	-106.3	0.66	NM	
14:20	12.09	200	0.75	13.8	8.18	200.8	NM	0.35	-114.9	0.07	NM	
14:25	13.08	200	1	13.5	8.15	200.5	NM	0.3	-122.1	0.02	NM	
14:30	14.09	200	1.25	13.5	8.14	200.1	NM	0.28	-126.9	0.11	NM	
14:35	15.2	200	1.5	13.5	8.11	199.7	NM	0.26	-130.2	0.02	NM	

<b>Sample ID(s):</b> MW-15D-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/01/2022 13:52



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-16S**  
**Well Permit No:**

**Date: 2022/06/27**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 604.17 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.02 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:55	17.57	200	0.25	19.8	6.86	2.9	NM	8.25	200.9	5.23	NM	
17:00	17.72	200	0.5	18.8	6.88	2.8	NM	8.42	199.2	3.61	NM	
17:05	17.89	200	0.75	18.3	6.93	2.7	NM	8.53	198.3	4.29	NM	
17:10	18.12	200	1	17.8	6.99	2.7	NM	8.61	198.5	4.51	NM	
17:15	18.14	200	1.25	17.8	7.05	2.6	NM	8.61	198	5.97	NM	
17:20	18.16	200	1.5	18	7.11	2.6	NM	8.57	197.9	4.71	NM	
17:25	18.2	200	1.75	18	7.12	2.6	NM	8.55	198.4	5.3	NM	
17:30	18.25	200	2	18	7.12	2.5	NM	8.55	199	6.43	NM	
17:35	18.28	200	2.25	18	7.13	2.5	NM	8.56	199.5	7.03	NM	
17:40	18.31	200	2.25	18.1	7.11	2.45	NM	8.57	200.2	6.66	NM	

<b>Sample ID(s):</b> MW-16S-WG-20220627	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/02/2022 00:37



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-19S**  
**Well Permit No:**

**Date: 2022/06/22**  
**70 sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 596.18 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 11.87 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 15 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:25	11.83	200	0.25	22.3	7.88	4.9	NM	8.43	156.1	1.93	NM	
09:30	11.89	200	0.5	21.2	7.82	4.6	NM	8.6	154.4	3.6	NM	
09:35	11.9	200	0.75	20.1	7.84	4.4	NM	8.69	148.2	1.01	NM	
09:40	11.9	200	1	19.5	7.87	4.2	NM	8.61	137.7	1.73	NM	
09:45	11.9	200	1.25	19	7.9	4.1	NM	8.65	131.7	1.14	NM	
09:50	11.9	200	1.5	18.8	7.91	3.8	NM	8.55	128.9	1.04	NM	
09:55	11.9	200	1.75	18.6	7.92	3.7	NM	8.54	127.8	0.02	NM	
10:00	11.9	200	2	18.5	7.93	3.5	NM	8.49	127.5	1.03	NM	
10:05	11.9	200	2.25	18.3	7.95	3.4	NM	8.41	128.2	0.99	NM	
10:10	11.9	200	2.5	18.2	7.95	3.4	NM	8.34	130.6	0.29	NM	

<b>Sample ID(s):</b> MW-19S-WG-20220622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/08/2022 19:37



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**

**Date: 2022/06/29**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 16.09 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:25	16.43	200	0.25	12.1	7.61	2802	NM	0.39	2.3	6.81	NM	
15:30	16.5	200	0.5	12	7.39	2353	NM	0.32	-0.7	2.02	NM	
15:32	15.57	200	0.75	11.9	7.35	2328	NM	0.31	-3.4	2.43	NM	
15:40	16.5	200	1	12	7.37	2400	NM	0.37	-8.7	1.05	NM	
15:45	16.62	200	1.25	12	7.39	2441	NM	0.5	-14.5	0.02	NM	
15:50	16.66	200	1.5	12	7.4	2463	NM	0.57	-18.1	0.02	NM	
15:55	16.66	200	1.75	12	7.4	2507	NM	0.62	-20.5	0.02	NM	
16:00	16.66	200	2	12	7.4	2538	NM	0.65	-23.4	0.02	NM	

<b>Sample ID(s):</b> MW-7S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-8S**  
**Well Permit No:**

**Date: 2022/06/28**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 604 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.02 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 0 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> Leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:20	16.1	200	0.25	13	7.59	3525	NM	0.66	55	0.75	NM	
16:25	16.1	200	0.5	12.7	7.58	3363	NM	0.56	4.81	0.49	NM	
16:30	16.1	200	0.75	12.8	7.57	2934	NM	0.88	43.1	0.21	NM	
16:35	16.1	200	1	12.5	7.56	2680	NM	1.09	41.8	0.02	NM	
16:40	16.1	200	1.25	12.9	7.55	2588	NM	1.36	41.3	0.7	NM	
16:45	16.1	200	1.5	12.5	7.55	2472	NM	1.6	41.7	0.68	NM	
16:50	16.1	200	1.75	12.3	7.55	2409	NM	1.78	42.3	0.62	NM	
16:55	16.1	200	2	12.3	7.54	2355	NM	1.96	43	0.27	NM	
17:00	16.1	200	2.25	12.3	7.55	2311	NM	2.11	43.8	0.02	NM	

<b>Sample ID(s):</b> MW-8S-WG-20220707	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-6S**  
**Well Permit No:**

**Date: 2022/06/29**  
**Sunny 70 s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 602.72 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 15.49 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 0 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:30	15.81	200	0.25	12.3	7.44	640	NM	6.26	64.7	0.02	NM	
11:35	15.84	200	0.5	12.2	7.4	633	NM	6.47	65.9	0.02	NM	
11:40	15.95	200	0.75	12.2	7.35	638	NM	6.63	67.5	0.02	NM	
11:45	16.02	200	1	12.1	7.32	659	NM	6.38	69.2	0.02	NM	
11:50	16.06	200	1.25	12.2	7.3	680	NM	6.14	70.2	0.02	NM	
11:55	16.09	200	1.5	12.1	7.28	700	NM	5.76	70.8	0.06	NM	
12:00	16.13	200	1.75	12	7.27	716	NM	5.56	71.2	0.02	NM	

<b>Sample ID(s):</b> MW-6S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-20S**  
**Well Permit No:**

**Date: 2022/06/29**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 13.1 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:50	13.34	200	0.25	13.1	7.77	1065	NM	6.55	66	7.72	NM	
12:55	13.55	200	0.5	12.7	7.71	1055	NM	6.83	67.8	0.11	NM	
13:00	13.69	200	0.75	12.6	7.68	1051	NM	6.9	68.9	0.67	NM	
13:05	13.87	200	1	12.5	7.67	1053	NM	6.78	69.9	1.27	NM	
13:10	13.99	200	1.25	12.4	7.65	1056	NM	6.8	70.5	3.95	NM	

<b>Sample ID(s):</b> MW-20S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/01/2022 13:56



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-08**  
**Well Permit No:**

**Date: 2022/06/28**  
**Cloudy 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.18 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 16.02 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 9 - 19 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 3.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:20	16.1	200	0.25	13	7.59	3525	NM	0.66	55	0.75	NM	
16:25	16.1	200	0.5	12.7	7.58	3363	NM	0.56	48.1	0.49	NM	
16:30	16.1	200	0.75	12.8	7.57	2934	NM	0.88	43.1	0.21	NM	
16:35	16.1	200	1	12.5	7.56	2680	NM	1.09	41.8	0.02	NM	
16:40	16.1	200	1.25	12.9	7.55	2588	NM	1.36	41.3	0.7	NM	
16:45	16.1	200	1.5	12.5	7.55	2472	NM	1.6	41.7	0.68	NM	
16:50	16.1	200	1.75	12.3	7.55	2409	NM	1.78	42.3	0.62	NM	
16:55	16.1	200	3	12.3	7.54	2355	NM	1.96	43	0.27	NM	
17:00	16.11	200	3.25	12.3	7.55	2311	NM	2.11	43.8	0.02	NM	

<b>Sample ID(s):</b> MW-08-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-24S**  
**Well Permit No:**

**Date: 2022/06/22**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 599.93 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 11.83 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (')
<b>Sampler</b> Leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.66 (gal) / 1.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:10	13.83	200	0.25	13.8	7.88	601	NM	6.29	66.4	0.02	NM	
11:15	13.83	200	0.5	13.9	7.85	601	NM	6.28	68.6	0.75	NM	
11:20	13.83	200	0.75	13.9	7.82	601	NM	6.31	70.7	3.19	NM	
11:25	13.83	200	1	13.9	7.81	600	NM	6.38	72.5	2.25	NM	

<b>Sample ID(s):</b> MW-24S-WG-20220622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/08/2022 19:48



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-26S**  
**Well Permit No:**

**Date: 2022/06/28**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.32 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:20	6.36	200	0.25	14.1	7.78	1134	NM	0.54	77.6	35.8	NM	
12:25	6.37	200	0.5	13.8	7.74	1134	NM	0.45	75.8	26.1	NM	
12:30	6.38	200	0.75	13.9	7.7	1133	NM	0.37	73	15.1	NM	
12:35	6.38	200	1	13.8	7.68	1134	NM	0.34	71.8	13.2	NM	
12:40	6.38	200	1.25	14.1	7.66	1136	NM	0.32	70.1	6.8	NM	
12:45	6.38	200	1.5	13.9	7.66	1136	NM	0.3	68.1	6.9	NM	
12:50	6.38	200	1.75	14.1	7.64	1131	NM	0.28	66.2	5.01	NM	
12:55	6.38	178.8	3	14.1	7.64	1133	NM	0.28	64.6	4.19	NM	
13:00	6.38	200	3.25	14.1	7.63	1134	NM	0.27	63.4	4.77	NM	
13:05	6.38	200	3.5	13.9	7.63	1135	NM	0.26	62.4	4.37	NM	

<b>Sample ID(s):</b> MW-26S-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-21S**  
**Well Permit No:**

**Date: 2022/06/28**  
**Cloudy 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 591.41 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 6.56 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> 18 (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> 1.87 (gal) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:05	6.75	200	0.25	13.1	7.96	982	NM	0.75	0.6	0.02	NM	
15:10	7.67	200	0.5	13.2	7.75	981	NM	0.49	3.5	0.7	NM	
15:15	6.77	200	0.76	13.2	7.64	983	NM	0.52	4	0.52	NM	
15:20	6.77	200	1	13.2	7.56	986	NM	0.56	4.4	0.53	NM	
15:25	6.77	200	1.25	13.2	7.5	982	NM	0.51	4.3	0.31	NM	
15:30	6.78	200	1.5	13.1	7.41	983	NM	0.5	4.6	0.18	NM	

<b>Sample ID(s):</b> MW-21S-WG-20220628	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/08/2022 14:40



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13D**  
**Well Permit No:**

**Date: 2022/06/29**  
**Cloudy 60s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 48 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 16.25 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:00	20.32	200	1	13.4	8.02	221.6	NM	0.31	-126.1	0.02	NM	
08:45	17.92	200	0.25	13.4	8.14	224.6	NM	0.59	-76.6	0.4	NM	
08:50	18.82	200	0.5	13.1	8.06	222.3	NM	0.4	-107	0.26	NM	
08:55	19.58	200	0.75	13.2	8.03	221.7	NM	0.34	-118.6	0.02	NM	
09:00	20.64	200	1	13.5	8.02	221.2	NM	0.3	-128.4	0.02	NM	
09:05	21.19	200	1.25	13.6	8.02	221.3	NM	0.29	-131.8	0.02	NM	
09:10	21.78	200	1.5	13.6	8.01	221.1	NM	0.27	-135.7	0.36	NM	

<b>Sample ID(s):</b> MW-13D-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-23S**  
**Well Permit No:**

**Date: 2022/06/29**  
**Cloudy 60s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 13 (ft)	<b>Reference Elevation</b> 595.01 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 10 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220626-GWMonitor	<b>Average Purge Rate</b> 0 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 20 (ft)
<b>Sampler</b> ryan plath	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:05	10.01	200	0.25	13.2	7.83	494.7	NM	7.71	47	17.7	NM	
10:10	10.01	200	0.5	13.3	7.82	495.1	NM	7.67	48.2	5.09	NM	
10:15	10.01	200	0.75	13.2	7.8	495.1	NM	7.61	50.2	2.94	NM	
10:20	10.01	200	1	13.1	7.8	493.9	NM	7.59	51	2.48	NM	

<b>Sample ID(s):</b> MW-23S-WG-20220629	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	07/01/2022 13:59



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-01**  
**Well Permit No:**

**Date: 2022/09/06**  
**Sunny 80**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 14 (ft)	<b>Reference Elevation</b> 603.74 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 16.7 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 194.6 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:25	16.92	200	0.25	15.2	7.85	2.551	NM	1.72	204.6	0.8	NM	
16:30	16.95	200	0.5	14.7	7.83	2.556	NM	0.71	201.4	0.57	NM	
16:35	16.96	200	0.75	15.4	7.79	2.543	NM	1.39	198.6	0.77	NM	
16:39	16.98	200	1	14.7	7.8	2.553	NM	0.74	196.7	1.02	NM	
16:45	17.01	162.3	1.25	14.5	7.82	2.528	NM	0.42	194.1	1.75	NM	
16:50	17.01	200	1.5	14.6	7.83	2.522	NM	0.35	192.2	1.92	NM	
16:55	17.01	200	1.75	14.6	7.82	2.527	NM	0.56	190.5	2	NM	

<b>Sample ID(s):</b> MW-01-WG-20220906	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	09/08/2022 19:00



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13D**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 46 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:40	18.24	200	0.25	16.4	8.17	0.366	NM	0.47	-194.9	4.06	NM	
12:45	19.2	200	0.5	17	8.01	0.363	NM	0.31	-204.9	24	NM	
12:50	19.92	200	0.75	17.1	7.98	0.364	NM	0.27	-209.2	48.5	NM	
12:55	20.48	200	1	17.3	7.96	0.363	NM	0.23	-213.2	57	NM	
13:00	21.12	200	1.25	17.9	7.95	0.362	NM	0.21	-216	35.5	NM	
13:05	21.9	200	1.5	17.5	7.95	0.364	NM	0.18	-218.3	68.76	NM	
13:10	22.5	200	1.75	17.7	7.94	0.364	NM	0.16	-220.8	101	NM	
13:15	23	200	2	17.9	7.94	0.363	NM	0.15	-221.9	136	NM	
13:20	23.7	200	2.25	17.9	7.9	0.364	NM	0.15	-221.7	2.5	NM	
13:25	24.13	200	2.5	18.2	7.91	0.364	NM	0.14	-221.9	3.16	NM	

<b>Sample ID(s):</b> DUP-01-WG-20220907,MW-13D-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	09/08/2022 19:01



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13S**  
**Well Permit No:**

**Date: 2022/09/06**  
**Sunny 80**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 16.54 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> LG	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:15	16.61	200	0.25	14.9	7.75	1.752	NM	1.01	191.4	31	NM	
15:20	16.61	200	0.5	15.3	7.62	1.68	NM	1.5	192.4	14.3	NM	
15:25	16.61	200	0.75	15.1	7.63	1.466	NM	4	190.9	11	NM	
15:30	16.61	200	1	15.2	7.7	1.188	NM	7.48	190.7	5.84	NM	
15:35	16.61	200	1.25	15.3	7.75	1.106	NM	8.37	192.3	3.5	NM	
15:40	16.61	200	1.5	15.3	7.76	1.085	NM	8.65	193.4	2.5	NM	
15:45	16.61	200	1.75	15	7.76	1.081	NM	8.7	196.8	1.7	NM	
15:50	16.61	200	2	15	7.76	1.084	NM	8.77	198.9	1.11	NM	

<b>Sample ID(s):</b> MW-13S-WG-20220906	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	09/08/2022 19:05





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-20S**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny 70s**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.35 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:50	14.61	200	0.25	15.7	7.68	1.852	NM	5.61	188.5	4.8	NM	
10:55	14.7	200	0.5	15.6	7.55	1.836	NM	5.49	192.8	5	NM	
11:00	14.73	200	0.75	17.2	7.5	1.825	NM	5.59	195.3	6.8	NM	
11:05	14.7	200	1	17.6	7.5	1.842	NM	5.64	197.4	5.4	NM	
11:10	14.73	200	1.25	16.7	7.51	1.847	NM	5.63	199.9	7.6	NM	
11:15	14.83	200	1.5	16.7	7.48	1.839	NM	5.67	203	8.9	NM	
11:20	14.85	200	1.75	16.7	7.48	1.849	NM	5.65	204.9	9	NM	

<b>Sample ID(s):</b> MW-20S-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	09/08/2022 19:04



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-6S**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny 70**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 602.72 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.5 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:25	16.78	200	0.25	13.7	7.26	1.754	NM	3.28	186	18	NM	
08:30	16.83	200	0.5	13.8	7.17	1.555	NM	4.11	189.9	9	NM	
08:35	16.8	200	0.75	14.4	7.13	1.526	NM	4.34	192.4	12.9	NM	
08:40	16.8	200	1	15.3	7.11	1.514	NM	4.3	193.9	8.2	NM	
08:45	16.88	200	1.25	14	7.12	1.502	NM	4.77	195.3	1	NM	
08:50	16.92	200	1.5	14	7.11	1.458	NM	4.62	198	1	NM	
08:55	16.99	200	1.75	14.1	7.11	1.479	NM	4.43	199.9	0.7	NM	

<b>Sample ID(s):</b> MW-6S-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	09/08/2022 19:09



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny 70**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> Peristaltic pump	<b>Depth to Water / Free Product</b> 17.3 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> Peristaltic pump	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 3 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:25	17.16	200	0.25	15.7	7.5	1.991	NM	1.29	201.4	5	NM	
09:30	17.2	200	0.5	15.5	7.34	1.947	NM	0.75	202.5	4.3	NM	
09:35	17.24	200	0.75	15.3	7.29	1.975	NM	0.58	195.3	6	NM	
09:40	17.27	200	1	15.3	7.29	2.179	NM	0.55	170.6	8.7	NM	
09:45	17.29	200	1.25	15.2	7.29	2.499	NM	0.54	111.3	11.36	NM	
09:50	173	200	1.5	15.2	7.29	2.662	NM	0.52	64	13.75	NM	
09:55	17.3	200	1.75	15.4	7.28	2.892	NM	0.5	20.7	14.84	NM	
10:00		200	2	15.6	7.27	3.1	NM	0.5	-9	14.24	NM	
10:05	17.3	200	2.25	15.7	7.28	3.246	NM	0.46	-20.4	16.5	NM	
10:10	17.3	200	2.5	15.4	7.28	3.328	NM	0.45	-27.9	17.3	NM	
10:15	17.3	200	2.75	15.5	7.28	3.361	NM	0.44	-36.9	18	NM	
10:20	17.3	200	3	15.6	7.29	3.441	NM	0.42	-40.2	18.1	NM	

<b>Sample ID(s):</b> MW-7S-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	09/08/2022 19:09



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-28S**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny 70**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> ( )
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / - (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 13.78 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:30	13.9	200	0.25	16.5	7.6	1.64	NM	2.58	130	45	NM	
15:35	13.9	200	0.5	16.4	7.51	1.6	NM	2.61	114.9	44	NM	
15:40	13.9	200	0.75	16.5	7.49	1.597	NM	2.59	110.7	35.57	NM	
15:45	13.9	200	1	16.4	7.5	1.601	NM	2.43	110.1	30.12	NM	
15:50	13.9	200	1.25	16.5	7.51	1.601	NM	2.31	113.3	25.95	NM	
15:55	13.9	200	1.5	16.4	7.53	1.59	NM	2.29	117.5	26.34	NM	
16:00	13.9	200	1.75	16.3	7.54	1.579	NM	2.32	119.2	24.7	NM	

<b>Sample ID(s):</b> DUP-02-WG-20220907,MW-28S-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	09/08/2022 19:07



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-27S**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny 70**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> ( )
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.52 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / - (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:10	15.66	200	0.25	16.3	7.79	0.953	NM	0.67	82.7	15	NM	
14:15	15.7	200	0.5	16.3	7.81	0.948	NM	1.32	70.7	5.72	NM	
14:20	15.7	200	0.75	16.6	7.77	0.856	NM	6.11	106.8	2.64	NM	
14:25	15.7	200	1	16.4	7.72	0.799	NM	7.33	152.7	1.8	NM	
14:30	15.7	200	1.25	16.5	7.72	0.793	NM	7.66	167.2	NM	NM	
14:35	15.7	200	1.5	16.6	7.7	0.796	NM	7.82	175.6	2.53	NM	
14:40	15.7	200	1.5	16.4	7.7	0.799	NM	7.91	185.1	2.25	NM	
14:45	15.7	200	1.75	16.4	7.7	0.802	NM	7.92	194.8	1.67	NM	
14:50	15.7	200	2	16.4	7.7	0.804	NM	7.93	197.6	1.16	NM	
14:55	15.7	200	2.25	16.3	7.71	0.805	NM	7.92	201.9	0.76	NM	

<b>Sample ID(s):</b> MW-27S-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Leann grahler	09/08/2022 19:06



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-03**  
**Well Permit No:**


**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> 597.5 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.68 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 263 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.7 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:00	12.72	200	0.2	14.3	7.4	2114	NM	0.79	-91.7	51.7	NM	
09:05	12.78	222.7	0.5	15.2	7.39	2059	NM	0.59	-125.9	32.7	NM	
09:10	12.79	297	0.9	15.2	7.38	2064	NM	0.59	-127.7	8.45	NM	
09:15	12.84	309.1	1.3	15.2	7.38	2057	NM	0.59	-127.9	7.68	NM	
09:20	12.82	286.2	1.7	15.1	7.38	2050	NM	0.6	-127.8	7.99	NM	

<b>Sample ID(s):</b> MW-03-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/07/2022 14:55





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-09**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> 601.44 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.95 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 244.6 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.6 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:10	14.06	250	0.3	13	7.26	1465	NM	3.98	110	58.9	NM	
08:15	14.44	276.4	0.7	13.8	7.22	1448	NM	3.69	114.5	32.7	NM	
08:20	14.56	242.1	1	13.8	7.22	1486	NM	3.82	117.6	8.24	NM	
08:25	14.64	222.7	1.3	13.8	7.22	1484	NM	3.81	117.9	7.89	NM	
08:30	14.7	231.8	1.6	13.9	7.22	1484	NM	3.81	118.2	7.54	NM	

<b>Sample ID(s):</b> MW-09-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/07/2022 13:31



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-15I**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> 589.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.1 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 273 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 18 - 23 (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.8 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:35	7.18	250	0.3	19.7	7.5	1329	NM	1.83	90.6	8.01	NM	
10:40	7.24	222.7	0.6	18.9	7.54	1325	NM	1.94	82	5.8	NM	
10:45	7.28	309.1	1	18.3	7.53	1325	NM	1.99	82.9	5.19	NM	
10:50	7.32	286.2	1.4	18.2	7.5	1334	NM	1.91	82.2	5.42	NM	
10:55	7.36	297	1.8	18.1	7.5	1333	NM	1.79	81.4	5.64	NM	

<b>Sample ID(s):</b> MW-15I-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/07/2022 16:30



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15S**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> 589.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.05 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 245.3 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.6 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:15	7.12	250	0.3	20.2	7.33	839	NM	3.44	-39.4	9.32	NM	
12:20	7.21	214.6	0.6	20.4	7.18	831	NM	2.27	2.5	0.87	NM	
12:25	7.26	297	1	20.4	7.19	836	NM	2.29	13.3	0.71	NM	
12:30	7.32	242.1	1.3	20.4	7.19	837	NM	2.29	15	0.77	NM	
12:35	7.34	222.7	1.6	20.4	7.19	839	NM	2.29	16.9	0.74	NM	

<b>Sample ID(s):</b> MW-15S-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/07/2022 18:28



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-26S**  
**Well Permit No:**

**Date: 2022/09/06**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.48 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 272.5 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.2 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:50	6.56	200	0.3	15.5	7.31	1875	NM	0.88	97.9	88.5	NM	
15:55	6.62	297	0.7	15.8	7.27	1865	NM	0.57	83.1	30.67	NM	
16:00	6.64	231.8	1	15.8	7.27	1864	NM	0.56	82	21.6	NM	
16:05	6.64	286.2	1.4	15.6	7.27	1857	NM	0.51	72.3	6.74	NM	
16:10	6.66	297	1.8	15.5	7.27	1861	NM	0.5	71.3	6.45	NM	
16:15	6.66	322.8	2.2	15.6	7.27	1861	NM	0.5	70.3	6.21	NM	

<b>Sample ID(s):</b> MW-26S-WG-20220906	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/06/2022 21:23



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-29I**  
**Well Permit No:**


**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> ( )
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.9 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 222.3 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / - (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.7 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:50	7.02	200	0.2	15.7	7.15	1693	NM	6.5	23.3	3.16	NM	
15:55	7.03	222.7	0.5	15.7	7.12	1645	NM	6.44	50.2	5.02	NM	
16:00	7.09	231.8	0.8	15.7	7.12	1646	NM	6.43	51	4.87	NM	
16:05	7.12	214.6	1.1	15.7	7.12	1647	NM	6.44	51.8	4.49	NM	
16:10	7.23	222.7	1.4	15.8	7.12	1647	NM	6.44	52.7	4.79	NM	
16:15	7.27	242.1	1.7	15.7	7.13	1644	NM	6.44	54.6	4.68	NM	

<b>Sample ID(s):</b> MW-29I-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/08/2022 16:13



## Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-30I**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> ( )
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.86 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 267 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / - (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.7 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:25	6.9	200	0.2	17.4	7.21	1345	NM	4.55	96.4	3.51	NM	
13:30	7.12	231.8	0.5	18.9	7.22	1243	NM	2.16	75.5	12.72	NM	
13:35	7.23	297	0.9	19	7.22	1239	NM	2.12	74.4	9.67	NM	
13:40	7.27	297	1.3	19	7.22	1236	NM	2.11	73.3	8.97	NM	
13:45	7.32	309.1	1.7	19	7.22	1232	NM	2.11	71.9	9.42	NM	

<b>Sample ID(s):</b> MW-30I-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/07/2022 19:05





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-23S**  
**Well Permit No:**


**Date: 2022/09/06**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> 595.01 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.28 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 243.8 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 20 (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.6 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:55	10.32	200	0.2	16.6	7.31	971	NM	7.31	98.7	0.55	NM	
15:00	10.32	231.8	0.5	16.5	7.27	961	NM	7.36	94.1	1.35	NM	
15:05	10.32	222.7	0.8	16.4	7.29	940	NM	7.48	87.6	1.26	NM	
15:10	10.32	297	1.2	16.4	7.29	940	NM	7.48	86.8	1.32	NM	
15:15	10.32	267.7	1.6	16.3	7.29	937	NM	7.47	86	1.22	NM	

<b>Sample ID(s):</b> MW-23S-WG-20220906	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/06/2022 20:47



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-04**  
**Well Permit No:**


**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> 590.45 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 5.58 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 257.5 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.7 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:45	6.08	250	0.3	18	7.23	1179	NM	2.48	48.3	9.72	NM	
09:50	6.14	222.7	0.6	17.5	7.08	1149	NM	1.89	48.8	2.61	NM	
09:55	6.22	297	1	17.6	7.08	1152	NM	1.6	49.6	2.11	NM	
10:00	6.12	231.8	1.3	17.7	7.07	1176	NM	1.59	53.6	2.23	NM	
10:05	6.12	286.2	1.7	17.7	7.08	1182	NM	1.54	54.1	2.41	NM	

<b>Sample ID(s):</b> MW-04-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/07/2022 16:02



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15D**  
**Well Permit No:**


**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 8.35 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 260.1 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.7 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:30	8.45	250	0.3	15.2	7.97	331.2	NM	0.7	-109.3	6.87	NM	
11:35	8.52	214.6	0.6	14.8	7.85	325	NM	0.45	-151.4	7.89	NM	
11:40	8.65	297	1	14.8	7.84	325.1	NM	0.45	-152.5	7.98	NM	
11:45	8.62	242.1	1.3	15	7.83	325.2	NM	0.45	-153.6	7.54	NM	
11:50	8.68	297	1.7	14.9	7.83	325.3	NM	0.44	-154.6	7.86	NM	

<b>Sample ID(s):</b> MW-15D-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> Surans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial;		Lande 	09/07/2022 16:51



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-31S**  
**Well Permit No:**

**Date: 2022/09/07**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 0 (ft)	<b>Reference Elevation</b> ( )
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.71 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20220906-GWMonitor	<b>Average Purge Rate</b> 280.3 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / - (ft)
<b>Sampler</b> lauren lande	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.8 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:35	6.82	250	0.3	16.4	7.23	949	NM	1.19	-93.4	52.76	NM	
14:40	6.92	222.7	0.6	16.4	7.02	923	NM	0.54	-134.8	7.1	NM	
14:45	6.98	322.8	1	16.8	7	912	NM	0.43	-150.2	7.89	NM	
14:50	7.04	297	1.4	16.9	7	912	NM	0.43	-150.7	7.63	NM	
14:55	7.1	309.1	1.8	16.9	6.99	914	NM	0.43	-151.4	6.98	NM	

<b>Sample ID(s):</b> FB-01-WQ-20220907,MW-31S-WG-20220907	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b> furans; 2 - 100mL; Unpreserved; Glass bottle/jar - amber; ,VOCs; 3 - 40mL; HCl; Glass vial; ,Dioxins_furans; 2 - 100mL; Unp		Lande	09/07/2022 20:05



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-09**  
**Well Permit No:**

**Date: 2022/11/16**  
**37 cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 601.44 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.65 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.87 (gal) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:45	14.93	200	0.25	11.3	7.35	1397	NM	27	158.5	0.02	NM	
14:50	14.97	200	0.5	11	7.35	1398	NM	25.7	159.1	0.02	NM	
14:55	14.98	200	0.75	11	7.36	1400	NM	25.6	158.4	0.02	NM	
15:00	14.89	200	1	10.9	7.36	1402	NM	25.6	157	0.02	NM	

<b>Sample ID(s):</b> MW-09-WG-20221116	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	11/21/2022 16:03



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13S**  
**Well Permit No:**

**Date: 2022/11/17**  
**30s cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.44 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.42 (gal) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:20	17.47	200	0.25	8.9	7.84	2826	NM	20	81	26	NM	
13:25	17.47	200	0.5	9.5	7.79	2814	NM	17.7	88.8	10.8	NM	
13:30	17.74	200	0.75	9.6	7.78	2793	NM	17.7	95.5	3.18	NM	
13:35	17.74	200	1	10	7.8	2757	NM	24.3	99.8	1.75	NM	
13:40	17.74	200	1.25	10	7.82	2733	NM	30.4	102.9	1.47	NM	
13:45	17.74	200	1.5	10	7.82	2732	NM	30.6	106.2	1.4	NM	
13:50	17.5	200	1.75	9.8	7.83	2730	NM	31.2	110.4	1.73	NM	

<b>Sample ID(s):</b> MW-13S-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-6S**  
**Well Permit No:**


**Date: 2022/11/17**  
**30s cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 602.72 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.17 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 18 (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.14 (gal) / 1.5 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:25	17.44	200	0.25	8.7	7.27	2710	NM	19	230.4	3.72	NM	
09:30	17.56	200	0.5	9.3	7.27	2603	NM	21.8	226.3	1.53	NM	
09:35	17.86	200	0.75	9.2	7.27	2613	NM	20.3	223.2	1.08	NM	
09:40	17.86	200	1	9.7	7.27	2626	NM	19.1	219.3	1.75	NM	
09:45	17.86	200	1.25	9.9	7.27	2633	NM	17.9	215.3	1.72	NM	
09:50	17.86	200	1.5	9.9	7.27	2645	NM	17	212.6	1.72	NM	

<b>Sample ID(s):</b> MW-6S-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	11/21/2022 16:12





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**


**Date: 2022/11/17**  
**30s cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.57 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.72 (gal) / 2.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:15	17.82	200	0.25	11.2	7.54	2757	NM	7.3	191	3.94	NM	
10:20	17.92	200	0.5	11.1	7.53	2468	NM	7.2	187	3.61	NM	
10:25	17.97	200	0.75	11	7.56	2693	NM	10.3	178.6	3.61	NM	
10:29	18.02	200	1	11	7.56	3092	NM	11	151	4.01	NM	
10:35	18.09	200	1.25	11.1	7.54	3675	NM	9.7	27.5	5.93	NM	
10:40	18.07	200	1.5	11.2	7.54	4002	NM	7.8	-25.9	9.8	NM	
10:45	18.02	200	1.5	10.1	7.53	5231	NM	5.2	-44.9	14	NM	
10:50	18.02	200	1.75	9.7	7.58	5879	NM	3.2	-71.9	11.6	NM	
10:55	17.9	200	2	9.6	7.58	5687	NM	3.2	-79.3	8.17	NM	
11:00	17.9	200	2.25	9.4	7.57	5319	NM	3.1	-76.8	6.71	NM	
11:05	18.9	200	2.5	9.6	7.57	5290	NM	3.3	-80.1	6.1	NM	
11:10	17.9	200	2.75	9.8	7.56	5138	NM	3.4	-79.2	1.51	NM	

<b>Sample ID(s):</b> MW-7S-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Lg 	11/21/2022 16:14



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-20S**  
**Well Permit No:**

**Date: 2022/11/16**  
**37 sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.99 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.82 (gal) / 0.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:40	15.25	200	0.25	10.9	7.35	1809	NM	42.9	209.7	5.75	NM	
13:45	15.37	200	0.5	11	7.35	1800	NM	43.7	207.1	5.36	NM	
13:50	15.53	200	0.75	10.9	7.35	1794	NM	44.3	200.3	11.3	NM	
13:55	15.87	200	1	11.1	7.43	1790	NM	44.8	195.5	0.72	NM	
14:00	15.87	200	1.25	11.1	7.35	1813	NM	43	190.3	3.73	NM	
14:03	15.87	200	1.5	11.1	7.37	1845	NM	40.6	185.7	8.19	NM	

<b>Sample ID(s):</b> MW-20S-WG-20221116	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	11/21/2022 16:09



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13D**  
**Well Permit No:**

**Date: 2022/11/17**  
**30 cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 47 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.92 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 50 (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 5.4 (gal) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:20	19	200	0.25	9.3	8.33	507	NM	6.5	-84.3	NM	NM	
14:25	19.82	200	0.5	9.4	8.23	494.5	NM	4.4	-131.4	0.03	NM	
14:30	20.75	200	0.75	9.6	8.2	492.8	NM	3	-147.7	0.02	NM	
14:35	21.88	200	1	9.6	8.2	491.6	NM	2.3	-154.6	1.91	NM	
14:40	22.67	200	1.25	9.7	8.19	490.1	NM	1.8	-160.6	0.02	NM	
14:45	23.26	200	1.5	9.6	8.19	491.1	NM	1.7	-163.6	0.02	NM	
14:50	24.23	200	1.75	9.4	8.19	488.7	NM	1.6	-166.9	0.02	NM	

<b>Sample ID(s):</b> DUP-02-WG-20221117,MW-13D-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	11/21/2022 16:05



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-03**  
**Well Permit No:**

**Date: 2022/11/17**  
**31 degrees F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 597.5 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.19 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 250 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.2 (gal)	<b>Well Construction</b> Metal flush mount PVC

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:14	13.5	250	0.2	10.4	7.39	1990	NM	1.57	138	9.63	NM	
09:17	13.55	250	0.4	10.5	7.42	1962	NM	0.75	109.2	79	NM	
09:20	13.65	250	0.6	10.2	7.4	1896	NM	0.6	35	36.1	NM	
09:23	13.7	250	0.8	10.5	7.47	1897	NM	0.5	14.2	26.1	NM	
09:26	13.74	250	1	10.3	7.47	1899	NM	0.49	7.5	26	NM	
09:29	13.78	250	1.2	10.1	7.48	1899	NM	0.49	5.1	25.4	NM	

<b>Sample ID(s):</b> MW-03-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Cody kauss	<b>Date Time</b>  11/21/2022 14:48
<b>Analysis:</b>			





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-04**  
**Well Permit No:**

**Date: 2022/11/17**  
**31 degrees F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 590.45 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.17 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 250 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b> Metal stick up PVC

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:02	6.43	250	0.2	9.7	7.42	1004	NM	3.99	47.2	3.76	NM	
10:05	6.52	250	0.4	9.2	7.31	1007	NM	3.42	50	1.05	NM	
10:08	6.78	250	0.6	9.2	7.28	1007	NM	3.49	51.5	1.56	NM	
10:11	6.89	250	0.8	9.4	7.25	1009	NM	3.49	52.9	3.04	NM	
10:14	6.96	250	1	9.5	7.24	1013	NM	3.45	53.7	2.29	NM	

<b>Sample ID(s):</b> MW-04-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody kauss 	11/21/2022 14:48



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15D**  
**Well Permit No:**


**Date: 2022/11/17**  
**31 degrees F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 40 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 8.23 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 250 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.2 (gal)	<b>Well Construction</b> Metal stick up PVC

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:40	9.25	250	0.2	9.1	8.14	308.1	NM	1.64	33.5	0.51	NM	
13:43	9.89	250	0.4	9.8	7.99	292.4	NM	0.8	20.5	0.23	NM	
13:46	10.61	250	0.6	10	7.93	289.6	NM	0.58	6.6	0.03	NM	
13:49	11.44	250	0.8	10.1	7.89	287.6	NM	0.5	-3.9	0.02	NM	
13:52	11.98	250	1	10.3	7.87	288.8	NM	0.46	-8.1	0.02	NM	
13:55	12.48	250	1.2	10.3	7.85	287.1	NM	0.44	-10.9	0.02	NM	

<b>Sample ID(s):</b> DUP-01-WG-20221117,MW-15D-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody kauss 	11/21/2022 14:49



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15I**  
**Well Permit No:**

**Date: 2022/11/17**  
**31 degrees F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 589.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.42 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 250 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 18 - 23 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b> Metal stick up PVC

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:04	8.21	250	0.2	9.3	7.78	1173	NM	4.76	69.8	1.32	NM	
13:07	8.55	250	0.4	10.1	7.74	1191	NM	3.98	68.2	0.21	NM	
13:10	8.93	250	0.6	10.1	7.73	1198	NM	3.86	66.8	1.14	NM	
13:13	9.15	250	0.8	10.1	7.74	1196	NM	3.82	66.2	0.82	NM	
13:16	9.36	250	1	10.3	7.74	1188	NM	3.78	65.8	0.74	NM	

<b>Sample ID(s):</b> MW-15I-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody kauss 	11/21/2022 14:50





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-23S**  
**Well Permit No:**

**Date: 2022/11/16**  
**35 degrees F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 595.01 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.54 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 250 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 20 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b> Metal stick up PVC

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:25	10.56	250	0.2	11.1	7.43	953	NM	7.91	118.7	2.87	NM	
13:28	10.56	250	0.4	10.9	7.45	949	NM	7.77	118.4	3.55	NM	
13:31	10.56	250	0.6	11.2	7.47	952	NM	7.76	116.5	3.99	NM	
13:34	10.56	250	0.8	11.4	7.48	955	NM	7.68	114.7	4.03	NM	
13:37	10.56	250	1	11.4	7.48	958	NM	7.56	113.5	4.09	NM	

<b>Sample ID(s):</b> MW-23S-WG-20221116	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody kauss 	11/21/2022 14:51



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-26S**  
**Well Permit No:**


**Date: 2022/11/16**  
**35 degrees F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.5 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 250 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.4 (gal)	<b>Well Construction</b> Metal flush mount PVC

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:06	6.75	250	0.2	12.1	7.6	1626	NM	1.42	92.6	58.7	NM	
14:09	6.77	250	0.4	12.3	7.53	1634	NM	0.69	90.2	43.1	NM	
14:12	6.77	250	0.6	12.4	7.52	1637	NM	0.5	87.8	31.4	NM	
14:15	6.77	250	0.8	12.1	7.51	1640	NM	0.48	85.5	27	NM	
14:18	6.77	250	1	12.1	7.51	1639	NM	0.43	82.5	22.1	NM	
14:21	6.77	250	1.2	12	7.5	1640	NM	0.39	78.5	20	NM	
14:24	6.77	250	1.4	11.8	7.5	1644	NM	0.38	77.4	20.7	NM	

<b>Sample ID(s):</b> MW-26S-WG-20221116	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody kauss 	11/21/2022 14:52



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15S**  
**Well Permit No:**

**Date: 2022/11/17**  
**31 degrees F and cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 11 (ft)	<b>Reference Elevation</b> 589.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.35 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20221115-GWMonitor	<b>Average Purge Rate</b> 250 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b> Metal stick up PVC

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:34	7.4	250	0.2	9.4	7.59	654	NM	4.57	63.4	0.5	NM	
12:37	7.4	250	0.4	9.4	7.53	659	NM	4.28	65.3	0.02	NM	
12:40	7.4	250	0.6	9.8	7.5	661	NM	4.08	65.8	0.02	NM	
12:43	7.4	250	0.8	9.8	7.47	662	NM	3.87	65.3	0.02	NM	
12:46	7.4	250	1	9.6	7.46	665	NM	3.81	65.1	0.02	NM	

<b>Sample ID(s):</b> MW-15S-WG-20221117	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Cody kauss	<b>Date Time</b>  11/21/2022 14:51
<b>Analysis:</b>			





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-01**  
**Well Permit No:**

**Date: 2023/03/14**  
**Mid 20s sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 5.5 (ft)	<b>Reference Elevation</b> 603.74 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.29 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 17.98 (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 197.1 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.44 (gal) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:00	15.47	200	0.15	6.6	7.62	1528	NM	9.86	133.6	30.8	NM	
11:05	15.49	200	0.5	6.4	7.6	1518	NM	9.91	141.6	33.6	NM	
11:10	16.5	200	0.75	6.7	7.6	1510	NM	9.85	147.3	25.6	NM	
11:15	15.53	200	1	6.8	7.6	1513	NM	9.76	150.2	24.4	NM	
11:20	15.54	185.6	1.25	6.7	7.6	1519	NM	9.76	152.9	23.1	NM	

<b>Sample ID(s):</b> MW-01-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Lg 	03/17/2023 14:55



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-03**  
**Well Permit No:**

**Date: 2023/03/14**  
**25 degrees F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 597.5 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.14 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b> Flush mount

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:20	12.26	200	0.25	8.2	7.44	1746	NM	0.88	-177.1	7.32	NM	
13:25	12.27	200	0.5	8.2	7.37	1721	NM	0.5	-199.4	8.27	NM	
13:30	12.28	200	0.75	8.3	7.31	1692	NM	0.3	-209.7	6.56	NM	
13:35	12.28	200	1	8.3	7.28	1682	NM	0.23	-211.9	6.11	NM	
13:40	12.29	200	1.25	8.3	7.26	1673	NM	0.23	-210.9	6.43	NM	

<b>Sample ID(s):</b> MW-03-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody k 	03/14/2023 20:49



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-04**  
**Well Permit No:**


**Date: 2023/03/14**  
**20 degrees F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 590.45 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 4.38 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 0.75 (gal)	<b>Well Construction</b> Stick up

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:35	4.82	200	0.25	4	7.13	995	NM	8.41	-74.3	1.64	NM	
09:40	5.98	193.2	0.5	4.1	7.08	998	NM	7.99	-72.1	1.43	NM	
09:45	5.09	200	0.75	4.1	7.07	993	NM	7.8	-68.6	1.58	NM	

<b>Sample ID(s):</b> MW-04-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody k 	03/14/2023 16:26



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-6S**  
**Well Permit No:**

**Date: 2023/03/14**  
**30s sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 16 (ft)	<b>Reference Elevation</b> 602.72 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.93 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 18 (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.66 (gal) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:30	14.13	200	0.25	7.9	7.21	1036	NM	8.58	144.4	5.43	NM	
13:35	14.56	200	0.5	7.2	7.21	1033	NM	8.53	157.7	4.09	NM	
13:40	14.18	200	0.75	7.2	7.21	1035	NM	8.44	164.9	3.75	NM	
13:45	14.02	200	1	7.3	7.21	1042	NM	8.34	170.3	5	NM	
13:50	14.21	200	1.25	7.5	7.22	1041	NM	8.27	174.7	4.63	NM	

<b>Sample ID(s):</b> MW-6S-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	03/17/2023 15:04





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**

**Date: 2023/03/14**  
**20 degrees F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.18 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b> Stick up

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:35	15.64	200	0.25	6.7	7.36	1181	NM	1.9	15.3	0.97	NM	
10:40	15.65	200	0.5	6.6	7.13	1184	NM	1.54	-144.2	0.38	NM	
10:45	15.68	200	0.75	6.9	7.11	1532	NM	0.85	-179	0.35	NM	
10:50	15.68	200	1	6.9	7.16	2133	NM	0.53	-185.4	0.47	NM	
10:55	15.7	200	1.25	6.9	7.2	2599	NM	0.49	-173.3	0.5	NM	
11:00	15.7	200	1.5	6.9	7.2	2664	NM	0.5	-170.2	0.54	NM	
11:05	15.7	200	1.75	7	7.18	2724	NM	0.51	-164.2	0.42	NM	

<b>Sample ID(s):</b> MW-7S-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody k	03/14/2023 16:25



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-09**  
**Well Permit No:**

**Date: 2023/03/14**  
**20 degrees F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 16 (ft)	<b>Reference Elevation</b> 601.44 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.34 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 220 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b> Flush mount

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:45	12.59	250	0.25	7.4	7.28	951	NM	8.88	-69.9	1.17	NM	
08:48	12.69	250	0.5	7.4	7.29	949	NM	8.76	-64.1	2.02	NM	
08:53	12.7	200	0.75	7.4	7.3	951	NM	8.65	-59.9	1.94	NM	
08:58	12.7	200	1	7.2	7.3	953	NM	8.59	-56.6	1.11	NM	

<b>Sample ID(s):</b> MW-09-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody k	03/14/2023 16:27



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13D**  
**Well Permit No:**


**Date: 2023/03/15**  
**Low 20s sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 48 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.3 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 50 (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 5.34 (gal) / 2 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:55	19.93	200	0.5	6.1	8.16	310	NM	1.1	-78.3	1.06	NM	
09:00	20.46	200	0.75	7	8.09	306.2	NM	0.86	-79.8	2.17	NM	
09:05	21.05	200	1	6.5	8.06	305	NM	0.7	-79	0.95	NM	
09:10	21.61	200	1.25	6.9	8.05	305.5	NM	0.59	-83.2	1.15	NM	
09:15	22.22	200	1.5	7.1	8.04	304.5	NM	0.47	-81.9	0.79	NM	
09:20	22.96	200	1.75	7.2	8.03	305.1	NM	0.41	-85.6	0.92	NM	
09:25	23.69	200	2	7.1	8.02	305.3	NM	0.38	-83.9	0.97	NM	

<b>Sample ID(s):</b> MW-13D-WG-20230315	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	03/17/2023 14:57



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13S**  
**Well Permit No:**


**Date: 2023/03/14**  
**20s sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.08 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.95 (gal) / 3 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:45	17.25	200	0.5	8.7	7.58	1546	NM	1.12	150.3	29.8	NM	
14:50	17.27	200	0.75	8.8	7.58	1522	NM	1.15	147.3	17.9	NM	
14:55	17.26	200	1	8.6	7.61	1447	NM	2.55	148.7	8.63	NM	
15:00	17.26	200	1.25	8.8	7.63	1387	NM	3.98	152.4	5.86	NM	
15:05	17.26	200	1.5	8.6	7.64	1327	NM	5.29	158	5.6	NM	
15:10	17.26	200	1.75	8.8	7.64	1303	NM	5.79	164.6	4.22	NM	
15:15	17.25	200	2	8.6	7.64	1302	NM	5.69	168.7	5.2	NM	
15:20	17.25	200	2.25	8.5	7.65	1279	NM	6.18	171.8	5.4	NM	
15:25	17.25	200	2.5	8.4	7.65	1269	NM	6.31	174.1	2.98	NM	
15:30	17.26	200	2.75	8.5	7.65	1271	NM	6.4	176.4	2.22	NM	
15:35	17.26	200	3	8.6	7.65	1275	NM	6.4	178.6	1.95	NM	

<b>Sample ID(s):</b> MW-13S-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Lg 	03/17/2023 14:58



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-15D**  
**Well Permit No:**

**Date: 2023/03/15**  
**20s sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 42 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 8.04 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 44 (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 5.87 (gal) / 2.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:10	9.94	200	0.5	6.1	8.07	282	NM	1.35	11.5	0.95	NM	
10:15	10.33	200	0.75	5.6	8.06	279.9	NM	0.89	-14.9	1.04	NM	
10:20	10.74	200	1	5.4	8.06	280.2	NM	0.74	-21.1	1.71	NM	
10:25	11.4	200	1.25	5.4	8.06	279.5	NM	0.63	-24	1.12	NM	
10:30	11.96	200	1.5	5.4	8.05	279.6	NM	0.55	-25.8	1.29	NM	
10:35	12.57	200	1.75	5.5	8.05	279.9	NM	0.49	-25.7	1.34	NM	
10:40	13.13	200	2	5.5	8.04	279.8	NM	0.46	-22.3	1.11	NM	
10:45	13.61	200	2.25	5.5	8.04	279.6	NM	0.43	-20.7	1.88	NM	

<b>Sample ID(s):</b> DUP-02-WG-20230315,MW-15D-WG-20230315	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	03/17/2023 15:01



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15I**  
**Well Permit No:**

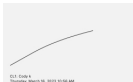
**Date: 2023/03/15**  
**25 degrees F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 589.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.87 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 18 - 23 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b> Stick up

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:30	7.9	0.5	0.25	6.9	7.5	1222	NM	4	-113.2	1.26	NM	
09:35	8.78	200	0.5	6.9	7.47	1237	NM	2.18	-124.5	1.01	NM	
09:40	9.29	200	0.75	7.1	7.47	1233	NM	2.15	-129.2	1.88	NM	
09:45	9.65	200	1	7.1	7.46	1228	NM	1.97	-132.6	1.73	NM	

<b>Sample ID(s):</b> DUP-01-WG-20230316,MW-15I-WG-20230315	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody k 	03/16/2023 15:56



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15S**  
**Well Permit No:**


**Date: 2023/03/15**  
**25 degrees F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 589.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.79 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.25 (gal)	<b>Well Construction</b> Stick up

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:50	6.89	200	0.25	3.8	7.51	435.3	NM	7.72	-71	0.02	NM	
08:55	6.9	200	0.5	4.5	7.45	666	NM	8.02	-79.8	0.21	NM	
09:00	6.92	200	0.75	4.6	7.44	720	NM	7.09	-80.2	0.26	NM	
09:05	6.93	200	1	4.7	7.44	731	NM	6.89	-79.7	0.49	NM	
09:10	6.95	200	1.25	4.7	7.43	745	NM	6.39	-78.8	0.41	NM	

<b>Sample ID(s):</b> MW-15S-WG-20230315	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Cody k 	03/16/2023 15:55



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-20S**  
**Well Permit No:**

**Date: 2023/03/14**  
**20 sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 11.67 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.36 (gal) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:15	12.12	200	0.5	6.6	7.52	1664	NM	8.61	107.2	10.2	NM	
09:20	12.18	200	0.5	6.7	7.51	1666	NM	8.6	113.6	11.8	NM	
09:25	12.27	200	0.75	6.7	7.51	1670	NM	8.6	121.3	11.2	NM	
09:30	12.34	200	1	6.7	7.5	1664	NM	8.55	127.5	12.1	NM	
09:35	12.41	200	1.25	7.1	7.49	1660	NM	8.52	132.9	15	NM	
09:40	12.44			7.1	7.49	656	NM	8.52	136	16.9	NM	
09:45		200		7.2	7.49	1659	NM	8.38	140.9	NM	NM	The iPad died due to the cold weather. I had to move to low flow forms
09:50	12.48	200	2	7.5	7.48	1657	NM	8.47	143.7	15.2	NM	
09:55	12.49	200	2.5	7.6	7.48	1657	NM	8.46	146.2	10.2	NM	
10:00	12.64	200	2.5	7.7	7.48	1658	NM	8.44	148.6	9.7	NM	
10:05	12.68	200	2.75	7.7	7.47	1658	NM	8.44	151.27	9.79	NM	

<b>Sample ID(s):</b> MW-20S-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	03/17/2023 15:02





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-23S**  
**Well Permit No:**

**Date: 2023/03/14**  
**25 degrees F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 595.01 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.03 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 20 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1 (gal)	<b>Well Construction</b> Stick up

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:10	10.07	200	0.25	7.1	7.58	757	NM	9.05	-29.3	2.6	NM	
15:15	10.08	200	0.5	7	7.49	738	NM	8.68	-29.4	0.61	NM	
15:20	10.08	200	0.75	7	7.47	731	NM	8.62	-35.8	1.35	NM	
15:25	10.08	200	1	6.9	7.46	727	NM	8.69	-35.6	1.21	NM	

<b>Sample ID(s):</b> MW-23S-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-26S**  
**Well Permit No:**

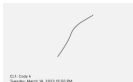
**Date: 2023/03/14**  
**25 degrees F and sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.3 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230306-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> cody kauss	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.5 (gal)	<b>Well Construction</b> Flush mount

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:35	6.4	200	0.25	7.4	7.47	1610	NM	0.69	-208.1	6.18	NM	
14:40	6.4	200	0.5	7.7	7.43	1606	NM	0.24	-268	4.6	NM	
14:45	6.4	200	0.75	7.4	7.41	1609	NM	0.11	-287.2	3.49	NM	
14:50	6.4	200	1	7.6	7.39	1611	NM	0.1	-303.5	2.96	NM	
14:55	6.4	200	1.25	7.5	7.39	1605	NM	0.09	-309.1	3.01	NM	
15:00	6.4	200	1.5	7.5	7.38	1612	NM	0.09	-311.2	2.28	NM	

<b>Sample ID(s):</b> MW-26S-WG-20230314	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Cody k 	<b>Date Time</b>  03/14/2023 20:50
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-01**  
**Well Permit No:**

**Date: 2023/06/20**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 603.74 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.91 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 20230601-GWMonitor-TF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 2.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
02:40	16.71	200	2.5	10.8	7.8	4750	NM	1.05	66.4	18.1	NM	
02:46	16.8	149.6	2.75	11.2	7.77	4844	NM	1.28	63.4	17.8	NM	
02:50	16.79	200	2.9	10.7	7.76	4794	NM	1.73	63.5	15.9	NM	
02:55	16.8	75	3	11	7.75	4818	NM	1.84	61.7	10.6	NM	
03:00	16.86	178.8	3.25	10.6	7.76	4802	NM	1.69	61.1	9.14	NM	Battery was dying - previous flows were slowing
03:05	16.92	201.8	3.5	10.6	7.71	4829	NM	2.96	62.5	16.2	NM	
03:10	16.95	193.2	3.75	10.6	7.75	4851	NM	2.09	60.6	6.33	NM	
03:15	16.96	193.2	4	10.7	7.76	4842	NM	1.74	59	5.81	NM	
03:20	16.98	185.6	4.25	10.7	7.75	4841	NM	1.62	57.6	5.34	NM	

<b>Sample ID(s):</b> MW-01-WG-20230620	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Glen	06/20/2023 12:29



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-03**  
**Well Permit No:**

**Date: 2023/06/19**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 22 (ft)	<b>Reference Elevation</b> 597.5 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.25 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20230601-GWMonitor-TF	<b>Average Purge Rate</b> 199.6 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.26 (gal) / 11.8 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:20	12.51	200	1.8	12.5	7.15	3852	NM	0.36	-34.8	NM	NM	
11:30	12.46	200	3.8	12.9	7.4	3776	NM	0.34	-71.3	149	NM	
11:35	12.46	189	4.8	12.9	7.42	3271	NM	1.35	-72.6	119	NM	
11:40	12.46	204.1	5.8	13	7.43	2715	NM	2.76	-60	54.7	NM	
11:45	12.46	200	6.8	13.1	7.43	2540	NM	3.11	-55.6	36.9	NM	
11:50	12.46	189	7.8	12.9	7.43	2425	NM	3.25	-52.2	21.3	NM	
11:55	12.46	213.2	8.8	12.8	7.42	2473	NM	3.29	-52.2	13.08	NM	
12:00	14.6	196.1	9.8	12.7	7.43	2309	NM	3.44	-49.3	11.04	NM	
12:05	12.46	200	10.8	12.8	7.43	2291	NM	3.46	-48.7	10.05	NM	
12:10	12.46	204.1	11.8	12.9	7.43	2258	NM	3.53	-47.8	7.57	NM	

<b>Sample ID(s):</b> MW-03-WG-20230619	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	06/26/2023 07:39



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-04**  
**Well Permit No:**


**Date: 2023/06/22**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 590.45 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 5.78 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 13 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 246.6 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 1.18 (gal) / 3 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:10	6.4	250	0.8	13.7	7.21	1911	NM	1.22	60.5	6.05	NM	
15:15	6.75	222.7	1.1	13.7	7.17	1940	NM	1.32	63.9	6.36	NM	
15:20	7	250.4	1.45	13.7	7.18	2030	NM	1.26	66.7	4.83	NM	
15:25	7.05	259.8	1.8	13.6	7.18	2092	NM	1.03	64.9	6.6	NM	
15:30	7.1	242.1	2.1	13.5	7.18	2148	NM	0.86	61.6	10.4	NM	
15:35	7.1	231.8	2.4	13.4	7.19	2186	NM	0.73	59.4	13.9	NM	
15:39	7.11	283.9	2.7	13.3	7.19	2202	NM	0.68	57.8	16.4	NM	
15:44	7.11	231.8	3	13.2	7.19	2217	NM	0.66	55.8	15.1	NM	

<b>Sample ID(s):</b> DUP-02-WG-20230622,MW-04-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Glen 	06/25/2023 19:28



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-05**  
**Well Permit No:**


**Date: 2023/06/21**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 11 (ft)	<b>Reference Elevation</b> 585.88 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 1.81 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 13 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.83 (gal) / 3 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:30	1.93	200	0.5	16.1	7.49	883	NM	0.41	112.3	48.8	NM	
10:35	1.93	200	0.75	16.1	7.49	882	NM	0.37	106.7	40	NM	
10:40	1.9	200	1	17	7.49	880	NM	0.34	100	34.7	NM	I think my flow dropped
10:45	1.95	200	1.25	15.5	7.49	880	NM	0.27	94.1	35.3	NM	
10:47	1.95	200	1.5	16	7.5	874	NM	0.23	87.2	22.3	NM	
10:55	1.95	200	1.75	16.4	7.49	876	NM	0.24	81.8	19.1	NM	
11:00	1.98	200	2	15.3	7.49	875	NM	0.2	76.9	21	NM	
11:05	2	200	2.25	15.1	7.5	873	NM	0.17	70.6	13.1	NM	
11:10	2	200	2.5	15.1	7.5	875	NM	0.17	65.1	8.85	NM	
11:15	2	200	2.75	15.2	7.5	872	NM	0.17	61.9	8.38	NM	
11:20	2	200	3	15.3	7.5	872	NM	0.18	57.8	8.36	NM	

<b>Sample ID(s):</b> MW-05-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Lg 	06/23/2023 14:14



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-6S**  
**Well Permit No:**

**Date: 2023/06/22**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 602.72 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.07 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 18 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 195.8 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 0.31 (gal) / 2.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:08	16.83	210	0.75	11.6	7.12	2201	NM	6.61	92.7	4.26	NM	
11:13	16.92	201.8	1	11.6	7.09	2264	NM	6.51	92.6	3.95	NM	
11:18	17.07	201.8	1.25	11.4	7.07	2424	NM	6.1	92.2	2.87	NM	
11:23	17.16	167.3	1.5	11.5	7.07	2592	NM	5.69	91.7	3.18	NM	
11:28	17.23	200	1.8	11.4	7.06	2718	NM	5.25	91	5.03	NM	
11:33	17.29	200	2.1	11.3	7.05	2800	NM	4.99	90.5	4.06	NM	
11:38	17.34	210	2.4	11.3	7.04	2881	NM	4.73	90	14.4	NM	
11:43	17.39	200	2.3	11.4	7.04	2923	NM	4.59	89.4	14.9	NM	
11:46	17.42	167.3	2.5	11.4	7.04	2983	NM	4.44	89.2	16.3	NM	
11:49	17.45	200	2.5	11.4	7.04	3015	NM	4.34	88.7	9.84	NM	Taking sample because stable except slowly rising conductivity and purged well over 4 well volumes

<b>Sample ID(s):</b> MW-6S-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Glen	06/25/2023 19:26



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**

**Date: 2023/06/22**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 19 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.51 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 254.9 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 0.9 (gal) / 3.7 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:18	17.05	250	0.7	11.6	7.31	4310	NM	1.37	47.1	55.2	NM	
13:23	17.2	242.1	1	11.6	7.29	4770	NM	1.29	15.7	55.4	NM	
13:28	17.3	270.4	1.35	11.6	7.28	5270	NM	0.91	-14.5	45.4	NM	
13:33	17.35	234.2	1.7	11.6	7.28	5590	NM	0.46	-31.4	36.2	NM	
13:38	17.39	267.7	2	11.6	7.28	5850	NM	0.31	-40.9	26.6	NM	
13:43	17.4	250.4	2.35	11.7	7.28	6188	NM	0.25	-48.3	17.5	NM	
13:48	17.42	270.4	2.7	11.7	7.27	6278	NM	0.21	-52.6	10.4	NM	
13:53	17.43	250.4	3.05	11.6	7.27	6370	NM	0.19	-55.3	6.19	NM	
13:58	17.44	253.9	3.35	11.7	7.27	6375	NM	0.18	-56.4	5.03	NM	
14:03	17.44	259.8	3.7	11.6	7.26	6403	NM	0.16	-57.5	5.01	NM	

<b>Sample ID(s):</b> MW-7S-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			





## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-08**  
**Well Permit No:**

**Date: 2023/06/21**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.18 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.18 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 9 - 19 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.11 (gal) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:00	13.51	200	0.5	12.9	7.36	927	NM	0.4	146.4	6.11	NM	
08:05	13.52	200	0.75	13	7.37	936	NM	0.38	144.7	6.91	NM	
08:10	13.53	200	1	13	7.37	942	NM	0.34	142.6	5.44	NM	
08:15	13.54	200	1.25	12.9	7.38	946	NM	0.32	140.2	5.23	NM	
08:20	13.55	200	1.5	13	7.37	948	NM	0.3	138.8	5.7	NM	

<b>Sample ID(s):</b> MW-08-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:17



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-8S**  
**Well Permit No:**

**Date: 2023/06/21**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 604 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.18 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 202.3 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.62 (gal) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:19	16.28	209	0.25	11.9	7.42	2810	NM	2.27	167	0.02	NM	
09:25	16.28	200	0.5	11.9	7.41	2667	NM	3.2	163.9	0.02	NM	
09:30	16.28	200	0.75	12	7.4	2611	NM	3.48	162.8	0.02	NM	
09:35	16.38	200	1	12.1	7.4	2606	NM	3.55	161.9	0.02	NM	

<b>Sample ID(s):</b> MW-8S-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:25



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-09**  
**Well Permit No:**

**Date: 2023/06/22**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 601.44 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.84 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 19.2 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 196.4 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.87 (gal) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:05	14.23	200	0.25	11.3	7.5	1512	NM	6.01	107.6	2.78	NM	
08:10	14.29	200	0.5	11.2	7.4	1516	NM	5.93	111.7	4.53	NM	
08:15	14.35	185.6	0.75	11.2	7.4	1513	NM	6.03	114.5	2.99	NM	
08:20	14.39	200	1	11.3	7.4	1511	NM	5.85	117.7	1.79	NM	

<b>Sample ID(s):</b> MW-09-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:17



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-9S**  
**Well Permit No:**


**Date: 2023/06/21**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 601.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.07 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 253.3 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 0.97 (gal) / 1.4 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:10	14.12	250	0.7	12.1	7.63	1988	NM	8.72	88.7	16.8	NM	
15:15	14.11	242.1	1	12.3	7.61	1988	NM	8.5	91	15.9	NM	
15:20	14.12	267.7	1.4	12.1	7.61	1968	NM	8.4	92.4	14.5	NM	

<b>Sample ID(s):</b> MW-9S-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Glen 	<b>Date Time</b>  06/22/2023 12:55
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-10D**  
**Well Permit No:**

**Date: 2023/06/21**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 42 (ft)	<b>Reference Elevation</b> 588.9 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 8.55 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 44 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 5.79 (gal) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:40	10	200	0.25	14.2	8.04	303.3	NM	0.96	103.8	18.6	NM	
12:45	11.15	200	0.5	14.3	7.9	300.4	NM	0.49	98.5	5.01	NM	
12:50	12.39	200	0.75	14.3	7.85	300.5	NM	0.36	93.7	7.06	NM	
12:55	13.64	200	1	14.4	7.83	299.7	NM	0.29	88.6	1.89	NM	
13:00	14.81	200	1.25	14.3	7.82	300.4	NM	0.26	84.7	0.02	NM	
13:05	16.02	200	1.5	14.3	7.81	299.5	NM	0.23	78.8	3.3	NM	

<b>Sample ID(s):</b> MW-10D-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:18



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-10S**  
**Well Permit No:**


**Date: 2023/06/20**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 589.91 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 5.89 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 13 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.16 (gal) / 3.25 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:30	6.24	200	0.5	14.9	7.4	2855	NM	0.66	172	8.3	NM	
15:35	6.35	200	0.75	15.2	7.4	2194	NM	1.85	162.4	6.15	NM	
15:40	6.45	200	1	15	7.35	1740	NM	1.65	160.6	4.38	NM	
15:45	6.55	200	1.25	15.3	7.32	1722	NM	1.33	154.5	3.74	NM	
15:50	6.59	200	1.5	15.1	7.29	1792	NM	1.21	149	3.46	NM	
15:55	6.65	200	1.75	15	7.3	1840	NM	1.34	143.3	2.54	NM	
16:00	6.66	200	2	15.2	7.3	1877	NM	1.45	143.6	2.54	NM	
16:05	6.66	200	2.75	15.1	7.31	1860	NM	1.61	142.6	1.3	NM	
16:10	6.68	200	3	14.9	7.31	1886	NM	1.66	142.8	0.18	NM	
16:15	7.71	200	3.25	14.8	7.32	1891	NM	1.74	142.8	0.41	NM	

<b>Sample ID(s):</b> MW-10S-WG-20230620	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Lg 	06/23/2023 14:18



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-12S**  
**Well Permit No:**

**Date: 2023/06/21**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 603.93 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.05 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 190.9 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.64 (gal) / 2.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:15	16.1	200	0.25	13.1	7.31	4180	NM	1.5	153.8	78.1	NM	
14:20	16.1	200	0.5	13	7.32	4040	NM	1.69	151.5	65.3	NM	
14:25	16.1	200	0.75	12.9	7.34	3635	NM	2.97	150.2	62.7	NM	
14:30	16.1	200	1	12.9	7.4	2830	NM	5.04	146.6	18.2	NM	
14:35	16.1	100	1.25	12.7	7.41	2201	NM	6.31	148	7.48	NM	
14:40	16.1	200	1.5	12.7	7.41	2105	NM	6.69	149	2.64	NM	
14:45	16.1	200	1.75	12.7	7.42	2034	NM	6.86	149.9	1.18	NM	
14:50	16.1	200	1.75	12.6	7.42	21012	NM	7	151	0.38	NM	
14:55	16.1	200	2	12.5	7.42	1992	NM	7.15	152	0.23	NM	
15:00	16.11	200	2	12.7	7.44	2024	NM	6.98	146.6	1.34	NM	
15:05	16.11	200	2.75	12.5	7.42	1971	NM	7.19	148.8	0.25	NM	

<b>Sample ID(s):</b> MW-12S-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:19



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-13S**  
**Well Permit No:**

**Date: 2023/06/20**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.81 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> ( ) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:05	15.89	200	0.5	12.5	7.6	1571	NM	0.54	175.5	7.11	NM	
11:10	15.9	200	0.75	12.2	7.56	1522	NM	1.21	174.6	21.6	NM	
11:15	15.9	200	1	12.3	7.8	886	NM	7.78	167.5	4.29	NM	
11:20	15.9	200	1.25	12.3	7.87	796	NM	9.37	169.9	2.89	NM	
11:25	15.9	200	1.5	12.2	7.87	799	NM	9.33	172.6	1.19	NM	
11:30	15.9	200	1.75	12.4	7.87	793	NM	9.36	174.1	0.47	NM	

<b>Sample ID(s):</b> MW-13S2-WG-20230622,MW-13S-WG-20230620	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:21





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13D**  
**Well Permit No:**

**Date: 2023/06/20**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 46 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.13 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 50 (ft)
<b>Project Name</b> 20230601-GWMonitor-TF	<b>Average Purge Rate</b> 201.1 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 5.53 (gal) / 2 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
03:25	19.42	200	0.25	13.6	7.53	386.9	NM	0.33	176.5	5.96	NM	
03:30	20.77	200	0.5	13.5	7.59	386.4	NM	0.26	168.6	3.13	NM	
03:35	21.9	200	0.75	13.6	7.63	385	NM	0.23	162.6	4.2	NM	
03:40	23.2	200	1	13.5	7.67	384.4	NM	0.19	154	4.28	NM	
03:45	24.39	209	1.25	13.9	7.68	384.2	NM	0.18	149.3	4.52	NM	
03:50	25.42	200	1.5	13.6	7.71	384.8	NM	0.16	143.7	5.46	NM	
03:55	26.56	200	1.75	13.7	7.72	384.1	NM	0.16	138.8	2.1	NM	
04:00	27.45	200	2	13.9	7.73	383.9	NM	0.15	133.9	4.56	NM	

<b>Sample ID(s):</b> MW-13D-WG-20230620	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-14S**  
**Well Permit No:**

**Date: 2023/06/22**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 597.42 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.95 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 16 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 208.2 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 0.33 (gal) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:57	14.2	200	0.75	12	7.49	2307	NM	6.83	73.5	9.41	NM	
10:02	14.21	202.3	0.95	12	7.48	2305	NM	6.74	78.2	9.1	NM	
10:07	14.22	207.3	1.25	11.9	7.46	2323	NM	6.42	82.4	10.1	NM	
10:12	14.22	223.1	1.5	11.9	7.45	2358	NM	6.41	84.5	9.5	NM	

<b>Sample ID(s):</b> MW-14S-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15D**  
**Well Permit No:**


**Date: 2023/06/22**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 42 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 8.35 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 44 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 5.82 (gal) / 1.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:40	11.62	200	0.25	14.1	8	316.5	NM	0.59	100.5	1.55	NM	
12:45	11.83	200	0.5	14.1	7.88	313.2	NM	0.39	99.7	1.83	NM	
12:50	13.4	200	0.75	14.1	7.84	312.8	NM	0.28	96.1	11.1	NM	
12:55	14.42	200	1	14.1	7.82	311.9	NM	0.25	92.9	3.22	NM	
13:00	15.8	200	1.25	14.4	7.81	311.7	NM	0.21	87.3	0.41	NM	
13:05	16.8	200	1.5	14.5	7.81	311.9	NM	0.19	81.3	0.38	NM	
13:10	17.53	200	1.75	14.6	7.81	311.1	NM	0.18	77.5	3.16	NM	

<b>Sample ID(s):</b> DUP-01-WG-20230622,MW-15D-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:22



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15I**  
**Well Permit No:**

**Date: 2023/06/23**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 22 (ft)	<b>Reference Elevation</b> 589.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.09 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 25 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 18 - 23 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 2.92 (gal) / 2.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:15	9.34	200	0.5	12.6	7.54	2567	NM	0.5	39.8	79.8	NM	
08:20		200	0.75	12.5	7.54	2574	NM	0.36	38.3	87.1	NM	
08:25	10.25	200	1	12.3	7.53	2570	NM	0.27	37.2	50.5	NM	
08:30	10.62	200	1.25	12.5	7.52	2584	NM	0.23	36.8	35.2	NM	
08:35	10.5	200	1.5	12.2	7.52	2597	NM	0.21	36.8	39.4	NM	
08:40	11.8	200	1.75	12.3	7.51	2603	NM	0.19	35.9	30.2	NM	
08:45	11.29	200	2	12.1	7.51	2604	NM	0.18	35.3	16.6	NM	
08:50	11.39	200	2.25	12	7.51	2612	NM	0.17	34.5	12.2	NM	
08:55	12.54	200	2.5	12.1	7.51	2613	NM	0.17	33	12.9	NM	

<b>Sample ID(s):</b> DUP-03-WG-20230623,MW-15I-WG-20230623	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	06/23/2023 14:22



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15S**  
**Well Permit No:**


**Date: 2023/06/22**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 589.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.95 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 13 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.82 (gal) / 1.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:15	7.05	200	0.25	15	7.63	763	NM	2.1	138.2	18	NM	
09:20	7.05	200	0.5	15	7.37	774	NM	2.15	139.5	13.1	NM	
09:25	7.05	200	0.75	15	7.35	791	NM	2.24	139.8	10.5	NM	
09:30	7.05	200	1	15	7.35	797	NM	2.28	139.5	8.95	NM	
09:35	7.05	200	1.25	15	7.34	802	NM	2.31	138.6	4.99	NM	
09:40	7.05	200	1.5	15	7.35	812	NM	2.35	138.2	2.7	NM	
09:45	7.05	200	1.75	15.1	7.35	812	NM	2.35	136.9	0.43	NM	

<b>Sample ID(s):</b> MW-15S-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:24



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-16S**  
**Well Permit No:**


**Date: 2023/06/20**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18.5 (ft)	<b>Reference Elevation</b> 604.17 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.11 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 226.6 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 1.55 (gal) / 1 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:55	18.11	230	0.75	12.1	7.63	6307	NM	9.13	-46.6	50.1	NM	
13:59	18.44	223.1	1	12.2	7.58	6308	NM	9.46	-13.4	14.5	NM	
14:04	18.8	230	1.25	11.9	7.57	6383	NM	9.44	1.1	26	NM	
14:09	19.05	231.8	1.55	11.9	7.58	6358	NM	9.47	14.1	24.2	NM	
14:16	19.31	227.6	2	11.9	7.59	6363	NM	9.56	22.4	14.6	NM	
14:20	19.54	252.9	2.25	12	7.58	6372	NM	9.54	26.2	22.3	NM	
14:26	19.66	214.9	2.6	12	7.58	6375	NM	9.52	30.7	20.8	NM	
14:30	19.81	242.1	2.9	11.9	7.57	6433	NM	9.51	34.3	37.3	NM	
14:35	19.95	253.9	3.2	11.9	7.56	6433	NM	9.56	35.9	64.3	NM	Taking samples because parameters stable excep turb which is likely increasing since wl near bot of well

<b>Sample ID(s):</b> MW-16S-WG-20230620	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
		Glen 	06/20/2023 20:56
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-17S**  
**Well Permit No:**

**Date: 2023/06/22**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.02 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 15.79 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 240.1 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 0.69 (gal) / 2 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:10	15.86	250	0.8	11.6	7.85	4371	NM	6.46	49.4	10.6	NM	
08:15	15.86	231.8	1.1	11.6	7.77	4877	NM	5.92	50.4	7.87	NM	
08:20	15.86	253.9	1.4	11.6	7.81	4510	NM	6.32	51.2	3.08	NM	
08:25	15.86	222.7	1.7	11.6	7.8	4533	NM	6.37	51.2	2.16	NM	
08:30	15.86	242.1	2	11.6	7.8	4574	NM	6.41	51.3	1.21	NM	

<b>Sample ID(s):</b> MW-17S-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-18S**  
**Well Permit No:**

**Date: 2023/06/20**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 14 (ft)	<b>Reference Elevation</b> 592.46 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.27 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 15 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 222.2 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 15 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 0.77 (gal) / 2.05 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
16:00	11.46	230	0.9	12.1	7.41	2181	NM	0.36	59.6	10.9	NM	
16:06	10.44	239.4	1.3	12.3	7.38	2216	NM	0.3	57.6	7.35	NM	
16:10	10.46	236.6	1.55	12.1	7.37	2242	NM	0.25	56.3	4.92	NM	
16:15	10.46	211.6	1.8	11.9	7.36	2237	NM	0.23	55	5.08	NM	
16:20	10.46	193.2	2.05	11.9	7.36	2256	NM	0.21	53.6	5.25	NM	

<b>Sample ID(s):</b> MW-18S-WG-20230620	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-19S**  
**Well Permit No:**


**Date: 2023/06/21**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 14 (ft)	<b>Reference Elevation</b> 596.18 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.02 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 15 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 239.4 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 15 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 0.49 (gal) / 2.5 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:10	12.09	240	0.9	11	8.88	2465	NM	0.43	58.2	2.92	NM	
08:15	12.09	231.8	1.2	11	8.77	2445	NM	0.32	57.1	1.72	NM	
08:20	12.09	250.4	1.55	11	8.72	2441	NM	0.29	53.3	1.16	NM	
08:25	12.09	231.8	1.85	11	8.66	2455	NM	0.24	53.5	0.58	NM	
08:30	12.09	222.7	2.15	10.8	8.63	2453	NM	0.23	53	0.37	NM	
08:35	12.09	259.8	2.5	10.9	8.61	2464	NM	0.22	51.8	0.56	NM	

<b>Sample ID(s):</b> MW-19S-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>  Glen 	<b>Date Time</b>  06/21/2023 14:34
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-20S**  
**Well Permit No:**


**Date: 2023/06/22**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.01 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.98 (gal) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:35	14.35	200	0.25	11	7.51	1734	NM	8.27	150.5	2.04	NM	
10:40	14.75	200	0.5	10.7	7.46	1784	NM	7.72	148.2	2.57	NM	
10:45	14.9	200	0.75	10.7	7.45	1815	NM	7.52	147.3	4.97	NM	
10:50	15.01	200	1	10.7	7.43	1861	NM	7.22	146.6	7.5	NM	The YSI tipped over spiking turbidity

<b>Sample ID(s):</b> MW-20S-WG-20230622	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Lg 	06/23/2023 14:23



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-21S**  
**Well Permit No:**


**Date: 2023/06/20**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 16 (ft)	<b>Reference Elevation</b> 591.41 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.32 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 18 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 199.2 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.74 (gal) / 2.5 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:45	7.52	200	0.5	12.6	7.57	1352	NM	0.52	141.3	40	NM	
13:50	7.55	200	0.75	12.8	7.55	1342	NM	0.36	141.4	32.8	NM	
13:55	7.55	200	1	12.8	7.55	1330	NM	0.32	141.7	25.9	NM	
14:00	7.57	200	1.25	13.1	7.52	1347	NM	0.32	142.4	16.1	NM	
14:05	7.58	200	1.75	13.1	7.49	1341	NM	0.31	142.7	10.9	NM	
14:10	7.6	200	2	13.1	7.5	1340	NM	0.32	143.1	7.89	NM	
14:15	7.6	193.2	2.25	13.1	7.49	1344	NM	0.31	143.9	7.51	NM	
14:20	7.6	200	2.5	13.1	7.46	1351	NM	0.3	144.5	6.42	NM	

<b>Sample ID(s):</b> MW-21S-WG-20230620	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	06/23/2023 14:23



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-23S**  
**Well Permit No:**

**Date: 2023/06/21**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 595.01 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.15 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 0 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 20 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 1.61 (gal) / 2.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:25	10.2	240	0.7	12.4	7.54	1596	NM	9.35	82.4	86.1	NM	
13:30	10.2	242.1	1	12.3	7.53	1576	NM	9.37	87.1	43	NM	
13:35	10.2	242.1	1.3	12.3	7.53	1562	NM	9.36	89.6	30.1	NM	
13:40	10.2	222.7	1.6	12.3	7.53	1564	NM	9.37	91.7	19	NM	
13:45	10.2	259.8	1.95	12.3	7.53	1550	NM	9.35	92	11.8	NM	
13:49	10.2	236.6	2.2	12.2	7.53	1563	NM	9.34	92.5	14.4	NM	
13:53	10.2	222.7	2.5	12.3	7.53	1566	NM	9.35	92.6	11.8	NM	

<b>Sample ID(s):</b> MW-23S-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-24S**  
**Well Permit No:**

**Date: 2023/06/21**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 19 (ft)	<b>Reference Elevation</b> 599.93 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.96 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 236.6 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 1.31 (gal) / 2.3 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:40	13.99	240	0.75	12.2	7.5	2053	NM	8.06	84.4	29.7	NM	
09:45	13.99	231.8	1.05	12.1	7.48	2055	NM	8.03	83.4	24.8	NM	
09:50	13.99	259.8	1.4	12.1	7.47	2051	NM	8.01	81.6	18.6	NM	
09:55	13.99	241.9	1.75	11.9	7.48	2036	NM	8.04	79.8	10.9	NM	
09:59	13.99	223.1	2	11.9	7.47	2032	NM	8.09	78.9	6.79	NM	
10:04	13.99	222.7	2.3	12.1	7.47	2037	NM	8.2	77.7	5.41	NM	

<b>Sample ID(s):</b> MW-24S-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Glen 	06/21/2023 19:55



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-25S**  
**Well Permit No:**

**Date: 2023/06/21**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 595.83 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.75 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 2023020-GWMonitorTF	<b>Average Purge Rate</b> 246.7 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 1.84 (gal) / 2.1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:15	10.96	240	0.8	12.3	7.61	1511	NM	9.21	85.7	11	NM	
11:19	10.96	240	1.1	12.4	7.6	1502	NM	9.23	86.2	12.8	NM	
11:25	10.96	259.7	1.5	12.3	7.59	1539	NM	9.14	86.6	7.6	NM	
11:29	10.96	253.9	1.8	12.3	7.58	1552	NM	9.08	86.5	8.21	NM	
11:34	11.96	240	2.1	12.2	7.57	1569	NM	9.01	86.5	7.87	NM	

<b>Sample ID(s):</b> MW-25S-WG-20230621	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-26S**  
**Well Permit No:**

**Date: 2023/06/20**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 16 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.34 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20230601-GWMonitor-TF	<b>Average Purge Rate</b> 224.1 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> glen hook	<b>Volume of Water in Well / Total Volume Purged</b> 2.56 (gal) / 3.7 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
04:50	6.57	220	0.75	12.9	7.51	3193	NM	0.31	45.4	133	NM	
05:00	6.58	220	1.3	13.1	7.49	3196	NM	0.25	39.4	110	NM	
05:05	6.58	231.8	1.6	12.9	7.49	3203	NM	0.2	37.4	98.2	NM	
05:10	6.58	231.8	1.9	12.7	7.48	3161	NM	0.18	34.9	492	NM	
05:15	6.59	231.8	2.2	12.6	7.5	3102	NM	0.18	34	968	NM	
05:20	6.59	222.7	2.5	12.6	7.5	3088	NM	0.17	33.5	866	NM	
05:25	6.59	222.7	2.8	12.6	7.5	3095	NM	0.17	33	709	NM	
05:30	6.6	222.7	3.1	12.9	7.5	3086	NM	0.16	31.8	601	NM	
05:35	6.6	214.6	3.4	13	7.5	3098	NM	0.15	30.7	481	NM	
05:40	6.6	222.7	3.7	13.1	7.5	3071	NM	0.14	29.1	410	NM	

<b>Sample ID(s):</b> MW-26S-WG-20230620	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-01**  
**Well Permit No:**


**Date: 2023/08/29**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 15 (ft)	<b>Reference Elevation</b> 603.74 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.78 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 17 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 6 - 16 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 0.04 (gal) / 2.5 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:28	17.14	200	0.5	14.1	7.72	2089	NM	1.44	45.7	7.22	NM	
09:44	17.17	200	1	13.9	7.74	2128	NM	1.48	55	14.8	NM	
09:49	17.21	200	1.25	13.9	7.74	2121	NM	0.65	54.9	15.3	NM	
09:54	17.22	200	1.5	14.4	7.7	2128	NM	1.97	58.2	14.9	NM	
09:59	17.24	200	1.75	14.2	7.7	2146	NM	2.2	62.4	10.2	NM	
10:04	17.27	200	2	13.6	7.75	2137	NM	0.48	60.5	11	NM	
10:09	17.3	200	2.25	13.6	7.75	2140	NM	0.39	59.9	10.1	NM	
10:14	17.36	200	2.5	13.6	7.75	2140	NM	0.37	59.6	10.1	NM	

<b>Sample ID(s):</b> MW-01-WG-20230829	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		AM 	08/29/2023 15:38





# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-03**  
**Well Permit No:**

**Date: 2023/08/29**  
**Cloudy, windy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 597.5 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 12.84 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 220 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 1.17 (gal) / 2.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:08	13.26	220	0.5	14.7	7.49	1925	NM	0.69	-125.3	17.4	NM	
11:13	13.29	220	0.75	14.6	7.49	1899	NM	0.27	-128.4	19.3	NM	
11:18	13.29	220	1	14.6	7.47	1896	NM	0.17	-128.2	18	NM	
11:23	13.31	220	1.25	14.8	7.46	1895	NM	0.15	-126.4	11.6	NM	
11:28	13.31	220	1.5	14.8	7.45	1895	NM	0.15	-123.6	7.18	NM	
11:33	13.31	220	1.75	14.8	7.44	1897	NM	0.14	-122.2	4.95	NM	
11:38	13.3	220	2	14.8	7.44	1897	NM	0.14	-120.9	4.54	NM	
11:44	13.3	220	2.25	14.8	7.44	1892	NM	0.13	-120.1	2.41	NM	
11:49	13.3	220	2.5	14.8	7.44	1892	NM	0.12	-119.7	2.57	NM	

<b>Sample ID(s):</b> MW-03-WG-20230829	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		AM 	08/29/2023 17:12



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-04**  
**Well Permit No:**

**Date: 2023/08/29**  
**Cloudy windy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 10 (ft)	<b>Reference Elevation</b> 590.45 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 5.98 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 13 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.15 (gal) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
04:45	6.47	200	0.5	17	7.13	1023	NM	2.07	120.3	2.32	NM	
04:50	6.8	200	0.75	17.1	7.12	1041	NM	1.73	114.9	1.35	NM	
04:55	6.84	200	1	17	7.12	1069	NM	1.63	111	1.97	NM	
05:00	6.89	200	1.25	16.9	7.12	1083	NM	1.58	107.9	2.28	NM	

<b>Sample ID(s):</b> MW-04-WG-20230829	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	08/30/2023 12:06



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-6S**  
**Well Permit No:**

**Date: 2023/08/28**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 16 (ft)	<b>Reference Elevation</b> 602.72 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.81 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 18 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 220 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 0.19 (gal) / 3.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
15:33	17.41	220	1.2	13.3	7.02	1744	NM	4.22	68.9	4.52	NM	
15:38	17.56	220	1.5	13.3	7.01	1805	NM	3.59	71.2	9.56	NM	
15:43	17.65	220	1.8	13.2	7	1825	NM	3.22	73	11.1	NM	
15:48	17.71	220	2.1	13.1	7	1846	NM	2.99	75	13.9	NM	
15:53	17.77	220	2.4	13.1	6.99	1862	NM	2.83	76.5	11.8	NM	
16:00	17.84	220	2.75	13	6.99	1882	NM	2.64	79.2	13.1	NM	
16:05	18.86	220	3	12.9	7	1872	NM	2.63	80.3	10.8	NM	
16:10	17.9	220	3.3	12.9	6.99	1884	NM	2.45	81.2	11.2	NM	
16:15	17.98	220	3.75	12.9	6.99	1905	NM	2.67	83	10.2	NM	

<b>Sample ID(s):</b> MW-6S-WG-20230828	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		AM 	08/29/2023 13:40



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**

**Date: 2023/08/28**  
**Sunny 70**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.7 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 199.4 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.7 (gal) / 3.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:10	17.38	200	0.25	15.3	7.16	1448	NM	1.54	71.3	1.26	NM	
09:15	17.5	200	0.5	15.1	7.16	1601	NM	1.09	74	0.87	NM	
09:20	17.53	200	0.75	14.9	7.19	1839	NM	0.96	49.2	0.95	NM	
09:25	17.59	200	1	14.8	7.19	1945	NM	0.77	13.6	1.69	NM	
09:30	17.63	200	1.25	14.7	7.19	2219	NM	0.64	-19.8	2.74	NM	
09:35	17.65	200	1.5	14.6	7.19	2406	NM	0.54	-38.3	4.59	NM	
09:40	17.67	200	1.75	14.6	7.19	2379	NM	0.53	-37.5	3.71	NM	
09:45	17.71	193.2	2	14.6	7.19	2582	NM	0.48	-44	2.37	NM	
09:50	17.73	200	2.25	14.3	7.18	2683	NM	0.42	-48.6	0.79	NM	
09:55	17.75	200	2.5	14.5	7.16	2830	NM	0.39	-52.3	0.3	NM	
10:00	17.77	200	2.75	14.1	7.16	2816	NM	0.39	-54.2	0.11	NM	
10:10	17.78	200	3.25	14.4	7.17	2896	NM	0.43	-51.4	0.5	NM	The tubing came out for 4:05 had to wait for YSI to refill

<b>Sample ID(s):</b> MW-7S-WG-20230828	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	08/30/2023 12:11



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-09**  
**Well Permit No:**

**Date: 2023/08/29**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 601.44 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.23 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 1.27 (gal) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:32	14.26	200	0.5	13.9	7.32	1597	NM	5.65	70.6	4.32	NM	
14:37	14.34	200	0.75	13.6	7.29	1592	NM	5.16	76.3	4.04	NM	
14:42	14.39	200	1	13.3	7.29	1591	NM	5	80.3	1.86	NM	
14:48	14.44	200	1.5	13.2	7.3	1590	NM	4.84	82.1	0.66	NM	
14:53	14.44	200	1.75	13.1	7.32	1591	NM	4.71	83	0.53	NM	

<b>Sample ID(s):</b> MW-09-WG-20230829	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		AM 	08/29/2023 20:20



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13D**  
**Well Permit No:**

**Date: 2023/08/29**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 53 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 18.04 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 50 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 5.22 (gal) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:35	18.95	200	0.25	14.3	7.91	340	NM	0.81	-158.7	3.14	NM	
08:40	20	200	0.5	14.5	7.9	339.2	NM	0.52	-161.8	2.93	NM	
08:45	20.94	200	0.75	14.5	7.89	337.2	NM	0.42	-164	12.1	NM	
08:50	21.9	200	1	14.3	7.89	338.1	NM	0.4	-167.2	18.6	NM	
08:55	23.43	200	1.25	14.5	7.89	335.7	NM	0.35	-167.4	4.55	NM	
09:00	24.43	200	1.25	14.1	7.88	335.1	NM	0.33	-167.8	4.94	NM	
09:05	25.49	200	1.5	14.2	7.88	336.6	NM	0.32	-167.3	4.6	NM	

<b>Sample ID(s):</b> DUP-01-WG-20230829,MW-13D-WG-20230829	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	08/30/2023 12:08



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13S**  
**Well Permit No:**

**Date: 2023/08/29**  
**Cloudy**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 16.79 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 199 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.52 (gal) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
05:50	16.86	200	0.15	14.6	7.54	1635	NM	3.99	132.7	1.4	NM	
05:55	16.86	193.2	0.25	14.5	7.53	1629	NM	3.31	137.1	1.06	NM	
06:00	16.86	200	0.5	14.6	7.6	1489	NM	4.46	135	0.69	NM	
06:05	16.87	200	0.75	14.7	7.7	1350	NM	6.99	129.7	1.49	NM	
06:10	16.92	200	1	14.2	7.73	1148	NM	8.42	126.8	2.14	NM	
06:15	16.93	200	1.25	14.1	7.71	1133	NM	8.73	126.9	3.28	NM	
06:20	16.94	200	1.5	14	7.71	1152	NM	8.7	127.9	2.99	NM	

<b>Sample ID(s):</b> MW-13S-WG-20230829	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15D**  
**Well Permit No:**

**Date: 2023/08/30**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 42 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 9.11 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 44 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 5.69 (gal) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:07	11.67	200	0.5	14.1	7.97	289.2	NM	0.49	-135.4	1.91	NM	
11:13	13.3	200	0.75	13.8	7.95	286.7	NM	0.23	-145.1	1.35	NM	
11:18	14.69	200	1	13.7	7.95	286.3	NM	0.14	-148	2.91	NM	
11:23	16.37	200	1.25	13.5	7.92	286.2	NM	0.09	-148.8	1.01	NM	

<b>Sample ID(s):</b> DUP-02-WG-20230830,MW-15D-WG-20230830	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		AM 	08/30/2023 17:54





# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-15I**  
**Well Permit No:**

**Date: 2023/08/30**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 21 (ft)	<b>Reference Elevation</b> 589.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.23 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 23 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 18 - 23 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 2.57 (gal) / 2.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:45	9.67	200	1	14.2	7.58	1294	NM	0.44	40.2	18.5	NM	
09:50	10.26	200	1.25	14.3	7.55	1291	NM	0.28	42.1	16.1	NM	
09:55	10.66	200	1.5	14.1	7.52	1297	NM	0.29	45	8.35	NM	
10:00	10.94	200	1.75	13.9	7.5	1297	NM	0.31	47.8	6.04	NM	
10:05	11.05	200	2	13.9	7.49	1298	NM	0.3	50.1	4.3	NM	
10:10	11.19	200	2.25	13.9	7.48	1296	NM	0.29	51.4	4.31	NM	
10:15	11.21	200	2.5	13.9	7.48	1296	NM	0.29	52.5	3.26	NM	
10:20	11.26	200	2.75	13.8	7.48	1310	NM	0.28	54	3.39	NM	

<b>Sample ID(s):</b> MW-15I-WG-20230830	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		AM 	08/30/2023 15:41



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-15S**  
**Well Permit No:**

**Date: 2023/08/30**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 11 (ft)	<b>Reference Elevation</b> 589.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.11 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 13 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 220 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 0.96 (gal) / 2.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:57	7.23	240	0.5	19.4	7.26	768	NM	3.39	70.5	14	NM	
13:02	7.24	220	0.75	19.7	7.26	762	NM	3.28	67.7	5.66	NM	
13:07	7.24	220	1	19.7	7.27	772	NM	3.32	64.9	3.91	NM	
13:12	7.24	220	1.25	19.7	7.28	773	NM	3.3	57.9	2.73	NM	
13:17	7.24	220	1.5	19.7	7.28	775	NM	3.31	44.6	1.79	NM	
13:22	7.24	220	1.75	19.7	7.28	779	NM	3.35	37	1.14	NM	
13:27	7.24	220	2	19.7	7.28	778	NM	3.41	34.4	1.32	NM	
13:32	7.24	220	2.25	19.7	7.29	781	NM	3.43	33.3	0.75	NM	

<b>Sample ID(s):</b> MW-15S-WG-20230830	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		AM 	08/30/2023 18:49



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-20S**  
**Well Permit No:**

**Date: 2023/08/29**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.27 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 199.2 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.94 (gal) / 2 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
03:20	14.7	200	0.25	14.1	7.38	1862	NM	5.89	74.7	10.7	NM	
03:25	14.8	200	0.5	14.1	7.34	1722	NM	7	89	4.47	NM	
03:30	15	200	0.75	14	7.34	1720	NM	6.96	94.1	3.68	NM	
03:35	15.21	200	1	13.8	7.34	1776	NM	6.48	97.8	3.83	NM	
03:40	15.35	200	1.25	14.1	7.34	1827	NM	6.16	99.8	5.62	NM	
03:45	15.5	193.2	1.5	13.9	7.35	1851	NM	5.86	100.9	7.86	NM	
03:50	15.62	200	1.75	13.8	7.36	1886	NM	5.56	101.5	7.82	NM	
03:55	17.77	200	2	13.8	7.36	1929	NM	5.18	101.7	8.1	NM	

<b>Sample ID(s):</b> MW-20S-WG-20230829	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	08/30/2023 12:09



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-23S**  
**Well Permit No:**

**Date: 2023/08/30**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 595.01 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.35 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 1.57 (gal) / 1 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
03:25	10.37	200	0.25	14.4	7.59	926	NM	8.11	48.8	5.42	NM	
03:30	10.37	200	0.5	14.6	7.51	923	NM	7.5	82.1	2.76	NM	
03:35	10.37	200	0.75	14.7	7.51	917	NM	7.51	87	3.14	NM	
03:40	10.37	200	1	14.8	7.51	907	NM	7.53	89.8	2.98	NM	

<b>Sample ID(s):</b> MW-23S-WG-20230830	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	08/30/2023 12:10



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-26S**  
**Well Permit No:**

**Date: 2023/08/30**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.4 (ft) / None
<b>Project Number</b> 0038990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20230828-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 7 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 2.55 (gal) / 1.75 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
04:40	6.55	200	0.25	15.3	7.51	1470	NM	1.65	68.8	29.5	NM	
04:45	6.58	200	0.5	14.7	7.48	1474	NM	0.6	72.9	24	NM	
04:50	6.59	200	0.75	14.8	7.48	1467	NM	0.46	70	21.5	NM	
04:55	6.6	200	1	14.9	7.48	1470	NM	0.43	67.1	20.9	NM	
05:00	6.6	200	1.25	14.9	7.47	1464	NM	0.38	62.5	22.8	NM	
05:05	6.6	200	1.5	14.8	7.47	1466	NM	0.36	58	23	NM	
05:10	6.6	200	1.75	14.8	7.47	1463	NM	0.34	52.8	24.8	NM	

<b>Sample ID(s):</b> MW-26S-WG-20230830	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg	08/30/2023 12:10



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-03**  
**Well Permit No:**


**Date: 2023/11/14**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 597.5 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 13.38 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 210 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 1.08 (gal) / 2.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:01	13.95	210	0.75	13	7.37	1777	NM	1.3	-109.2	47.5	NM	
09:06	13.98	210	1	13	7.39	1778	NM	0.52	-122.4	20.4	NM	
09:11	13.99	210	1.25	12.9	7.41	1779	NM	0.23	-130.3	11.4	NM	
09:16	14.04	210	1.5	13.1	7.42	1782	NM	0.15	-132.3	8.01	NM	
09:23	14.06	210	1.75	13	7.42	1790	NM	0.06	-134.4	5.24	NM	
09:28	14.08	210	2	13.1	7.42	1792	NM	0.01	-135.4	3.72	NM	
09:33	14.1	210	2.25	13.2	7.42	1792	NM	-0.03	-136.4	3.29	NM	
09:38	14.1	210	2.5	13.1	7.42	1796	NM	-0.06	-136.4	3.49	NM	
09:43	14.12	210	2.75	13	7.42	1798	NM	-0.09	-136.6	4.73	NM	

<b>Sample ID(s):</b> MW-03-WG-20231114	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		AM 	11/14/2023 16:16



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-04**  
**Well Permit No:**

**Date: 2023/11/15**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 11 (ft)	<b>Reference Elevation</b> 590.45 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.45 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 13 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 220 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 1.07 (gal) / 3.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:25	7.22	220	0.5	14	7.14	1069	NM	3.35	111.5	9.27	NM	
11:30	7.29	220	0.75	13.9	7.11	1093	NM	2.83	107.9	8.25	NM	
11:35	7.36	220	1	13.9	7.1	1120	NM	2.4	74.3	8.19	NM	
11:40	7.43	220	1.25	13.9	7.1	1183	NM	2.03	76.6	9.29	NM	
11:45	7.5	220	1.5	13.9	7.1	1172	NM	1.75	76.5	7.26	NM	
11:50	7.55	220	1.75	13.9	7.1	1201	NM	1.45	75.1	9.1	NM	
11:55	7.61	220	2	13.8	7.1	1197	NM	1.15	72.1	8.16	NM	
12:00	7.66	220	2.25	13.8	7.1	1201	NM	0.93	68	9.34	NM	
12:05	7.69	220	2.5	13.9	7.1	1210	NM	0.85	64	7.79	NM	
12:10	7.72	220	2.75	13.8	7.1	1223	NM	0.75	59.9	7.02	NM	
12:15	7.76	220	3	13.9	7.1	1224	NM	0.68	55.3	6.05	NM	
12:20	7.78	220	3.25	13.9	7.11	1247	NM	0.62	50.7	5.48	NM	
12:25	7.79	220	3.5	13.9	7.11	1237	NM	0.59	48	5.36	NM	

<b>Sample ID(s):</b> DUP-01-WG-20231115,MW-04-WG-20231115	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		AM 	11/15/2023 20:16



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-6S**  
**Well Permit No:**

**Date: 2023/11/14**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 17 (ft)	<b>Reference Elevation</b> 602.72 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.33 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 18 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 8 - 18 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.11 (gal) / 3.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:55	17.72	200	0.25	12.2	7.04	1737	NM	3.96	88.8	50.8	NM	
15:00	17.87	200	0.5	12.2	7.04	1715	NM	3.97	91.8	20.8	NM	
15:05	17.93	200	0.75	12.2	7.02	1724	NM	3.58	94.8	23.4	NM	
15:10	18.15	200	1	12.2	7.01	1755	NM	3.17	96.4	22.8	NM	
15:15	18.21	200	1.25	12.2	7	1773	NM	2.88	97	38.5	NM	
15:20	18.24	200	1.5	12.2	7	1793	NM	2.56	98.1	41.8	NM	
15:25	18.28	200	1.75	12.1	6.99	1804	NM	2.29	98.8	445	NM	
15:30	18.32	200	2	12	7	1792	NM	2.56	99.2	115	NM	
15:35	18.36	200	2.25	12.1	6.99	1813	NM	2.06	98.6	37.3	NM	
15:40	18.45	200	2.5	12.1	6.99	1819	NM	1.99	98.4	24.5	NM	
15:45	18.45	200	2.75	12	6.99	1824	NM	1.91	98	8.45	NM	
15:50	18.45	200	3	12.1	6.99	1829	NM	1.91	97.4	8.17	NM	
15:55	18.45	200	3.25	12.1	6.99	1829	NM	1.98	97	8.22	NM	

<b>Sample ID(s):</b> MW-6S-WG-20231114	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	11/16/2023 19:27





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-7S**  
**Well Permit No:**

**Date: 2023/11/15**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 602.28 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.66 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.71 (gal) / 2.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:25	18.02	200	0.5	12.4	7.04	2932	NM	0.87	58.9	12	NM	
08:30	18.13	200	0.75	12.5	7.07	3141	NM	0.67	8.4	6.59	NM	
08:35	18.21	200	1	12.5	7.1	3201	NM	0.74	-22.5	6.59	NM	
08:40	18.26	200	1.25	12.5	7.12	3351	NM	0.83	-44.7	9.38	NM	
08:45	18.29	200	1.5	12.5	7.12	3488	NM	0.78	-52.5	3.62	NM	
08:50	18.3	200	1.75	12.6	7.12	3611	NM	0.68	-54.3	2.21	NM	
08:55	18.33	200	2	12.6	7.12	3706	NM	0.62	-55.7	1.69	NM	
09:00	18.35	200	2.25	12.6	7.12	3726	NM	0.58	-55.6	0.71	NM	

<b>Sample ID(s):</b> MW-7S-WG-20231115	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Lg 	11/16/2023 19:27



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-09**  
**Well Permit No:**

**Date: 2023/11/14**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 601.44 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.48 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 12 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 4.03 (gal) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:30	14.8	200	0.25	12.5	7.43	1398	NM	4.27	31.6	0.6	NM	
08:35	14.89	200	0.5	12.6	7.41	1394	NM	4.12	34.1	0.6	NM	
08:45	14.99	200	1	12.5	7.4	1394	NM	4.01	37.8	0.1	NM	Had to help Aditi
08:50	15.04	200	1.25	12.6	7.39	1395	NM	3.92	37.4	0.02	NM	

<b>Sample ID(s):</b> MW-09-WG-20231114	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	11/16/2023 19:22



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13D**  
**Well Permit No:**


**Date: 2023/11/14**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 48 (ft)	<b>Reference Elevation</b> 601.54 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.14 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 50 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 240 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 45 - 50 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 5.36 (gal) / 2.4 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:13	20.73	240	0.5	12.1	7.93	333.4	NM	0.8	-141.4	7.45	NM	
11:18	22.61	240	0.8	12.1	7.87	331.5	NM	0.25	-156.3	6.37	NM	
11:23	24.72	240	1.25	12.1	7.85	331.3	NM	0.11	-162.5	5.75	NM	
11:28	25.78	240	1.5	12.2	7.83	331.4	NM	0.04	-165.2	3.92	NM	
11:33	27.49	240	1.8	12.1	7.82	331.7	NM	-0.03	-168.7	2.92	NM	
11:38	28.63	240	2.1	12.1	7.81	331.3	NM	-0.05	-171.3	3.19	NM	
11:43	29.68	240	2.4	12.1	7.81	331.2	NM	-0.05	-172.6	3.44	NM	

<b>Sample ID(s):</b> MW-13D-WG-20231114	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		AM 	11/14/2023 18:13



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-13S**  
**Well Permit No:**


**Date: 2023/11/15**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.78 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 17.52 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 196.9 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.4 (gal) / 1.5 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:30	17.88	200	0.75	14.4	7.5	1740	NM	3.88	53.2	0.93	NM	
11:35	17.88	200	1	14.4	7.5	1751	NM	4.05	50.3	0.15	NM	
11:40	17.9	185.6	1.25	14.4	7.5	1753	NM	4.13	51.3	0.02	NM	
11:45	17.9	201.8	1.5	14.4	7.5	1753	NM	4.12	52.9	0.02	NM	

<b>Sample ID(s):</b> MW-13S-WG-20231115	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			
		Lg 	11/16/2023 19:25



# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-15D**  
**Well Permit No:**

**Date: 2023/11/15**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 43 (ft)	<b>Reference Elevation</b> 589.75 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 18.3 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 44 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 39 - 44 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 4.19 (gal) / 1.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:50	11.81	200	0.5	13.1	8.13	287	NM	0.6	-139.7	3.65	NM	
09:55	13.02	200	0.75	13.1	8.09	284.9	NM	0.48	-151.5	1.99	NM	
10:00	14.43	200	1	13.1	8.06	284	NM	0.42	-154.5	0.33	NM	
10:05	15.68	200	1.25	13.1	8.04	284.2	NM	0.39	-155.3	2.19	NM	

<b>Sample ID(s):</b> MW-15D-WG-20231115	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-151**  
**Well Permit No:**

**Date: 2023/11/15**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 21 (ft)	<b>Reference Elevation</b> 589.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 7.46 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 23 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 179.3 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 18 - 23 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 2.54 (gal) / 2.65 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:30	9.62	200	0.5	14.8	7.52	1267	NM	1.8	96.3	3.84	NM	
14:35	9.99	200	0.75	14.8	7.5	1267	NM	1.26	94.5	3.63	NM	
14:40	10.16	200	1	14.7	7.47	1270	NM	0.94	92.6	5.27	NM	
14:45	10.34	200	1.25	14.7	7.45	1276	NM	0.82	91.2	10.2	NM	
14:50	10.46	200	1.5	14.6	7.43	1280	NM	0.68	90.2	5.69	NM	
14:55	10.53	193.2	1.75	14.6	7.42	1283	NM	0.57	89.5	7.4	NM	
15:00	10.61	200	2	14.7	7.41	1284	NM	0.42	88	4.02	NM	
15:05	10.67	200	2.25	14.6	7.41	1283	NM	0.32	86.3	5.34	NM	
15:10	10.7	200	2.5	14.5	7.41	1283	NM	0.24	85.8	5.48	NM	
15:15	10.79	0	2.65	14.4	7.4	1286	NM	0.17	84.3	5.55	NM	Edited flow rate

<b>Sample ID(s):</b> DUP-02-WG-20231115,MW-151-WG-20231115	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	11/16/2023 19:25



# Low Flow Groundwater Sampling Field Data Form


**Well ID: MW-15S**  
**Well Permit No:**

**Date: 2023/11/14**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 11 (ft)	<b>Reference Elevation</b> 589.16 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 8.87 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 13 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 3 - 13 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> 0.67 (gal) / 1.5 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
00:00	7.45	200	1.75	13.8	7.36	984	NM	5.12	76.6	3.36	NM	
11:40	7.54	200	0.5	13.8	7.4	957	NM	5.83	55.2	9.77	NM	
11:45	7.46	200	0.75	13.8	7.36	954	NM	5.67	69.6	5.48	NM	
11:50	7.45	200	1	13.7	7.36	963	NM	5.42	73.6	3.64	NM	
11:55	7.47	200	1.5	13.8	7.36	977	NM	4.97	75.6	4.32	NM	Fixed rate

<b>Sample ID(s):</b> MW-15S-WG-20231114	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	11/16/2023 19:26



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-20S**  
**Well Permit No:**

**Date: 2023/11/15**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 601.27 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 14.94 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 10 - 20 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 0.5 (gal) / 4 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:15	15.48	200	0.5	12.7	7.38	1977	NM	6.21	78.8	34.3	NM	
08:20	15.72	200	0.75	12.8	7.29	1875	NM	6.57	76.1	22.1	NM	
08:25	16	200	1	12.7	7.3	1947	NM	5.91	72.7	34	NM	
08:30	16.22	200	1.25	12.7	7.31	2011	NM	5.27	69.3	51.4	NM	
08:35	16.45	200	1.5	12.7	7.32	2060	NM	4.69	65.4	45.9	NM	
08:40	16.6	200	1.75	12.7	7.34	2100	NM	4.2	61.8	36.2	NM	
08:45	16.74	200	2	12.7	7.35	2120	NM	3.84	58.7	33.9	NM	
08:50	16.78	200	2.25	12.9	7.33	2192	NM	5.63	58.4	37	NM	
09:00	17.01	200	2.75	12.7	7.38	2128	NM	3.08	48.5	39.5	NM	
09:05	17.2	200	3	12.6	7.38	2163	NM	2.94	49.6	19.1	NM	
09:10	17.33	200	3.25	12.6	7.4	2212	NM	2.43	46.8	53.1	NM	
09:15	17.43	200	3.5	12.8	7.41	2253	NM	2.14	43.5	21.1	NM	
09:20	17.49	200	3.75	12.6	7.41	2265	NM	2.09	41	20.6	NM	
09:25	17.53	200	4	12.7	7.4	2256	NM	2.3	39	20.9	NM	

<b>Sample ID(s):</b> MW-20S-WG-20231115	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		AM  <small>ERM Manufacturing, November 15, 2023 02:52 AM</small>	11/15/2023 15:52





# Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-23S**  
**Well Permit No:**


**Date: 2023/11/14**  
**Sunny**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 18 (ft)	<b>Reference Elevation</b> 595.01 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 10.65 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 20 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> 2 (in) / 5 - 20 (ft)
<b>Sampler</b> aditi mahantesh	<b>Volume of Water in Well / Total Volume Purged</b> 1.53 (gal) / 3.75 (gal)	<b>Well Construction</b>

### Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
14:31	10.61	200	0.6	13.5	7.43	1044	NM	7.74	68.5	57.8	NM	
14:36	10.61	200	1	13.5	7.42	1036	NM	7.52	72.1	53.1	NM	
14:41	10.61	200	1.25	13.5	7.42	1024	NM	7.48	75.5	36.9	NM	
14:46	10.61	200	1.5	13.5	7.43	1020	NM	7.49	78.4	23.8	NM	
14:51	10.61	200	1.75	13.4	7.43	1039	NM	7.43	80.8	14.4	NM	
14:56	10.61	200	2	13.4	7.43	1049	NM	7.37	83.2	9.55	NM	
15:01	10.61	200	2.25	13.4	7.43	1051	NM	7.35	84.9	6.59	NM	
15:06	10.61	200	2.5	13.4	7.43	1051	NM	7.31	86.7	5.58	NM	
15:11	10.61	200	2.75	13.4	7.43	1052	NM	7.3	88.6	5.51	NM	
15:16	10.61	200	3	13.4	7.43	1053	NM	7.3	90.1	4.56	NM	
15:21	10.61	200	3.25	13.3	7.43	1052	NM	7.29	92.1	2.67	NM	
15:26	10.61	200	3.5	13.3	7.43	1049	NM	7.28	93.5	2.94	NM	
15:31	10.61	200	3.75	13.3	7.43	1048	NM	7.3	94.1	3.12	NM	

<b>Sample ID(s):</b> MW-23S-WG-20231114	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
		AM 	11/14/2023 22:03
<b>Analysis:</b>			



## Low Flow Groundwater Sampling Field Data Form

**Well ID: MW-26S**  
**Well Permit No:**

**Date: 2023/11/14**

<b>Site ID</b> TF-TWO-RIVERS	<b>Purge Method / Pump Intake Depth</b> Low_Flow / 20 (ft)	<b>Reference Elevation</b> 589.92 (ft)
<b>Site Address</b> 1316 18th St, Two Rivers, US-WI	<b>Purge Equipment</b> NA	<b>Depth to Water / Free Product</b> 6.49 (ft) / None
<b>Project Number</b> 0383990	<b>Sample Equipment</b> NA	<b>Total Well Depth</b> 22 (ft)
<b>Project Name</b> 20231027-GWMonitor	<b>Average Purge Rate</b> 200 (mL/min)	<b>Well Diameter / Well Screen Interval</b> (in) / 7 - 22 (ft)
<b>Sampler</b> leann grahler	<b>Volume of Water in Well / Total Volume Purged</b> (gal) / 2.25 (gal)	<b>Well Construction</b>

**Well Head Vapor Measurements**  
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (gal)	Temperature (C) ±3%	pH ±0.1pH units	Specific Conductivity (uS/cm) ±3%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:50	6.71	200	0.5	13.6	7.54	1459	NM	0.73	42.7	141	NM	
09:55	6.72	200	0.75	13.7	7.51	1459	NM	0.53	34.5	107	NM	
10:00	6.72	200	1.25	13.8	7.5	1473	NM	0.43	24.5	57.5	NM	
10:05	6.72	200	1.5	13.8	7.5	1475	NM	0.41	20.9	46.2	NM	
10:10	6.72	200	1.75	13.8	7.5	1473	NM	0.38	15.8	41.4	NM	
10:15	6.72	200	2	13.9	7.49	1473	NM	0.36	11.7	39.7	NM	
10:20	6.72	200	2.25	13.9	7.49	1479	NM	0.35	9.9	39.6	NM	

<b>Sample ID(s):</b> MW-26S-WG-20231114	<b>Additional Comments</b>	<b>SAMPLER NAME AND SIGNATURE</b>	<b>Date Time</b>
<b>Analysis:</b>		Lg 	11/16/2023 19:26

## APPENDIX B      LABORATORY ANALYTICAL REPORTS

April 18, 2022

John Roberts  
ERM, Inc.  
7311 W. Greenfield Ave.  
Milwaukee, WI 53214

RE: Project: 0383990 TWO RIVERS  
Pace Project No.: 40243068

Dear John Roberts:

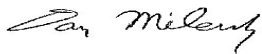
Enclosed are the analytical results for sample(s) received by the laboratory on April 07, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise 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,



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

Enclosures

cc: Ryan Plath, ERM, INC.  
David deCourcy-Bower, ERM, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

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### **Pace Analytical Services Green Bay**

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40243068001	MW-13D-WG-20220405	Water	04/05/22 16:00	04/07/22 12:30
40243068002	MW-13S-WG-20220405	Water	04/05/22 16:55	04/07/22 12:30
40243068003	MW-03-WG-20220405	Water	04/05/22 17:55	04/07/22 12:30
40243068004	MW-09-WG-20220405	Water	04/05/22 18:50	04/07/22 12:30
40243068005	MW-23S-WG-20220406	Water	04/06/22 10:30	04/07/22 12:30
40243068006	MW-6S-WG-20220406	Water	04/06/22 11:30	04/07/22 12:30
40243068007	DUP-01-WG-20220406	Water	04/06/22 00:00	04/07/22 12:30
40243068008	MW-01-WG-20220406	Water	04/06/22 12:30	04/07/22 12:30
40243068009	MW-20S-WG-20220406	Water	04/06/22 13:30	04/07/22 12:30
40243068010	TB-01-WG-20220406	Water	04/06/22 13:10	04/07/22 12:30
40243068011	MW-26S-WG-20220406	Water	04/06/22 15:20	04/07/22 12:30
40243068012	MW-15S-WG-20220406	Water	04/06/22 16:10	04/07/22 12:30
40243068013	MW-15D-WG-20220406	Water	04/06/22 17:00	04/07/22 12:30
40243068014	DUP-02-WG-20220406	Water	04/06/22 00:00	04/07/22 12:30
40243068015	MW-15I-WG-20220406	Water	04/06/22 18:20	04/07/22 12:30
40243068016	MW-7S-WG-20220407	Water	04/07/22 09:00	04/07/22 12:30
40243068017	MW-04-WG-20220407	Water	04/07/22 10:25	04/07/22 12:30
40243068018	FB-01-WQ-20220406	Water	04/06/22 18:00	04/07/22 12:30

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40243068001	MW-13D-WG-20220405	EPA 8260	LAP	13	PASI-G
40243068002	MW-13S-WG-20220405	EPA 8260	LAP	13	PASI-G
40243068003	MW-03-WG-20220405	EPA 8260	LAP	13	PASI-G
40243068004	MW-09-WG-20220405	EPA 8260	LAP	13	PASI-G
40243068005	MW-23S-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068006	MW-6S-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068007	DUP-01-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068008	MW-01-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068009	MW-20S-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068010	TB-01-WG-20220406	EPA 8260	SMT	13	PASI-G
40243068011	MW-26S-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068012	MW-15S-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068013	MW-15D-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068014	DUP-02-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068015	MW-15I-WG-20220406	EPA 8260	LAP	13	PASI-G
40243068016	MW-7S-WG-20220407	EPA 8260	LAP	13	PASI-G
40243068017	MW-04-WG-20220407	EPA 8260	LAP	13	PASI-G
40243068018	FB-01-WQ-20220406	EPA 8260	LAP	13	PASI-G

PASI-G = Pace Analytical Services - Green Bay

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-13D-WG-20220405**      **Lab ID: 40243068001**      Collected: 04/05/22 16:00      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 16:03	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/13/22 16:03	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 16:03	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/13/22 16:03	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/13/22 16:03	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/13/22 16:03	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		04/13/22 16:03	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/13/22 16:03	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/13/22 16:03	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/13/22 16:03	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		04/13/22 16:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		04/13/22 16:03	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		04/13/22 16:03	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-13S-WG-20220405**      **Lab ID: 40243068002**      Collected: 04/05/22 16:55      Received: 04/07/22 12:30      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-Trichloroethane	3.6	ug/L	1.0	0.30	1		04/13/22 18:23	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/13/22 18:23	79-00-5	
1,1-Dichloroethane	2.3	ug/L	1.0	0.30	1		04/13/22 18:23	75-34-3	
1,1-Dichloroethene	0.74J	ug/L	1.0	0.58	1		04/13/22 18:23	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/13/22 18:23	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/13/22 18:23	127-18-4	
Trichloroethene	351	ug/L	5.0	1.6	5		04/14/22 08:40	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/13/22 18:23	75-01-4	
cis-1,2-Dichloroethene	2.3	ug/L	1.0	0.47	1		04/13/22 18:23	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/13/22 18:23	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	111	%	70-130		1		04/13/22 18:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		04/13/22 18:23	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		04/13/22 18:23	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-03-WG-20220405**      **Lab ID: 40243068003**      Collected: 04/05/22 17:55      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 11:55	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/13/22 11:55	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 11:55	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/13/22 11:55	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/13/22 11:55	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/13/22 11:55	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		04/13/22 11:55	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/13/22 11:55	75-01-4	
cis-1,2-Dichloroethene	0.71J	ug/L	1.0	0.47	1		04/13/22 11:55	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/13/22 11:55	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		04/13/22 11:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		04/13/22 11:55	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		04/13/22 11:55	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-09-WG-20220405**      **Lab ID: 40243068004**      Collected: 04/05/22 18:50      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 08:00	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/14/22 08:00	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 08:00	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/14/22 08:00	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/14/22 08:00	107-06-2	
Tetrachloroethene	0.41J	ug/L	1.0	0.41	1		04/14/22 08:00	127-18-4	
Trichloroethene	0.55J	ug/L	1.0	0.32	1		04/14/22 08:00	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/14/22 08:00	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/14/22 08:00	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/14/22 08:00	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		04/14/22 08:00	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		04/14/22 08:00	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		04/14/22 08:00	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-23S-WG-20220406**      **Lab ID: 40243068005**      Collected: 04/06/22 10:30      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 17:43	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/13/22 17:43	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 17:43	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/13/22 17:43	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/13/22 17:43	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/13/22 17:43	127-18-4	
Trichloroethene	2.9	ug/L	1.0	0.32	1		04/13/22 17:43	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/13/22 17:43	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/13/22 17:43	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/13/22 17:43	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		04/13/22 17:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		04/13/22 17:43	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		04/13/22 17:43	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-6S-WG-20220406**      **Lab ID: 40243068006**      Collected: 04/06/22 11:30      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 08:20	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/14/22 08:20	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 08:20	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/14/22 08:20	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/14/22 08:20	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/14/22 08:20	127-18-4	
Trichloroethene	0.56J	ug/L	1.0	0.32	1		04/14/22 08:20	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/14/22 08:20	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/14/22 08:20	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/14/22 08:20	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		04/14/22 08:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		04/14/22 08:20	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		04/14/22 08:20	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: DUP-01-WG-20220406**      **Lab ID: 40243068007**      Collected: 04/06/22 00:00      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 17:03	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/13/22 17:03	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 17:03	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/13/22 17:03	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/13/22 17:03	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/13/22 17:03	127-18-4	
Trichloroethene	5.7	ug/L	1.0	0.32	1		04/13/22 17:03	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/13/22 17:03	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/13/22 17:03	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/13/22 17:03	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		04/13/22 17:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		04/13/22 17:03	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		04/13/22 17:03	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-01-WG-20220406**      **Lab ID: 40243068008**      Collected: 04/06/22 12:30      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 16:43	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/13/22 16:43	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 16:43	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/13/22 16:43	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/13/22 16:43	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/13/22 16:43	127-18-4	
Trichloroethene	67.6	ug/L	1.0	0.32	1		04/13/22 16:43	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/13/22 16:43	75-01-4	
cis-1,2-Dichloroethene	0.73J	ug/L	1.0	0.47	1		04/13/22 16:43	156-59-2	
trans-1,2-Dichloroethene	0.59J	ug/L	1.0	0.53	1		04/13/22 16:43	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		04/13/22 16:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		04/13/22 16:43	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		04/13/22 16:43	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-20S-WG-20220406**      **Lab ID: 40243068009**      Collected: 04/06/22 13:30      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 16:23	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/13/22 16:23	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 16:23	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/13/22 16:23	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/13/22 16:23	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/13/22 16:23	127-18-4	
Trichloroethene	5.0	ug/L	1.0	0.32	1		04/13/22 16:23	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/13/22 16:23	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/13/22 16:23	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/13/22 16:23	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	110	%	70-130		1		04/13/22 16:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		04/13/22 16:23	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		04/13/22 16:23	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: TB-01-WG-20220406**      **Lab ID: 40243068010**      Collected: 04/06/22 13:10      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 16:48	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/13/22 16:48	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/13/22 16:48	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/13/22 16:48	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/13/22 16:48	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/13/22 16:48	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		04/13/22 16:48	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/13/22 16:48	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/13/22 16:48	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/13/22 16:48	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1		04/13/22 16:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	70-130		1		04/13/22 16:48	2199-69-1	
Toluene-d8 (S)	106	%	70-130		1		04/13/22 16:48	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-26S-WG-20220406**      **Lab ID: 40243068011**      Collected: 04/06/22 15:20      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 21:03	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/14/22 21:03	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 21:03	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/14/22 21:03	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/14/22 21:03	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/14/22 21:03	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		04/14/22 21:03	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/14/22 21:03	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/14/22 21:03	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/14/22 21:03	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		04/14/22 21:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		04/14/22 21:03	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		04/14/22 21:03	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-15S-WG-20220406**      **Lab ID: 40243068012**      Collected: 04/06/22 16:10      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 20:23	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/14/22 20:23	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 20:23	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/14/22 20:23	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/14/22 20:23	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/14/22 20:23	127-18-4	
Trichloroethene	1.8	ug/L	1.0	0.32	1		04/14/22 20:23	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/14/22 20:23	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/14/22 20:23	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/14/22 20:23	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		04/14/22 20:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		04/14/22 20:23	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		04/14/22 20:23	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-15D-WG-20220406**      **Lab ID: 40243068013**      Collected: 04/06/22 17:00      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 20:43	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/14/22 20:43	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 20:43	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/14/22 20:43	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/14/22 20:43	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/14/22 20:43	127-18-4	
Trichloroethene	2.3	ug/L	1.0	0.32	1		04/14/22 20:43	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/14/22 20:43	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/14/22 20:43	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/14/22 20:43	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	107	%	70-130		1		04/14/22 20:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		04/14/22 20:43	2199-69-1	
Toluene-d8 (S)	105	%	70-130		1		04/14/22 20:43	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: DUP-02-WG-20220406**      **Lab ID: 40243068014**      Collected: 04/06/22 00:00      Received: 04/07/22 12:30      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-Trichloroethane	2.3	ug/L	1.0	0.30	1		04/14/22 21:42	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/14/22 21:42	79-00-5	
1,1-Dichloroethane	1.1	ug/L	1.0	0.30	1		04/14/22 21:42	75-34-3	
1,1-Dichloroethene	0.89J	ug/L	1.0	0.58	1		04/14/22 21:42	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/14/22 21:42	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/14/22 21:42	127-18-4	
Trichloroethene	701	ug/L	10.0	3.2	10		04/15/22 08:47	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/14/22 21:42	75-01-4	
cis-1,2-Dichloroethene	9.4	ug/L	1.0	0.47	1		04/14/22 21:42	156-59-2	
trans-1,2-Dichloroethene	1.5	ug/L	1.0	0.53	1		04/14/22 21:42	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		04/14/22 21:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		04/14/22 21:42	2199-69-1	
Toluene-d8 (S)	105	%	70-130		1		04/14/22 21:42	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-15I-WG-20220406**      **Lab ID: 40243068015**      Collected: 04/06/22 18:20      Received: 04/07/22 12:30      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-Trichloroethane	<b>3.1J</b>	ug/L	10.0	3.0	10		04/15/22 01:01	71-55-6	
1,1,2-Trichloroethane	<b>&lt;3.4</b>	ug/L	50.0	3.4	10		04/15/22 01:01	79-00-5	
1,1-Dichloroethane	<b>&lt;3.0</b>	ug/L	10.0	3.0	10		04/15/22 01:01	75-34-3	
1,1-Dichloroethene	<b>&lt;5.8</b>	ug/L	10.0	5.8	10		04/15/22 01:01	75-35-4	
1,2-Dichloroethane	<b>&lt;2.9</b>	ug/L	10.0	2.9	10		04/15/22 01:01	107-06-2	
Tetrachloroethene	<b>&lt;4.1</b>	ug/L	10.0	4.1	10		04/15/22 01:01	127-18-4	
Trichloroethene	<b>740</b>	ug/L	10.0	3.2	10		04/15/22 01:01	79-01-6	
Vinyl chloride	<b>&lt;1.7</b>	ug/L	10.0	1.7	10		04/15/22 01:01	75-01-4	
cis-1,2-Dichloroethene	<b>10.1</b>	ug/L	10.0	4.7	10		04/15/22 01:01	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;5.3</b>	ug/L	10.0	5.3	10		04/15/22 01:01	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		10		04/15/22 01:01	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		10		04/15/22 01:01	2199-69-1	
Toluene-d8 (S)	105	%	70-130		10		04/15/22 01:01	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-7S-WG-20220407**      **Lab ID: 40243068016**      Collected: 04/07/22 09:00      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 21:23	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/14/22 21:23	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 21:23	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/14/22 21:23	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/14/22 21:23	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/14/22 21:23	127-18-4	
Trichloroethene	17.4	ug/L	1.0	0.32	1		04/14/22 21:23	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/14/22 21:23	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/14/22 21:23	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/14/22 21:23	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		1		04/14/22 21:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		04/14/22 21:23	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		04/14/22 21:23	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: MW-04-WG-20220407**      **Lab ID: 40243068017**      Collected: 04/07/22 10:25      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/15/22 00:41	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/15/22 00:41	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/15/22 00:41	75-34-3	
1,1-Dichloroethene	1.3	ug/L	1.0	0.58	1		04/15/22 00:41	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/15/22 00:41	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/15/22 00:41	127-18-4	
Trichloroethene	122	ug/L	1.0	0.32	1		04/15/22 00:41	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/15/22 00:41	75-01-4	
cis-1,2-Dichloroethene	30.0	ug/L	1.0	0.47	1		04/15/22 00:41	156-59-2	
trans-1,2-Dichloroethene	14.3	ug/L	1.0	0.53	1		04/15/22 00:41	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		04/15/22 00:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		04/15/22 00:41	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		04/15/22 00:41	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

**Sample: FB-01-WQ-20220406**      **Lab ID: 40243068018**      Collected: 04/06/22 18:00      Received: 04/07/22 12:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 20:03	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		04/14/22 20:03	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		04/14/22 20:03	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		04/14/22 20:03	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		04/14/22 20:03	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		04/14/22 20:03	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		04/14/22 20:03	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/14/22 20:03	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		04/14/22 20:03	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		04/14/22 20:03	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		04/14/22 20:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		04/14/22 20:03	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		04/14/22 20:03	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40243068

QC Batch:	412919	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40243068001, 40243068002, 40243068003, 40243068004, 40243068005, 40243068006, 40243068007, 40243068008, 40243068009

METHOD BLANK: 2377640 Matrix: Water  
Associated Lab Samples: 40243068001, 40243068002, 40243068003, 40243068004, 40243068005, 40243068006, 40243068007, 40243068008, 40243068009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	04/13/22 07:37	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	04/13/22 07:37	
1,1-Dichloroethane	ug/L	<0.30	1.0	04/13/22 07:37	
1,1-Dichloroethene	ug/L	<0.58	1.0	04/13/22 07:37	
1,2-Dichloroethane	ug/L	<0.29	1.0	04/13/22 07:37	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	04/13/22 07:37	
Tetrachloroethene	ug/L	<0.41	1.0	04/13/22 07:37	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	04/13/22 07:37	
Trichloroethene	ug/L	<0.32	1.0	04/13/22 07:37	
Vinyl chloride	ug/L	<0.17	1.0	04/13/22 07:37	
1,2-Dichlorobenzene-d4 (S)	%	107	70-130	04/13/22 07:37	
4-Bromofluorobenzene (S)	%	108	70-130	04/13/22 07:37	
Toluene-d8 (S)	%	104	70-130	04/13/22 07:37	

LABORATORY CONTROL SAMPLE: 2377641

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.5	107	70-130	
1,1,2-Trichloroethane	ug/L	50	51.2	102	70-130	
1,1-Dichloroethane	ug/L	50	51.9	104	68-132	
1,1-Dichloroethene	ug/L	50	56.9	114	85-126	
1,2-Dichloroethane	ug/L	50	52.2	104	70-130	
cis-1,2-Dichloroethene	ug/L	50	47.3	95	70-130	
Tetrachloroethene	ug/L	50	52.2	104	70-130	
trans-1,2-Dichloroethene	ug/L	50	49.8	100	70-130	
Trichloroethene	ug/L	50	52.4	105	70-130	
Vinyl chloride	ug/L	50	61.8	124	63-142	
1,2-Dichlorobenzene-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	
Toluene-d8 (S)	%			104	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2377989 2377990

Parameter	Units	40243068003 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
1,1,1-Trichloroethane	ug/L	<0.30	50	50	52.1	54.4	104	109	70-130	4	20	

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2377989		2377990		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40243068003 Result	MS Spike Conc.	MSD Spike Conc.									
1,1,2-Trichloroethane	ug/L	<0.34	50	50	49.6	53.0	99	106	70-130	7	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	50.0	52.7	100	105	68-132	5	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	47.6	49.3	95	99	76-132	3	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	49.9	52.2	100	104	70-130	4	20		
cis-1,2-Dichloroethene	ug/L	0.71J	50	50	46.2	49.9	91	98	70-130	8	20		
Tetrachloroethene	ug/L	<0.41	50	50	51.7	52.4	103	105	70-130	1	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	48.5	51.1	97	102	70-134	5	20		
Trichloroethene	ug/L	<0.32	50	50	50.0	52.0	100	104	70-130	4	20		
Vinyl chloride	ug/L	<0.17	50	50	57.5	60.0	115	120	61-143	4	20		
1,2-Dichlorobenzene-d4 (S)	%						103	104	70-130				
4-Bromofluorobenzene (S)	%						108	110	70-130				
Toluene-d8 (S)	%						106	104	70-130				

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40243068

QC Batch: 412923 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40243068010

METHOD BLANK: 2377642 Matrix: Water  
Associated Lab Samples: 40243068010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	04/13/22 15:11	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	04/13/22 15:11	
1,1-Dichloroethane	ug/L	<0.30	1.0	04/13/22 15:11	
1,1-Dichloroethene	ug/L	<0.58	1.0	04/13/22 15:11	
1,2-Dichloroethane	ug/L	<0.29	1.0	04/13/22 15:11	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	04/13/22 15:11	
Tetrachloroethene	ug/L	<0.41	1.0	04/13/22 15:11	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	04/13/22 15:11	
Trichloroethene	ug/L	<0.32	1.0	04/13/22 15:11	
Vinyl chloride	ug/L	<0.17	1.0	04/13/22 15:11	
1,2-Dichlorobenzene-d4 (S)	%	96	70-130	04/13/22 15:11	
4-Bromofluorobenzene (S)	%	104	70-130	04/13/22 15:11	
Toluene-d8 (S)	%	101	70-130	04/13/22 15:11	

LABORATORY CONTROL SAMPLE: 2377643

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.8	112	70-130	
1,1,2-Trichloroethane	ug/L	50	51.8	104	70-130	
1,1-Dichloroethane	ug/L	50	51.8	104	68-132	
1,1-Dichloroethene	ug/L	50	53.5	107	85-126	
1,2-Dichloroethane	ug/L	50	48.3	97	70-130	
cis-1,2-Dichloroethene	ug/L	50	50.9	102	70-130	
Tetrachloroethene	ug/L	50	51.7	103	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.4	107	70-130	
Trichloroethene	ug/L	50	52.3	105	70-130	
Vinyl chloride	ug/L	50	57.2	114	63-142	
1,2-Dichlorobenzene-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2378329 2378330

Parameter	Units	40243259002 Result	MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			MS Spike Conc.	MSD Spike Conc.								
1,1,1-Trichloroethane	ug/L	<0.30	50	50	49.2	57.2	98	114	70-130	15	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	44.3	51.3	89	103	70-130	15	20	

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2378329		2378330		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		40243259002 Result	MS Spike Conc.	MSD Spike Conc.									
1,1-Dichloroethane	ug/L	<0.30	50	50	46.0	53.8	92	108	68-132	16	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	46.9	54.1	94	108	76-132	14	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	42.9	48.8	86	98	70-130	13	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	45.7	53.1	91	106	70-130	15	20		
Tetrachloroethene	ug/L	<0.41	50	50	45.7	50.1	91	100	70-130	9	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	46.7	55.1	93	110	70-134	16	20		
Trichloroethene	ug/L	1.6	50	50	45.9	52.1	89	101	70-130	13	20		
Vinyl chloride	ug/L	<0.17	50	50	49.9	57.3	100	115	61-143	14	20		
1,2-Dichlorobenzene-d4 (S)	%						100	100	70-130				
4-Bromofluorobenzene (S)	%						103	102	70-130				
Toluene-d8 (S)	%						100	100	70-130				

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

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40243068

QC Batch:	412949	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40243068011, 40243068012, 40243068013, 40243068014, 40243068015, 40243068016, 40243068017, 40243068018

METHOD BLANK: 2377760 Matrix: Water  
Associated Lab Samples: 40243068011, 40243068012, 40243068013, 40243068014, 40243068015, 40243068016, 40243068017, 40243068018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	04/14/22 15:24	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	04/14/22 15:24	
1,1-Dichloroethane	ug/L	<0.30	1.0	04/14/22 15:24	
1,1-Dichloroethene	ug/L	<0.58	1.0	04/14/22 15:24	
1,2-Dichloroethane	ug/L	<0.29	1.0	04/14/22 15:24	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	04/14/22 15:24	
Tetrachloroethene	ug/L	<0.41	1.0	04/14/22 15:24	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	04/14/22 15:24	
Trichloroethene	ug/L	<0.32	1.0	04/14/22 15:24	
Vinyl chloride	ug/L	<0.17	1.0	04/14/22 15:24	
1,2-Dichlorobenzene-d4 (S)	%	102	70-130	04/14/22 15:24	
4-Bromofluorobenzene (S)	%	106	70-130	04/14/22 15:24	
Toluene-d8 (S)	%	104	70-130	04/14/22 15:24	

LABORATORY CONTROL SAMPLE: 2377761

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.1	104	70-130	
1,1,2-Trichloroethane	ug/L	50	51.7	103	70-130	
1,1-Dichloroethane	ug/L	50	49.6	99	68-132	
1,1-Dichloroethene	ug/L	50	55.7	111	85-126	
1,2-Dichloroethane	ug/L	50	49.7	99	70-130	
cis-1,2-Dichloroethene	ug/L	50	46.6	93	70-130	
Tetrachloroethene	ug/L	50	51.9	104	70-130	
trans-1,2-Dichloroethene	ug/L	50	48.4	97	70-130	
Trichloroethene	ug/L	50	50.5	101	70-130	
Vinyl chloride	ug/L	50	59.5	119	63-142	
1,2-Dichlorobenzene-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	
Toluene-d8 (S)	%			103	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2378333 2378334

Parameter	Units	40243068012 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
1,1,1-Trichloroethane	ug/L	<0.30	50	50	53.4	53.6	107	107	70-130	0	20	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS

Pace Project No.: 40243068

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2378333		2378334		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40243068012 Result	MS Spike Conc.	MSD Spike Conc.									
1,1,2-Trichloroethane	ug/L	<0.34	50	50	53.3	51.5	107	103	70-130	3	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	50.6	51.0	101	102	68-132	1	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	49.6	56.1	99	112	76-132	12	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	51.3	50.8	103	102	70-130	1	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	48.1	47.3	96	95	70-130	2	20		
Tetrachloroethene	ug/L	<0.41	50	50	53.3	51.9	107	104	70-130	3	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	50.4	50.6	101	101	70-134	1	20		
Trichloroethene	ug/L	1.8	50	50	52.5	54.0	101	104	70-130	3	20		
Vinyl chloride	ug/L	<0.17	50	50	60.9	60.2	122	120	61-143	1	20		
1,2-Dichlorobenzene-d4 (S)	%						103	103	70-130				
4-Bromofluorobenzene (S)	%						106	106	70-130				
Toluene-d8 (S)	%						104	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

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## QUALIFIERS

Project: 0383990 TWO RIVERS  
Pace Project No.: 40243068

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### DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990 TWO RIVERS  
Pace Project No.: 40243068

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40243068001	MW-13D-WG-20220405	EPA 8260	412919		
40243068002	MW-13S-WG-20220405	EPA 8260	412919		
40243068003	MW-03-WG-20220405	EPA 8260	412919		
40243068004	MW-09-WG-20220405	EPA 8260	412919		
40243068005	MW-23S-WG-20220406	EPA 8260	412919		
40243068006	MW-6S-WG-20220406	EPA 8260	412919		
40243068007	DUP-01-WG-20220406	EPA 8260	412919		
40243068008	MW-01-WG-20220406	EPA 8260	412919		
40243068009	MW-20S-WG-20220406	EPA 8260	412919		
40243068010	TB-01-WG-20220406	EPA 8260	412923		
40243068011	MW-26S-WG-20220406	EPA 8260	412949		
40243068012	MW-15S-WG-20220406	EPA 8260	412949		
40243068013	MW-15D-WG-20220406	EPA 8260	412949		
40243068014	DUP-02-WG-20220406	EPA 8260	412949		
40243068015	MW-15I-WG-20220406	EPA 8260	412949		
40243068016	MW-7S-WG-20220407	EPA 8260	412949		
40243068017	MW-04-WG-20220407	EPA 8260	412949		
40243068018	FB-01-WQ-20220406	EPA 8260	412949		

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

U/0243068

**ALL SHADED AREAS are for LAB USE ONLY**

Company: **EPM** Billing Information:

Address: **7311 W Greenfield Ave West Allis WI 53214** Email: **EPM-NAaccounts@epm.com**

Report To: **John.Roberts@epm.com** Email To: **John.Roberts@epm.com**

Copy To: **Ryan.Plath@epm.com** Site Collection Info/Address:

Customer Project Name/Number: **0383490 Two Rivers** State: **WI** County/City: **WI** Time Zone Collected: **[ ] PT [ ] MT [ ] CT [ ] ET**

Phone: **531 231 1111** Site/Facility ID #: **0383490** Compliance Monitoring?  Yes  No

Collected By (print): **Ryan Plath** Purchase Order #: **0383490** DW PWS ID #: **0383490**

Collected By (signature): **[Signature]** Turnaround Date Required: **04/17/22** Immediately Packed on Ice:  Yes  No

Sample Disposal:  Dispose as appropriate  Return  Archive:  Hold:  Rush:  Same Day  Next Day  2 Day  3 Day  4 Day  5 Day (Expedite Charges Apply) Field Filtered (if applicable):  Yes  No Analysis: **WI LIST**

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		# of Ctns	# of Cl
			Date	Time	Date	Time		
MW-13D-WG-20220405	GW	G	4/5/22	1600			3	X
MW-13S-WG-20220405	GW	G	4/5/22	1655			3	X
MW-03-WG-20220405	GW	G	4/5/22	1755			3	X
MW-09-WG-20220405	GW	G	4/5/22	1850			3	X
MW-23S-WG-20220406	GW	G	4/6/22	1030			3	X
MW-6S-WG-20220406	GW	G	4/6/22	1130			3	X
Dup-01- <del>13D</del> -20220406	GW	G	4/6/22	-			3	X
MW-01-WG-20220406	GW	G	4/6/22	1230			3	X
MW-20S-WG-20220406	GW	G	4/6/22	1330			3	X
TB-01-WA-20220406	W	G	4/6/22	1310			3	X

Container Preservative Type \*\* **3**

Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line:

Lab Sample Receipt Check	
Custody Seals Present Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips	
Sample pH Acceptable	Y N NA
pH Strips	
Sulfide Present	Y N NA
Lead Acetate Strips	

LAB USE ONLY: Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards: **Please send Equis EDD of Data**

Type of Ice Used:  Wet  Blue  Dry  None

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Packing Material Used:

Lab Tracking #: **2764006**

Radchem sample(s) screened (<500 cpm): Y N NA

Samples received via: FEDEX UPS Client Courier Pace Courier

Relinquished by/Company: (Signature) **[Signature]**

Date/Time: **4/7/22 1230**

Received by/Company: (Signature) **[Signature]**

Date/Time: **4/7/22 1230**

MTJL LAB USE ONLY

Relinquished by/Company: (Signature)

Date/Time:

Received by/Company: (Signature)

Date/Time:

Table #:

Acctnum:

Template:

Prelogin:

PM:

PB:

Lab Sample Temperature Info:  
Temp Blank Received: Y N NA  
Therm ID#: **105**  
Cooler 1 Temp Upon Receipt: **1** oC  
Cooler 1 Therm Corr. Factor: **1** oC  
Cooler 1 Corrected Temp: **1** oC  
Comments:

Trip Blank Received: Y N NA  
HCL MeOH TSP Other

Non Conformance(s): YES / NO  
Page: **Page 31 of 34**  
of: **2**



# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40243068

**ALL SHADED AREAS are for LAB USE ONLY**

Company: **ERM** Billing Information: **ERM-NAaccounts@pacem.com**

Address: **2311 W Greenfield Ave West Allis WI**

Report To: **John.Roberts@erm.com** Email To:

Copy To: **Nylon.Plath@erm.com** Site Collection Info/Address:

Customer Project Name/Number: **0383990 Two River** State: **WI** County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone: Site/Facility ID #: Compliance Monitoring?  Yes [ ] No

Collected By (print): **Ryan Plath** Purchase Order #: DW PWS ID #: Quote #: DW Location Code:

Collected By (signature): *[Signature]* Turnaround Date Required: Immediately Packed on Ice:  Yes [ ] No

Sample Disposal:  Dispose as appropriate [ ] Return Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day Field Filtered (if applicable): [ ] Yes  No [ ] Archive: [ ] Hold: (Expedite Charges Apply) Analysis:

Container Preservative Type \*\*

Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses	Lab Profile/Line:
CVOCs WI List	Lab Sample Receipt Checklist:
	Custody Seals Present/Intact Y N NA
	Custody Signatures Present Y N NA
	Collector Signature Present Y N NA
	Bottles Intact Y N NA
	Correct Bottles Y N NA
	Sufficient Volume Y N NA
	Samples Received on Ice Y N NA
	VOA - Headspace Acceptable Y N NA
	USDA Regulated Soils Y N NA
	Samples in Holding Time Y N NA
	Residual Chlorine Present Y N NA
	Cl Strips: <b>1</b> Y N NA
	Sample pH Acceptable Y N NA
	pH Strips: Y N NA
Sulfide Present Y N NA	
Lead Acetate Strips: Y N NA	
LAB USE ONLY:	
Lab sample # / Comments:	

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-265-WG-20220406	GW	G	4/6/22	1526				3 X
MW-15S-WG-20220406	GW	G	4/6/22	1610				3 X
MW-15D-WG-20220406	GW	G	4/6/22	1700				3 X
Duf-02-WG-20220406	GW	G	4/6/22	-				3 X
MW-15T-WG-20220406	GW	G	4/6/22	1820				3 X
MW-7S-WG-20220407	GW	G	4/7/22	0950				3 X
MW-04-WG-20220407	GW	G	4/7/22	1025				3 X
FB-01-WG-20220406	W	G	4/6/22	1800				3 X

Customer Remarks / Special Conditions / Possible Hazards: **Please send Eau3 EPO or Data**

Type of Ice Used:  Wet  Blue  Dry  None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: **2764005**

Samples received via:  FEDEX  UPS  Client  Courier  Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: **105**

Cooler 1 Temp Upon Receipt: **7** oC

Cooler 1 Therm Corr. Factor: oC

Cooler 1 Corrected Temp: **7** oC

Comments:

Relinquished by/Company: (Signature) *[Signature]* Date/Time: **4/7/22 1230** Received by/Company: (Signature) *[Signature]* Date/Time: **4/7/22**

Relinquished by/Company: (Signature) Date/Time: Received by/Company: (Signature) Date/Time:

Relinquished by/Company: (Signature) Date/Time: Received by/Company: (Signature) Date/Time:

MTJL LAB USE ONLY

Table #:

Acctnum:

Template:

Prelogin:

PM:

PB:

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: **2** of 34



**Sample Condition Upon Receipt Form (SCUR)**

Client Name: ERM

Project #: **WO#: 40243068**

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



Tracking #: \_\_\_\_\_  
 Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - 105 Type of Ice:  Wet  Blue Dry None  Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 1 / Corr: 1

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

Person examining contents:  
 Date: 4/17/22 / Initials: SKW  
 Labeled By Initials: [Signature]

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

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>009- No time</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		<u>4/17/22 SKW</u>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>477</u>		

Client Notification/ Resolution: \_\_\_\_\_  
 Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Comments/ Resolution: \_\_\_\_\_

If checked, see attached form for additional comments

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

July 11, 2022

Ryan Plath  
ERM, INC.  
7311 W. Greenfield Ave.  
Milwaukee, WI 53214

RE: Project: 0383990  
Pace Project No.: 40247318

Dear Ryan Plath:

Enclosed are the analytical results for sample(s) received by the laboratory on June 28, 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 National - Mt. Juliet
- Pace Analytical Services - Green Bay

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

Sincerely,



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

Enclosures

cc: Duncan Favill, ERM, INC.  
John Roberts, ERM, Inc.  
David deCourcy-Bower, ERM, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990  
Pace Project No.: 40247318

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### **Pace Analytical Services Green Bay**

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky UST Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 12064  
North Dakota Certification #: R-150

Virginia VELAP ID: 460263  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-16-00157  
Federal Fish & Wildlife Permit #: LE51774A-0

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### **Pace Analytical Services National**

12065 Lebanon Road, Mt. Juliet, TN 37122  
Alabama Certification #: 40660  
Alaska Certification 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008  
Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
New Hampshire Certification #: 2975  
New Jersey Certification #: TN002  
New Mexico DW Certification  
New York Certification #: 11742  
North Carolina Aquatic Toxicity Certification #: 41  
North Carolina Drinking Water Certification #: 21704  
North Carolina Environmental Certificate #: 375  
North Dakota Certification #: R-140  
Ohio VAP Certification #: CL0069  
Oklahoma Certification #: 9915  
Oregon Certification #: TN200002  
Pennsylvania Certification #: 68-02979  
Rhode Island Certification #: LAO00356  
South Carolina Certification #: 84004  
South Dakota Certification  
Tennessee DW/Chem/Micro Certification #: 2006  
Texas Mold Certification #: LAB0152  
Texas Certification #: T 104704245-17-14  
USDA Soil Permit #: P330-15-00234  
Utah Certification #: TN00003  
Virginia Certification #: VT2006  
Vermont Dept. of Health: ID# VT-2006  
Virginia Certification #: 460132  
Washington Certification #: C847  
West Virginia Certification #: 233  
Wisconsin Certification #: 998093910  
Wyoming UST Certification #: via A2LA 2926.01  
A2LA-ISO 17025 Certification #: 1461.01  
A2LA-ISO 17025 Certification #: 1461.02  
AIHA-LAP/LLC EMLAP Certification #:100789

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: 0383990  
Pace Project No.: 40247318

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40247318001	MW-18S-WG-20220627	Water	06/27/22 17:45	06/28/22 12:55
40247318002	MW-10S-WG-20220628	Water	06/28/22 11:15	06/28/22 12:55
40247318003	MW-10D-WG-20220628	Water	06/28/22 10:05	06/28/22 12:55
40247318004	TB-01-WQ-20220628	Water	06/28/22 11:50	06/28/22 12:55
40247318005	MW-19S-WG-20220628	Water	06/28/22 10:15	06/28/22 12:55
40247318006	MW-24S-WG-20220628	Water	06/28/22 11:30	06/28/22 12:55
40247318007	MW-16S-WG-20220627	Water	06/27/22 12:45	06/28/22 12:55

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### SAMPLE ANALYTE COUNT

Project: 0383990  
Pace Project No.: 40247318

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40247318001	MW-18S-WG-20220627	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247318002	MW-10S-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247318003	MW-10D-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247318004	TB-01-WQ-20220628	EPA 8260	LAP	13	PASI-G
40247318005	MW-19S-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247318006	MW-24S-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247318007	MW-16S-WG-20220627	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G

PAN = Pace National - Mt. Juliet

PASI-G = Pace Analytical Services - Green Bay

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247318

**Sample: MW-18S-WG-20220627**    **Lab ID: 40247318001**    Collected: 06/27/22 17:45    Received: 06/28/22 12:55    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	1.52	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 17:04	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	40.0	%	10.0-120		1	07/03/22 14:45	07/04/22 17:04	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 15:03	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/29/22 15:03	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 15:03	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/22 15:03	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/22 15:03	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/22 15:03	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/22 15:03	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/22 15:03	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/22 15:03	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/22 15:03	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/29/22 15:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		1		06/29/22 15:03	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		06/29/22 15:03	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247318

**Sample: MW-10S-WG-20220628**    **Lab ID: 40247318002**    Collected: 06/28/22 11:15    Received: 06/28/22 12:55    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	17.3	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 17:24	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	44.8	%	10.0-120		1	07/03/22 14:45	07/04/22 17:24	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 15:23	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/29/22 15:23	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 15:23	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/22 15:23	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/22 15:23	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/22 15:23	127-18-4	
Trichloroethene	0.82J	ug/L	1.0	0.32	1		06/29/22 15:23	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/22 15:23	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/22 15:23	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/22 15:23	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/22 15:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		1		06/29/22 15:23	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		06/29/22 15:23	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247318

**Sample: MW-10D-WG-20220628**    **Lab ID: 40247318003**    Collected: 06/28/22 10:05    Received: 06/28/22 12:55    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	34.5	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 17:43	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	39.6	%	10.0-120		1	07/03/22 14:45	07/04/22 17:43	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 15:43	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/29/22 15:43	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 15:43	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/22 15:43	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/22 15:43	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/22 15:43	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/22 15:43	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/22 15:43	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/22 15:43	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/22 15:43	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/29/22 15:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		06/29/22 15:43	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		06/29/22 15:43	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990

Pace Project No.: 40247318

**Sample: TB-01-WQ-20220628**      **Lab ID: 40247318004**      Collected: 06/28/22 11:50      Received: 06/28/22 12:55      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 13:44	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/29/22 13:44	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 13:44	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/22 13:44	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/22 13:44	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/22 13:44	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/22 13:44	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/22 13:44	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/22 13:44	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/22 13:44	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/29/22 13:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		06/29/22 13:44	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		06/29/22 13:44	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247318

**Sample: MW-19S-WG-20220628**      **Lab ID: 40247318005**      Collected: 06/28/22 10:15      Received: 06/28/22 12:55      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	13.7	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 18:03	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	30.2	%	10.0-120		1	07/03/22 14:45	07/04/22 18:03	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 14:44	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/29/22 14:44	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 14:44	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/22 14:44	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/22 14:44	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/22 14:44	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/22 14:44	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/22 14:44	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/22 14:44	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/22 14:44	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/29/22 14:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		06/29/22 14:44	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		06/29/22 14:44	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247318

**Sample: MW-24S-WG-20220628**    **Lab ID: 40247318006**    Collected: 06/28/22 11:30    Received: 06/28/22 12:55    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>1.36</b>	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 18:23	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	29.7	%	10.0-120		1	07/03/22 14:45	07/04/22 18:23	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/29/22 16:03	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		06/29/22 16:03	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/29/22 16:03	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		06/29/22 16:03	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		06/29/22 16:03	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		06/29/22 16:03	127-18-4	
Trichloroethene	<b>&lt;0.32</b>	ug/L	1.0	0.32	1		06/29/22 16:03	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		06/29/22 16:03	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		06/29/22 16:03	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		06/29/22 16:03	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/22 16:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		06/29/22 16:03	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		06/29/22 16:03	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247318

**Sample: MW-16S-WG-20220627**    **Lab ID: 40247318007**    Collected: 06/27/22 12:45    Received: 06/28/22 12:55    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	5.99	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 18:42	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	37.4	%	10.0-120		1	07/03/22 14:45	07/04/22 18:42	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 14:04	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/29/22 14:04	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/22 14:04	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/22 14:04	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/22 14:04	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/22 14:04	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/22 14:04	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/22 14:04	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/22 14:04	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/22 14:04	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	107	%	70-130		1		06/29/22 14:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	70-130		1		06/29/22 14:04	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		06/29/22 14:04	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247318

QC Batch: 1889291	Analysis Method: EPA 8270D by SIM
QC Batch Method: 3510C	Analysis Description: SVOA (GC/MS) 8270 D-SIM
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 40247318001, 40247318002, 40247318003, 40247318005, 40247318006, 40247318007

METHOD BLANK: R3811502-3 Matrix: Water  
Associated Lab Samples: 40247318001, 40247318002, 40247318003, 40247318005, 40247318006, 40247318007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.0447	0.149	07/04/22 14:08	
Nitrobenzene-d5 (S)	%	72.8	10.0-120	07/04/22 14:08	

Parameter	Units	R3811502-1		R3811502-2		% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec				
1,4-Dioxane (p-Dioxane)	ug/L	50.0	69.9	74.4	140	149	73.0-146	6.24	20 L0
Nitrobenzene-d5 (S)	%				72.3	61.5	10.0-120		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247318

QC Batch: 419691 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Laboratory: Pace Analytical Services - Green Bay  
Associated Lab Samples: 40247318001, 40247318002, 40247318003, 40247318004, 40247318005, 40247318006, 40247318007

METHOD BLANK: 2416883 Matrix: Water  
Associated Lab Samples: 40247318001, 40247318002, 40247318003, 40247318004, 40247318005, 40247318006, 40247318007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/29/22 11:25	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	06/29/22 11:25	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/29/22 11:25	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/29/22 11:25	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/29/22 11:25	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/29/22 11:25	
Tetrachloroethene	ug/L	<0.41	1.0	06/29/22 11:25	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/29/22 11:25	
Trichloroethene	ug/L	<0.32	1.0	06/29/22 11:25	
Vinyl chloride	ug/L	<0.17	1.0	06/29/22 11:25	
1,2-Dichlorobenzene-d4 (S)	%	107	70-130	06/29/22 11:25	
4-Bromofluorobenzene (S)	%	108	70-130	06/29/22 11:25	
Toluene-d8 (S)	%	103	70-130	06/29/22 11:25	

LABORATORY CONTROL SAMPLE: 2416884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.3	109	70-134	
1,1,2-Trichloroethane	ug/L	50	48.2	96	70-130	
1,1-Dichloroethane	ug/L	50	49.2	98	70-130	
1,1-Dichloroethene	ug/L	50	53.2	106	74-131	
1,2-Dichloroethane	ug/L	50	52.8	106	70-137	
cis-1,2-Dichloroethene	ug/L	50	42.3	85	70-130	
Tetrachloroethene	ug/L	50	49.8	100	70-130	
trans-1,2-Dichloroethene	ug/L	50	47.6	95	70-130	
Trichloroethene	ug/L	50	47.9	96	70-130	
Vinyl chloride	ug/L	50	49.4	99	63-134	
1,2-Dichlorobenzene-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			114	70-130	
Toluene-d8 (S)	%			106	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2417222 2417223

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40247318007	Result	Conc.	Conc.								
1,1,1-Trichloroethane	ug/L	<0.30	50	50	57.7	53.4	115	107	70-134	8	20		
1,1,2-Trichloroethane	ug/L	<0.34	50	50	51.4	48.1	103	96	70-130	7	20		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247318

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2417222		2417223		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40247318007 Result	MS Spike Conc.	MSD Spike Conc.									
1,1-Dichloroethane	ug/L	<0.30	50	50	52.7	48.6	105	97	70-130	8	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	55.5	51.3	111	103	71-130	8	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	56.9	52.8	114	106	70-137	7	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	45.2	42.4	90	85	70-130	6	20		
Tetrachloroethene	ug/L	<0.41	50	50	52.1	48.3	104	97	70-130	7	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	49.9	47.8	100	96	70-130	4	20		
Trichloroethene	ug/L	<0.32	50	50	51.6	47.8	103	96	70-130	8	20		
Vinyl chloride	ug/L	<0.17	50	50	51.9	48.5	104	97	60-137	7	20		
1,2-Dichlorobenzene-d4 (S)	%						101	102	70-130				
4-Bromofluorobenzene (S)	%						114	115	70-130				
Toluene-d8 (S)	%						105	105	70-130				

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### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: 0383990

Pace Project No.: 40247318

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### 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

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990

Pace Project No.: 40247318

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40247318001	MW-18S-WG-20220627	3510C	1889291	EPA 8270D by SIM	1889291
40247318002	MW-10S-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247318003	MW-10D-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247318005	MW-19S-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247318006	MW-24S-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247318007	MW-16S-WG-20220627	3510C	1889291	EPA 8270D by SIM	1889291
40247318001	MW-18S-WG-20220627	EPA 8260	419691		
40247318002	MW-10S-WG-20220628	EPA 8260	419691		
40247318003	MW-10D-WG-20220628	EPA 8260	419691		
40247318004	TB-01-WQ-20220628	EPA 8260	419691		
40247318005	MW-19S-WG-20220628	EPA 8260	419691		
40247318006	MW-24S-WG-20220628	EPA 8260	419691		
40247318007	MW-16S-WG-20220627	EPA 8260	419691		

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40247318

ALL SHADED AREAS are for LAB USE ONLY

Company: **ERM**

Billing Information: ~~ACCOUNTS~~

Address: **7311 W GREENFIELD AVE WEST ALTON**

Account: **ACCOUNTS PAYABLE**

Report To: **John.Roberts@erm.com**

Email To: **ERM.NA.accounts.payable@erm.com**

Copy To: **Ryan.Plath@erm.com**

Site Collection Info/Address: **1316 18th Street**

Customer Project Name/Number: **04 0383990**

State: **WI** County/City: **Two Rivers** Time Zone Collected: **[ ] PT [ ] MT [ ] CT [ ] ET**

Phone: **847-848-4500**

Site/Facility ID #:

Compliance Monitoring?  Yes [ ] No

Collected By (print): **RYAN PLATH**

Purchase Order #: Quote #:

DW PWS ID #: DW Location Code:

Collected By (signature): *[Signature]*

Turnaround Date Required: **Standard TOT**

Immediately Packed on Ice:  Yes [ ] No

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	CVOCS - set 43T	1,4-Dioxane by 8270 SIM	Lab Profile/Line:
			Date	Time	Date	Time					
MW-185-WG-20220627	GW	G	6/27/22	1745				5	X	X	001
MW-108-WG-20220628	GW	G	6/28/22	1115				5	X	X	002
MW-100-WG-20220628	GW	G	6/28/22	1005				5	X	X	003
TB-01-WQ-20220628	GW	G	6/28/22	1150				2	X		004
MW-195-WG-20220629	GW	G	6/29/22	1015				5	X	X	005
MW-245-WG-20220629	GW	G	6/28/22	1130				5	X	X	006
MW-165-WG-20220627	GW	G	6/27/22	1245				5	X	X	007

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA **See**

Custody Signatures Present Y N NA **See**

Collector Signature Present Y N NA **See**

Bottles Intact Y N NA **See**

Correct Bottles Y N NA **See**

Sufficient Volume Y N NA **See**

Samples Received on Ice Y N NA **See**

VOA - Headspace Acceptable Y N NA **See**

USDA Regulated Soils Y N NA **See**

Samples in Holding Time Y N NA **See**

Residual Chlorine Present Y N NA **See**

Cl Strips: Y N NA **See**

Sample pH Acceptable Y N NA **See**

pH Strips: Y N NA **See**

Sulfide Present Y N NA **See**

Lead Acetate Strips: Y N NA **See**

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: **Wet Blue Dry None** Packing Material Used: **See** Radchem sample(s) screened (<500 cpm): **Y N NA**

SHORT HOLDS PRESENT (<72 hours): **Y N N/A** Lab Tracking #: **2781501** Samples received via: **FEDEX UPS Client Courier Pace Courier**

Lab Sample Temperature Info: Temp Blank Received: **Y N NA** Therm ID#: **116** Cooler 1 Temp Upon Receipt: **0** °C Cooler 1 Therm Corr. Factor: **5.1** °C Cooler 1 Corrected Temp: **0.1** °C Comments:

Relinquished by/Company: (Signature) *[Signature]* Date/Time: **6/28/22 1210**

Relinquished by/Company: (Signature) *[Signature]* Date/Time: **6/28/22 1255**

Relinquished by/Company: (Signature) *[Signature]* Date/Time:

Received by/Company: (Signature) *[Signature]* Date/Time: **6/28/22 1210**

Received by/Company: (Signature) *[Signature]* Date/Time: **1255**

Received by/Company: (Signature) *[Signature]* Date/Time:

MTJL LAB USE ONLY Table #: Acctnum: Template: Prelogin: PM: PB:

Trip Blank Received: **Y N NA** HCL MeOH TSP Other: Non Conformance(s): **YES / NO** Page: **Page 17 of 19** of:



**Sample Condition Upon Receipt Form (SCUR)**

Client Name: ERM

Project #:

**WO#: 40247318**



40247318

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Waltco

6/28/22 mp  Client  Pace Other: \_\_\_\_\_

Tracking #: \_\_\_\_\_

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR-116 Type of Ice:  Wet  Blue Dry None

Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 0 / Corr: 0.1

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: 6/28/22 Initials: MP

Labeled By Initials: NK

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. pg# <u>6/28/22 mp</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>006" MW-225-W020W6-20220628 6/28/22 mp</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>486</u>		

**Client Notification/ Resolution:**

If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

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



July 14, 2022

Ryan Plath  
ERM, INC.  
7311 W. Greenfield Ave.  
Milwaukee, WI 53214

RE: Project: 0383990  
Pace Project No.: 40247377

Dear Ryan Plath:

Enclosed are the analytical results for sample(s) received by the laboratory on June 29, 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 National - Mt. Juliet
- Pace Analytical Services - Green Bay

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

Sincerely,



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

Enclosures

cc: Duncan Favill, ERM, INC.  
John Roberts, ERM, Inc.  
David deCourcy-Bower, ERM, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990  
Pace Project No.: 40247377

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### **Pace Analytical Services Green Bay**

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky UST Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 12064  
North Dakota Certification #: R-150

Virginia VELAP ID: 460263  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-16-00157  
Federal Fish & Wildlife Permit #: LE51774A-0

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### **Pace Analytical Services National**

12065 Lebanon Road, Mt. Juliet, TN 37122  
Alabama Certification #: 40660  
Alaska Certification #: 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification #: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008  
Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
New Hampshire Certification #: 2975  
New Jersey Certification #: TN002  
New Mexico DW Certification  
New York Certification #: 11742  
North Carolina Aquatic Toxicity Certification #: 41  
North Carolina Drinking Water Certification #: 21704  
North Carolina Environmental Certificate #: 375  
North Dakota Certification #: R-140  
Ohio VAP Certification #: CL0069  
Oklahoma Certification #: 9915  
Oregon Certification #: TN200002  
Pennsylvania Certification #: 68-02979  
Rhode Island Certification #: LAO00356  
South Carolina Certification #: 84004  
South Dakota Certification  
Tennessee DW/Chem/Micro Certification #: 2006  
Texas Mold Certification #: LAB0152  
Texas Certification #: T 104704245-17-14  
USDA Soil Permit #: P330-15-00234  
Utah Certification #: TN00003  
Virginia Certification #: VT2006  
Vermont Dept. of Health: ID# VT-2006  
Virginia Certification #: 460132  
Washington Certification #: C847  
West Virginia Certification #: 233  
Wisconsin Certification #: 998093910  
Wyoming UST Certification #: via A2LA 2926.01  
A2LA-ISO 17025 Certification #: 1461.01  
A2LA-ISO 17025 Certification #: 1461.02  
AIHA-LAP/LLC EMLAP Certification #:100789

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 0383990  
Pace Project No.: 40247377

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40247377001	DUP-01-WG-20220628	Water	06/28/22 00:00	06/29/22 13:40
40247377002	MW-12S-WG-20220628	Water	06/28/22 13:10	06/29/22 13:40
40247377003	TB-02-WQ-20220628	Water	06/28/22 15:00	06/29/22 13:40
40247377004	MW-03-WG-20220628	Water	06/28/22 15:45	06/29/22 13:40
40247377005	MW-9S-WG-20220628	Water	06/28/22 17:30	06/29/22 13:40
40247377006	MW-26S-WG-20220628	Water	06/28/22 13:10	06/29/22 13:40
40247377007	MW-21S-WG-20220628	Water	06/28/22 15:40	06/29/22 13:40
40247377008	MW-8S-WG-20220628	Water	06/28/22 17:05	06/29/22 13:40
40247377009	MW-13D-WG-20220629	Water	06/29/22 09:15	06/29/22 13:40
40247377010	MW-23S-WG-20220629	Water	06/29/22 10:15	06/29/22 13:40
40247377011	MW-08-WG-20220629	Water	06/29/22 09:15	06/29/22 13:40
40247377012	MW-05-WG-20220629	Water	06/29/22 10:30	06/29/22 13:40
40247377013	MW-25S-WG-20220629	Water	06/29/22 11:50	06/29/22 13:40
40247377014	MW-6S-WG-20220629	Water	06/29/22 12:00	06/29/22 13:40

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### SAMPLE ANALYTE COUNT

Project: 0383990  
Pace Project No.: 40247377

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40247377001	DUP-01-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377002	MW-12S-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377003	TB-02-WQ-20220628	EPA 8260	LAP	13	PASI-G
40247377004	MW-03-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377005	MW-9S-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377006	MW-26S-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377007	MW-21S-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377008	MW-8S-WG-20220628	EPA 8270D by SIM	AMG	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377009	MW-13D-WG-20220629	EPA 8270D by SIM	ADF	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377010	MW-23S-WG-20220629	EPA 8270D by SIM	ADF	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377011	MW-08-WG-20220629	EPA 8270D by SIM	ADF	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377012	MW-05-WG-20220629	EPA 8270D by SIM	ADF	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377013	MW-25S-WG-20220629	EPA 8270D by SIM	ADF	2	PAN
		EPA 8260	LAP	13	PASI-G
40247377014	MW-6S-WG-20220629	EPA 8270D by SIM	ADF	2	PAN
		EPA 8260	LAP	13	PASI-G

PAN = Pace National - Mt. Juliet

PASI-G = Pace Analytical Services - Green Bay

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: DUP-01-WG-20220628**      **Lab ID: 40247377001**      Collected: 06/28/22 00:00      Received: 06/29/22 13:40      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	3.82	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 14:47	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	62.6	%	10.0-120		1	07/03/22 14:45	07/04/22 14:47	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 17:06	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 17:06	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 17:06	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 17:06	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 17:06	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/30/22 17:06	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/30/22 17:06	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 17:06	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/30/22 17:06	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 17:06	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		06/30/22 17:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	70-130		1		06/30/22 17:06	2199-69-1	
Toluene-d8 (S)	83	%	70-130		1		06/30/22 17:06	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-12S-WG-20220628**    **Lab ID: 40247377002**    Collected: 06/28/22 13:10    Received: 06/29/22 13:40    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	5.66	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 15:07	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	56.9	%	10.0-120		1	07/03/22 14:45	07/04/22 15:07	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 14:48	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 14:48	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 14:48	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 14:48	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 14:48	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/30/22 14:48	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/30/22 14:48	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 14:48	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/30/22 14:48	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 14:48	156-60-5	L1,M0
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		06/30/22 14:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	70-130		1		06/30/22 14:48	2199-69-1	
Toluene-d8 (S)	86	%	70-130		1		06/30/22 14:48	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990

Pace Project No.: 40247377

**Sample: TB-02-WQ-20220628**      **Lab ID: 40247377003**      Collected: 06/28/22 15:00      Received: 06/29/22 13:40      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 14:28	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 14:28	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 14:28	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 14:28	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 14:28	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/30/22 14:28	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/30/22 14:28	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 14:28	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/30/22 14:28	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 14:28	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		1		06/30/22 14:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	70-130		1		06/30/22 14:28	2199-69-1	
Toluene-d8 (S)	84	%	70-130		1		06/30/22 14:28	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-03-WG-20220628**      **Lab ID: 40247377004**      Collected: 06/28/22 15:45      Received: 06/29/22 13:40      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	5.27	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 15:26	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	68.4	%	10.0-120		1	07/03/22 14:45	07/04/22 15:26	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 15:08	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 15:08	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 15:08	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 15:08	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 15:08	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/30/22 15:08	127-18-4	
Trichloroethene	1.1	ug/L	1.0	0.32	1		06/30/22 15:08	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 15:08	75-01-4	
cis-1,2-Dichloroethene	1.3	ug/L	1.0	0.47	1		06/30/22 15:08	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 15:08	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		1		06/30/22 15:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	70-130		1		06/30/22 15:08	2199-69-1	
Toluene-d8 (S)	84	%	70-130		1		06/30/22 15:08	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-9S-WG-20220628**      **Lab ID: 40247377005**      Collected: 06/28/22 17:30      Received: 06/29/22 13:40      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.247</b>	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 15:46	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	68.1	%	10.0-120		1	07/03/22 14:45	07/04/22 15:46	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 15:27	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		06/30/22 15:27	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 15:27	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		06/30/22 15:27	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		06/30/22 15:27	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		06/30/22 15:27	127-18-4	
Trichloroethene	<b>0.69J</b>	ug/L	1.0	0.32	1		06/30/22 15:27	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		06/30/22 15:27	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		06/30/22 15:27	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		06/30/22 15:27	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		06/30/22 15:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	70-130		1		06/30/22 15:27	2199-69-1	
Toluene-d8 (S)	84	%	70-130		1		06/30/22 15:27	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-26S-WG-20220628**    **Lab ID: 40247377006**    Collected: 06/28/22 13:10    Received: 06/29/22 13:40    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	3.35	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 16:06	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	56.1	%	10.0-120		1	07/03/22 14:45	07/04/22 16:06	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 17:26	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 17:26	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 17:26	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 17:26	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 17:26	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/30/22 17:26	127-18-4	
Trichloroethene	0.68J	ug/L	1.0	0.32	1		06/30/22 17:26	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 17:26	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/30/22 17:26	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 17:26	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		06/30/22 17:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	70-130		1		06/30/22 17:26	2199-69-1	
Toluene-d8 (S)	84	%	70-130		1		06/30/22 17:26	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-21S-WG-20220628**    **Lab ID: 40247377007**    Collected: 06/28/22 15:40    Received: 06/29/22 13:40    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	18.6	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 16:25	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	65.6	%	10.0-120		1	07/03/22 14:45	07/04/22 16:25	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 16:46	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 16:46	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 16:46	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 16:46	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 16:46	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/30/22 16:46	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/30/22 16:46	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 16:46	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/30/22 16:46	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 16:46	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		06/30/22 16:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	119	%	70-130		1		06/30/22 16:46	2199-69-1	
Toluene-d8 (S)	84	%	70-130		1		06/30/22 16:46	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-8S-WG-20220628**      **Lab ID: 40247377008**      Collected: 06/28/22 17:05      Received: 06/29/22 13:40      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	10.7	ug/L	0.149	0.0447	1	07/03/22 14:45	07/04/22 16:45	123-91-1	L0
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	64.4	%	10.0-120		1	07/03/22 14:45	07/04/22 16:45	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 17:46	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 17:46	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 17:46	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 17:46	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 17:46	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/30/22 17:46	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/30/22 17:46	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 17:46	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/30/22 17:46	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 17:46	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		06/30/22 17:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	70-130		1		06/30/22 17:46	2199-69-1	
Toluene-d8 (S)	87	%	70-130		1		06/30/22 17:46	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-13D-WG-20220629**    **Lab ID: 40247377009**    Collected: 06/29/22 09:15    Received: 06/29/22 13:40    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	12.5	ug/L	0.149	0.0447	1	07/05/22 05:49	07/06/22 14:13	123-91-1	B
1,4-Dioxane (p-Dioxane)	0.528	ug/L	0.149	0.0447	1	07/09/22 05:00	07/10/22 12:50	123-91-1	B,H1
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	70.0	%	10.0-120		1	07/05/22 05:49	07/06/22 14:13	4165-60-0	
Nitrobenzene-d5 (S)	58.9	%	10.0-120		1	07/09/22 05:00	07/10/22 12:50	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 15:47	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 15:47	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 15:47	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 15:47	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 15:47	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/30/22 15:47	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/30/22 15:47	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 15:47	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/30/22 15:47	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 15:47	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		06/30/22 15:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	118	%	70-130		1		06/30/22 15:47	2199-69-1	
Toluene-d8 (S)	83	%	70-130		1		06/30/22 15:47	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-23S-WG-20220629**    **Lab ID: 40247377010**    Collected: 06/29/22 10:15    Received: 06/29/22 13:40    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C									
Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>23.2</b>	ug/L	0.149	0.0447	1	07/05/22 05:49	07/06/22 14:33	123-91-1	B
1,4-Dioxane (p-Dioxane)	<b>0.243</b>	ug/L	0.149	0.0447	1	07/09/22 05:00	07/10/22 13:09	123-91-1	B,H1
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	76.2	%	10.0-120		1	07/05/22 05:49	07/06/22 14:33	4165-60-0	
Nitrobenzene-d5 (S)	31.1	%	10.0-120		1	07/09/22 05:00	07/10/22 13:09	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 18:06	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		06/30/22 18:06	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 18:06	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		06/30/22 18:06	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		06/30/22 18:06	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		06/30/22 18:06	127-18-4	
Trichloroethene	<b>1.2</b>	ug/L	1.0	0.32	1		06/30/22 18:06	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		06/30/22 18:06	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		06/30/22 18:06	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		06/30/22 18:06	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		1		06/30/22 18:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	70-130		1		06/30/22 18:06	2199-69-1	
Toluene-d8 (S)	84	%	70-130		1		06/30/22 18:06	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-08-WG-20220629**      **Lab ID: 40247377011**      Collected: 06/29/22 09:15      Received: 06/29/22 13:40      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C									
Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	27.4	ug/L	0.149	0.0447	1	07/05/22 05:49	07/06/22 14:52	123-91-1	B
1,4-Dioxane (p-Dioxane)	0.288	ug/L	0.149	0.0447	1	07/09/22 05:00	07/10/22 13:29	123-91-1	B,H1
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	76.3	%	10.0-120		1	07/05/22 05:49	07/06/22 14:52	4165-60-0	
Nitrobenzene-d5 (S)	40.1	%	10.0-120		1	07/09/22 05:00	07/10/22 13:29	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 16:07	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		06/30/22 16:07	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/30/22 16:07	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/30/22 16:07	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/30/22 16:07	107-06-2	
Tetrachloroethane	<0.41	ug/L	1.0	0.41	1		06/30/22 16:07	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/30/22 16:07	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/30/22 16:07	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/30/22 16:07	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/30/22 16:07	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	70-130		1		06/30/22 16:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	116	%	70-130		1		06/30/22 16:07	2199-69-1	
Toluene-d8 (S)	86	%	70-130		1		06/30/22 16:07	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-05-WG-20220629**      **Lab ID: 40247377012**      Collected: 06/29/22 10:30      Received: 06/29/22 13:40      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C									
Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>37.3</b>	ug/L	0.149	0.0447	1	07/05/22 05:49	07/06/22 15:12	123-91-1	B
1,4-Dioxane (p-Dioxane)	<b>0.358</b>	ug/L	0.149	0.0447	1	07/09/22 05:00	07/10/22 13:48	123-91-1	B,H1
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	73.9	%	10.0-120		1	07/05/22 05:49	07/06/22 15:12	4165-60-0	
Nitrobenzene-d5 (S)	59.0	%	10.0-120		1	07/09/22 05:00	07/10/22 13:48	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 16:27	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		06/30/22 16:27	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 16:27	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		06/30/22 16:27	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		06/30/22 16:27	107-06-2	
Tetrachloroethane	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		06/30/22 16:27	127-18-4	
Trichloroethene	<b>0.35J</b>	ug/L	1.0	0.32	1		06/30/22 16:27	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		06/30/22 16:27	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		06/30/22 16:27	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		06/30/22 16:27	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	70-130		1		06/30/22 16:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	119	%	70-130		1		06/30/22 16:27	2199-69-1	
Toluene-d8 (S)	82	%	70-130		1		06/30/22 16:27	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-25S-WG-20220629**    **Lab ID: 40247377013**    Collected: 06/29/22 11:50    Received: 06/29/22 13:40    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C									
Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>37.8</b>	ug/L	0.149	0.0447	1	07/05/22 05:49	07/06/22 15:31	123-91-1	B
1,4-Dioxane (p-Dioxane)	<b>0.217</b>	ug/L	0.149	0.0447	1	07/09/22 05:00	07/10/22 14:21	123-91-1	B,H1
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	59.0	%	10.0-120		1	07/05/22 05:49	07/06/22 15:31	4165-60-0	
Nitrobenzene-d5 (S)	59.0	%	10.0-120		1	07/09/22 05:00	07/10/22 14:21	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 18:25	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		06/30/22 18:25	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 18:25	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		06/30/22 18:25	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		06/30/22 18:25	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		06/30/22 18:25	127-18-4	
Trichloroethene	<b>1.5</b>	ug/L	1.0	0.32	1		06/30/22 18:25	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		06/30/22 18:25	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		06/30/22 18:25	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		06/30/22 18:25	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		06/30/22 18:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	115	%	70-130		1		06/30/22 18:25	2199-69-1	
Toluene-d8 (S)	84	%	70-130		1		06/30/22 18:25	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247377

**Sample: MW-6S-WG-20220629**      **Lab ID: 40247377014**      Collected: 06/29/22 12:00      Received: 06/29/22 13:40      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C									
Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>63.4</b>	ug/L	0.149	0.0447	1	07/05/22 05:49	07/06/22 15:51	123-91-1	B
1,4-Dioxane (p-Dioxane)	<b>0.323</b>	ug/L	0.149	0.0447	1	07/09/22 05:00	07/10/22 14:40	123-91-1	B,H1
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	73.6	%	10.0-120		1	07/05/22 05:49	07/06/22 15:51	4165-60-0	
Nitrobenzene-d5 (S)	28.2	%	10.0-120		1	07/09/22 05:00	07/10/22 14:40	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 18:45	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		06/30/22 18:45	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/30/22 18:45	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		06/30/22 18:45	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		06/30/22 18:45	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		06/30/22 18:45	127-18-4	
Trichloroethene	<b>5.8</b>	ug/L	1.0	0.32	1		06/30/22 18:45	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		06/30/22 18:45	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		06/30/22 18:45	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		06/30/22 18:45	156-60-5	L1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		06/30/22 18:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	70-130		1		06/30/22 18:45	2199-69-1	
Toluene-d8 (S)	83	%	70-130		1		06/30/22 18:45	2037-26-5	

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247377

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QC Batch: 1889291	Analysis Method: EPA 8270D by SIM
QC Batch Method: 3510C	Analysis Description: SVOA (GC/MS) 8270 D-SIM
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 40247377001, 40247377002, 40247377004, 40247377005, 40247377006, 40247377007, 40247377008

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METHOD BLANK: R3811502-3 Matrix: Water  
Associated Lab Samples: 40247377001, 40247377002, 40247377004, 40247377005, 40247377006, 40247377007, 40247377008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.0447	0.149	07/04/22 14:08	
Nitrobenzene-d5 (S)	%	72.8	10.0-120	07/04/22 14:08	

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LABORATORY CONTROL SAMPLE & LCSD: R3811502-1 R3811502-2

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	50.0	69.9	74.4	140	149	73.0-146	6.24	20	L0
Nitrobenzene-d5 (S)	%				72.3	61.5	10.0-120			

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

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247377

QC Batch:	1889759	Analysis Method:	EPA 8270D by SIM
QC Batch Method:	3510C	Analysis Description:	SVOA (GC/MS) 8270 D-SIM
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 40247377009, 40247377010, 40247377011, 40247377012, 40247377013, 40247377014

METHOD BLANK: R3812094-3 Matrix: Water  
Associated Lab Samples: 40247377009, 40247377010, 40247377011, 40247377012, 40247377013, 40247377014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	7.18	0.149	07/06/22 13:53	
Nitrobenzene-d5 (S)	%	84.2	10.0-120	07/06/22 13:53	

Parameter	Units	R3812094-1		R3812094-2		% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec				
1,4-Dioxane (p-Dioxane)	ug/L	50.0	67.2	72.0	134	144	73.0-146	6.90	20
Nitrobenzene-d5 (S)	%				79.8	81.4	10.0-120		

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

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247377

QC Batch: 1891741	Analysis Method: EPA 8270D by SIM
QC Batch Method: 3510C	Analysis Description: SVOA (GC/MS) 8270 D-SIM
	Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 40247377009, 40247377010, 40247377011, 40247377012, 40247377013, 40247377014

METHOD BLANK: R3813194-3 Matrix: Water  
Associated Lab Samples: 40247377009, 40247377010, 40247377011, 40247377012, 40247377013, 40247377014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.181	0.149	07/10/22 12:30	
Nitrobenzene-d5 (S)	%	36.2	10.0-120	07/10/22 12:30	

Parameter	Units	R3813194-1		R3813194-2		% Rec Limits	RPD	Max RPD	Qualifiers
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec				
1,4-Dioxane (p-Dioxane)	ug/L	50.0	58.1	56.0	116	112	73.0-146	3.68	20
Nitrobenzene-d5 (S)	%				40.2	62.3	10.0-120		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247377

QC Batch:	419791	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40247377001, 40247377002, 40247377003, 40247377004, 40247377005, 40247377006, 40247377007, 40247377008, 40247377009, 40247377010, 40247377011, 40247377012, 40247377013, 40247377014

METHOD BLANK: 2417434 Matrix: Water  
Associated Lab Samples: 40247377001, 40247377002, 40247377003, 40247377004, 40247377005, 40247377006, 40247377007, 40247377008, 40247377009, 40247377010, 40247377011, 40247377012, 40247377013, 40247377014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/30/22 10:51	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	06/30/22 10:51	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/30/22 10:51	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/30/22 10:51	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/30/22 10:51	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/30/22 10:51	
Tetrachloroethene	ug/L	<0.41	1.0	06/30/22 10:51	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/30/22 10:51	
Trichloroethene	ug/L	<0.32	1.0	06/30/22 10:51	
Vinyl chloride	ug/L	<0.17	1.0	06/30/22 10:51	
1,2-Dichlorobenzene-d4 (S)	%	115	70-130	06/30/22 10:51	
4-Bromofluorobenzene (S)	%	90	70-130	06/30/22 10:51	
Toluene-d8 (S)	%	83	70-130	06/30/22 10:51	

LABORATORY CONTROL SAMPLE: 2417435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	58.7	117	70-134	
1,1,2-Trichloroethane	ug/L	50	49.5	99	70-130	
1,1-Dichloroethane	ug/L	50	59.8	120	70-130	
1,1-Dichloroethene	ug/L	50	54.5	109	74-131	
1,2-Dichloroethane	ug/L	50	50.3	101	70-137	
cis-1,2-Dichloroethene	ug/L	50	62.4	125	70-130	
Tetrachloroethene	ug/L	50	59.7	119	70-130	
trans-1,2-Dichloroethene	ug/L	50	65.3	131	70-130 L1	
Trichloroethene	ug/L	50	52.3	105	70-130	
Vinyl chloride	ug/L	50	50.3	101	63-134	
1,2-Dichlorobenzene-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			89	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2417566 2417567

Parameter	Units	40247377002 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
1,1,1-Trichloroethane	ug/L	<0.30	50	50	61.7	57.0	123	114	70-134	8	20	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990

Pace Project No.: 40247377

Parameter	Units	2417566		2417567		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40247377002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
1,1,2-Trichloroethane	ug/L	<0.34	50	50	51.3	49.1	103	98	70-130	4	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	62.7	57.1	125	114	70-130	9	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	58.7	55.7	117	111	71-130	5	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	54.3	53.1	109	106	70-137	2	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	62.8	58.5	126	117	70-130	7	20		
Tetrachloroethene	ug/L	<0.41	50	50	60.3	59.5	121	119	70-130	1	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	67.8	64.3	136	129	70-130	5	20	M0	
Trichloroethene	ug/L	<0.32	50	50	56.4	52.8	113	106	70-130	7	20		
Vinyl chloride	ug/L	<0.17	50	50	53.8	49.0	108	98	60-137	9	20		
1,2-Dichlorobenzene-d4 (S)	%						103	102	70-130				
4-Bromofluorobenzene (S)	%						101	102	70-130				
Toluene-d8 (S)	%						89	88	70-130				

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### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: 0383990  
Pace Project No.: 40247377

---

### 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.

### SAMPLE QUALIFIERS

Sample: 40247377009

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270 D-SIM - Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

Sample: 40247377010

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270 D-SIM - Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

Sample: 40247377011

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270 D-SIM - Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

Sample: 40247377012

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270 D-SIM - Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

Sample: 40247377013

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270 D-SIM - Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

Sample: 40247377014

[1] Semi Volatile Organic Compounds (GC/MS) by Method 8270 D-SIM - Duplicate Analysis performed due to QC failure. Results don't confirm; both analyses reported

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

H1 Analysis conducted outside the recognized method holding time.

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.

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

## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 0383990  
Pace Project No.: 40247377

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40247377001	DUP-01-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247377002	MW-12S-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247377004	MW-03-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247377005	MW-9S-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247377006	MW-26S-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247377007	MW-21S-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247377008	MW-8S-WG-20220628	3510C	1889291	EPA 8270D by SIM	1889291
40247377009	MW-13D-WG-20220629	3510C	1889759	EPA 8270D by SIM	1889759
40247377009	MW-13D-WG-20220629	3510C	1891741	EPA 8270D by SIM	1891741
40247377010	MW-23S-WG-20220629	3510C	1889759	EPA 8270D by SIM	1889759
40247377010	MW-23S-WG-20220629	3510C	1891741	EPA 8270D by SIM	1891741
40247377011	MW-08-WG-20220629	3510C	1889759	EPA 8270D by SIM	1889759
40247377011	MW-08-WG-20220629	3510C	1891741	EPA 8270D by SIM	1891741
40247377012	MW-05-WG-20220629	3510C	1889759	EPA 8270D by SIM	1889759
40247377012	MW-05-WG-20220629	3510C	1891741	EPA 8270D by SIM	1891741
40247377013	MW-25S-WG-20220629	3510C	1889759	EPA 8270D by SIM	1889759
40247377013	MW-25S-WG-20220629	3510C	1891741	EPA 8270D by SIM	1891741
40247377014	MW-6S-WG-20220629	3510C	1889759	EPA 8270D by SIM	1889759
40247377014	MW-6S-WG-20220629	3510C	1891741	EPA 8270D by SIM	1891741
40247377001	DUP-01-WG-20220628	EPA 8260	419791		
40247377002	MW-12S-WG-20220628	EPA 8260	419791		
40247377003	TB-02-WQ-20220628	EPA 8260	419791		
40247377004	MW-03-WG-20220628	EPA 8260	419791		
40247377005	MW-9S-WG-20220628	EPA 8260	419791		
40247377006	MW-26S-WG-20220628	EPA 8260	419791		
40247377007	MW-21S-WG-20220628	EPA 8260	419791		
40247377008	MW-8S-WG-20220628	EPA 8260	419791		
40247377009	MW-13D-WG-20220629	EPA 8260	419791		
40247377010	MW-23S-WG-20220629	EPA 8260	419791		
40247377011	MW-08-WG-20220629	EPA 8260	419791		
40247377012	MW-05-WG-20220629	EPA 8260	419791		
40247377013	MW-25S-WG-20220629	EPA 8260	419791		
40247377014	MW-6S-WG-20220629	EPA 8260	419791		

**REPORT OF LABORATORY ANALYSIS**

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

W047377

ALL SHADED AREAS are for LAB USE ONLY

Company: ERM

Billing Information: Accounts Payable

Address: 7311 W Greenfield Ave, West Allis, WI

Report To: Jona.Roberts@erm.com

Copy To: Ryan.Plath@erm.com

Email To: ERM.NAaccounts payable@erm.com

Customer Project Name/Number: 0383990

Site Collection Info/Address: 1316 18th Street

State: WI / Two Rivers

Time Zone Collected: [PT] [MT] [CT] [ET]

Phone: 847-848-4500

Site/Facility ID #:

Compliance Monitoring? [X] Yes [ ] No

Collected By (print): Ryan Plath

Purchase Order #: Quote #:

DW PWS ID #: DW Location Code:

Collected By (signature): [Signature]

Turnaround Date Required: Standard 70T

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive [ ] Hold

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	Gross - Set List	1,4-Dioxane by 8120 SIM
			Date	Time	Date	Time				
MW-08-WG-20220629	GW	G	6/29/22	0915				5	X	X
MW-05-WG-20220629	GW	G	6/29/22	1030				5	X	X
MW-25S-WG-20220629	GW	G	6/29/22	1150				5	X	X
MW-6S-WG-20220629	GW	G	6/29/22	1200				5	X	X

Container Preservative Type \*\*

Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA

Custody Signatures Present Y N NA

Collector Signature Present Y N NA

Bottles Intact Y N NA

Correct Bottles Y N NA

Sufficient Volume Y N NA

Samples Received on Ice Y N NA

VOA - Headspace Acceptable Y N NA

USDA Regulated Soils Y N NA

Samples in Holding Time Y N NA

Residual Chlorine Present Y N NA

Cl Strips: \_\_\_\_\_

Sample pH Acceptable Y N NA

pH Strips: \_\_\_\_\_

Sulfide Present Y N NA

Lead Acetate Strips: \_\_\_\_\_

LAB USE ONLY: Lab Sample # / Comments:

011  
012  
013  
014

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None  
Packing Material Used:  
Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A  
Lab Tracking #: 2781506  
Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:  
Temp Blank Received: Y N NA  
Therm ID#: \_\_\_\_\_  
Cooler 1 Temp Upon Receipt: \_\_\_\_\_ oC  
Cooler 1 Therm Corr. Factor: \_\_\_\_\_ oC  
Cooler 1 Corrected Temp: \_\_\_\_\_ oC

Relinquished by/Company: (Signature) [Signature] ERM  
[Signature] pace

Date/Time: 6/29/22 1256  
6/29/22 1340

Received by/Company: (Signature) [Signature] pace  
[Signature] Stewart White Paul

Date/Time: 6/29/22 1250  
6/29/22 1340

MTJL LAB USE ONLY  
Table #:  
Acctnum:  
Template:  
Prelogin:  
PM:  
PB:

Trip Blank Received: Y N NA  
HCL MeOH TSP Other  
Non Conformance(s): YES / NO  
Page: 27 of 29  
of: 2



Sample Condition Upon Receipt Form (SCUR)

Client Name: ERM

Project #: \_\_\_\_\_

WO#: **40247377**

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



Tracking #: \_\_\_\_\_

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - 117 Type of Ice:  Blue  Dry  None  Samples on ice

Cooler Temperature Uncorr: 5 / Corr: 1

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

Person examining contents:  
Date: 6/29/22 / Initials: JKW  
Labeled By Initials: NK

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

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>6/29/22</u>	6. <u>JKW</u>
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>005 - time on AG50's 1700</u> <u>010 - time 1025.</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		<u>6/29/22</u> <u>JKW</u>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>486</u>		

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

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

July 11, 2022

Ryan Plath  
ERM, INC.  
7311 W. Greenfield Ave.  
Milwaukee, WI 53214

RE: Project: 0383990  
Pace Project No.: 40247458

Dear Ryan Plath:

Enclosed are the analytical results for sample(s) received by the laboratory on June 30, 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 National - Mt. Juliet
- Pace Analytical Services - Green Bay

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

Sincerely,



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

Enclosures

cc: Duncan Favill, ERM, INC.  
John Roberts, ERM, Inc.  
David deCourcy-Bower, ERM, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990  
Pace Project No.: 40247458

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### **Pace Analytical Services Green Bay**

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky UST Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 12064  
North Dakota Certification #: R-150

Virginia VELAP ID: 460263  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-16-00157  
Federal Fish & Wildlife Permit #: LE51774A-0

---

### **Pace Analytical Services National**

12065 Lebanon Road, Mt. Juliet, TN 37122  
Alabama Certification #: 40660  
Alaska Certification #: 17-026  
Arizona Certification #: AZ0612  
Arkansas Certification #: 88-0469  
California Certification #: 2932  
Canada Certification #: 1461.01  
Colorado Certification #: TN00003  
Connecticut Certification #: PH-0197  
DOD Certification #: #1461.01  
EPA# TN00003  
Florida Certification #: E87487  
Georgia DW Certification #: 923  
Georgia Certification: NELAP  
Idaho Certification #: TN00003  
Illinois Certification #: 200008  
Indiana Certification #: C-TN-01  
Iowa Certification #: 364  
Kansas Certification #: E-10277  
Kentucky UST Certification #: 16  
Kentucky Certification #: 90010  
Louisiana Certification #: AI30792  
Louisiana DW Certification #: LA180010  
Maine Certification #: TN0002  
Maryland Certification #: 324  
Massachusetts Certification #: M-TN003  
Michigan Certification #: 9958  
Minnesota Certification #: 047-999-395  
Mississippi Certification #: TN00003  
Missouri Certification #: 340  
Montana Certification #: CERT0086  
Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34  
New Hampshire Certification #: 2975  
New Jersey Certification #: TN002  
New Mexico DW Certification  
New York Certification #: 11742  
North Carolina Aquatic Toxicity Certification #: 41  
North Carolina Drinking Water Certification #: 21704  
North Carolina Environmental Certificate #: 375  
North Dakota Certification #: R-140  
Ohio VAP Certification #: CL0069  
Oklahoma Certification #: 9915  
Oregon Certification #: TN200002  
Pennsylvania Certification #: 68-02979  
Rhode Island Certification #: LAO00356  
South Carolina Certification #: 84004  
South Dakota Certification  
Tennessee DW/Chem/Micro Certification #: 2006  
Texas Mold Certification #: LAB0152  
Texas Certification #: T 104704245-17-14  
USDA Soil Permit #: P330-15-00234  
Utah Certification #: TN00003  
Virginia Certification #: VT2006  
Vermont Dept. of Health: ID# VT-2006  
Virginia Certification #: 460132  
Washington Certification #: C847  
West Virginia Certification #: 233  
Wisconsin Certification #: 998093910  
Wyoming UST Certification #: via A2LA 2926.01  
A2LA-ISO 17025 Certification #: 1461.01  
A2LA-ISO 17025 Certification #: 1461.02  
AIHA-LAP/LLC EMLAP Certification #:100789

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 0383990  
Pace Project No.: 40247458

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40247458001	MW-20S-WG-20220629	Water	06/29/22 13:15	06/30/22 13:15
40247458002	MW-15D-WG-20220629	Water	06/29/22 14:40	06/30/22 13:15
40247458003	MW-7S-WG-20220629	Water	06/29/22 16:05	06/30/22 13:15
40247458004	DUP-02-WG-20220629	Water	06/29/22 00:00	06/30/22 13:15
40247458005	MW-09-WG-20220629	Water	06/29/22 13:40	06/30/22 13:15
40247458006	MW-14S-WG-20220629	Water	06/29/22 14:40	06/30/22 13:15
40247458007	MW-15S-WG-20220629	Water	06/29/22 15:45	06/30/22 13:15
40247458008	MW-17S-WG-20220629	Water	06/29/22 17:25	06/30/22 13:15
40247458009	MW-04-WG-20220630	Water	06/30/22 09:10	06/30/22 13:15
40247458010	MW-01-WG-20220630	Water	06/30/22 08:55	06/30/22 13:15
40247458011	DUP-03-WG-20220630	Water	06/30/22 00:00	06/30/22 13:15
40247458012	MW-15I-WG-20220630	Water	06/30/22 10:45	06/30/22 13:15
40247458013	MW-13S-WG-20220630	Water	06/30/22 10:00	06/30/22 13:15
40247458014	FB-01-WQ-20220630	Water	06/30/22 10:40	06/30/22 13:15
40247458015	TB-03-WQ-20220629	Water	06/29/22 16:30	06/30/22 13:15

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### SAMPLE ANALYTE COUNT

Project: 0383990  
Pace Project No.: 40247458

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40247458001	MW-20S-WG-20220629	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458002	MW-15D-WG-20220629	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458003	MW-7S-WG-20220629	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458004	DUP-02-WG-20220629	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458005	MW-09-WG-20220629	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458006	MW-14S-WG-20220629	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458007	MW-15S-WG-20220629	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458008	MW-17S-WG-20220629	EPA 8270D by SIM	ADF	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458009	MW-04-WG-20220630	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458010	MW-01-WG-20220630	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458011	DUP-03-WG-20220630	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458012	MW-15I-WG-20220630	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458013	MW-13S-WG-20220630	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458014	FB-01-WQ-20220630	EPA 8270D by SIM	SAW	2	PAN
		EPA 8260	LAP	13	PASI-G
40247458015	TB-03-WQ-20220629	EPA 8260	LAP	13	PASI-G

PAN = Pace National - Mt. Juliet  
PASI-G = Pace Analytical Services - Green Bay

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-20S-WG-20220629**    **Lab ID: 40247458001**    Collected: 06/29/22 13:15    Received: 06/30/22 13:15    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.267</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 09:08	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	51.8	%	10.0-120		1	07/06/22 16:07	07/07/22 09:08	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 12:48	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 12:48	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 12:48	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 12:48	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 12:48	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 12:48	127-18-4	
Trichloroethene	<b>0.40J</b>	ug/L	1.0	0.32	1		07/01/22 12:48	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 12:48	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		07/01/22 12:48	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		07/01/22 12:48	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		07/01/22 12:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		1		07/01/22 12:48	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		07/01/22 12:48	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-15D-WG-20220629**    **Lab ID: 40247458002**    Collected: 06/29/22 14:40    Received: 06/30/22 13:15    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.433</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 11:05	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	41.5	%	10.0-120		1	07/06/22 16:07	07/07/22 11:05	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 13:08	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 13:08	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 13:08	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 13:08	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 13:08	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 13:08	127-18-4	
Trichloroethene	<b>2.4</b>	ug/L	1.0	0.32	1		07/01/22 13:08	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 13:08	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		07/01/22 13:08	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		07/01/22 13:08	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		07/01/22 13:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	70-130		1		07/01/22 13:08	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		07/01/22 13:08	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-7S-WG-20220629**      **Lab ID: 40247458003**      Collected: 06/29/22 16:05      Received: 06/30/22 13:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C									
Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.312</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 11:25	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	56.8	%	10.0-120		1	07/06/22 16:07	07/07/22 11:25	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 14:08	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 14:08	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 14:08	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 14:08	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 14:08	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 14:08	127-18-4	
Trichloroethene	<b>13.8</b>	ug/L	1.0	0.32	1		07/01/22 14:08	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 14:08	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		07/01/22 14:08	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		07/01/22 14:08	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	70-130		1		07/01/22 14:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		1		07/01/22 14:08	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		07/01/22 14:08	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: DUP-02-WG-20220629**      **Lab ID: 40247458004**      Collected: 06/29/22 00:00      Received: 06/30/22 13:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.174</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 09:27	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	68.8	%	10.0-120		1	07/06/22 16:07	07/07/22 09:27	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 16:07	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 16:07	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 16:07	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 16:07	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 16:07	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 16:07	127-18-4	
Trichloroethene	<b>2.0</b>	ug/L	1.0	0.32	1		07/01/22 16:07	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 16:07	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		07/01/22 16:07	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		07/01/22 16:07	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1		07/01/22 16:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	70-130		1		07/01/22 16:07	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		07/01/22 16:07	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-09-WG-20220629**      **Lab ID: 40247458005**      Collected: 06/29/22 13:40      Received: 06/30/22 13:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.201</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 09:47	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	56.2	%	10.0-120		1	07/06/22 16:07	07/07/22 09:47	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 14:27	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 14:27	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 14:27	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 14:27	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 14:27	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 14:27	127-18-4	
Trichloroethene	<b>&lt;0.32</b>	ug/L	1.0	0.32	1		07/01/22 14:27	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 14:27	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		07/01/22 14:27	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		07/01/22 14:27	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	107	%	70-130		1		07/01/22 14:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		1		07/01/22 14:27	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		07/01/22 14:27	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-14S-WG-20220629**    **Lab ID: 40247458006**    Collected: 06/29/22 14:40    Received: 06/30/22 13:15    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	12.7	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 10:06	123-91-1	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	56.8	%	10.0-120		1	07/06/22 16:07	07/07/22 10:06	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		07/01/22 14:47	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		07/01/22 14:47	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		07/01/22 14:47	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		07/01/22 14:47	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		07/01/22 14:47	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		07/01/22 14:47	127-18-4	
Trichloroethene	1.4	ug/L	1.0	0.32	1		07/01/22 14:47	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		07/01/22 14:47	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		07/01/22 14:47	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		07/01/22 14:47	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1		07/01/22 14:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	70-130		1		07/01/22 14:47	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		07/01/22 14:47	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-15S-WG-20220629**    **Lab ID: 40247458007**    Collected: 06/29/22 15:45    Received: 06/30/22 13:15    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.330</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 10:26	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	59.1	%	10.0-120		1	07/06/22 16:07	07/07/22 10:26	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 13:28	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 13:28	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 13:28	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 13:28	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 13:28	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 13:28	127-18-4	
Trichloroethene	<b>2.0</b>	ug/L	1.0	0.32	1		07/01/22 13:28	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 13:28	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		07/01/22 13:28	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		07/01/22 13:28	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		07/01/22 13:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		1		07/01/22 13:28	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		07/01/22 13:28	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-17S-WG-20220629**    **Lab ID: 40247458008**    Collected: 06/29/22 17:25    Received: 06/30/22 13:15    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.340</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 11:44	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	26.9	%	10.0-120		1	07/06/22 16:07	07/07/22 11:44	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 15:07	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 15:07	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 15:07	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 15:07	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 15:07	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 15:07	127-18-4	
Trichloroethene	<b>1.9</b>	ug/L	1.0	0.32	1		07/01/22 15:07	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 15:07	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		07/01/22 15:07	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		07/01/22 15:07	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	70-130		1		07/01/22 15:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		07/01/22 15:07	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		07/01/22 15:07	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-04-WG-20220630**      **Lab ID: 40247458009**      Collected: 06/30/22 09:10      Received: 06/30/22 13:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.257</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 12:04	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	41.6	%	10.0-120		1	07/06/22 16:07	07/07/22 12:04	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 16:27	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 16:27	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 16:27	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 16:27	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 16:27	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 16:27	127-18-4	
Trichloroethene	<b>88.6</b>	ug/L	1.0	0.32	1		07/01/22 16:27	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 16:27	75-01-4	
cis-1,2-Dichloroethene	<b>8.8</b>	ug/L	1.0	0.47	1		07/01/22 16:27	156-59-2	
trans-1,2-Dichloroethene	<b>5.9</b>	ug/L	1.0	0.53	1		07/01/22 16:27	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		07/01/22 16:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	70-130		1		07/01/22 16:27	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		07/01/22 16:27	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-01-WG-20220630**      **Lab ID: 40247458010**      Collected: 06/30/22 08:55      Received: 06/30/22 13:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.290</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 10:46	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	51.2	%	10.0-120		1	07/06/22 16:07	07/07/22 10:46	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 15:27	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 15:27	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 15:27	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 15:27	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 15:27	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 15:27	127-18-4	
Trichloroethene	<b>26.7</b>	ug/L	1.0	0.32	1		07/01/22 15:27	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 15:27	75-01-4	
cis-1,2-Dichloroethene	<b>2.1</b>	ug/L	1.0	0.47	1		07/01/22 15:27	156-59-2	
trans-1,2-Dichloroethene	<b>2.7</b>	ug/L	1.0	0.53	1		07/01/22 15:27	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		07/01/22 15:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	114	%	70-130		1		07/01/22 15:27	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		07/01/22 15:27	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: DUP-03-WG-20220630**    **Lab ID: 40247458011**    Collected: 06/30/22 00:00    Received: 06/30/22 13:15    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C									
Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>51.4</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 12:23	123-91-1	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	40.1	%	10.0-120		1	07/06/22 16:07	07/07/22 12:23	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>3.0J</b>	ug/L	5.0	1.5	5		07/01/22 17:06	71-55-6	
1,1,2-Trichloroethane	<b>&lt;1.7</b>	ug/L	25.0	1.7	5		07/01/22 17:06	79-00-5	
1,1-Dichloroethane	<b>&lt;1.5</b>	ug/L	5.0	1.5	5		07/01/22 17:06	75-34-3	
1,1-Dichloroethene	<b>&lt;2.9</b>	ug/L	5.0	2.9	5		07/01/22 17:06	75-35-4	
1,2-Dichloroethane	<b>&lt;1.5</b>	ug/L	5.0	1.5	5		07/01/22 17:06	107-06-2	
Tetrachloroethene	<b>&lt;2.0</b>	ug/L	5.0	2.0	5		07/01/22 17:06	127-18-4	
Trichloroethene	<b>900</b>	ug/L	5.0	1.6	5		07/01/22 17:06	79-01-6	
Vinyl chloride	<b>&lt;0.87</b>	ug/L	5.0	0.87	5		07/01/22 17:06	75-01-4	
cis-1,2-Dichloroethene	<b>8.8</b>	ug/L	5.0	2.4	5		07/01/22 17:06	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;2.6</b>	ug/L	5.0	2.6	5		07/01/22 17:06	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		5		07/01/22 17:06	460-00-4	
1,2-Dichlorobenzene-d4 (S)	113	%	70-130		5		07/01/22 17:06	2199-69-1	
Toluene-d8 (S)	103	%	70-130		5		07/01/22 17:06	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-15I-WG-20220630**      **Lab ID: 40247458012**      Collected: 06/30/22 10:45      Received: 06/30/22 13:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>53.9</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 13:22	123-91-1	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	69.5	%	10.0-120		1	07/06/22 16:07	07/07/22 13:22	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;3.0</b>	ug/L	10.0	3.0	10		07/01/22 17:26	71-55-6	
1,1,2-Trichloroethane	<b>&lt;3.4</b>	ug/L	50.0	3.4	10		07/01/22 17:26	79-00-5	
1,1-Dichloroethane	<b>&lt;3.0</b>	ug/L	10.0	3.0	10		07/01/22 17:26	75-34-3	
1,1-Dichloroethene	<b>&lt;5.8</b>	ug/L	10.0	5.8	10		07/01/22 17:26	75-35-4	
1,2-Dichloroethane	<b>&lt;2.9</b>	ug/L	10.0	2.9	10		07/01/22 17:26	107-06-2	
Tetrachloroethene	<b>&lt;4.1</b>	ug/L	10.0	4.1	10		07/01/22 17:26	127-18-4	
Trichloroethene	<b>950</b>	ug/L	10.0	3.2	10		07/01/22 17:26	79-01-6	
Vinyl chloride	<b>&lt;1.7</b>	ug/L	10.0	1.7	10		07/01/22 17:26	75-01-4	
cis-1,2-Dichloroethene	<b>10.6</b>	ug/L	10.0	4.7	10		07/01/22 17:26	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;5.3</b>	ug/L	10.0	5.3	10		07/01/22 17:26	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		10		07/01/22 17:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		10		07/01/22 17:26	2199-69-1	
Toluene-d8 (S)	101	%	70-130		10		07/01/22 17:26	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: MW-13S-WG-20220630**    **Lab ID: 40247458013**    Collected: 06/30/22 10:00    Received: 06/30/22 13:15    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	17.2	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 12:43	123-91-1	
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	44.2	%	10.0-120		1	07/06/22 16:07	07/07/22 12:43	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	0.73J	ug/L	1.0	0.30	1		07/01/22 16:47	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		07/01/22 16:47	79-00-5	
1,1-Dichloroethane	0.33J	ug/L	1.0	0.30	1		07/01/22 16:47	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		07/01/22 16:47	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		07/01/22 16:47	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		07/01/22 16:47	127-18-4	
Trichloroethene	39.1	ug/L	1.0	0.32	1		07/01/22 16:47	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		07/01/22 16:47	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		07/01/22 16:47	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		07/01/22 16:47	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1		07/01/22 16:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	113	%	70-130		1		07/01/22 16:47	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		07/01/22 16:47	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990  
Pace Project No.: 40247458

**Sample: FB-01-WQ-20220630**      **Lab ID: 40247458014**      Collected: 06/30/22 10:40      Received: 06/30/22 13:15      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>SVOA (GC/MS) 8270 D-SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: 3510C Pace National - Mt. Juliet									
1,4-Dioxane (p-Dioxane)	<b>0.328</b>	ug/L	0.149	0.0447	1	07/06/22 16:07	07/07/22 13:03	123-91-1	B
<b>Surrogates</b>									
Nitrobenzene-d5 (S)	31.9	%	10.0-120		1	07/06/22 16:07	07/07/22 13:03	4165-60-0	
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 13:48	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		07/01/22 13:48	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		07/01/22 13:48	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		07/01/22 13:48	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		07/01/22 13:48	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		07/01/22 13:48	127-18-4	
Trichloroethene	<b>&lt;0.32</b>	ug/L	1.0	0.32	1		07/01/22 13:48	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		07/01/22 13:48	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		07/01/22 13:48	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		07/01/22 13:48	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		07/01/22 13:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	70-130		1		07/01/22 13:48	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		07/01/22 13:48	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 0383990

Pace Project No.: 40247458

**Sample: TB-03-WQ-20220629**      **Lab ID: 40247458015**      Collected: 06/29/22 16:30      Received: 06/30/22 13:15      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		07/01/22 12:28	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		07/01/22 12:28	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		07/01/22 12:28	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		07/01/22 12:28	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		07/01/22 12:28	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		07/01/22 12:28	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		07/01/22 12:28	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		07/01/22 12:28	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		07/01/22 12:28	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		07/01/22 12:28	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		07/01/22 12:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		1		07/01/22 12:28	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		07/01/22 12:28	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247458

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QC Batch:	1890527	Analysis Method:	EPA 8270D by SIM
QC Batch Method:	3510C	Analysis Description:	SVOA (GC/MS) 8270 D-SIM
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 40247458001, 40247458002, 40247458003, 40247458004, 40247458005, 40247458006, 40247458007, 40247458008, 40247458009, 40247458010, 40247458011, 40247458012, 40247458013, 40247458014

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METHOD BLANK: R3813135-3 Matrix: Water  
Associated Lab Samples: 40247458001, 40247458002, 40247458003, 40247458004, 40247458005, 40247458006, 40247458007, 40247458008, 40247458009, 40247458010, 40247458011, 40247458012, 40247458013, 40247458014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	0.183	0.149	07/07/22 08:48	
Nitrobenzene-d5 (S)	%	48.4	10.0-120	07/07/22 08:48	

---

LABORATORY CONTROL SAMPLE & LCSD: R3813135-1 R3813135-2

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	50.0	69.0	68.1	138	136	73.0-146	1.31	20	
Nitrobenzene-d5 (S)	%				60.2	66.5	10.0-120			

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

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990  
Pace Project No.: 40247458

QC Batch:	419897	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40247458001, 40247458002, 40247458003, 40247458004, 40247458005, 40247458006, 40247458007, 40247458008, 40247458009, 40247458010, 40247458011, 40247458012, 40247458013, 40247458014, 40247458015

METHOD BLANK: 2418213 Matrix: Water

Associated Lab Samples: 40247458001, 40247458002, 40247458003, 40247458004, 40247458005, 40247458006, 40247458007, 40247458008, 40247458009, 40247458010, 40247458011, 40247458012, 40247458013, 40247458014, 40247458015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	07/01/22 09:09	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	07/01/22 09:09	
1,1-Dichloroethane	ug/L	<0.30	1.0	07/01/22 09:09	
1,1-Dichloroethene	ug/L	<0.58	1.0	07/01/22 09:09	
1,2-Dichloroethane	ug/L	<0.29	1.0	07/01/22 09:09	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	07/01/22 09:09	
Tetrachloroethene	ug/L	<0.41	1.0	07/01/22 09:09	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	07/01/22 09:09	
Trichloroethene	ug/L	<0.32	1.0	07/01/22 09:09	
Vinyl chloride	ug/L	<0.17	1.0	07/01/22 09:09	
1,2-Dichlorobenzene-d4 (S)	%	107	70-130	07/01/22 09:09	
4-Bromofluorobenzene (S)	%	100	70-130	07/01/22 09:09	
Toluene-d8 (S)	%	102	70-130	07/01/22 09:09	

LABORATORY CONTROL SAMPLE: 2418214

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	58.1	116	70-134	
1,1,2-Trichloroethane	ug/L	50	51.8	104	70-130	
1,1-Dichloroethane	ug/L	50	53.1	106	70-130	
1,1-Dichloroethene	ug/L	50	59.0	118	74-131	
1,2-Dichloroethane	ug/L	50	58.4	117	70-137	
cis-1,2-Dichloroethene	ug/L	50	44.8	90	70-130	
Tetrachloroethene	ug/L	50	52.6	105	70-130	
trans-1,2-Dichloroethene	ug/L	50	51.5	103	70-130	
Trichloroethene	ug/L	50	52.1	104	70-130	
Vinyl chloride	ug/L	50	60.5	121	63-134	
1,2-Dichlorobenzene-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			111	70-130	
Toluene-d8 (S)	%			105	70-130	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990

Pace Project No.: 40247458

Parameter	Units	2418534		2418535		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40247458001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
1,1,1-Trichloroethane	ug/L	<0.30	50	50	59.0	58.1	118	116	70-134	2	20		
1,1,2-Trichloroethane	ug/L	<0.34	50	50	52.8	53.0	106	106	70-130	0	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	53.0	52.1	106	104	70-130	2	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	56.3	56.8	113	114	71-130	1	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	58.1	58.5	116	117	70-137	1	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	45.7	45.1	91	90	70-130	1	20		
Tetrachloroethene	ug/L	<0.41	50	50	53.6	52.4	107	105	70-130	2	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	51.3	52.1	103	104	70-130	2	20		
Trichloroethene	ug/L	0.40J	50	50	52.4	53.0	104	105	70-130	1	20		
Vinyl chloride	ug/L	<0.17	50	50	60.2	59.3	120	119	60-137	2	20		
1,2-Dichlorobenzene-d4 (S)	%						102	100	70-130				
4-Bromofluorobenzene (S)	%						113	111	70-130				
Toluene-d8 (S)	%						104	105	70-130				

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### REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: 0383990  
Pace Project No.: 40247458

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### 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.

### WORKORDER QUALIFIERS

WO: 40247458

[1] REVISED REPORT: The Sample ID has been updated for 40247458003.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990  
Pace Project No.: 40247458

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40247458001	MW-20S-WG-20220629	3510C	1890527	EPA 8270D by SIM	1890527
40247458002	MW-15D-WG-20220629	3510C	1890527	EPA 8270D by SIM	1890527
40247458003	MW-7S-WG-20220629	3510C	1890527	EPA 8270D by SIM	1890527
40247458004	DUP-02-WG-20220629	3510C	1890527	EPA 8270D by SIM	1890527
40247458005	MW-09-WG-20220629	3510C	1890527	EPA 8270D by SIM	1890527
40247458006	MW-14S-WG-20220629	3510C	1890527	EPA 8270D by SIM	1890527
40247458007	MW-15S-WG-20220629	3510C	1890527	EPA 8270D by SIM	1890527
40247458008	MW-17S-WG-20220629	3510C	1890527	EPA 8270D by SIM	1890527
40247458009	MW-04-WG-20220630	3510C	1890527	EPA 8270D by SIM	1890527
40247458010	MW-01-WG-20220630	3510C	1890527	EPA 8270D by SIM	1890527
40247458011	DUP-03-WG-20220630	3510C	1890527	EPA 8270D by SIM	1890527
40247458012	MW-15I-WG-20220630	3510C	1890527	EPA 8270D by SIM	1890527
40247458013	MW-13S-WG-20220630	3510C	1890527	EPA 8270D by SIM	1890527
40247458014	FB-01-WQ-20220630	3510C	1890527	EPA 8270D by SIM	1890527
40247458001	MW-20S-WG-20220629	EPA 8260	419897		
40247458002	MW-15D-WG-20220629	EPA 8260	419897		
40247458003	MW-7S-WG-20220629	EPA 8260	419897		
40247458004	DUP-02-WG-20220629	EPA 8260	419897		
40247458005	MW-09-WG-20220629	EPA 8260	419897		
40247458006	MW-14S-WG-20220629	EPA 8260	419897		
40247458007	MW-15S-WG-20220629	EPA 8260	419897		
40247458008	MW-17S-WG-20220629	EPA 8260	419897		
40247458009	MW-04-WG-20220630	EPA 8260	419897		
40247458010	MW-01-WG-20220630	EPA 8260	419897		
40247458011	DUP-03-WG-20220630	EPA 8260	419897		
40247458012	MW-15I-WG-20220630	EPA 8260	419897		
40247458013	MW-13S-WG-20220630	EPA 8260	419897		
40247458014	FB-01-WQ-20220630	EPA 8260	419897		
40247458015	TB-03-WQ-20220629	EPA 8260	419897		

### REPORT OF LABORATORY ANALYSIS

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**Sample Preservation Receipt Form**

Client Name: ERM

Project # 40247458

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

Initial when completed:

Date/Time:

Lab Lot# of pH paper:

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

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

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

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



**Sample Condition Upon Receipt Form (SCUR)**

Client Name: ERM

Project #:

**WO#: 40247458**



40247458

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

Tracking #: \_\_\_\_\_

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - 116 Type of Ice:  Wet  Blue  Dry  None

Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 0 / Corr: 0.1

Temp Blank Present:  yes  no

Biological Tissue is Frozen:  yes  no

Person examining contents:

Date: 6/30/22 initials: mp

Labeled By Initials: TP

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

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>002" MW-15P-WG-20220629" 1/3</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		<u>007 notimes on 2/2 AG5U 6/30/22 mp V69H only</u>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <u>013 notime 1/2 AG5U 6/30/22 mp 6/30/22</u>
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>mp</u>
Pace Trip Blank Lot # (if purchased): <u>486</u>		

**Client Notification/ Resolution:**

If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

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

September 26, 2022

Ryan Plath  
ERM, INC.  
7311 W. Greenfield Ave.  
Milwaukee, WI 53214

RE: Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

Dear Ryan Plath:

Enclosed are the analytical results for sample(s) received by the laboratory on September 09, 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
- Pace Analytical Services - Minneapolis

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

Sincerely,



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

Enclosures

cc: John Roberts, ERM, Inc.  
David deCourcy-Bower, ERM, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

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### **Pace Analytical Services, LLC - Minneapolis MN**

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification (A2LA) #: R-036  
North Dakota Certification (MN) #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563\*  
Puerto Rico Certification #: MN00064  
South Carolina Certification #:74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### **Pace Analytical Services Green Bay**

1241 Bellevue Street, Green Bay, WI 54302  
Florida/NELAP Certification #: E87948  
Illinois Certification #: 200050  
Kentucky UST Certification #: 82  
Louisiana Certification #: 04168  
Minnesota Certification #: 055-999-334  
New York Certification #: 12064  
North Dakota Certification #: R-150

Virginia VELAP ID: 460263  
South Carolina Certification #: 83006001  
Texas Certification #: T104704529-14-1  
Wisconsin Certification #: 405132750  
Wisconsin DATCP Certification #: 105-444  
USDA Soil Permit #: P330-16-00157  
Federal Fish & Wildlife Permit #: LE51774A-0

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40251180001	MW-23S-WG-20220906	Water	09/06/22 15:20	09/09/22 11:50
40251180002	MW-26S-WG-20220906	Water	09/06/22 16:20	09/09/22 11:50
40251180003	MW-01-WG-20220906	Water	09/06/22 17:00	09/09/22 11:50
40251180004	MW-13S-WG-20220906	Water	09/06/22 15:55	09/09/22 11:50
40251180005	MW-09-WG-20220907	Water	09/07/22 08:35	09/09/22 11:50
40251180006	MW-03-WG-20220907	Water	09/07/22 09:25	09/09/22 11:50
40251180007	MW-04-WG-20220907	Water	09/07/22 10:10	09/09/22 11:50
40251180008	MW-6S-WG-20220907	Water	09/07/22 09:00	09/09/22 11:50
40251180009	MW-7S-WG-20220907	Water	09/07/22 10:25	09/09/22 11:50
40251180010	MW-20S-WG-20220907	Water	09/07/22 11:25	09/09/22 11:50
40251180011	MW-15I-WG-20220907	Water	09/07/22 11:05	09/09/22 11:50
40251180012	MW-15D-WG-20220907	Water	09/07/22 11:55	09/09/22 11:50
40251180013	MW-15S-WG-20220907	Water	09/07/22 12:40	09/09/22 11:50
40251180014	MW-30I-WG-20220907	Water	09/07/22 13:50	09/09/22 11:50
40251180015	MW-31S-WG-20220907	Water	09/07/22 15:00	09/09/22 11:50
40251180016	FB-01-WQ-20220907	Water	09/07/22 15:05	09/09/22 11:50
40251180017	TB-01-WQ-20220907	Water	09/07/22 00:00	09/09/22 11:50
40251180018	MW-27S-WG-20220907	Water	09/07/22 15:00	09/09/22 11:50
40251180019	MW-28S-WG-20220907	Water	09/07/22 16:30	09/09/22 11:50
40251180020	MW-13S-WG-20220907	Water	09/07/22 13:30	09/09/22 11:50
40251180021	MW-29I-WG-20220907	Water	09/07/22 16:20	09/09/22 11:50
40251180022	DUP-01-WG-20220907	Water	09/07/22 13:35	09/09/22 11:50
40251180023	DUP-02-WG-20220907	Water	09/07/22 16:35	09/09/22 11:50

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40251180001	MW-23S-WG-20220906	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180002	MW-26S-WG-20220906	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180003	MW-01-WG-20220906	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180004	MW-13S-WG-20220906	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180005	MW-09-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180006	MW-03-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180007	MW-04-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180008	MW-6S-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180009	MW-7S-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180010	MW-20S-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180011	MW-15I-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180012	MW-15D-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180013	MW-15S-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180014	MW-30I-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180015	MW-31S-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180016	FB-01-WQ-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180017	TB-01-WQ-20220907	EPA 8260	EIB	13	PASI-G
40251180018	MW-27S-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180019	MW-28S-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G

### REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40251180020	MW-13S-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180021	MW-29I-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180022	DUP-01-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40251180023	DUP-02-WG-20220907	EPA 8270D by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G

PASI-G = Pace Analytical Services - Green Bay

PASI-M = Pace Analytical Services - Minneapolis

### REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

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**Date:** September 26, 2022

Sample MW-15I-WG-20220907 (40251180011) was extracted on 9/12/22 and analyzed on 9/14/22. The detection of 1,4-dioxane in this sample was over the range of the instrument calibration and therefore considered estimated. This sample went back for re-extraction on 9/16/22 (out of hold) at a lower volume (20 mLs vs the original 100mLs) in order for the results to be in the calibration range. The re-extracted out of hold results analyzed on 9/19/22 were 58.2 ug/L for 1,4-dioxane.

**MW-15I-WG-20220907 (Lab ID: 40251180011)**

- Sample MW-15I-WG-20220907 (40251180011) was extracted on 9/14. The detection of 1,4-Dioxane was over the calibration range and considered estimated. The sample was re-extracted out of hold on 9/16 at a lower volume. The re-extracted out of hold results were 58.2 ug/L of 1,4-Dioxane.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

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**Method:** EPA 8270D by SIM

**Description:** 8270D MSSV 14 Dioxane By SIM

**Client:** ERM, INC.

**Date:** September 26, 2022

**General Information:**

22 samples were analyzed for EPA 8270D by SIM by Pace Analytical Services Minneapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

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

**Sample Preparation:**

The samples were prepared in accordance with EPA Mod. 3510C with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

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

**Continuing Calibration:**

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

**Internal Standards:**

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

**Surrogates:**

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

**Method Blank:**

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

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

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

**Additional Comments:**

Analyte Comments:

QC Batch: 839974

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

- MW-15I-WG-20220907 (Lab ID: 40251180011)
  - 1,4-Dioxane (SIM)

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

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**Method:** EPA 8260

**Description:** 8260 MSV

**Client:** ERM, INC.

**Date:** September 26, 2022

### General Information:

23 samples were analyzed for EPA 8260 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

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

### Initial Calibrations (including MS Tune as applicable):

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

### Continuing Calibration:

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

### Internal Standards:

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

### Surrogates:

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

### Method Blank:

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

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

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

### Additional Comments:

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

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-23S-WG-20220906**    **Lab ID: 40251180001**    Collected: 09/06/22 15:20    Received: 09/09/22 11:50    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 13:22	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	41	%	15-125		1	09/12/22 17:03	09/14/22 13:22		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 17:16	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 17:16	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 17:16	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 17:16	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 17:16	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 17:16	127-18-4	
Trichloroethene	1.2	ug/L	1.0	0.32	1		09/12/22 17:16	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 17:16	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 17:16	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 17:16	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	114	%	70-130		1		09/12/22 17:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		09/12/22 17:16	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		09/12/22 17:16	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-26S-WG-20220906**    **Lab ID: 40251180002**    Collected: 09/06/22 16:20    Received: 09/09/22 11:50    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 13:38	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	46	%	15-125		1	09/12/22 17:03	09/14/22 13:38		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 17:36	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 17:36	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 17:36	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 17:36	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 17:36	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 17:36	127-18-4	
Trichloroethene	0.53J	ug/L	1.0	0.32	1		09/12/22 17:36	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 17:36	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 17:36	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 17:36	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	110	%	70-130		1		09/12/22 17:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		09/12/22 17:36	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		09/12/22 17:36	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-01-WG-20220906**      **Lab ID: 40251180003**      Collected: 09/06/22 17:00      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 13:55	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	41	%	15-125		1	09/12/22 17:03	09/14/22 13:55		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 17:57	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 17:57	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 17:57	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 17:57	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 17:57	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 17:57	127-18-4	
Trichloroethene	16.2	ug/L	1.0	0.32	1		09/12/22 17:57	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 17:57	75-01-4	
cis-1,2-Dichloroethene	1.6	ug/L	1.0	0.47	1		09/12/22 17:57	156-59-2	
trans-1,2-Dichloroethene	1.2	ug/L	1.0	0.53	1		09/12/22 17:57	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		09/12/22 17:57	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		09/12/22 17:57	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		09/12/22 17:57	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-13S-WG-20220906**      **Lab ID: 40251180004**      Collected: 09/06/22 15:55      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>10.2</b>	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 14:12	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	45	%	15-125		1	09/12/22 17:03	09/14/22 14:12		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>1.2</b>	ug/L	1.0	0.30	1		09/13/22 10:57	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		09/13/22 10:57	79-00-5	
1,1-Dichloroethane	<b>0.60J</b>	ug/L	1.0	0.30	1		09/13/22 10:57	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		09/13/22 10:57	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		09/13/22 10:57	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		09/13/22 10:57	127-18-4	
Trichloroethene	<b>57.0</b>	ug/L	1.0	0.32	1		09/13/22 10:57	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		09/13/22 10:57	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		09/13/22 10:57	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		09/13/22 10:57	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		1		09/13/22 10:57	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		09/13/22 10:57	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		09/13/22 10:57	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

**Sample: MW-09-WG-20220907**      **Lab ID: 40251180005**      Collected: 09/07/22 08:35      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 15:19	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	48	%	15-125		1	09/12/22 17:03	09/14/22 15:19		
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/13/22 09:55	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/13/22 09:55	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/13/22 09:55	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/13/22 09:55	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/13/22 09:55	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/13/22 09:55	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/13/22 09:55	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/13/22 09:55	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/13/22 09:55	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/13/22 09:55	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	111	%	70-130		1		09/13/22 09:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		09/13/22 09:55	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		09/13/22 09:55	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-03-WG-20220907**      **Lab ID: 40251180006**      Collected: 09/07/22 09:25      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 15:52	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	49	%	15-125		1	09/12/22 17:03	09/14/22 15:52		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 15:53	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 15:53	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 15:53	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 15:53	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 15:53	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 15:53	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/12/22 15:53	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 15:53	75-01-4	
cis-1,2-Dichloroethene	1.6	ug/L	1.0	0.47	1		09/12/22 15:53	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 15:53	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	112	%	70-130		1		09/12/22 15:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		09/12/22 15:53	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		09/12/22 15:53	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-04-WG-20220907**      **Lab ID: 40251180007**      Collected: 09/07/22 10:10      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 16:09	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	55	%	15-125		1	09/12/22 17:03	09/14/22 16:09		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 20:22	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 20:22	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 20:22	75-34-3	
1,1-Dichloroethene	0.88J	ug/L	1.0	0.58	1		09/12/22 20:22	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 20:22	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 20:22	127-18-4	
Trichloroethene	152	ug/L	1.0	0.32	1		09/12/22 20:22	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 20:22	75-01-4	
cis-1,2-Dichloroethene	24.5	ug/L	1.0	0.47	1		09/12/22 20:22	156-59-2	
trans-1,2-Dichloroethene	16.2	ug/L	1.0	0.53	1		09/12/22 20:22	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	110	%	70-130		1		09/12/22 20:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		09/12/22 20:22	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		09/12/22 20:22	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

**Sample: MW-6S-WG-20220907**      **Lab ID: 40251180008**      Collected: 09/07/22 09:00      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 16:26	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	42	%	15-125		1	09/12/22 17:03	09/14/22 16:26		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 18:39	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 18:39	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 18:39	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 18:39	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 18:39	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 18:39	127-18-4	
Trichloroethene	8.1	ug/L	1.0	0.32	1		09/12/22 18:39	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 18:39	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 18:39	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 18:39	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	112	%	70-130		1		09/12/22 18:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		09/12/22 18:39	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		09/12/22 18:39	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-7S-WG-20220907**      **Lab ID: 40251180009**      Collected: 09/07/22 10:25      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 16:43	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	49	%	15-125		1	09/12/22 17:03	09/14/22 16:43		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 18:59	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 18:59	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 18:59	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 18:59	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 18:59	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 18:59	127-18-4	
Trichloroethene	15.8	ug/L	1.0	0.32	1		09/12/22 18:59	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 18:59	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 18:59	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 18:59	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	114	%	70-130		1		09/12/22 18:59	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		09/12/22 18:59	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		09/12/22 18:59	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

**Sample: MW-20S-WG-20220907**      **Lab ID: 40251180010**      Collected: 09/07/22 11:25      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 16:59	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	53	%	15-125		1	09/12/22 17:03	09/14/22 16:59		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 16:55	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 16:55	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 16:55	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 16:55	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 16:55	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 16:55	127-18-4	
Trichloroethene	1.5	ug/L	1.0	0.32	1		09/12/22 16:55	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 16:55	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 16:55	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 16:55	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	112	%	70-130		1		09/12/22 16:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		09/12/22 16:55	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		09/12/22 16:55	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

**Sample: MW-15I-WG-20220907**      **Lab ID: 40251180011**      Collected: 09/07/22 11:05      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>75.0</b>	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 17:16	123-91-1	E
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	50	%	15-125		1	09/12/22 17:03	09/14/22 17:16		
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;3.0</b>	ug/L	10.0	3.0	10		09/13/22 11:18	71-55-6	
1,1,2-Trichloroethane	<b>&lt;3.4</b>	ug/L	50.0	3.4	10		09/13/22 11:18	79-00-5	
1,1-Dichloroethane	<b>&lt;3.0</b>	ug/L	10.0	3.0	10		09/13/22 11:18	75-34-3	
1,1-Dichloroethene	<b>&lt;5.8</b>	ug/L	10.0	5.8	10		09/13/22 11:18	75-35-4	
1,2-Dichloroethane	<b>&lt;2.9</b>	ug/L	10.0	2.9	10		09/13/22 11:18	107-06-2	
Tetrachloroethene	<b>&lt;4.1</b>	ug/L	10.0	4.1	10		09/13/22 11:18	127-18-4	
Trichloroethene	<b>539</b>	ug/L	10.0	3.2	10		09/13/22 11:18	79-01-6	
Vinyl chloride	<b>&lt;1.7</b>	ug/L	10.0	1.7	10		09/13/22 11:18	75-01-4	
cis-1,2-Dichloroethene	<b>12.6</b>	ug/L	10.0	4.7	10		09/13/22 11:18	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;5.3</b>	ug/L	10.0	5.3	10		09/13/22 11:18	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	107	%	70-130		10		09/13/22 11:18	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		10		09/13/22 11:18	2199-69-1	
Toluene-d8 (S)	98	%	70-130		10		09/13/22 11:18	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-15D-WG-20220907**    **Lab ID: 40251180012**    Collected: 09/07/22 11:55    Received: 09/09/22 11:50    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM    Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	7.8	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 17:33	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	52	%	15-125		1	09/12/22 17:03	09/14/22 17:33		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 16:13	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 16:13	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 16:13	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 16:13	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 16:13	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 16:13	127-18-4	
Trichloroethene	2.2	ug/L	1.0	0.32	1		09/12/22 16:13	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 16:13	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 16:13	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 16:13	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	112	%	70-130		1		09/12/22 16:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		09/12/22 16:13	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		09/12/22 16:13	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-15S-WG-20220907**      **Lab ID: 40251180013**      Collected: 09/07/22 12:40      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 17:50	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	40	%	15-125		1	09/12/22 17:03	09/14/22 17:50		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 16:34	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 16:34	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 16:34	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 16:34	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 16:34	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 16:34	127-18-4	
Trichloroethene	1.8	ug/L	1.0	0.32	1		09/12/22 16:34	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 16:34	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 16:34	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 16:34	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	111	%	70-130		1		09/12/22 16:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		09/12/22 16:34	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		09/12/22 16:34	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-30I-WG-20220907**      **Lab ID: 40251180014**      Collected: 09/07/22 13:50      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>3.2</b>	ug/L	0.25	0.11	1	09/12/22 17:03	09/14/22 18:06	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	45	%	15-125		1	09/12/22 17:03	09/14/22 18:06		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>0.35J</b>	ug/L	1.0	0.30	1		09/12/22 19:20	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		09/12/22 19:20	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		09/12/22 19:20	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		09/12/22 19:20	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		09/12/22 19:20	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		09/12/22 19:20	127-18-4	
Trichloroethene	<b>110</b>	ug/L	1.0	0.32	1		09/12/22 19:20	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		09/12/22 19:20	75-01-4	
cis-1,2-Dichloroethene	<b>1.3</b>	ug/L	1.0	0.47	1		09/12/22 19:20	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		09/12/22 19:20	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	111	%	70-130		1		09/12/22 19:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		09/12/22 19:20	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		09/12/22 19:20	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

**Sample: MW-31S-WG-20220907**      **Lab ID: 40251180015**      Collected: 09/07/22 15:00      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	1.2	ug/L	0.23	0.096	1	09/12/22 17:03	09/15/22 14:27	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	36	%	15-125		1	09/12/22 17:03	09/15/22 14:27		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/13/22 10:15	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/13/22 10:15	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/13/22 10:15	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/13/22 10:15	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/13/22 10:15	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/13/22 10:15	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/13/22 10:15	79-01-6	
Vinyl chloride	0.64J	ug/L	1.0	0.17	1		09/13/22 10:15	75-01-4	
cis-1,2-Dichloroethene	1.6	ug/L	1.0	0.47	1		09/13/22 10:15	156-59-2	
trans-1,2-Dichloroethene	0.62J	ug/L	1.0	0.53	1		09/13/22 10:15	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		09/13/22 10:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		09/13/22 10:15	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		09/13/22 10:15	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: FB-01-WQ-20220907**      **Lab ID: 40251180016**      Collected: 09/07/22 15:05      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.096	ug/L	0.23	0.096	1	09/12/22 17:03	09/14/22 18:40	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	48	%	15-125		1	09/12/22 17:03	09/14/22 18:40		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 15:11	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 15:11	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 15:11	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 15:11	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 15:11	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 15:11	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/12/22 15:11	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 15:11	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 15:11	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 15:11	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	113	%	70-130		1		09/12/22 15:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		09/12/22 15:11	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		09/12/22 15:11	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: TB-01-WQ-20220907**      **Lab ID: 40251180017**      Collected: 09/07/22 00:00      Received: 09/09/22 11:50      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 15:32	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 15:32	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 15:32	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 15:32	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 15:32	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 15:32	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/12/22 15:32	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 15:32	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 15:32	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 15:32	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	114	%	70-130		1		09/12/22 15:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		09/12/22 15:32	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		09/12/22 15:32	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-27S-WG-20220907**      **Lab ID: 40251180018**      Collected: 09/07/22 15:00      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	1.1	ug/L	0.24	0.10	1	09/12/22 17:03	09/14/22 18:57	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	44	%	15-125		1	09/12/22 17:03	09/14/22 18:57		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	0.41J	ug/L	1.0	0.30	1		09/12/22 20:02	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 20:02	79-00-5	
1,1-Dichloroethane	0.31J	ug/L	1.0	0.30	1		09/12/22 20:02	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 20:02	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 20:02	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 20:02	127-18-4	
Trichloroethene	128	ug/L	1.0	0.32	1		09/12/22 20:02	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 20:02	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 20:02	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 20:02	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	111	%	70-130		1		09/12/22 20:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		09/12/22 20:02	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		09/12/22 20:02	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-28S-WG-20220907**      **Lab ID: 40251180019**      Collected: 09/07/22 16:30      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>21.0</b>	ug/L	0.23	0.096	1	09/12/22 17:03	09/14/22 19:13	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	41	%	15-125		1	09/12/22 17:03	09/14/22 19:13		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>2.5J</b>	ug/L	2.5	0.76	2.5		09/13/22 11:39	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.86</b>	ug/L	12.5	0.86	2.5		09/13/22 11:39	79-00-5	
1,1-Dichloroethane	<b>1.9J</b>	ug/L	2.5	0.74	2.5		09/13/22 11:39	75-34-3	
1,1-Dichloroethene	<b>&lt;1.5</b>	ug/L	2.5	1.5	2.5		09/13/22 11:39	75-35-4	
1,2-Dichloroethane	<b>&lt;0.73</b>	ug/L	2.5	0.73	2.5		09/13/22 11:39	107-06-2	
Tetrachloroethene	<b>&lt;1.0</b>	ug/L	2.5	1.0	2.5		09/13/22 11:39	127-18-4	
Trichloroethene	<b>487</b>	ug/L	2.5	0.80	2.5		09/13/22 11:39	79-01-6	
Vinyl chloride	<b>&lt;0.44</b>	ug/L	2.5	0.44	2.5		09/13/22 11:39	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;1.2</b>	ug/L	2.5	1.2	2.5		09/13/22 11:39	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;1.3</b>	ug/L	2.5	1.3	2.5		09/13/22 11:39	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		2.5		09/13/22 11:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		2.5		09/13/22 11:39	2199-69-1	
Toluene-d8 (S)	98	%	70-130		2.5		09/13/22 11:39	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-13S-WG-20220907**      **Lab ID: 40251180020**      Collected: 09/07/22 13:30      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.096	ug/L	0.23	0.096	1	09/12/22 17:03	09/14/22 19:30	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	47	%	15-125		1	09/12/22 17:03	09/14/22 19:30		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/13/22 10:36	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/13/22 10:36	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/13/22 10:36	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/13/22 10:36	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/13/22 10:36	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/13/22 10:36	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/13/22 10:36	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/13/22 10:36	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/13/22 10:36	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/13/22 10:36	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	113	%	70-130		1		09/13/22 10:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		1		09/13/22 10:36	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		09/13/22 10:36	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: MW-29I-WG-20220907**      **Lab ID: 40251180021**      Collected: 09/07/22 16:20      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.096	ug/L	0.23	0.096	1	09/13/22 12:49	09/16/22 14:09	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	30	%	15-125		1	09/13/22 12:49	09/16/22 14:09		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 20:08	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		09/12/22 20:08	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/12/22 20:08	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/12/22 20:08	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/12/22 20:08	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/12/22 20:08	127-18-4	
Trichloroethene	20.8	ug/L	1.0	0.32	1		09/12/22 20:08	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/12/22 20:08	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/12/22 20:08	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/12/22 20:08	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1		09/12/22 20:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		09/12/22 20:08	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		09/12/22 20:08	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: DUP-01-WG-20220907**      **Lab ID: 40251180022**      Collected: 09/07/22 13:35      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>0.27</b>	ug/L	0.23	0.096	1	09/13/22 12:49	09/16/22 13:53	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	37	%	15-125		1	09/13/22 12:49	09/16/22 13:53		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		09/12/22 20:27	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		09/12/22 20:27	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		09/12/22 20:27	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		09/12/22 20:27	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		09/12/22 20:27	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		09/12/22 20:27	127-18-4	
Trichloroethene	<b>&lt;0.32</b>	ug/L	1.0	0.32	1		09/12/22 20:27	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		09/12/22 20:27	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		09/12/22 20:27	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		09/12/22 20:27	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/12/22 20:27	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		09/12/22 20:27	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		09/12/22 20:27	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

**Sample: DUP-02-WG-20220907**      **Lab ID: 40251180023**      Collected: 09/07/22 16:35      Received: 09/09/22 11:50      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270D MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270D by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	17.1	ug/L	0.23	0.096	1	09/13/22 12:49	09/16/22 14:26	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	34	%	15-125		1	09/13/22 12:49	09/16/22 14:26		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	2.7J	ug/L	4.0	1.2	4		09/12/22 20:47	71-55-6	
1,1,2-Trichloroethane	<1.4	ug/L	20.0	1.4	4		09/12/22 20:47	79-00-5	
1,1-Dichloroethane	1.9J	ug/L	4.0	1.2	4		09/12/22 20:47	75-34-3	
1,1-Dichloroethene	<2.3	ug/L	4.0	2.3	4		09/12/22 20:47	75-35-4	
1,2-Dichloroethane	<1.2	ug/L	4.0	1.2	4		09/12/22 20:47	107-06-2	
Tetrachloroethene	<1.6	ug/L	4.0	1.6	4		09/12/22 20:47	127-18-4	
Trichloroethene	433	ug/L	4.0	1.3	4		09/12/22 20:47	79-01-6	
Vinyl chloride	<0.70	ug/L	4.0	0.70	4		09/12/22 20:47	75-01-4	
cis-1,2-Dichloroethene	<1.9	ug/L	4.0	1.9	4		09/12/22 20:47	156-59-2	
trans-1,2-Dichloroethene	<2.1	ug/L	4.0	2.1	4		09/12/22 20:47	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		4		09/12/22 20:47	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	70-130		4		09/12/22 20:47	2199-69-1	
Toluene-d8 (S)	104	%	70-130		4		09/12/22 20:47	2037-26-5	

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

QC Batch:	425676	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40251180001, 40251180002, 40251180003, 40251180004, 40251180005, 40251180006, 40251180007, 40251180008, 40251180009, 40251180010, 40251180011, 40251180012, 40251180013, 40251180014, 40251180015, 40251180016, 40251180017, 40251180018, 40251180019, 40251180020

METHOD BLANK: 2451532 Matrix: Water  
Associated Lab Samples: 40251180001, 40251180002, 40251180003, 40251180004, 40251180005, 40251180006, 40251180007, 40251180008, 40251180009, 40251180010, 40251180011, 40251180012, 40251180013, 40251180014, 40251180015, 40251180016, 40251180017, 40251180018, 40251180019, 40251180020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	09/12/22 12:40	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	09/12/22 12:40	
1,1-Dichloroethane	ug/L	<0.30	1.0	09/12/22 12:40	
1,1-Dichloroethene	ug/L	<0.58	1.0	09/12/22 12:40	
1,2-Dichloroethane	ug/L	<0.29	1.0	09/12/22 12:40	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	09/12/22 12:40	
Tetrachloroethene	ug/L	<0.41	1.0	09/12/22 12:40	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	09/12/22 12:40	
Trichloroethene	ug/L	<0.32	1.0	09/12/22 12:40	
Vinyl chloride	ug/L	<0.17	1.0	09/12/22 12:40	
1,2-Dichlorobenzene-d4 (S)	%	100	70-130	09/12/22 12:40	
4-Bromofluorobenzene (S)	%	110	70-130	09/12/22 12:40	
Toluene-d8 (S)	%	99	70-130	09/12/22 12:40	

LABORATORY CONTROL SAMPLE: 2451533

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.3	107	70-134	
1,1,2-Trichloroethane	ug/L	50	46.2	92	70-130	
1,1-Dichloroethane	ug/L	50	52.0	104	70-130	
1,1-Dichloroethene	ug/L	50	48.3	97	74-131	
1,2-Dichloroethane	ug/L	50	52.0	104	70-137	
cis-1,2-Dichloroethene	ug/L	50	49.8	100	70-130	
Tetrachloroethene	ug/L	50	54.2	108	70-130	
trans-1,2-Dichloroethene	ug/L	50	51.6	103	70-130	
Trichloroethene	ug/L	50	53.6	107	70-130	
Vinyl chloride	ug/L	50	46.0	92	63-134	
1,2-Dichlorobenzene-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			112	70-130	
Toluene-d8 (S)	%			97	70-130	

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2451582		2451583		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		40251180006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
1,1,1-Trichloroethane	ug/L	<0.30	50	50	53.2	53.2	106	106	70-134	0	20		
1,1,2-Trichloroethane	ug/L	<0.34	50	50	44.5	47.6	89	95	70-130	7	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	50.2	51.2	100	102	70-130	2	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	46.5	48.8	93	98	71-130	5	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	50.0	50.3	100	101	70-137	1	20		
cis-1,2-Dichloroethene	ug/L	1.6	50	50	49.6	49.3	96	95	70-130	1	20		
Tetrachloroethene	ug/L	<0.41	50	50	52.7	53.7	105	107	70-130	2	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	49.6	49.8	99	100	70-130	0	20		
Trichloroethene	ug/L	<0.32	50	50	53.2	51.8	106	104	70-130	3	20		
Vinyl chloride	ug/L	<0.17	50	50	44.3	44.3	89	89	60-137	0	20		
1,2-Dichlorobenzene-d4 (S)	%						104	103	70-130				
4-Bromofluorobenzene (S)	%						111	112	70-130				
Toluene-d8 (S)	%						96	99	70-130				

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

QC Batch: 425678 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40251180021, 40251180022, 40251180023

METHOD BLANK: 2451539 Matrix: Water

Associated Lab Samples: 40251180021, 40251180022, 40251180023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	09/12/22 12:30	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	09/12/22 12:30	
1,1-Dichloroethane	ug/L	<0.30	1.0	09/12/22 12:30	
1,1-Dichloroethene	ug/L	<0.58	1.0	09/12/22 12:30	
1,2-Dichloroethane	ug/L	<0.29	1.0	09/12/22 12:30	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	09/12/22 12:30	
Tetrachloroethene	ug/L	<0.41	1.0	09/12/22 12:30	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	09/12/22 12:30	
Trichloroethene	ug/L	<0.32	1.0	09/12/22 12:30	
Vinyl chloride	ug/L	<0.17	1.0	09/12/22 12:30	
1,2-Dichlorobenzene-d4 (S)	%	94	70-130	09/12/22 12:30	
4-Bromofluorobenzene (S)	%	101	70-130	09/12/22 12:30	
Toluene-d8 (S)	%	103	70-130	09/12/22 12:30	

LABORATORY CONTROL SAMPLE: 2451540

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.0	100	70-134	
1,1,2-Trichloroethane	ug/L	50	54.0	108	70-130	
1,1-Dichloroethane	ug/L	50	50.4	101	70-130	
1,1-Dichloroethene	ug/L	50	47.8	96	74-131	
1,2-Dichloroethane	ug/L	50	45.7	91	70-137	
cis-1,2-Dichloroethene	ug/L	50	54.4	109	70-130	
Tetrachloroethene	ug/L	50	50.1	100	70-130	
trans-1,2-Dichloroethene	ug/L	50	55.1	110	70-130	
Trichloroethene	ug/L	50	53.4	107	70-130	
Vinyl chloride	ug/L	50	40.7	81	63-134	
1,2-Dichlorobenzene-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2451580 2451581

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40251172001 Result	Spike Conc.	Spike Conc.	Conc.								
1,1,1-Trichloroethane	ug/L	<0.30	50	50	50	48.7	48.1	97	96	70-134	1	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	50	52.1	52.4	104	105	70-130	1	20	

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2451580		2451581		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40251172001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
1,1-Dichloroethane	ug/L	<0.30	50	50	50.5	45.9	101	92	70-130	10	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	46.0	44.7	92	89	71-130	3	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	43.0	41.2	86	82	70-137	4	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	53.7	49.1	107	98	70-130	9	20		
Tetrachloroethene	ug/L	<0.41	50	50	52.0	50.3	104	101	70-130	3	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	52.5	50.1	105	100	70-130	5	20		
Trichloroethene	ug/L	<0.32	50	50	53.6	51.4	107	103	70-130	4	20		
Vinyl chloride	ug/L	<0.17	50	50	37.2	33.4	74	67	60-137	11	20		
1,2-Dichlorobenzene-d4 (S)	%						97	99	70-130				
4-Bromofluorobenzene (S)	%						98	99	70-130				
Toluene-d8 (S)	%						102	104	70-130				

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

QC Batch:	839974	Analysis Method:	EPA 8270D by SIM
QC Batch Method:	EPA Mod. 3510C	Analysis Description:	8270D Water 14 Dioxane by SIM
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 40251180001, 40251180002, 40251180003, 40251180004, 40251180005, 40251180006, 40251180007, 40251180008, 40251180009, 40251180010, 40251180011, 40251180012, 40251180013, 40251180014, 40251180015, 40251180016, 40251180018, 40251180019, 40251180020

METHOD BLANK: 4445771 Matrix: Water  
Associated Lab Samples: 40251180001, 40251180002, 40251180003, 40251180004, 40251180005, 40251180006, 40251180007, 40251180008, 40251180009, 40251180010, 40251180011, 40251180012, 40251180013, 40251180014, 40251180015, 40251180016, 40251180018, 40251180019, 40251180020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (SIM)	ug/L	<0.11	0.25	09/14/22 12:15	
1,4-Dioxane-d8 (S)	%	48	15-125	09/14/22 12:15	

LABORATORY CONTROL SAMPLE: 4445772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (SIM)	ug/L	10	10.1	101	30-133	
1,4-Dioxane-d8 (S)	%			50	15-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4445773 4445774

Parameter	Units	10624965001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (SIM)	ug/L	<0.35	33.3	33.3	34.8	31.5	104	94	30-150	10	30	
1,4-Dioxane-d8 (S)	%						52	53	15-125			P1

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

QC Batch: 840139 Analysis Method: EPA 8270D by SIM  
QC Batch Method: EPA Mod. 3510C Analysis Description: 8270D Water 14 Dioxane by SIM  
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 40251180021, 40251180022, 40251180023

METHOD BLANK: 4446461 Matrix: Water

Associated Lab Samples: 40251180021, 40251180022, 40251180023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (SIM)	ug/L	<0.11	0.25	09/15/22 11:58	
1,4-Dioxane-d8 (S)	%	39	15-125	09/15/22 11:58	

LABORATORY CONTROL SAMPLE: 4446462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (SIM)	ug/L	10	10.7	107	30-133	
1,4-Dioxane-d8 (S)	%			41	15-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4446463 4446464

Parameter	Units	10624965002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (SIM)	ug/L	<0.35	33.3	33.3	39.7	37.4	119	112	30-150	6	30	
1,4-Dioxane-d8 (S)	%						37	35	15-125			P1

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## QUALIFIERS

Project: 0383990 TWO RIVERS

Pace Project No.: 40251180

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### DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

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

P1 Routine initial sample volume or weight was not used for extraction, resulting in elevated reporting limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990 TWO RIVERS  
Pace Project No.: 40251180

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40251180001	MW-23S-WG-20220906	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180002	MW-26S-WG-20220906	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180003	MW-01-WG-20220906	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180004	MW-13S-WG-20220906	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180005	MW-09-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180006	MW-03-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180007	MW-04-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180008	MW-6S-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180009	MW-7S-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180010	MW-20S-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180011	MW-15I-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180012	MW-15D-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180013	MW-15S-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180014	MW-30I-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180015	MW-31S-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180016	FB-01-WQ-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180018	MW-27S-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180019	MW-28S-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180020	MW-13S-WG-20220907	EPA Mod. 3510C	839974	EPA 8270D by SIM	840444
40251180021	MW-29I-WG-20220907	EPA Mod. 3510C	840139	EPA 8270D by SIM	840738
40251180022	DUP-01-WG-20220907	EPA Mod. 3510C	840139	EPA 8270D by SIM	840738
40251180023	DUP-02-WG-20220907	EPA Mod. 3510C	840139	EPA 8270D by SIM	840738
40251180001	MW-23S-WG-20220906	EPA 8260	425676		
40251180002	MW-26S-WG-20220906	EPA 8260	425676		
40251180003	MW-01-WG-20220906	EPA 8260	425676		
40251180004	MW-13S-WG-20220906	EPA 8260	425676		
40251180005	MW-09-WG-20220907	EPA 8260	425676		
40251180006	MW-03-WG-20220907	EPA 8260	425676		
40251180007	MW-04-WG-20220907	EPA 8260	425676		
40251180008	MW-6S-WG-20220907	EPA 8260	425676		
40251180009	MW-7S-WG-20220907	EPA 8260	425676		
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40251180011	MW-15I-WG-20220907	EPA 8260	425676		
40251180012	MW-15D-WG-20220907	EPA 8260	425676		
40251180013	MW-15S-WG-20220907	EPA 8260	425676		
40251180014	MW-30I-WG-20220907	EPA 8260	425676		
40251180015	MW-31S-WG-20220907	EPA 8260	425676		
40251180016	FB-01-WQ-20220907	EPA 8260	425676		
40251180017	TB-01-WQ-20220907	EPA 8260	425676		
40251180018	MW-27S-WG-20220907	EPA 8260	425676		
40251180019	MW-28S-WG-20220907	EPA 8260	425676		
40251180020	MW-13S-WG-20220907	EPA 8260	425676		
40251180021	MW-29I-WG-20220907	EPA 8260	425678		
40251180022	DUP-01-WG-20220907	EPA 8260	425678		
40251180023	DUP-02-WG-20220907	EPA 8260	425678		

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

4251180

ALL SHADED AREAS are for LAB USE ONLY

Company: **ERM** Billing Information: **ERM Accounts Payable**

Address: **Milwaukee, WI**

Report To: **John Roberts** Email To: **John.Roberts@ERM.com**

Copy To: **Lauren Lande** Site Collection Info/Address: **Two Rivers, WI**

Customer Project Name/Number: **0383990** State: **WI** County/City: **/** Time Zone Collected: **[ ] PT [ ] MT [ ] CT [ ] ET**

Phone: \_\_\_\_\_ Site/Facility ID #: \_\_\_\_\_ Compliance Monitoring?  Yes  No

Collected By (print): **Lauren Lande Grabler** Purchase Order #: \_\_\_\_\_ DW PWS ID #: \_\_\_\_\_

Collected By (signature): *[Signature]* Turnaround Date Required: **Standard** Immediately Packed on Ice:  Yes  No

Sample Disposal:  Dispose as appropriate  Return  Archive: \_\_\_\_\_ Rush:  Same Day  Next Day  2 Day  3 Day  4 Day  5 Day  Hold: \_\_\_\_\_ Field Filtered (if applicable):  Yes  No

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-15I-W6-20220907	GW	Grab	9/7/22	1105				5
MW-15P-W6-20220907	GW	Grab	9/7/22	1155				5
MW-15S-W6-20220907	GW		9/7/22	1240				5
MW-30I-W6-20220907	GW		9/7/22	1350				5
MW-31S-W6-20220907	GW		9/7/22	1500				5
FB-01-WQ-20220907	WQ		9/7/22	1505				5
TB-01-WQ-20220907	WQ		9/7/22					2
MW-27S-W6-20220907	GW		9/7/22	1500				5
MW-28S-W6-20220907	GW		9/7/22	1630				5
MW-13S-W6-20220907	GW	Grab	9/7/22	1330				5

8260 VOCs site specific 1,4-Dioxane

Container Preservative Type \*\* **3** Lab Project Manager: \_\_\_\_\_

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses										Lab Profile/Line:
										Lab Sample Receipt Checklist:
										Custody Seals Present/Intact Y N NA
										Custody Signatures Present Y N NA
										Collector Signature Present Y N NA
										Bottles Intact Y N NA
										Correct Bottles Y N NA
										Sufficient Volume Y N NA
										Samples Received on Ice Y N NA
										VOA - Headspace Acceptable Y N NA
										USDA Regulated Soils Y N NA
										Samples in Holding Time Y N NA
										Residual Chlorine Present Y N NA
										Cl Strips: _____
										Sample pH Acceptable Y N NA
										pH Strips: _____
										Sulfide Present Y N NA
										Lead Acetate Strips: _____
										LAB USE ONLY:
										Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards: \_\_\_\_\_

Type of Ice Used: Wet Blue Dry None

Packing Material Used: **①**

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: **2828780**

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: \_\_\_\_\_

Cooler 1 Temp Upon Receipt: \_\_\_\_\_ oC

Cooler 1 Therm Corr. Factor: \_\_\_\_\_ oC

Cooler 1 Corrected Temp: \_\_\_\_\_ oC

Comments: \_\_\_\_\_

Relinquished by/Company: (Signature) *[Signature]* ERM Date/Time: **9/18/22 0900**

Relinquished by/Company: (Signature) **CS Logistics** Date/Time: **9/19/22 1150**

Relinquished by/Company: (Signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received by/Company: (Signature) *[Signature]* Date/Time: \_\_\_\_\_

Received by/Company: (Signature) *[Signature]* Date/Time: **9/19/22 1150**

Received by/Company: (Signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

MTJL LAB USE ONLY

Table #: \_\_\_\_\_

Acctnum: \_\_\_\_\_

Template: \_\_\_\_\_

Prelogin: \_\_\_\_\_

PM: \_\_\_\_\_

PB: \_\_\_\_\_

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: **Page 41 of 45**

of: **3**





Client Name: ERM

Sample Preservation Receipt Form  
 Project #: 10251180

Pace Lab #	Glass						Plastic						Vials					Jars			General			Special				Volume (mL)							
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	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		
<del>021</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>
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<del>041</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>
<del>042</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>
<del>043</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>
<del>044</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>
<del>045</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>
<del>046</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>
<del>047</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>
<del>048</del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>	<del></del>

*Handwritten notes:*  
 021-024: AG1U  
 021-024: AG2S  
 021-024: AG5U  
 021-024: AG4S  
 021-024: AG1H  
 021-024: BG1U  
 021-024: BG3U  
 021-024: BP1U  
 021-024: BP3U  
 021-024: BP3B  
 021-024: BP3N  
 021-024: BP3S  
 021-024: BP2Z  
 021-024: VG9C  
 021-024: DG9T  
 021-024: VG9U  
 021-024: VG9H  
 021-024: VG9M  
 021-024: VG9D  
 021-024: JGFU  
 021-024: JG9U  
 021-024: WGFU  
 021-024: WPFU  
 021-024: SP5T  
 021-024: ZPLC  
 021-024: GN 1  
 021-024: GN 2  
 021-024: VOA Vials (>6mm) \*  
 021-024: H2SO4 pH ≤2  
 021-024: NaOH+Zn Act pH ≥9  
 021-024: NaOH pH ≥12  
 021-024: HNO3 pH ≤2  
 021-024: pH after adjusted  
 021-024: Volume (mL)

**Sample Condition Upon Receipt Form (SCUR)**

Project #:

Client Name: ERM

WO#: **40251180**

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



Tracking #: \_\_\_\_\_

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR-115 Type of Ice:  Wet  Blue Dry None  Meltwater Only

Cooler Temperature Uncorr: 5.1 / Corr: 1.6

Temp Blank Present:  yes  no

Biological Tissue is Frozen:  yes  no

Person examining contents:  
 Date: 9/9/22 / Initials: AW  
 Labeled By Initials: mt

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

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1. <u>+CC 9/9/22 AW</u>
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>no filt. 9/9/22 AW</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- DI VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input 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: <u>Pace Green Bay</u> , 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 checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>019: "1605"; 020: "MW-13D-..."; 023: one vial "1610", no time on everything else 9/9/22 AW</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>486</u>		

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

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Comments/ Resolution: \_\_\_\_\_

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



December 02, 2022

Ryan Plath  
ERM, INC.  
7311 W. Greenfield Ave.  
Milwaukee, WI 53214

RE: Project: 0383990 TWO RIVERS  
Pace Project No.: 40255015

Dear Ryan Plath:

Enclosed are the analytical results for sample(s) received by the laboratory on November 18, 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
- Pace Analytical Services - Minneapolis

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

Sincerely,



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

Enclosures

cc: John Roberts, ERM, Inc.  
David deCourcy-Bower, ERM, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990 TWO RIVERS  
Pace Project No.: 40255015

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### **Pace Analytical Services, LLC - Minneapolis MN**

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
GMP+ Certification #: GMP050884  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification (A2LA) #: R-036  
North Dakota Certification (MN) #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563  
Puerto Rico Certification #: MN00064  
South Carolina Certification #:74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### **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

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40255015001	MW-23S-WG-20221116	Water	11/16/22 13:37	11/18/22 10:45
40255015002	MW-20S-WG-20221116	Water	11/16/22 14:10	11/18/22 10:45
40255015003	MW-26S-WG-20221116	Water	11/16/22 14:24	11/18/22 10:45
40255015004	MW-09-WG-20221116	Water	11/16/22 15:10	11/18/22 10:45
40255015005	MW-03-WG-20221117	Water	11/17/22 09:30	11/18/22 10:45
40255015006	MW-6S-WG-20221117	Water	11/17/22 10:00	11/18/22 10:45
40255015007	MW-04-WG-20221117	Water	11/17/22 10:15	11/18/22 10:45
40255015008	FB-01-WQ-20221117	Water	11/17/22 11:10	11/18/22 10:45
40255015009	MW-7S-WG-20221117	Water	11/17/22 11:20	11/18/22 10:45
40255015010	MW-15S-WG-20221117	Water	11/17/22 12:46	11/18/22 10:45
40255015011	MW-15I-WG-20221117	Water	11/17/22 13:16	11/18/22 10:45
40255015012	MW-13S-WG-20221117	Water	11/17/22 13:18	11/18/22 10:45
40255015013	MW-15D-WG-20221117	Water	11/17/22 13:55	11/18/22 10:45
40255015014	DUP-01-WG-20221117	Water	11/17/22 13:55	11/18/22 10:45
40255015015	MW-13D-WG-20221117	Water	11/17/22 15:00	11/18/22 10:45
40255015016	DUP-02-WG-20221117	Water	11/17/22 15:00	11/18/22 10:45
40255015017	TB-01-WQ-20221117	Water	11/17/22 00:00	11/18/22 10:45
40255015018	MW-01-WG-20221117	Water	11/17/22 15:30	11/18/22 10:45

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40255015001	MW-23S-WG-20221116	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015002	MW-20S-WG-20221116	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015003	MW-26S-WG-20221116	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015004	MW-09-WG-20221116	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015005	MW-03-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	JAV	13	PASI-G
40255015006	MW-6S-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	JAV	13	PASI-G
40255015007	MW-04-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	JAV	13	PASI-G
40255015008	FB-01-WQ-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	JAV	13	PASI-G
40255015009	MW-7S-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	JAV	13	PASI-G
40255015010	MW-15S-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015011	MW-15I-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015012	MW-13S-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015013	MW-15D-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015014	DUP-01-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015015	MW-13D-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015016	DUP-02-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G
40255015017	TB-01-WQ-20221117	EPA 8260	EIB	13	PASI-G
40255015018	MW-01-WG-20221117	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	EIB	13	PASI-G

PASI-G = Pace Analytical Services - Green Bay  
PASI-M = Pace Analytical Services - Minneapolis

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-23S-WG-20221116**      **Lab ID: 40255015001**      Collected: 11/16/22 13:37      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 16:14	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	35	%	15-125		1	11/21/22 15:49	11/22/22 16:14		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/29/22 14:58	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/29/22 14:58	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/29/22 14:58	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/29/22 14:58	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/29/22 14:58	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/29/22 14:58	127-18-4	
Trichloroethene	0.41J	ug/L	1.0	0.32	1		11/29/22 14:58	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/29/22 14:58	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/29/22 14:58	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/29/22 14:58	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		11/29/22 14:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		11/29/22 14:58	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		11/29/22 14:58	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-20S-WG-20221116**      **Lab ID: 40255015002**      Collected: 11/16/22 14:10      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 16:31	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	39	%	15-125		1	11/21/22 15:49	11/22/22 16:31		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/29/22 11:42	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/29/22 11:42	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/29/22 11:42	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/29/22 11:42	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/29/22 11:42	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/29/22 11:42	127-18-4	
Trichloroethene	2.8	ug/L	1.0	0.32	1		11/29/22 11:42	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/29/22 11:42	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/29/22 11:42	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/29/22 11:42	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		11/29/22 11:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		11/29/22 11:42	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		11/29/22 11:42	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-26S-WG-20221116**      **Lab ID: 40255015003**      Collected: 11/16/22 14:24      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 16:48	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	35	%	15-125		1	11/21/22 15:49	11/22/22 16:48		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/29/22 15:17	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/29/22 15:17	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/29/22 15:17	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/29/22 15:17	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/29/22 15:17	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/29/22 15:17	127-18-4	
Trichloroethene	0.48J	ug/L	1.0	0.32	1		11/29/22 15:17	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/29/22 15:17	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/29/22 15:17	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/29/22 15:17	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		11/29/22 15:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		11/29/22 15:17	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		11/29/22 15:17	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-09-WG-20221116**      **Lab ID: 40255015004**      Collected: 11/16/22 15:10      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 17:05	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	36	%	15-125		1	11/21/22 15:49	11/22/22 17:05		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/29/22 12:02	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/29/22 12:02	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/29/22 12:02	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/29/22 12:02	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/29/22 12:02	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/29/22 12:02	127-18-4	
Trichloroethene	0.35J	ug/L	1.0	0.32	1		11/29/22 12:02	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/29/22 12:02	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/29/22 12:02	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/29/22 12:02	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		11/29/22 12:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		11/29/22 12:02	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		11/29/22 12:02	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-03-WG-20221117**      **Lab ID: 40255015005**      Collected: 11/17/22 09:30      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 18:13	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	41	%	15-125		1	11/21/22 15:49	11/22/22 18:13		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 14:42	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/30/22 14:42	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 14:42	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/30/22 14:42	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/30/22 14:42	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/30/22 14:42	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/30/22 14:42	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/30/22 14:42	75-01-4	
cis-1,2-Dichloroethene	1.6	ug/L	1.0	0.47	1		11/30/22 14:42	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/30/22 14:42	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		11/30/22 14:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/30/22 14:42	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		11/30/22 14:42	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-6S-WG-20221117**      **Lab ID: 40255015006**      Collected: 11/17/22 10:00      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 18:30	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	39	%	15-125		1	11/21/22 15:49	11/22/22 18:30		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 15:02	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/30/22 15:02	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 15:02	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/30/22 15:02	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/30/22 15:02	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/30/22 15:02	127-18-4	
Trichloroethene	4.1	ug/L	1.0	0.32	1		11/30/22 15:02	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/30/22 15:02	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/30/22 15:02	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/30/22 15:02	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		11/30/22 15:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		11/30/22 15:02	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		11/30/22 15:02	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-04-WG-20221117**      **Lab ID: 40255015007**      Collected: 11/17/22 10:15      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 18:47	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	38	%	15-125		1	11/21/22 15:49	11/22/22 18:47		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 16:42	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/30/22 16:42	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 16:42	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/30/22 16:42	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/30/22 16:42	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/30/22 16:42	127-18-4	
Trichloroethene	77.5	ug/L	1.0	0.32	1		11/30/22 16:42	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/30/22 16:42	75-01-4	
cis-1,2-Dichloroethene	6.0	ug/L	1.0	0.47	1		11/30/22 16:42	156-59-2	
trans-1,2-Dichloroethene	5.2	ug/L	1.0	0.53	1		11/30/22 16:42	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		11/30/22 16:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/30/22 16:42	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		11/30/22 16:42	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: FB-01-WQ-20221117**      **Lab ID: 40255015008**      Collected: 11/17/22 11:10      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 19:04	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	44	%	15-125		1	11/21/22 15:49	11/22/22 19:04		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 13:43	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/30/22 13:43	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 13:43	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/30/22 13:43	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/30/22 13:43	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/30/22 13:43	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/30/22 13:43	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/30/22 13:43	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/30/22 13:43	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/30/22 13:43	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	70-130		1		11/30/22 13:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		11/30/22 13:43	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		11/30/22 13:43	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-7S-WG-20221117**      **Lab ID: 40255015009**      Collected: 11/17/22 11:20      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA Mod. 3510C Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 19:21	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	44	%	15-125		1	11/21/22 15:49	11/22/22 19:21		
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 15:22	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/30/22 15:22	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/30/22 15:22	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/30/22 15:22	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/30/22 15:22	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/30/22 15:22	127-18-4	
Trichloroethene	17.2	ug/L	1.0	0.32	1		11/30/22 15:22	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/30/22 15:22	75-01-4	
cis-1,2-Dichloroethene	0.50J	ug/L	1.0	0.47	1		11/30/22 15:22	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/30/22 15:22	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		11/30/22 15:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		11/30/22 15:22	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		11/30/22 15:22	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-15S-WG-20221117**      **Lab ID: 40255015010**      Collected: 11/17/22 12:46      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 19:38	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	46	%	15-125		1	11/21/22 15:49	11/22/22 19:38		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/22 14:10	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/21/22 14:10	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/22 14:10	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/21/22 14:10	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/21/22 14:10	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/21/22 14:10	127-18-4	
Trichloroethene	1.8	ug/L	1.0	0.32	1		11/21/22 14:10	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/21/22 14:10	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/21/22 14:10	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/21/22 14:10	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		11/21/22 14:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		11/21/22 14:10	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		11/21/22 14:10	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-15I-WG-20221117**      **Lab ID: 40255015011**      Collected: 11/17/22 13:16      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>74.5</b>	ug/L	1.2	0.53	1	11/23/22 17:14	11/28/22 16:44	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	40	%	15-125		1	11/23/22 17:14	11/28/22 16:44		P1
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.76</b>	ug/L	2.5	0.76	2.5		11/22/22 13:23	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.86</b>	ug/L	12.5	0.86	2.5		11/22/22 13:23	79-00-5	
1,1-Dichloroethane	<b>&lt;0.74</b>	ug/L	2.5	0.74	2.5		11/22/22 13:23	75-34-3	
1,1-Dichloroethene	<b>&lt;1.5</b>	ug/L	2.5	1.5	2.5		11/22/22 13:23	75-35-4	
1,2-Dichloroethane	<b>&lt;0.73</b>	ug/L	2.5	0.73	2.5		11/22/22 13:23	107-06-2	
Tetrachloroethene	<b>&lt;1.0</b>	ug/L	2.5	1.0	2.5		11/22/22 13:23	127-18-4	
Trichloroethene	<b>235</b>	ug/L	2.5	0.80	2.5		11/22/22 13:23	79-01-6	
Vinyl chloride	<b>&lt;0.44</b>	ug/L	2.5	0.44	2.5		11/22/22 13:23	75-01-4	
cis-1,2-Dichloroethene	<b>7.2</b>	ug/L	2.5	1.2	2.5		11/22/22 13:23	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;1.3</b>	ug/L	2.5	1.3	2.5		11/22/22 13:23	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		2.5		11/22/22 13:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		2.5		11/22/22 13:23	2199-69-1	
Toluene-d8 (S)	99	%	70-130		2.5		11/22/22 13:23	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-13S-WG-20221117**      **Lab ID: 40255015012**      Collected: 11/17/22 13:18      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>33.7</b>	ug/L	0.25	0.11	1	11/21/22 15:49	11/23/22 11:54	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	39	%	15-125		1	11/21/22 15:49	11/23/22 11:54		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>3.9</b>	ug/L	1.0	0.30	1		11/21/22 14:31	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		11/21/22 14:31	79-00-5	
1,1-Dichloroethane	<b>1.7</b>	ug/L	1.0	0.30	1		11/21/22 14:31	75-34-3	
1,1-Dichloroethene	<b>0.62J</b>	ug/L	1.0	0.58	1		11/21/22 14:31	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		11/21/22 14:31	107-06-2	
Tetrachloroethene	<b>0.45J</b>	ug/L	1.0	0.41	1		11/21/22 14:31	127-18-4	
Trichloroethene	<b>218</b>	ug/L	1.0	0.32	1		11/21/22 14:31	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		11/21/22 14:31	75-01-4	
cis-1,2-Dichloroethene	<b>1.4</b>	ug/L	1.0	0.47	1		11/21/22 14:31	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		11/21/22 14:31	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		11/21/22 14:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		11/21/22 14:31	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		11/21/22 14:31	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-15D-WG-20221117**      **Lab ID: 40255015013**      Collected: 11/17/22 13:55      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	7.9	ug/L	0.25	0.11	1	11/21/22 15:49	11/23/22 12:11	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	43	%	15-125		1	11/21/22 15:49	11/23/22 12:11		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/22/22 10:58	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/22/22 10:58	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/22/22 10:58	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/22/22 10:58	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/22/22 10:58	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/22/22 10:58	127-18-4	
Trichloroethene	2.0	ug/L	1.0	0.32	1		11/22/22 10:58	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/22/22 10:58	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/22/22 10:58	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/22/22 10:58	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		11/22/22 10:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		11/22/22 10:58	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		11/22/22 10:58	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: DUP-01-WG-20221117**      **Lab ID: 40255015014**      Collected: 11/17/22 13:55      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	7.7	ug/L	0.25	0.11	1	11/21/22 15:49	11/23/22 12:28	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	44	%	15-125		1	11/21/22 15:49	11/23/22 12:28		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/22/22 11:19	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/22/22 11:19	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/22/22 11:19	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/22/22 11:19	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/22/22 11:19	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/22/22 11:19	127-18-4	
Trichloroethene	1.9	ug/L	1.0	0.32	1		11/22/22 11:19	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/22/22 11:19	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/22/22 11:19	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/22/22 11:19	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		11/22/22 11:19	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/22/22 11:19	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		11/22/22 11:19	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-13D-WG-20221117**      **Lab ID: 40255015015**      Collected: 11/17/22 15:00      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/23/22 12:45	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	38	%	15-125		1	11/21/22 15:49	11/23/22 12:45		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/22 15:53	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/21/22 15:53	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/22 15:53	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/21/22 15:53	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/21/22 15:53	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/21/22 15:53	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/21/22 15:53	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/21/22 15:53	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/21/22 15:53	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/21/22 15:53	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	101	%	70-130		1		11/21/22 15:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		11/21/22 15:53	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		11/21/22 15:53	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: DUP-02-WG-20221117**      **Lab ID: 40255015016**      Collected: 11/17/22 15:00      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 21:19	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	41	%	15-125		1	11/21/22 15:49	11/22/22 21:19		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/22/22 11:39	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/22/22 11:39	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/22/22 11:39	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/22/22 11:39	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/22/22 11:39	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/22/22 11:39	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/22/22 11:39	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/22/22 11:39	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/22/22 11:39	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/22/22 11:39	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	101	%	70-130		1		11/22/22 11:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/22/22 11:39	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		11/22/22 11:39	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: TB-01-WQ-20221117**      **Lab ID: 40255015017**      Collected: 11/17/22 00:00      Received: 11/18/22 10:45      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/22 13:28	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/21/22 13:28	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/22 13:28	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/21/22 13:28	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/21/22 13:28	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/21/22 13:28	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/21/22 13:28	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/21/22 13:28	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/21/22 13:28	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/21/22 13:28	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		1		11/21/22 13:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		11/21/22 13:28	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		11/21/22 13:28	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

**Sample: MW-01-WG-20221117**      **Lab ID: 40255015018**      Collected: 11/17/22 15:30      Received: 11/18/22 10:45      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	11/21/22 15:49	11/22/22 21:36	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	45	%	15-125		1	11/21/22 15:49	11/22/22 21:36		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/22 17:58	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		11/21/22 17:58	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/22 17:58	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/21/22 17:58	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/21/22 17:58	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/21/22 17:58	127-18-4	
Trichloroethene	47.1	ug/L	1.0	0.32	1		11/21/22 17:58	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/21/22 17:58	75-01-4	
cis-1,2-Dichloroethene	0.86J	ug/L	1.0	0.47	1		11/21/22 17:58	156-59-2	
trans-1,2-Dichloroethene	0.64J	ug/L	1.0	0.53	1		11/21/22 17:58	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		11/21/22 17:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		11/21/22 17:58	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		11/21/22 17:58	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40255015

QC Batch: 431990 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Laboratory: Pace Analytical Services - Green Bay  
Associated Lab Samples: 40255015001, 40255015002, 40255015003, 40255015004

METHOD BLANK: 2488183 Matrix: Water  
Associated Lab Samples: 40255015001, 40255015002, 40255015003, 40255015004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	11/29/22 07:49	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	11/29/22 07:49	
1,1-Dichloroethane	ug/L	<0.30	1.0	11/29/22 07:49	
1,1-Dichloroethene	ug/L	<0.58	1.0	11/29/22 07:49	
1,2-Dichloroethane	ug/L	<0.29	1.0	11/29/22 07:49	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	11/29/22 07:49	
Tetrachloroethene	ug/L	<0.41	1.0	11/29/22 07:49	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	11/29/22 07:49	
Trichloroethene	ug/L	<0.32	1.0	11/29/22 07:49	
Vinyl chloride	ug/L	<0.17	1.0	11/29/22 07:49	
1,2-Dichlorobenzene-d4 (S)	%	100	70-130	11/29/22 07:49	
4-Bromofluorobenzene (S)	%	101	70-130	11/29/22 07:49	
Toluene-d8 (S)	%	102	70-130	11/29/22 07:49	

LABORATORY CONTROL SAMPLE: 2488184

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	44.5	89	70-134	
1,1,2-Trichloroethane	ug/L	50	47.1	94	70-130	
1,1-Dichloroethane	ug/L	50	45.1	90	70-130	
1,1-Dichloroethene	ug/L	50	46.7	93	74-131	
1,2-Dichloroethane	ug/L	50	44.9	90	70-137	
cis-1,2-Dichloroethene	ug/L	50	45.9	92	70-130	
Tetrachloroethene	ug/L	50	54.8	110	70-130	
trans-1,2-Dichloroethene	ug/L	50	45.8	92	70-130	
Trichloroethene	ug/L	50	46.9	94	70-130	
Vinyl chloride	ug/L	50	32.5	65	63-134	
1,2-Dichlorobenzene-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2489816 2489817

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40255003018 Result	Spike Conc.	Spike Conc.	MS Result							
1,1,1-Trichloroethane	ug/L	<6.1	2000	2000	1780	1800	89	90	70-134	1	20	
1,1,2-Trichloroethane	ug/L	<6.9	2000	2000	1870	2040	94	102	70-130	9	20	

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2489816		2489817		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40255003018 Result	MS Spike Conc.	MSD Spike Conc.									
1,1-Dichloroethane	ug/L	<5.9	2000	2000	1840	1880	92	94	70-130	2	20		
1,1-Dichloroethene	ug/L	<11.6	2000	2000	1920	1950	96	98	71-130	2	20		
1,2-Dichloroethane	ug/L	<5.8	2000	2000	1780	1870	89	94	70-137	5	20		
cis-1,2-Dichloroethene	ug/L	22.1	2000	2000	1870	1960	93	97	70-130	5	20		
Tetrachloroethene	ug/L	<8.2	2000	2000	2140	2250	107	113	70-130	5	20		
trans-1,2-Dichloroethene	ug/L	<10.6	2000	2000	1910	1910	96	96	70-130	0	20		
Trichloroethene	ug/L	1250	2000	2000	3250	3200	100	98	70-130	2	20		
Vinyl chloride	ug/L	<3.5	2000	2000	1420	1420	71	71	60-137	0	20		
1,2-Dichlorobenzene-d4 (S)	%						98	102	70-130				
4-Bromofluorobenzene (S)	%						98	101	70-130				
Toluene-d8 (S)	%						101	101	70-130				

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40255015

QC Batch: 431995 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Laboratory: Pace Analytical Services - Green Bay  
Associated Lab Samples: 40255015005, 40255015006, 40255015007, 40255015008, 40255015009

METHOD BLANK: 2488196 Matrix: Water  
Associated Lab Samples: 40255015005, 40255015006, 40255015007, 40255015008, 40255015009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	11/30/22 09:04	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	11/30/22 09:04	
1,1-Dichloroethane	ug/L	<0.30	1.0	11/30/22 09:04	
1,1-Dichloroethene	ug/L	<0.58	1.0	11/30/22 09:04	
1,2-Dichloroethane	ug/L	<0.29	1.0	11/30/22 09:04	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	11/30/22 09:04	
Tetrachloroethene	ug/L	<0.41	1.0	11/30/22 09:04	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	11/30/22 09:04	
Trichloroethene	ug/L	<0.32	1.0	11/30/22 09:04	
Vinyl chloride	ug/L	<0.17	1.0	11/30/22 09:04	
1,2-Dichlorobenzene-d4 (S)	%	99	70-130	11/30/22 09:04	
4-Bromofluorobenzene (S)	%	100	70-130	11/30/22 09:04	
Toluene-d8 (S)	%	99	70-130	11/30/22 09:04	

LABORATORY CONTROL SAMPLE: 2488197

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	52.8	106	70-134	
1,1,2-Trichloroethane	ug/L	50	50.8	102	70-130	
1,1-Dichloroethane	ug/L	50	52.5	105	70-130	
1,1-Dichloroethene	ug/L	50	57.2	114	74-131	
1,2-Dichloroethane	ug/L	50	48.8	98	70-137	
cis-1,2-Dichloroethene	ug/L	50	49.9	100	70-130	
Tetrachloroethene	ug/L	50	46.3	93	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.7	107	70-130	
Trichloroethene	ug/L	50	51.2	102	70-130	
Vinyl chloride	ug/L	50	56.1	112	63-134	
1,2-Dichlorobenzene-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2488634 2488635

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40255003044 Result	Spike Conc.	Spike Conc.	Result							Result
1,1,1-Trichloroethane	ug/L	<0.30	50	50	54.2	57.0	108	114	70-134	5	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	51.1	53.8	102	108	70-130	5	20	

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2488634 2488635												
Parameter	Units	40255003044		MS	MSD	MS		MSD		% Rec Limits	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
1,1-Dichloroethane	ug/L	<0.30	50	50	53.6	56.1	107	112	70-130	5	20	
1,1-Dichloroethene	ug/L	<0.58	50	50	58.6	61.5	117	123	71-130	5	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	50.4	52.4	101	105	70-137	4	20	
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	50.9	53.5	102	107	70-130	5	20	
Tetrachloroethene	ug/L	<0.41	50	50	46.5	49.9	93	100	70-130	7	20	
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	55.8	59.0	112	118	70-130	6	20	
Trichloroethene	ug/L	<0.32	50	50	51.8	54.7	104	109	70-130	5	20	
Vinyl chloride	ug/L	<0.17	50	50	56.9	58.6	114	117	60-137	3	20	
1,2-Dichlorobenzene-d4 (S)	%						98	99	70-130			
4-Bromofluorobenzene (S)	%						99	101	70-130			
Toluene-d8 (S)	%						98	100	70-130			

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40255015

QC Batch:	431999	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40255015010, 40255015011, 40255015012, 40255015013, 40255015014, 40255015015, 40255015016, 40255015017, 40255015018

METHOD BLANK: 2488206 Matrix: Water  
Associated Lab Samples: 40255015010, 40255015011, 40255015012, 40255015013, 40255015014, 40255015015, 40255015016, 40255015017, 40255015018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	11/21/22 07:57	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	11/21/22 07:57	
1,1-Dichloroethane	ug/L	<0.30	1.0	11/21/22 07:57	
1,1-Dichloroethene	ug/L	<0.58	1.0	11/21/22 07:57	
1,2-Dichloroethane	ug/L	<0.29	1.0	11/21/22 07:57	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	11/21/22 07:57	
Tetrachloroethene	ug/L	<0.41	1.0	11/21/22 07:57	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	11/21/22 07:57	
Trichloroethene	ug/L	<0.32	1.0	11/21/22 07:57	
Vinyl chloride	ug/L	<0.17	1.0	11/21/22 07:57	
1,2-Dichlorobenzene-d4 (S)	%	104	70-130	11/21/22 07:57	
4-Bromofluorobenzene (S)	%	100	70-130	11/21/22 07:57	
Toluene-d8 (S)	%	103	70-130	11/21/22 07:57	

LABORATORY CONTROL SAMPLE: 2488207

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	58.2	116	70-134	
1,1,2-Trichloroethane	ug/L	50	50.5	101	70-130	
1,1-Dichloroethane	ug/L	50	56.0	112	70-130	
1,1-Dichloroethene	ug/L	50	59.7	119	74-131	
1,2-Dichloroethane	ug/L	50	56.1	112	70-137	
cis-1,2-Dichloroethene	ug/L	50	51.5	103	70-130	
Tetrachloroethene	ug/L	50	57.3	115	70-130	
trans-1,2-Dichloroethene	ug/L	50	51.5	103	70-130	
Trichloroethene	ug/L	50	56.1	112	70-130	
Vinyl chloride	ug/L	50	52.5	105	63-134	
1,2-Dichlorobenzene-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			105	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2488309 2488310

Parameter	Units	40255015010 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
1,1,1-Trichloroethane	ug/L	<0.30	50	50	61.2	61.0	122	122	70-134	0	20	

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2488309		2488310		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40255015010 Result	MS Spike Conc.	MSD Spike Conc.									
1,1,2-Trichloroethane	ug/L	<0.34	50	50	50.4	50.6	101	101	70-130	1	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	58.6	58.5	117	117	70-130	0	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	62.4	61.5	125	123	71-130	1	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	56.5	56.9	113	114	70-137	1	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	53.3	53.2	107	106	70-130	0	20		
Tetrachloroethene	ug/L	<0.41	50	50	58.9	59.8	118	120	70-130	2	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	54.9	54.2	110	108	70-130	1	20		
Trichloroethene	ug/L	1.8	50	50	60.1	59.8	117	116	70-130	0	20		
Vinyl chloride	ug/L	<0.17	50	50	51.8	50.3	104	101	60-137	3	20		
1,2-Dichlorobenzene-d4 (S)	%						102	101	70-130				
4-Bromofluorobenzene (S)	%						104	105	70-130				
Toluene-d8 (S)	%						101	100	70-130				

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40255015

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QC Batch:	854682	Analysis Method:	EPA 8270E by SIM
QC Batch Method:	EPA Mod. 3510C	Analysis Description:	8270E Water 14 Dioxane by SIM
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 40255015001, 40255015002, 40255015003, 40255015004, 40255015005, 40255015006, 40255015007, 40255015008, 40255015009, 40255015010, 40255015012, 40255015013, 40255015014, 40255015015, 40255015016, 40255015018

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METHOD BLANK: 4518886 Matrix: Water

Associated Lab Samples: 40255015001, 40255015002, 40255015003, 40255015004, 40255015005, 40255015006, 40255015007, 40255015008, 40255015009, 40255015010, 40255015012, 40255015013, 40255015014, 40255015015, 40255015016, 40255015018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (SIM)	ug/L	<0.11	0.25	11/22/22 11:26	
1,4-Dioxane-d8 (S)	%	32	15-125	11/22/22 11:26	

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LABORATORY CONTROL SAMPLE: 4518887

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (SIM)	ug/L	10	10.0	100	30-133	
1,4-Dioxane-d8 (S)	%			37	15-125	

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MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4518888 4518889

Parameter	Units	10634516001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (SIM)	ug/L	<0.35	33.3	33.3	31.7	33.9	95	102	30-150	7	30	
1,4-Dioxane-d8 (S)	%						46	44	15-125			P1

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### QUALITY CONTROL DATA

Project: 0383990 TWO RIVERS  
Pace Project No.: 40255015

QC Batch: 855144	Analysis Method: EPA 8270E by SIM
QC Batch Method: EPA Mod. 3510C	Analysis Description: 8270E Water 14 Dioxane by SIM
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 40255015011

METHOD BLANK: 4520702 Matrix: Water  
Associated Lab Samples: 40255015011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (SIM)	ug/L	<0.11	0.25	11/28/22 10:50	
1,4-Dioxane-d8 (S)	%.	34	15-125	11/28/22 10:50	

LABORATORY CONTROL SAMPLE & LCSD: 4520703

Parameter	Units	4520704								
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,4-Dioxane (SIM)	ug/L	10	9.6	9.0	96	90	30-133	7	20	
1,4-Dioxane-d8 (S)	%.				32	39	15-125			

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## QUALIFIERS

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

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### 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.

### BATCH QUALIFIERS

Batch: 855412

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

P1 Routine initial sample volume or weight was not used for extraction, resulting in elevated reporting limits.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990 TWO RIVERS

Pace Project No.: 40255015

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40255015001	MW-23S-WG-20221116	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015002	MW-20S-WG-20221116	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015003	MW-26S-WG-20221116	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015004	MW-09-WG-20221116	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015005	MW-03-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015006	MW-6S-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015007	MW-04-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015008	FB-01-WQ-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015009	MW-7S-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015010	MW-15S-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015011	MW-15I-WG-20221117	EPA Mod. 3510C	855144	EPA 8270E by SIM	855412
40255015012	MW-13S-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015013	MW-15D-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015014	DUP-01-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015015	MW-13D-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015016	DUP-02-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015018	MW-01-WG-20221117	EPA Mod. 3510C	854682	EPA 8270E by SIM	854886
40255015001	MW-23S-WG-20221116	EPA 8260	431990		
40255015002	MW-20S-WG-20221116	EPA 8260	431990		
40255015003	MW-26S-WG-20221116	EPA 8260	431990		
40255015004	MW-09-WG-20221116	EPA 8260	431990		
40255015005	MW-03-WG-20221117	EPA 8260	431995		
40255015006	MW-6S-WG-20221117	EPA 8260	431995		
40255015007	MW-04-WG-20221117	EPA 8260	431995		
40255015008	FB-01-WQ-20221117	EPA 8260	431995		
40255015009	MW-7S-WG-20221117	EPA 8260	431995		
40255015010	MW-15S-WG-20221117	EPA 8260	431999		
40255015011	MW-15I-WG-20221117	EPA 8260	431999		
40255015012	MW-13S-WG-20221117	EPA 8260	431999		
40255015013	MW-15D-WG-20221117	EPA 8260	431999		
40255015014	DUP-01-WG-20221117	EPA 8260	431999		
40255015015	MW-13D-WG-20221117	EPA 8260	431999		
40255015016	DUP-02-WG-20221117	EPA 8260	431999		
40255015017	TB-01-WQ-20221117	EPA 8260	431999		
40255015018	MW-01-WG-20221117	EPA 8260	431999		

### REPORT OF LABORATORY ANALYSIS

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**CHAIN-OF-CUSTODY Analytical Request Document**

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40255015

Company: **ERM**

Address: **Milwaukee, WI**

Report To: **John Roberts**

Copy To: **Lauren Lande**

Customer Project Name/Number: **0383990**

State: **WI** County/City: **Two Rivers, WI** Time Zone Collected: **[ ] PT [ ] MT [X] CT [ ] ET**

Billing Information: **ERM Accounts Payable**

Email To: **John.Roberts@ERM.com**

Site Collection Info/Address: **Two Rivers, WI**

**ALL SHADED AREAS are for LAB USE ONLY**

Container Preservative Type \*\*

Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Phone: \_\_\_\_\_ Site/Facility ID #: \_\_\_\_\_ Compliance Monitoring?  Yes  No

Collected By (print): **Leann Gody, Kari Grantler** Purchase Order #: \_\_\_\_\_ DW PWS ID #: \_\_\_\_\_

Quote #: \_\_\_\_\_ DW Location Code: \_\_\_\_\_

Collect Ad By (signature): *[Signature]* Turnaround Date Required: **Standard** Immediately Packed on Ice:  Yes  No

Sample Disposal:  Dispose as appropriate  Return  Archive \_\_\_\_\_ Rush:  Same Day  Next Day  2 Day  3 Day  4 Day  5 Day  Hold: \_\_\_\_\_ (Expedite Charges Apply)

Field Filtered (if applicable):  Yes  No Analysis: \_\_\_\_\_

Analyses										Lab Profile/Line:	
<b>Site Specific</b> <b>8260 VOCs</b> <b>1,4-Dioxane</b>										Lab Sample Receipt Checklist:	
										Custody Seals Present/Intact	Y N NA
										Custody Signatures Present	Y N NA
										Collector Signature Present	Y N NA
										Bottles Intact	Y N NA
										Correct Bottles	Y N NA
										Sufficient Volume	Y N NA
										Samples Received on Ice	Y N NA
										VOA - Headspace Acceptable	Y N NA
										USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA										
Residual Chlorine Present	Y N NA										
Cl Strips:											
Sample pH Acceptable	Y N NA										
pH Strips:											
Sulfide Present	Y N NA										
Lead Acetate Strips:											

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-15I-WG-20221117	GW	Grab	11/17/22	1316			5	X X
MW-13S-WG-20221117				1318			5	X X
MW-15D-WG-20221117				1355			5	X X
DUP-01-WG-20221117				1355			5	X X
MW-13D-WG-20221117				1500			5	X X
DUP-02-WG-20221117				1500			5	X X
TB-01-WQ-20221117	WQ						2	X
MW-01-WG-20221117	GW	Grab	11/17/22	1530			5	X X

LAB USE ONLY:

Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet  Blue  Dry  None

Packing Material Used: *15mm 0.5 1 pg 1*

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: **2782646**

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received:  Y N NA

Therm ID# \_\_\_\_\_

Cooler 1 Temp Upon Receipt: \_\_\_\_\_ oC

Cooler 1 Therm Corr. Factor: \_\_\_\_\_ oC

Cooler 1 Corrected Temp: \_\_\_\_\_ oC

Comments:

Relinquished by/Company: (Signature) *[Signature]* Date/Time: **1045 11/18/22**

Relinquished by/Company: (Signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

Relinquished by/Company: (Signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received by/Company: (Signature) *[Signature]* Date/Time: **11/18/22 1045**

Received by/Company: (Signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received by/Company: (Signature) \_\_\_\_\_ Date/Time: \_\_\_\_\_

MTJL LAB USE ONLY

Table #: \_\_\_\_\_

Acctnum: \_\_\_\_\_

Template: \_\_\_\_\_

Prelogin: \_\_\_\_\_

PM: \_\_\_\_\_

PB: \_\_\_\_\_

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): \_\_\_\_\_ Page **32** of **36**

YES / NO of: **3**



Effective Date: 8/16/2022

*KP 11/18/22*  
**492-ERM**

Sample Preservation Receipt Form  
 Project # **4055015**

Client Name: 492-ERM  
 All containers needing preservation have been checked and noted below.  
 Lab Lot# of pH paper

Yes  No  N/A  
 Lab Std #/ID of preservation (if pH adjusted)

Initial when completed. Date/Time

Pace Lab #	Glass						Plastic						Vials					Jars				General		VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)					
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU								SP5T	ZPLC	GN 1	GN 2	
001				2												3																			2.5 / 5
002				2												3																			2.5 / 5
003				2												3																			2.5 / 5
004				2												3																			2.5 / 5
005				2												3																			2.5 / 5
006				2												3																			2.5 / 5
007				2												3																			2.5 / 5
008				2												3																			2.5 / 5
009				2												3																			2.5 / 5
010				2												3																			2.5 / 5
011				2												3																			2.5 / 5
012				2												3																			2.5 / 5
013				2												3																			2.5 / 5
014				2												3																			2.5 / 5
015				2												3																			2.5 / 5
016				2												3																			2.5 / 5
017				2												2																			2.5 / 5
018				2												3																			2.5 / 5
019																																			2.5 / 5
020																																			2.5 / 5

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

<b>AG1U</b>	1 liter amber glass	<b>BP1U</b>	1 liter plastic unpres	<b>VG9C</b>	40 mL clear ascorbic w/ HCl	<b>JGFU</b>	4 oz amber jar unpres
<b>BG1U</b>	1 liter clear glass	<b>BP3U</b>	250 mL plastic unpres	<b>DG9T</b>	40 mL amber Na Thio	<b>JG9U</b>	9 oz amber jar unpres
<b>AG1H</b>	1 liter amber glass HCL	<b>BP3B</b>	250 mL plastic NaOH	<b>VG9U</b>	40 mL clear vial unpres	<b>WGFU</b>	4 oz clear jar unpres
<b>AG4S</b>	125 mL amber glass H2SO4	<b>BP3N</b>	250 mL plastic HNO3	<b>VG9H</b>	40 mL clear vial HCL	<b>WPFU</b>	4 oz plastic jar unpres
<b>AG5U</b>	100 mL amber glass unpres	<b>BP3S</b>	250 mL plastic H2SO4	<b>VG9M</b>	40 mL clear vial MeOH	<b>SP5T</b>	120 mL plastic Na Thiosulfate
<b>AG2S</b>	500 mL amber glass H2SO4	<b>BP2Z</b>	500 mL plastic NaOH + Zn	<b>VG9D</b>	40 mL clear vial DI	<b>ZPLC</b>	ziploc bag
<b>BG3U</b>	250 mL clear glass unpres					<b>GN 1</b>	
						<b>GN 2</b>	

**Sample Condition Upon Receipt Form (SCUR)**

Project #:

Client Name: ERM

WO#: **40255015**

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



Tracking #: \_\_\_\_\_

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - 110 Type of Ice:  Wet  Blue Dry None  Meltwater Only

Cooler Temperature Uncorr: 3° / Corr. 3°

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

Person examining contents:  
 Date: 11/18/22 Initials: MP  
 Labeled By Initials: mt

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

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- DI VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Correct Type: <u>Pace Green Bay</u> , 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 checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>hl</u>		<u>012 "MW-01-WG-20221117"</u> <u>placed by time</u>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>11/18/22</u> <u>MP</u>
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 in

March 27, 2023

Ryan Plath  
ERM, INC.  
7311 W. Greenfield Ave.  
Milwaukee, WI 53214

RE: Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

Dear Ryan Plath:

Enclosed are the analytical results for sample(s) received by the laboratory on March 15, 2023. 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
- Pace Analytical Services - Minneapolis

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

Sincerely,



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

Enclosures

cc: John Roberts, ERM, Inc.  
David deCourcy-Bower, ERM, Inc.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

### **Pace Analytical Services, LLC - Minneapolis MN**

1700 Elm Street SE, Minneapolis, MN 55414  
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab

A2LA Certification #: 2926.01\*  
Alabama Certification #: 40770  
Alaska Contaminated Sites Certification #: 17-009\*  
Alaska DW Certification #: MN00064  
Arizona Certification #: AZ0014\*  
Arkansas DW Certification #: MN00064  
Arkansas WW Certification #: 88-0680  
California Certification #: 2929  
Colorado Certification #: MN00064  
Connecticut Certification #: PH-0256  
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137  
Florida Certification #: E87605\*  
Georgia Certification #: 959  
GMP+ Certification #: GMP050884  
Hawaii Certification #: MN00064  
Idaho Certification #: MN00064  
Illinois Certification #: 200011  
Indiana Certification #: C-MN-01  
Iowa Certification #: 368  
Kansas Certification #: E-10167  
Kentucky DW Certification #: 90062  
Kentucky WW Certification #: 90062  
Louisiana DEQ Certification #: AI-03086\*  
Louisiana DW Certification #: MN00064  
Maine Certification #: MN00064\*  
Maryland Certification #: 322  
Michigan Certification #: 9909  
Minnesota Certification #: 027-053-137\*  
Minnesota Dept of Ag Approval: via MN 027-053-137  
Minnesota Petrofund Registration #: 1240\*  
Mississippi Certification #: MN00064

Missouri Certification #: 10100  
Montana Certification #: CERT0092  
Nebraska Certification #: NE-OS-18-06  
Nevada Certification #: MN00064  
New Hampshire Certification #: 2081\*  
New Jersey Certification #: MN002  
New York Certification #: 11647\*  
North Carolina DW Certification #: 27700  
North Carolina WW Certification #: 530  
North Dakota Certification (A2LA) #: R-036  
North Dakota Certification (MN) #: R-036  
Ohio DW Certification #: 41244  
Ohio VAP Certification (1700) #: CL101  
Ohio VAP Certification (1800) #: CL110\*  
Oklahoma Certification #: 9507\*  
Oregon Primary Certification #: MN300001  
Oregon Secondary Certification #: MN200001\*  
Pennsylvania Certification #: 68-00563  
Puerto Rico Certification #: MN00064  
South Carolina Certification #:74003001  
Tennessee Certification #: TN02818  
Texas Certification #: T104704192\*  
Utah Certification #: MN00064\*  
Vermont Certification #: VT-027053137  
Virginia Certification #: 460163\*  
Washington Certification #: C486\*  
West Virginia DEP Certification #: 382  
West Virginia DW Certification #: 9952 C  
Wisconsin Certification #: 999407970  
Wyoming UST Certification #: via A2LA 2926.01  
USDA Permit #: P330-19-00208  
\*Please Note: Applicable air certifications are denoted with an asterisk (\*).

### **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

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## SAMPLE SUMMARY

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40259410001	MW-09-WG-20230314	Water	03/14/23 09:00	03/15/23 13:30
40259410002	MW-04-WG-20230314	Water	03/14/23 09:50	03/15/23 13:30
40259410003	MW-7S-WG-20230314	Water	03/14/23 11:10	03/15/23 13:30
40259410004	MW-20S-WG-20230314	Water	03/14/23 10:10	03/15/23 13:30
40259410005	MW-01-WG-20230314	Water	03/14/23 11:30	03/15/23 13:30
40259410006	MW-03-WG-20230314	Water	03/14/23 13:45	03/15/23 13:30
40259410007	MW-26S-WG-20230314	Water	03/14/23 15:00	03/15/23 13:30
40259410008	MW-23S-WG-20230314	Water	03/14/23 15:30	03/15/23 13:30
40259410009	MW-13S-WG-20230314	Water	03/14/23 15:45	03/15/23 13:30
40259410010	MW-6S-WG-20230314	Water	03/14/23 14:00	03/15/23 13:30
40259410011	MW-15S-WG-20230315	Water	03/15/23 09:10	03/15/23 13:30
40259410012	MW-15I-WG-20230315	Water	03/15/23 09:50	03/15/23 13:30
40259410013	MW-15D-WG-20230315	Water	03/15/23 10:55	03/15/23 13:30
40259410014	MW-13D-WG-20230315	Water	03/15/23 09:35	03/15/23 13:30
40259410015	DUP-01-WG-20230315	Water	03/15/23 00:00	03/15/23 13:30
40259410016	DUP-02-WG-20230315	Water	03/15/23 00:00	03/15/23 13:30
40259410017	FB-01-WQ-20230315	Water	03/15/23 11:40	03/15/23 13:30
40259410018	TB-01-WQ-20230315	Water	03/15/23 00:00	03/15/23 13:30

## REPORT OF LABORATORY ANALYSIS

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### SAMPLE ANALYTE COUNT

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40259410001	MW-09-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410002	MW-04-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410003	MW-7S-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410004	MW-20S-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410005	MW-01-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410006	MW-03-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410007	MW-26S-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410008	MW-23S-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410009	MW-13S-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410010	MW-6S-WG-20230314	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410011	MW-15S-WG-20230315	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410012	MW-15I-WG-20230315	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410013	MW-15D-WG-20230315	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410014	MW-13D-WG-20230315	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410015	DUP-01-WG-20230315	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410016	DUP-02-WG-20230315	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410017	FB-01-WQ-20230315	EPA 8270E by SIM	TWH	2	PASI-M
		EPA 8260	CXJ	13	PASI-G
40259410018	TB-01-WQ-20230315	EPA 8260	CXJ	13	PASI-G

PASI-G = Pace Analytical Services - Green Bay  
PASI-M = Pace Analytical Services - Minneapolis

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: MW-09-WG-20230314**      **Lab ID: 40259410001**      Collected: 03/14/23 09:00      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.12	ug/L	0.29	0.12	1	03/20/23 12:14	03/21/23 13:28	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	38	%	10-130		1	03/20/23 12:14	03/21/23 13:28		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 14:15	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 14:15	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 14:15	75-35-4	M1
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 14:15	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 14:15	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 14:15	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 14:15	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 14:15	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		03/16/23 14:15	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 14:15	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		03/16/23 14:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		03/16/23 14:15	2199-69-1	
Toluene-d8 (S)	94	%	70-130		1		03/16/23 14:15	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

**Sample: MW-04-WG-20230314**      **Lab ID: 40259410002**      Collected: 03/14/23 09:50      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	03/20/23 12:14	03/21/23 13:45	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	36	%	10-130		1	03/20/23 12:14	03/21/23 13:45		
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 18:37	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 18:37	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 18:37	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 18:37	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 18:37	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 18:37	127-18-4	
Trichloroethene	44.0	ug/L	1.0	0.32	1		03/16/23 18:37	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 18:37	75-01-4	
cis-1,2-Dichloroethene	2.8	ug/L	1.0	0.47	1		03/16/23 18:37	156-59-2	
trans-1,2-Dichloroethene	2.5	ug/L	1.0	0.53	1		03/16/23 18:37	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	86	%	70-130		1		03/16/23 18:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		03/16/23 18:37	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		03/16/23 18:37	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: MW-7S-WG-20230314**      **Lab ID: 40259410003**      Collected: 03/14/23 11:10      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	03/20/23 12:14	03/21/23 14:02	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	40	%	10-130		1	03/20/23 12:14	03/21/23 14:02		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 17:03	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 17:03	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 17:03	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 17:03	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 17:03	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 17:03	127-18-4	
Trichloroethene	14.5	ug/L	1.0	0.32	1		03/16/23 17:03	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 17:03	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 17:03	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 17:03	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	88	%	70-130		1		03/16/23 17:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		03/16/23 17:03	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		03/16/23 17:03	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: MW-20S-WG-20230314**      **Lab ID: 40259410004**      Collected: 03/14/23 10:10      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.10	ug/L	0.24	0.10	1	03/20/23 12:14	03/21/23 14:18	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	35	%	10-130		1	03/20/23 12:14	03/21/23 14:18		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 14:34	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 14:34	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 14:34	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 14:34	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 14:34	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 14:34	127-18-4	
Trichloroethene	0.33J	ug/L	1.0	0.32	1		03/16/23 14:34	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 14:34	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 14:34	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 14:34	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	70-130		1		03/16/23 14:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	70-130		1		03/16/23 14:34	2199-69-1	
Toluene-d8 (S)	93	%	70-130		1		03/16/23 14:34	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: MW-01-WG-20230314**      **Lab ID: 40259410005**      Collected: 03/14/23 11:30      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.10	ug/L	0.24	0.10	1	03/20/23 12:14	03/21/23 14:35	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	42	%	10-130		1	03/20/23 12:14	03/21/23 14:35		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 17:22	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 17:22	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 17:22	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 17:22	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 17:22	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 17:22	127-18-4	
Trichloroethene	29.4	ug/L	1.0	0.32	1		03/16/23 17:22	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 17:22	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 17:22	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 17:22	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	88	%	70-130		1		03/16/23 17:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		03/16/23 17:22	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		03/16/23 17:22	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: MW-03-WG-20230314**      **Lab ID: 40259410006**      Collected: 03/14/23 13:45      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	03/20/23 12:14	03/21/23 14:52	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	37	%	10-130		1	03/20/23 12:14	03/21/23 14:52		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 14:53	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 14:53	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 14:53	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 14:53	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 14:53	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 14:53	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		03/16/23 14:53	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 14:53	75-01-4	
cis-1,2-Dichloroethene	1.2	ug/L	1.0	0.47	1		03/16/23 14:53	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 14:53	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		03/16/23 14:53	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		03/16/23 14:53	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		03/16/23 14:53	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: MW-26S-WG-20230314**      **Lab ID: 40259410007**      Collected: 03/14/23 15:00      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	03/20/23 12:14	03/21/23 15:09	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	39	%	10-130		1	03/20/23 12:14	03/21/23 15:09		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 17:41	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 17:41	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 17:41	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 17:41	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 17:41	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 17:41	127-18-4	
Trichloroethene	0.39J	ug/L	1.0	0.32	1		03/16/23 17:41	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 17:41	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 17:41	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 17:41	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	86	%	70-130		1		03/16/23 17:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		03/16/23 17:41	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		03/16/23 17:41	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

**Sample: MW-23S-WG-20230314**    **Lab ID: 40259410008**    Collected: 03/14/23 15:30    Received: 03/15/23 13:30    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA Mod. 3510C Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.26	0.11	1	03/20/23 12:14	03/21/23 15:26	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	39	%	10-130		1	03/20/23 12:14	03/21/23 15:26		
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 18:00	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 18:00	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 18:00	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 18:00	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 18:00	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 18:00	127-18-4	
Trichloroethene	2.3	ug/L	1.0	0.32	1		03/16/23 18:00	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 18:00	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 18:00	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 18:00	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	86	%	70-130		1		03/16/23 18:00	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		03/16/23 18:00	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		03/16/23 18:00	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

**Sample: MW-13S-WG-20230314**    **Lab ID: 40259410009**    Collected: 03/14/23 15:45    Received: 03/15/23 13:30    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA Mod. 3510C Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>19.9</b>	ug/L	0.24	0.10	1	03/20/23 12:14	03/21/23 15:43	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	38	%	10-130		1	03/20/23 12:14	03/21/23 15:43		
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>1.8</b>	ug/L	1.0	0.30	1		03/16/23 15:11	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		03/16/23 15:11	79-00-5	
1,1-Dichloroethane	<b>0.98J</b>	ug/L	1.0	0.30	1		03/16/23 15:11	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		03/16/23 15:11	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		03/16/23 15:11	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		03/16/23 15:11	127-18-4	
Trichloroethene	<b>183</b>	ug/L	1.0	0.32	1		03/16/23 15:11	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		03/16/23 15:11	75-01-4	
cis-1,2-Dichloroethene	<b>0.53J</b>	ug/L	1.0	0.47	1		03/16/23 15:11	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		03/16/23 15:11	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	70-130		1		03/16/23 15:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		03/16/23 15:11	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		03/16/23 15:11	2037-26-5	HS

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: MW-6S-WG-20230314**      **Lab ID: 40259410010**      Collected: 03/14/23 14:00      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.096	ug/L	0.23	0.096	1	03/20/23 12:14	03/21/23 16:00	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	39	%	10-130		1	03/20/23 12:14	03/21/23 16:00		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 18:18	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 18:18	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 18:18	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 18:18	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 18:18	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 18:18	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		03/16/23 18:18	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 18:18	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 18:18	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 18:18	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	87	%	70-130		1		03/16/23 18:18	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		03/16/23 18:18	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		03/16/23 18:18	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

**Sample: MW-15S-WG-20230315**    **Lab ID: 40259410011**    Collected: 03/15/23 09:10    Received: 03/15/23 13:30    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA Mod. 3510C Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.25	0.11	1	03/20/23 12:14	03/21/23 16:16	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	39	%	10-130		1	03/20/23 12:14	03/21/23 16:16		
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 15:30	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 15:30	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 15:30	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 15:30	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 15:30	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 15:30	127-18-4	
Trichloroethene	1.4	ug/L	1.0	0.32	1		03/16/23 15:30	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 15:30	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 15:30	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 15:30	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	88	%	70-130		1		03/16/23 15:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	70-130		1		03/16/23 15:30	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		03/16/23 15:30	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

**Sample: MW-15I-WG-20230315**      **Lab ID: 40259410012**      Collected: 03/15/23 09:50      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	67.0	ug/L	0.50	0.21	1	03/22/23 13:27	03/23/23 12:11	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	46	%	10-130		1	03/22/23 13:27	03/23/23 12:11		P1
<b>8260 MSV</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<3.0	ug/L	10.0	3.0	10		03/16/23 19:33	71-55-6	
1,1,2-Trichloroethane	<3.4	ug/L	50.0	3.4	10		03/16/23 19:33	79-00-5	
1,1-Dichloroethane	<3.0	ug/L	10.0	3.0	10		03/16/23 19:33	75-34-3	
1,1-Dichloroethene	<5.8	ug/L	10.0	5.8	10		03/16/23 19:33	75-35-4	
1,2-Dichloroethane	<2.9	ug/L	10.0	2.9	10		03/16/23 19:33	107-06-2	
Tetrachloroethene	<4.1	ug/L	10.0	4.1	10		03/16/23 19:33	127-18-4	
Trichloroethene	684	ug/L	10.0	3.2	10		03/16/23 19:33	79-01-6	
Vinyl chloride	<1.7	ug/L	10.0	1.7	10		03/16/23 19:33	75-01-4	
cis-1,2-Dichloroethene	14.6	ug/L	10.0	4.7	10		03/16/23 19:33	156-59-2	
trans-1,2-Dichloroethene	<5.3	ug/L	10.0	5.3	10		03/16/23 19:33	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	86	%	70-130		10		03/16/23 19:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		10		03/16/23 19:33	2199-69-1	
Toluene-d8 (S)	98	%	70-130		10		03/16/23 19:33	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

**Sample: MW-15D-WG-20230315**      **Lab ID: 40259410013**      Collected: 03/15/23 10:55      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	6.0	ug/L	0.23	0.096	1	03/20/23 12:14	03/21/23 16:50	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	45	%	10-130		1	03/20/23 12:14	03/21/23 16:50		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 15:49	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 15:49	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 15:49	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 15:49	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 15:49	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 15:49	127-18-4	
Trichloroethene	1.8	ug/L	1.0	0.32	1		03/16/23 15:49	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 15:49	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 15:49	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 15:49	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	90	%	70-130		1		03/16/23 15:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		03/16/23 15:49	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		03/16/23 15:49	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: MW-13D-WG-20230315**      **Lab ID: 40259410014**      Collected: 03/15/23 09:35      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>0.23J</b>	ug/L	0.24	0.10	1	03/20/23 12:14	03/21/23 17:07	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	38	%	10-130		1	03/20/23 12:14	03/21/23 17:07		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		03/16/23 16:07	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		03/16/23 16:07	79-00-5	
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		03/16/23 16:07	75-34-3	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		03/16/23 16:07	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		03/16/23 16:07	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		03/16/23 16:07	127-18-4	
Trichloroethene	<b>&lt;0.32</b>	ug/L	1.0	0.32	1		03/16/23 16:07	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		03/16/23 16:07	75-01-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		03/16/23 16:07	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		03/16/23 16:07	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	88	%	70-130		1		03/16/23 16:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		03/16/23 16:07	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		03/16/23 16:07	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: DUP-01-WG-20230315**      **Lab ID: 40259410015**      Collected: 03/15/23 00:00      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<b>51.8</b>	ug/L	0.50	0.21	1	03/22/23 13:27	03/23/23 12:28	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	52	%	10-130		1	03/22/23 13:27	03/23/23 12:28		P1
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<b>1.6</b>	ug/L	1.0	0.30	1		03/16/23 16:26	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	5.0	0.34	1		03/16/23 16:26	79-00-5	
1,1-Dichloroethane	<b>1.0</b>	ug/L	1.0	0.30	1		03/16/23 16:26	75-34-3	
1,1-Dichloroethene	<b>0.80J</b>	ug/L	1.0	0.58	1		03/16/23 16:26	75-35-4	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		03/16/23 16:26	107-06-2	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		03/16/23 16:26	127-18-4	
Trichloroethene	<b>589</b>	ug/L	5.0	1.6	5		03/17/23 11:05	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		03/16/23 16:26	75-01-4	
cis-1,2-Dichloroethene	<b>13.0</b>	ug/L	1.0	0.47	1		03/16/23 16:26	156-59-2	
trans-1,2-Dichloroethene	<b>2.2</b>	ug/L	1.0	0.53	1		03/16/23 16:26	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	88	%	70-130		1		03/16/23 16:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		03/16/23 16:26	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		03/16/23 16:26	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: DUP-02-WG-20230315**      **Lab ID: 40259410016**      Collected: 03/15/23 00:00      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM      Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	5.5	ug/L	0.23	0.096	1	03/20/23 12:14	03/21/23 17:41	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	46	%	10-130		1	03/20/23 12:14	03/21/23 17:41		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/17/23 10:46	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/17/23 10:46	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/17/23 10:46	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/17/23 10:46	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/17/23 10:46	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/17/23 10:46	127-18-4	
Trichloroethene	1.7	ug/L	1.0	0.32	1		03/17/23 10:46	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/17/23 10:46	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/17/23 10:46	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/17/23 10:46	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		03/17/23 10:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		03/17/23 10:46	2199-69-1	
Toluene-d8 (S)	93	%	70-130		1		03/17/23 10:46	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample: FB-01-WQ-20230315**      **Lab ID: 40259410017**      Collected: 03/15/23 11:40      Received: 03/15/23 13:30      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8270E MSSV 14 Dioxane By SIM</b>									
Analytical Method: EPA 8270E by SIM    Preparation Method: EPA Mod. 3510C									
Pace Analytical Services - Minneapolis									
1,4-Dioxane (SIM)	<0.11	ug/L	0.26	0.11	1	03/20/23 12:14	03/21/23 17:58	123-91-1	
<b>Surrogates</b>									
1,4-Dioxane-d8 (S)	39	%	10-130		1	03/20/23 12:14	03/21/23 17:58		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 13:37	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 13:37	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 13:37	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 13:37	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 13:37	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 13:37	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		03/16/23 13:37	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 13:37	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 13:37	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 13:37	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		03/16/23 13:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		03/16/23 13:37	2199-69-1	
Toluene-d8 (S)	94	%	70-130		1		03/16/23 13:37	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

**Sample:** TB-01-WQ-20230315      **Lab ID:** 40259410018      Collected: 03/15/23 00:00      Received: 03/15/23 13:30      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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 13:56	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	5.0	0.34	1		03/16/23 13:56	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		03/16/23 13:56	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		03/16/23 13:56	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		03/16/23 13:56	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		03/16/23 13:56	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		03/16/23 13:56	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		03/16/23 13:56	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		03/16/23 13:56	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		03/16/23 13:56	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	70-130		1		03/16/23 13:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		03/16/23 13:56	2199-69-1	
Toluene-d8 (S)	93	%	70-130		1		03/16/23 13:56	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

QC Batch:	440036	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40259410001, 40259410002, 40259410003, 40259410004, 40259410005, 40259410006, 40259410007, 40259410008, 40259410009, 40259410010, 40259410011, 40259410012, 40259410013, 40259410014, 40259410015, 40259410016, 40259410017, 40259410018

METHOD BLANK: 2527628 Matrix: Water  
Associated Lab Samples: 40259410001, 40259410002, 40259410003, 40259410004, 40259410005, 40259410006, 40259410007, 40259410008, 40259410009, 40259410010, 40259410011, 40259410012, 40259410013, 40259410014, 40259410015, 40259410016, 40259410017, 40259410018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	03/16/23 11:41	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	03/16/23 11:41	
1,1-Dichloroethane	ug/L	<0.30	1.0	03/16/23 11:41	
1,1-Dichloroethene	ug/L	<0.58	1.0	03/16/23 11:41	
1,2-Dichloroethane	ug/L	<0.29	1.0	03/16/23 11:41	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	03/16/23 11:41	
Tetrachloroethene	ug/L	<0.41	1.0	03/16/23 11:41	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	03/16/23 11:41	
Trichloroethene	ug/L	<0.32	1.0	03/16/23 11:41	
Vinyl chloride	ug/L	<0.17	1.0	03/16/23 11:41	
1,2-Dichlorobenzene-d4 (S)	%	98	70-130	03/16/23 11:41	
4-Bromofluorobenzene (S)	%	98	70-130	03/16/23 11:41	
Toluene-d8 (S)	%	97	70-130	03/16/23 11:41	

LABORATORY CONTROL SAMPLE: 2527629

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	40.3	81	70-134	
1,1,2-Trichloroethane	ug/L	50	43.2	86	70-130	
1,1-Dichloroethane	ug/L	50	56.1	112	70-130	
1,1-Dichloroethene	ug/L	50	54.3	109	74-131	
1,2-Dichloroethane	ug/L	50	40.5	81	70-137	
cis-1,2-Dichloroethene	ug/L	50	43.6	87	70-130	
Tetrachloroethene	ug/L	50	46.7	93	70-130	
trans-1,2-Dichloroethene	ug/L	50	60.3	121	70-130	
Trichloroethene	ug/L	50	42.4	85	70-130	
Vinyl chloride	ug/L	50	59.7	119	63-134	
1,2-Dichlorobenzene-d4 (S)	%			96	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Toluene-d8 (S)	%			96	70-130	

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

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2527782		2527783		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40259410001 Result	MS Spike Conc.	MSD Spike Conc.									
1,1,1-Trichloroethane	ug/L	<0.30	50	50	56.6	50.6	113	101	70-134	11	20		
1,1,2-Trichloroethane	ug/L	<0.34	50	50	47.7	49.0	95	98	70-130	3	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	48.4	44.7	97	89	70-130	8	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	70.3	66.8	141	134	71-130	5	20	M1	
1,2-Dichloroethane	ug/L	<0.29	50	50	52.3	49.6	105	99	70-137	5	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	55.0	47.4	110	95	70-130	15	20		
Tetrachloroethene	ug/L	<0.41	50	50	51.5	51.5	103	103	70-130	0	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	60.5	57.6	121	115	70-130	5	20		
Trichloroethene	ug/L	<0.32	50	50	52.7	48.8	105	98	70-130	8	20		
Vinyl chloride	ug/L	<0.17	50	50	61.1	59.2	122	118	60-137	3	20		
1,2-Dichlorobenzene-d4 (S)	%						96	96	70-130				
4-Bromofluorobenzene (S)	%						96	94	70-130				
Toluene-d8 (S)	%						97	95	70-130				

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### QUALITY CONTROL DATA

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

QC Batch: 872282	Analysis Method: EPA 8270E by SIM
QC Batch Method: EPA Mod. 3510C	Analysis Description: 8270E Water 14 Dioxane by SIM
	Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 40259410012, 40259410015

METHOD BLANK: 4600502 Matrix: Water

Associated Lab Samples: 40259410012, 40259410015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (SIM)	ug/L	<0.11	0.25	03/23/23 10:47	
1,4-Dioxane-d8 (S)	%.	41	10-130	03/23/23 10:47	

LABORATORY CONTROL SAMPLE: 4600503

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (SIM)	ug/L	10	8.5	85	30-150	
1,4-Dioxane-d8 (S)	%.			40	10-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4600504 4600505

Parameter	Units	10646574001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (SIM)	ug/L	<0.35	33.3	33.3	31.8	31.8	95	95	30-150	0	30	
1,4-Dioxane-d8 (S)	%.						49	47	10-130			P1

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## QUALIFIERS

Project: 0383990-THERMO FISCHER

Pace Project No.: 40259410

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### 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

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

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

P1 Routine initial sample volume or weight was not used for extraction, resulting in elevated reporting limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990-THERMO FISCHER  
Pace Project No.: 40259410

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40259410001	MW-09-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410002	MW-04-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410003	MW-7S-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410004	MW-20S-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410005	MW-01-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410006	MW-03-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410007	MW-26S-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410008	MW-23S-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410009	MW-13S-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410010	MW-6S-WG-20230314	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410011	MW-15S-WG-20230315	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410012	MW-15I-WG-20230315	EPA Mod. 3510C	872282	EPA 8270E by SIM	872469
40259410013	MW-15D-WG-20230315	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410014	MW-13D-WG-20230315	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410015	DUP-01-WG-20230315	EPA Mod. 3510C	872282	EPA 8270E by SIM	872469
40259410016	DUP-02-WG-20230315	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410017	FB-01-WQ-20230315	EPA Mod. 3510C	871879	EPA 8270E by SIM	872087
40259410001	MW-09-WG-20230314	EPA 8260	440036		
40259410002	MW-04-WG-20230314	EPA 8260	440036		
40259410003	MW-7S-WG-20230314	EPA 8260	440036		
40259410004	MW-20S-WG-20230314	EPA 8260	440036		
40259410005	MW-01-WG-20230314	EPA 8260	440036		
40259410006	MW-03-WG-20230314	EPA 8260	440036		
40259410007	MW-26S-WG-20230314	EPA 8260	440036		
40259410008	MW-23S-WG-20230314	EPA 8260	440036		
40259410009	MW-13S-WG-20230314	EPA 8260	440036		
40259410010	MW-6S-WG-20230314	EPA 8260	440036		
40259410011	MW-15S-WG-20230315	EPA 8260	440036		
40259410012	MW-15I-WG-20230315	EPA 8260	440036		
40259410013	MW-15D-WG-20230315	EPA 8260	440036		
40259410014	MW-13D-WG-20230315	EPA 8260	440036		
40259410015	DUP-01-WG-20230315	EPA 8260	440036		
40259410016	DUP-02-WG-20230315	EPA 8260	440036		
40259410017	FB-01-WQ-20230315	EPA 8260	440036		
40259410018	TB-01-WQ-20230315	EPA 8260	440036		

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40250410

ALL SHADED AREAS are for LAB USE ONLY

Company: **ERM** Billing Information: **ERM Accounts payable**

Address: **Milwaukee, WI**

Report To: **John Roberts** Email To: **John.Roberts@ERM.com**

Copy To: Site Collection Info/Address: **TWO RIVERS**

Container Preservative Type \*\*

3	U																		
---	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Lab Project Manager:

\*\* Preservative Types. (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Customer Project Name/Number: **0383990 - Thermo Fischer**

State: **WI** County/City: **WI** Time Zone Collected: **[ ] PT [ ] MT [X] CT [ ] ET**

Phone: Site/Facility ID #: Compliance Monitoring? **[ ] Yes [ ] No**

Email: Purchase Order #: DW PWS ID #: DW Location Code:

Collected By (print): **Cody Kassis** Quote #: Turnaround Date Required: **Standard**

Collected By (signature): *Cody Kassis* Immediately Packed on Ice: **[ ] Yes [ ] No**

Sample Disposal: Rush: **[ ] Same Day [ ] Next Day** Field Filtered (if applicable): **[ ] Yes [ ] No**

**[ ] Dispose as appropriate [ ] Return** **[ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day** Analysis: \_\_\_\_\_

**[ ] Archive: \_\_\_\_\_** (Expedite Charges Apply)

**[ ] Hold: \_\_\_\_\_**

Analyses	Lab Profile/Line:	
	Lab Sample Receipt Checklist:	
8260 VOCs site specific 1,4-Dioxane	Custody Seals Present/Intact	Y N NA
	Custody Signatures Present	Y N NA
	Collector Signature Present	Y N NA
	Bottles Intact	Y N NA
	Correct Bottles	Y N NA
	Sufficient Volume	Y N NA
	Samples Received on Ice	Y N NA
	VOA - Headspace Acceptable	Y N NA
	USDA Regulated Soils	Y N NA
	Samples in Holding Time	Y N NA
	Residual Chlorine Present	Y N NA
	Cl Strips:	
	Sample pH Acceptable	Y N NA
	pH Strips:	
	Sulfide Present	Y N NA
Lead Acetate Strips:		
LAB USE ONLY: Lab Sample # / Comments:		
	011	
	012	
	013	
	014	
	015	
	016	
	017	
	018	

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-153-WG-20230315	WG	Grab	3/15/23	0910			5	X X
MW-157-WG-20230315				0950			5	X X
MW-15D-WG-20230315				1055			5	X X
MW-13D-WG-20230315				0935			5	X X
DUP-01-WG-20230315							5	X X
DUP-02-WG-20230315							5	X X
FB-01-WQ-20230315	WQ			1140			5	X X
TR-01-WQ-20230315	WQ						2	X

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: **Wet** Blue Dry None

Packing Material Used: **D**

Radchem sample(s) screened (<500 cpm): **Y N NA**

SHORT HOLDS PRESENT (<72 hours): **Y N N/A**

Lab Tracking #: **2829871**

Samples received via: **FEDEX UPS Client Courier Pace Courier**

Lab Sample Temperature Info:

Temp Blank Received: **Y N NA**

Therm ID#: **9**

Cooler 1 Temp Upon Receipt: **25.0°C**

Cooler 1 Therm Corr. Factor: **4.0°C**

Cooler 1 Corrected Temp: **3.5°C**

Comments:

Relinquished by/Company: (Signature) *Cody Kassis* Date/Time: **3/15/23 @ 1130**

Received by/Company: (Signature) *[Signature]* Date/Time: **3/15/23 1330**

Relinquished by/Company: (Signature) Date/Time:

Received by/Company: (Signature) Date/Time:

Relinquished by/Company: (Signature) Date/Time:

Received by/Company: (Signature) Date/Time:

Table #: \_\_\_\_\_

Acctnum: \_\_\_\_\_

Template: \_\_\_\_\_

Prelogin: \_\_\_\_\_

PM: \_\_\_\_\_

PB: \_\_\_\_\_

Trip Blank Received: **Y N NA**

HCL MeOH TSP Other

Non Conformance(s): **Page 30 of 33**

YES / NO of: **2**



# Pace Container Order #1071796 40259410

Addresses	Ship To :	Return To:
<b>Order By :</b>	<b>Company</b> Cobblestone Hotel & Suites	<b>Company</b> Pace Analytical Green Bay
<b>Company</b> ERM, INC.	<b>Contact</b> LeAnn Grahler, guest	<b>Contact</b> Milewsky, Dan
<b>Contact</b> Roberts, John	<b>Email</b> leann.grahler@erm.com	<b>Email</b> dan.milewsky@pacelabs.com
<b>Email</b> john.roberts@erm.com	<b>Address</b> 1407 16th Street	<b>Address</b> 1241 Bellevue Street
<b>Address</b> 7311 W. Greenfield Ave.	<b>Address 2</b>	<b>Address 2</b> Suite 9
<b>Address 2</b>	<b>City</b> Two Rivers	<b>City</b> Green Bay
<b>City</b> Milwaukee	<b>State</b> WI <b>Zip</b> 54241	<b>State</b> WI <b>Zip</b> 54302
<b>State</b> WI <b>Zip</b> 53214	<b>Phone</b> 414-687-8596	<b>Phone</b> (920)469-2436
<b>Phone</b> 414-687-8596		

Info			
<b>Project Name</b> 0383990 Two Rivers	<b>Due Date</b> 03/13/2023	<b>Profile</b> 407-20	<b>Quote</b>
<b>Project Manager</b> Milewsky, Dan	<b>Return Date</b>	<b>Carrier</b> Pace Courier	<b>Location</b> WI

**Trip Blanks**

Include Trip Blanks

**Bottle Labels**

Blank

Pre-Printed No Sample IDs

Pre-Printed With Sample IDs

**Bottles**

Boxed Cases

Individually Wrapped

Grouped By Sample ID/Matrix

**Return Shipping Labels**

No Shipper

With Shipper

**Misc**

Sampling Instructions

Custody Seal

Temp. Blanks

Coolers

Syringes

Extra Bubble Wrap

Short Hold/Rush Stickers

DI Water

USDA Regulated Soils

**COC Options**

Number of Blanks

Pre-Printed

# of Samples	Matrix	Test	Container	Total	# of	Lot #	Notes
17	WT	1,4-Dioxane by 8270SIM	2-100ml amber glass, unpres	34	0	D-2-200-01DB	
17	WT	VOC by 8260	(3) 40 mL clear glass vials, HCL	51	0	B-2-341-01VB	
1	WT	Trip Blank	2-40mL HCL w/custody seal	2	0	B-2-214-01VB	

## Hazard Shipping Placard In Place : NO

- \*Sample receiving hours are typically 8am-5pm, but may differ by location. Please check with your Pace Project Manager.
- \*Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.
- \*Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage/disposal.
- \*Payment term are net 30 days.
- \*Please include the proposal number on the chain of custody to insure proper billing.

**LAB USE:**

<b>Ship Date :</b>	03/10/2023
<b>Prepared By:</b>	yh
<b>Verified By:</b>	

**Sample**

**CLIENT USE (Optional):**

<b>Date Rec'd:</b>	
<b>Received By:</b>	
<b>Verified By:</b>	



Sample Condition Upon Receipt Form (SCUR)

Project #: \_\_\_\_\_

Client Name: ERM

WO#: 40259410

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



Tracking #: \_\_\_\_\_

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

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

Cooler Temperature Uncorr. 2.5 / Corr. 3.0

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

Person examining contents:  
 Date: 3/15/20 Initials: SG  
 Labeled By Initials: JAA

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

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- DI VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Correct Type: <u>Pace Green Bay</u> Pace IR, Non-Pace		
Containers Intact:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10. <u>010 1/3 vials frozen &amp; shattered 3/15/20 SG</u>
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>494</u>		

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

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution:  
001 1/2 AL-SU, 003 1/2 AL-SU, 004 2/2 AL-SUS, 007 1/2 AL-SUS, 008 1/2 AL-SU,  
009 2/2 AL-SUS, 010 AL-SU 1/2 - frozen  
002 1/3 vials, 004 2/3 vials, 005 1/3 vials, 009 2/3 vials frozen 3/15/20 SG

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



July 14, 2023

Ryan Plath  
ERM, INC.  
7311 W. Greenfield Ave.  
Milwaukee, WI 53214

RE: Project: 0383990-THERMOFISHER  
Pace Project No.: 40264224

Dear Ryan Plath:

Enclosed are the analytical results for sample(s) received by the laboratory on June 23, 2023. 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 Gulf Coast
- Pace Analytical Services - Green Bay

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

Sincerely,

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

Enclosures

cc: John Roberts, ERM, Inc.  
David deCourcy-Bower, ERM, Inc.



## REPORT OF LABORATORY ANALYSIS

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### CERTIFICATIONS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

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#### 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

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#### Pace Analytical Gulf Coast

7979 Innovation Park Drive, Baton Rouge, LA 70820

Arkansas Certification #: 88-0655

DoD ELAP Certification #: 6429-01

Florida Certification #: E87854

Illinois Certification #: 004585

Kansas Certification #: E-10354

Louisiana/LELAP Certification #: 01955

North Carolina Certification #: 618

North Dakota Certification #: R-195

Oklahoma Certification #: 2019-101

South Carolina Certification #: 73006001

Texas Certification #: T104704178-19-11

USDA Soil Permit # P330-19-00209

Virginia Certification #: 460215

Washington Certification #: C929

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### REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: 0383990-THERMOFISHER  
Pace Project No.: 40264224

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40264224001	MW-03-WG-20230619	Water	06/19/23 08:20	06/23/23 10:37
40264224002	TB-01-WQ-20230620	Water	06/20/23 09:25	06/23/23 10:37
40264224003	TB-02-WQ-20230620	Water	06/20/23 09:25	06/23/23 10:37
40264224004	MW-13D-WG-20230620	Water	06/20/23 10:10	06/23/23 10:37
40264224005	MW-13S-WG-20230620	Water	06/20/23 11:40	06/23/23 10:37
40264224006	MW-01-WG-20230620	Water	06/20/23 09:30	06/23/23 10:37
40264224007	MW-26-WG-20230620	Water	06/20/23 11:50	06/23/23 10:37
40264224008	MW-21S-WG-20230620	Water	06/20/23 14:30	06/23/23 10:37
40264224009	MW-16-WG-20230620	Water	06/20/23 14:50	06/23/23 10:37
40264224010	MW-10S-WG-20230620	Water	06/20/23 16:25	06/23/23 10:37
40264224011	MW-18S-WG-20230620	Water	06/20/23 16:35	06/23/23 10:37
40264224012	MW-08-WG-20230621	Water	06/21/23 08:30	06/23/23 10:37
40264224013	MW-19S-WG-20230621	Water	06/21/23 08:50	06/23/23 10:37
40264224014	MW-8S-WG-20230621	Water	06/21/23 09:40	06/23/23 10:37
40264224015	MW-05-WG-20230621	Water	06/21/23 11:30	06/23/23 10:37
40264224016	MW-24S-WG-20230621	Water	06/21/23 10:20	06/23/23 10:37
40264224017	MW-25S-WG-20230621	Water	06/21/23 12:10	06/23/23 10:37
40264224018	MW-10D-WG-20230621	Water	06/21/23 13:15	06/23/23 10:37
40264224019	MW-12S-WG-20230621	Water	06/21/23 15:10	06/23/23 10:37
40264224020	FB-01-WQ-20230621	Water	06/21/23 16:10	06/23/23 10:37
40264224021	FB-02-WQ-20230621	Water	06/21/23 16:10	06/23/23 10:37
40264224022	MW-9S-WG-20230621	Water	06/21/23 15:35	06/23/23 10:37
40264224023	MW-09-WG-20230622	Water	06/22/23 08:25	06/23/23 10:37
40264224024	MW-15S-WG-20230622	Water	06/22/23 09:25	06/23/23 10:37
40264224025	MW-17S-WG-20230622	Water	06/22/23 08:45	06/23/23 10:37
40264224026	MW-14S-WG-20230622	Water	06/22/23 10:30	06/23/23 10:37
40264224027	MW-20S-WG-20230622	Water	06/22/23 11:00	06/23/23 10:37
40264224028	MW-15D-WG-20230622	Water	06/22/23 12:40	06/23/23 10:37
40264224029	MW-13S-WG-20230622	Water	06/22/23 14:40	06/23/23 10:37
40264224030	MW-6S-WG-20230622	Water	06/22/23 12:10	06/23/23 10:37
40264224031	MW-7S-WG-20230622	Water	06/22/23 14:20	06/23/23 10:37
40264224032	MW-04-WG-20230622	Water	06/22/23 16:00	06/23/23 10:37
40264224033	MW-15I-WG-20230623	Water	06/23/23 09:05	06/23/23 10:37
40264224034	MW-23S-WG-20230621	Water	06/21/23 14:10	06/23/23 10:37
40264224035	DUP-01-WG-20230622	Water	06/22/23 00:00	06/23/23 10:37
40264224036	DUP-02-WG-20230622	Water	06/22/23 00:00	06/23/23 10:37
40264224037	DUP-03-WG-20230623	Water	06/23/23 00:00	06/23/23 10:37

## REPORT OF LABORATORY ANALYSIS

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**SAMPLE ANALYTE COUNT**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40264224001	MW-03-WG-20230619	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224002	TB-01-WQ-20230620	EPA 8260	EIB	13	PASI-G
40264224003	TB-02-WQ-20230620	EPA 8260	EIB	13	PASI-G
40264224004	MW-13D-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224005	MW-13S-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224006	MW-01-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224007	MW-26-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224008	MW-21S-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224009	MW-16-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224010	MW-10S-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224011	MW-18S-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224012	MW-08-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224013	MW-19S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224014	MW-8S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G

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### SAMPLE ANALYTE COUNT

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40264224015	MW-05-WG-20230621	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224016	MW-24S-WG-20230621	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224017	MW-25S-WG-20230621	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224018	MW-10D-WG-20230621	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224019	MW-12S-WG-20230621	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224020	FB-01-WQ-20230621	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224021	FB-02-WQ-20230621	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224022	MW-9S-WG-20230621	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224023	MW-09-WG-20230622	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224024	MW-15S-WG-20230622	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224025	MW-17S-WG-20230622	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224026	MW-14S-WG-20230622	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40264224027	MW-20S-WG-20230622	EPA 537 Modified	KCR	58	GCLA
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA

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### SAMPLE ANALYTE COUNT

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40264224028	MW-15D-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224029	MW-13S-WG-20230622	EPA 8082A	BLM	10	PASI-G
40264224030	MW-6S-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224031	MW-7S-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224032	MW-04-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224033	MW-15I-WG-20230623	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224034	MW-23S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224035	DUP-01-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224036	DUP-02-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224037	DUP-03-WG-20230623	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA

GCLA = Pace Analytical Gulf Coast

PASI-G = Pace Analytical Services - Green Bay

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-03-WG-20230619 Lab ID: 40264224001 Collected: 06/19/23 08:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 14:33	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	116	%	70-130		1		06/27/23 14:33		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 16:13	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 16:13	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 16:13	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 16:13	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 16:13	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 16:13	127-18-4	
Trichloroethene	0.55J	ug/L	1.0	0.32	1		06/28/23 16:13	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 16:13	75-01-4	
cis-1,2-Dichloroethene	0.85J	ug/L	1.0	0.47	1		06/28/23 16:13	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 16:13	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/28/23 16:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/28/23 16:13	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/28/23 16:13	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.601	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 05:43	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.727	ng/L	1.94	0.727	1	06/30/23 11:34	07/11/23 05:43	27619-97-2	
8:2 FTS	<0.513	ng/L	1.94	0.513	1	06/30/23 11:34	07/11/23 05:43	39108-34-4	
9Cl-PF3ONS	<0.436	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 05:43	756426-58-1	
11Cl-PF3OUdS	<0.436	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 05:43	763051-92-9	
ADONA	<0.417	ng/L	1.94	0.417	1	06/30/23 11:34	07/11/23 05:43	919005-14-4	
Perfluorooctanesulfonamide	<0.358	ng/L	1.94	0.358	1	06/30/23 11:34	07/11/23 05:43	754-91-6	
HFPO-DA	<3.23	ng/L	9.69	3.23	1	06/30/23 11:34	07/11/23 05:43	13252-13-6	
NEtFOSA	<0.678	ng/L	3.88	0.678	1	06/30/23 11:34	07/11/23 05:43	4151-50-2	
NEtFOSAA	<0.765	ng/L	3.88	0.765	1	06/30/23 11:34	07/11/23 05:43	2991-50-6	
NEtFOSE	<0.489	ng/L	3.88	0.489	1	06/30/23 11:34	07/11/23 05:43	1691-99-2	
NMeFOSA	<0.804	ng/L	3.88	0.804	1	06/30/23 11:34	07/11/23 05:43	31506-32-8	
NMeFOSAA	<0.436	ng/L	3.88	0.436	1	06/30/23 11:34	07/11/23 05:43	2355-31-9	
NMeFOSE	<0.630	ng/L	3.88	0.630	1	06/30/23 11:34	07/11/23 05:43	24448-09-7	
Perfluorobutanoic acid	4.75	ng/L	1.94	0.736	1	06/30/23 11:34	07/11/23 05:43	375-22-4	
Perfluorobutanesulfonic acid	2.87	ng/L	1.94	0.300	1	06/30/23 11:34	07/11/23 05:43	375-73-5	
Perfluorodecanoic acid	<0.698	ng/L	1.94	0.698	1	06/30/23 11:34	07/11/23 05:43	335-76-2	
Perfluorododecanoic acid	<0.630	ng/L	1.94	0.630	1	06/30/23 11:34	07/11/23 05:43	307-55-1	
PFDoS	<0.635	ng/L	1.94	0.635	1	06/30/23 11:34	07/11/23 05:43	79780-39-5	
PFDS	<0.591	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 05:43	335-77-3	
Perfluoroheptanoic acid	2.49	ng/L	1.94	0.562	1	06/30/23 11:34	07/11/23 05:43	375-85-9	
PFHpS	<0.591	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 05:43	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-03-WG-20230619 Lab ID: 40264224001 Collected: 06/19/23 08:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	3.52	ng/L	1.94	0.455	1	06/30/23 11:34	07/11/23 05:43	307-24-4	
Perfluorohexanesulfonic acid	3.82	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 05:43	355-46-4	
Perfluorononanoic acid	<0.475	ng/L	1.94	0.475	1	06/30/23 11:34	07/11/23 05:43	375-95-1	
PFNS	<0.843	ng/L	1.94	0.843	1	06/30/23 11:34	07/11/23 05:43	68259-12-1	
Perfluorooctanoic acid	33.2	ng/L	1.94	0.407	1	06/30/23 11:34	07/11/23 05:43	335-67-1	
Perfluorooctanesulfonic acid	<0.368	ng/L	1.94	0.368	1	06/30/23 11:34	07/11/23 05:43	1763-23-1	
Perfluoropentanoic acid	3.38	ng/L	1.94	0.426	1	06/30/23 11:34	07/11/23 05:43	2706-90-3	
PFPeS	<0.494	ng/L	1.94	0.494	1	06/30/23 11:34	07/11/23 05:43	2706-91-4	
Perfluorotetradecanoic acid	<0.552	ng/L	1.94	0.552	1	06/30/23 11:34	07/11/23 05:43	376-06-7	
Perfluorotridecanoic acid	<0.596	ng/L	1.94	0.596	1	06/30/23 11:34	07/11/23 05:43	72629-94-8	
Perfluoroundecanoic acid	<0.601	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 05:43	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	5	%	50-150		1	06/30/23 11:34	07/11/23 05:43	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	6	%	50-150		1	06/30/23 11:34	07/11/23 05:43	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	76	%	50-150		1	06/30/23 11:34	07/11/23 05:43	2355-31-9-EI	
d5-NEtFOSAA	79	%	50-150		1	06/30/23 11:34	07/11/23 05:43	2991-50-6-EI	
d7-NMeFOSE	32	%	50-150		1	06/30/23 11:34	07/11/23 05:43	24448-09-7-	
d9-NEtFOSE	27	%	50-150		1	06/30/23 11:34	07/11/23 05:43	1691-99-2-EI	
M2 4:2 FTS	131	%	50-150		1	06/30/23 11:34	07/11/23 05:43	757124-72-4	
M2 6:2 FTS	113	%	50-150		1	06/30/23 11:34	07/11/23 05:43	27619-97-2-	
M2 8:2 FTS	91	%	50-150		1	06/30/23 11:34	07/11/23 05:43	39108-34-4-	
M2PFHxDA	65	%	50-150		1	06/30/23 11:34	07/11/23 05:43	67905-19-5-	
M2PFTeDA	65	%	50-150		1	06/30/23 11:34	07/11/23 05:43	376-06-7-EI	
M3HFPODA	81	%	50-150		1	06/30/23 11:34	07/11/23 05:43	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 05:43	375-73-5-EI	
M3PFHxS	83	%	50-150		1	06/30/23 11:34	07/11/23 05:43	355-46-4-EI	
M4PFHpA	89	%	50-150		1	06/30/23 11:34	07/11/23 05:43	375-85-9-EI	
M5PFHxA	90	%	50-150		1	06/30/23 11:34	07/11/23 05:43	307-24-4-EI	
M5PFPeA	92	%	50-150		1	06/30/23 11:34	07/11/23 05:43	2706-90-3-EI	
M6PFDA	87	%	50-150		1	06/30/23 11:34	07/11/23 05:43	335-76-2-EI	
M7PFUdA	84	%	50-150		1	06/30/23 11:34	07/11/23 05:43	2058-94-8-EI	
M8FOSA	64	%	50-150		1	06/30/23 11:34	07/11/23 05:43	754-91-6-EI	
M8PFOA	92	%	50-150		1	06/30/23 11:34	07/11/23 05:43	335-67-1-EI	
M8PFOS	84	%	50-150		1	06/30/23 11:34	07/11/23 05:43	1763-23-1-EI	
M9PFNA	90	%	50-150		1	06/30/23 11:34	07/11/23 05:43	375-95-1-EI	
MPFBA	85	%	50-150		1	06/30/23 11:34	07/11/23 05:43	375-22-4-EI	
MPFDoA	72	%	50-150		1	06/30/23 11:34	07/11/23 05:43	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: TB-01-WQ-20230620 Lab ID: 40264224002 Collected: 06/20/23 09:25 Received: 06/23/23 10:37 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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 15:11	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 15:11	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 15:11	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 15:11	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 15:11	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 15:11	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/28/23 15:11	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 15:11	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 15:11	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 15:11	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	107	%	70-130		1		06/28/23 15:11	460-00-4	HS
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		06/28/23 15:11	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/28/23 15:11	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: **TB-02-WQ-20230620** Lab ID: **40264224003** Collected: 06/20/23 09:25 Received: 06/23/23 10:37 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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 15:31	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 15:31	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 15:31	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 15:31	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 15:31	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 15:31	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/28/23 15:31	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 15:31	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 15:31	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 15:31	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/28/23 15:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/28/23 15:31	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/28/23 15:31	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-13D-WG-20230620 Lab ID: 40264224004 Collected: 06/20/23 10:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	0.64	ug/L	0.20	0.057	1		06/27/23 14:52	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	109	%	70-130		1		06/27/23 14:52		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 16:33	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 16:33	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 16:33	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 16:33	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 16:33	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 16:33	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/28/23 16:33	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 16:33	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 16:33	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 16:33	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1		06/28/23 16:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/28/23 16:33	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/28/23 16:33	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.614	ng/L	1.98	0.614	1	06/30/23 11:34	07/11/23 05:59	757124-72-4	
6:2 Fluorotelomer sulfonate	2.81	ng/L	1.98	0.743	1	06/30/23 11:34	07/11/23 05:59	27619-97-2	
8:2 FTS	<0.525	ng/L	1.98	0.525	1	06/30/23 11:34	07/11/23 05:59	39108-34-4	
9Cl-PF3ONS	<0.446	ng/L	1.98	0.446	1	06/30/23 11:34	07/11/23 05:59	756426-58-1	
11Cl-PF3OUdS	<0.446	ng/L	1.98	0.446	1	06/30/23 11:34	07/11/23 05:59	763051-92-9	
ADONA	<0.426	ng/L	1.98	0.426	1	06/30/23 11:34	07/11/23 05:59	919005-14-4	
Perfluorooctanesulfonamide	<0.366	ng/L	1.98	0.366	1	06/30/23 11:34	07/11/23 05:59	754-91-6	
HFPO-DA	<3.30	ng/L	9.90	3.30	1	06/30/23 11:34	07/11/23 05:59	13252-13-6	
NEtFOSA	<0.693	ng/L	3.96	0.693	1	06/30/23 11:34	07/11/23 05:59	4151-50-2	
NEtFOSAA	<0.782	ng/L	3.96	0.782	1	06/30/23 11:34	07/11/23 05:59	2991-50-6	
NEtFOSE	<0.500	ng/L	3.96	0.500	1	06/30/23 11:34	07/11/23 05:59	1691-99-2	
NMeFOSA	<0.822	ng/L	3.96	0.822	1	06/30/23 11:34	07/11/23 05:59	31506-32-8	
NMeFOSAA	<0.446	ng/L	3.96	0.446	1	06/30/23 11:34	07/11/23 05:59	2355-31-9	
NMeFOSE	<0.644	ng/L	3.96	0.644	1	06/30/23 11:34	07/11/23 05:59	24448-09-7	
Perfluorobutanoic acid	<0.753	ng/L	1.98	0.753	1	06/30/23 11:34	07/11/23 05:59	375-22-4	
Perfluorobutanesulfonic acid	<0.307	ng/L	1.98	0.307	1	06/30/23 11:34	07/11/23 05:59	375-73-5	
Perfluorodecanoic acid	<0.713	ng/L	1.98	0.713	1	06/30/23 11:34	07/11/23 05:59	335-76-2	
Perfluorododecanoic acid	<0.644	ng/L	1.98	0.644	1	06/30/23 11:34	07/11/23 05:59	307-55-1	
PFDoS	<0.649	ng/L	1.98	0.649	1	06/30/23 11:34	07/11/23 05:59	79780-39-5	
PFDS	<0.604	ng/L	1.98	0.604	1	06/30/23 11:34	07/11/23 05:59	335-77-3	
Perfluoroheptanoic acid	<0.574	ng/L	1.98	0.574	1	06/30/23 11:34	07/11/23 05:59	375-85-9	
PFHpS	<0.604	ng/L	1.98	0.604	1	06/30/23 11:34	07/11/23 05:59	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-13D-WG-20230620 Lab ID: 40264224004 Collected: 06/20/23 10:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.465	ng/L	1.98	0.465	1	06/30/23 11:34	07/11/23 05:59	307-24-4	
Perfluorohexanesulfonic acid	<0.614	ng/L	1.98	0.614	1	06/30/23 11:34	07/11/23 05:59	355-46-4	
Perfluorononanoic acid	<0.485	ng/L	1.98	0.485	1	06/30/23 11:34	07/11/23 05:59	375-95-1	
PFNS	<0.862	ng/L	1.98	0.862	1	06/30/23 11:34	07/11/23 05:59	68259-12-1	
Perfluorooctanoic acid	<0.416	ng/L	1.98	0.416	1	06/30/23 11:34	07/11/23 05:59	335-67-1	
Perfluorooctanesulfonic acid	<0.376	ng/L	1.98	0.376	1	06/30/23 11:34	07/11/23 05:59	1763-23-1	
Perfluoropentanoic acid	3.33	ng/L	1.98	0.436	1	06/30/23 11:34	07/11/23 05:59	2706-90-3	
PFPeS	<0.505	ng/L	1.98	0.505	1	06/30/23 11:34	07/11/23 05:59	2706-91-4	
Perfluorotetradecanoic acid	<0.564	ng/L	1.98	0.564	1	06/30/23 11:34	07/11/23 05:59	376-06-7	
Perfluorotridecanoic acid	<0.609	ng/L	1.98	0.609	1	06/30/23 11:34	07/11/23 05:59	72629-94-8	
Perfluoroundecanoic acid	<0.614	ng/L	1.98	0.614	1	06/30/23 11:34	07/11/23 05:59	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 05:59	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 05:59	31506-32-8-EI	MSSV1 2.3
d3-NMeFOSAA	66	%	50-150		1	06/30/23 11:34	07/11/23 05:59	2355-31-9-EI	
d5-NEtFOSAA	62	%	50-150		1	06/30/23 11:34	07/11/23 05:59	2991-50-6-EI	
d7-NMeFOSE	2	%	50-150		1	06/30/23 11:34	07/11/23 05:59	24448-09-7-EI	MSSV1 2.3
d9-NEtFOSE	1	%	50-150		1	06/30/23 11:34	07/11/23 05:59	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	144	%	50-150		1	06/30/23 11:34	07/11/23 05:59	757124-72-4	
M2 6:2 FTS	128	%	50-150		1	06/30/23 11:34	07/11/23 05:59	27619-97-2-EI	
M2 8:2 FTS	93	%	50-150		1	06/30/23 11:34	07/11/23 05:59	39108-34-4-EI	
M2PFHxDA	11	%	50-150		1	06/30/23 11:34	07/11/23 05:59	67905-19-5-EI	MSSV1 2.3
M2PFTeDA	12	%	50-150		1	06/30/23 11:34	07/11/23 05:59	376-06-7-EI	MSSV1 2.3
M3HFPODA	77	%	50-150		1	06/30/23 11:34	07/11/23 05:59	13252-13-6-EI	
M3PFBS	81	%	50-150		1	06/30/23 11:34	07/11/23 05:59	375-73-5-EI	
M3PFHxS	81	%	50-150		1	06/30/23 11:34	07/11/23 05:59	355-46-4-EI	
M4PFHpA	89	%	50-150		1	06/30/23 11:34	07/11/23 05:59	375-85-9-EI	
M5PFHxA	91	%	50-150		1	06/30/23 11:34	07/11/23 05:59	307-24-4-EI	
M5PFPeA	91	%	50-150		1	06/30/23 11:34	07/11/23 05:59	2706-90-3-EI	
M6PFDA	78	%	50-150		1	06/30/23 11:34	07/11/23 05:59	335-76-2-EI	
M7PFUdA	59	%	50-150		1	06/30/23 11:34	07/11/23 05:59	2058-94-8-EI	
M8FOSA	51	%	50-150		1	06/30/23 11:34	07/11/23 05:59	754-91-6-EI	
M8PFOA	91	%	50-150		1	06/30/23 11:34	07/11/23 05:59	335-67-1-EI	
M8PFOS	77	%	50-150		1	06/30/23 11:34	07/11/23 05:59	1763-23-1-EI	
M9PFNA	87	%	50-150		1	06/30/23 11:34	07/11/23 05:59	375-95-1-EI	
MPFBA	82	%	50-150		1	06/30/23 11:34	07/11/23 05:59	375-22-4-EI	
MPFDoA	35	%	50-150		1	06/30/23 11:34	07/11/23 05:59	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-13S-WG-20230620 Lab ID: 40264224005 Collected: 06/20/23 11:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	11.5	ug/L	0.20	0.057	1		06/27/23 15:11	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	101	%	70-130		1		06/27/23 15:11		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	0.41J	ug/L	1.0	0.30	1		06/28/23 16:54	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 16:54	79-00-5	
1,1-Dichloroethane	0.60J	ug/L	1.0	0.30	1		06/28/23 16:54	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 16:54	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 16:54	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 16:54	127-18-4	
Trichloroethene	32.9	ug/L	1.0	0.32	1		06/28/23 16:54	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 16:54	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 16:54	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 16:54	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/28/23 16:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		06/28/23 16:54	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		06/28/23 16:54	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.594	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 06:14	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.718	ng/L	1.92	0.718	1	06/30/23 11:34	07/11/23 06:14	27619-97-2	
8:2 FTS	<0.508	ng/L	1.92	0.508	1	06/30/23 11:34	07/11/23 06:14	39108-34-4	
9CI-PF3ONS	<0.431	ng/L	1.92	0.431	1	06/30/23 11:34	07/11/23 06:14	756426-58-1	
11CI-PF3OUdS	<0.431	ng/L	1.92	0.431	1	06/30/23 11:34	07/11/23 06:14	763051-92-9	
ADONA	<0.412	ng/L	1.92	0.412	1	06/30/23 11:34	07/11/23 06:14	919005-14-4	
Perfluorooctanesulfonamide	<0.354	ng/L	1.92	0.354	1	06/30/23 11:34	07/11/23 06:14	754-91-6	
HFPO-DA	<3.19	ng/L	9.58	3.19	1	06/30/23 11:34	07/11/23 06:14	13252-13-6	
NEtFOSA	<0.670	ng/L	3.83	0.670	1	06/30/23 11:34	07/11/23 06:14	4151-50-2	
NEtFOSAA	<0.757	ng/L	3.83	0.757	1	06/30/23 11:34	07/11/23 06:14	2991-50-6	
NEtFOSE	<0.484	ng/L	3.83	0.484	1	06/30/23 11:34	07/11/23 06:14	1691-99-2	
NMeFOSA	<0.795	ng/L	3.83	0.795	1	06/30/23 11:34	07/11/23 06:14	31506-32-8	
NMeFOSAA	<0.431	ng/L	3.83	0.431	1	06/30/23 11:34	07/11/23 06:14	2355-31-9	
NMeFOSE	<0.623	ng/L	3.83	0.623	1	06/30/23 11:34	07/11/23 06:14	24448-09-7	
Perfluorobutanoic acid	7.95	ng/L	1.92	0.728	1	06/30/23 11:34	07/11/23 06:14	375-22-4	
Perfluorobutanesulfonic acid	3.54	ng/L	1.92	0.297	1	06/30/23 11:34	07/11/23 06:14	375-73-5	
Perfluorodecanoic acid	<0.690	ng/L	1.92	0.690	1	06/30/23 11:34	07/11/23 06:14	335-76-2	
Perfluorododecanoic acid	<0.623	ng/L	1.92	0.623	1	06/30/23 11:34	07/11/23 06:14	307-55-1	
PFDoS	<0.627	ng/L	1.92	0.627	1	06/30/23 11:34	07/11/23 06:14	79780-39-5	
PFDS	<0.584	ng/L	1.92	0.584	1	06/30/23 11:34	07/11/23 06:14	335-77-3	
Perfluoroheptanoic acid	3.77	ng/L	1.92	0.555	1	06/30/23 11:34	07/11/23 06:14	375-85-9	
PFHpS	<0.584	ng/L	1.92	0.584	1	06/30/23 11:34	07/11/23 06:14	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-13S-WG-20230620 Lab ID: 40264224005 Collected: 06/20/23 11:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	5.29	ng/L	1.92	0.450	1	06/30/23 11:34	07/11/23 06:14	307-24-4	
Perfluorohexanesulfonic acid	<0.594	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 06:14	355-46-4	
Perfluorononanoic acid	<0.469	ng/L	1.92	0.469	1	06/30/23 11:34	07/11/23 06:14	375-95-1	
PFNS	<0.833	ng/L	1.92	0.833	1	06/30/23 11:34	07/11/23 06:14	68259-12-1	
Perfluorooctanoic acid	6.58	ng/L	1.92	0.402	1	06/30/23 11:34	07/11/23 06:14	335-67-1	
Perfluorooctanesulfonic acid	<0.364	ng/L	1.92	0.364	1	06/30/23 11:34	07/11/23 06:14	1763-23-1	
Perfluoropentanoic acid	8.63	ng/L	1.92	0.421	1	06/30/23 11:34	07/11/23 06:14	2706-90-3	
PFPeS	<0.488	ng/L	1.92	0.488	1	06/30/23 11:34	07/11/23 06:14	2706-91-4	
Perfluorotetradecanoic acid	<0.546	ng/L	1.92	0.546	1	06/30/23 11:34	07/11/23 06:14	376-06-7	
Perfluorotridecanoic acid	<0.589	ng/L	1.92	0.589	1	06/30/23 11:34	07/11/23 06:14	72629-94-8	
Perfluoroundecanoic acid	<0.594	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 06:14	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 06:14	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.4	%	50-150		1	06/30/23 11:34	07/11/23 06:14	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	82	%	50-150		1	06/30/23 11:34	07/11/23 06:14	2355-31-9-EI	
d5-NEtFOSAA	77	%	50-150		1	06/30/23 11:34	07/11/23 06:14	2991-50-6-EI	
d7-NMeFOSE	3	%	50-150		1	06/30/23 11:34	07/11/23 06:14	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	3	%	50-150		1	06/30/23 11:34	07/11/23 06:14	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	164	%	50-150		1	06/30/23 11:34	07/11/23 06:14	757124-72-4	MSSV1 2.5
M2 6:2 FTS	135	%	50-150		1	06/30/23 11:34	07/11/23 06:14	27619-97-2-	
M2 8:2 FTS	120	%	50-150		1	06/30/23 11:34	07/11/23 06:14	39108-34-4-	
M2PFHxDA	1	%	50-150		1	06/30/23 11:34	07/11/23 06:14	67905-19-5-	MSSV1 2.3
M2PFTeDA	14	%	50-150		1	06/30/23 11:34	07/11/23 06:14	376-06-7-EI	MSSV1 2.3
M3HFPODA	71	%	50-150		1	06/30/23 11:34	07/11/23 06:14	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 06:14	375-73-5-EI	
M3PFHxS	88	%	50-150		1	06/30/23 11:34	07/11/23 06:14	355-46-4-EI	
M4PFHpA	99	%	50-150		1	06/30/23 11:34	07/11/23 06:14	375-85-9-EI	
M5PFHxA	98	%	50-150		1	06/30/23 11:34	07/11/23 06:14	307-24-4-EI	
M5PFPeA	76	%	50-150		1	06/30/23 11:34	07/11/23 06:14	2706-90-3-EI	
M6PFDA	92	%	50-150		1	06/30/23 11:34	07/11/23 06:14	335-76-2-EI	
M7PFUdA	75	%	50-150		1	06/30/23 11:34	07/11/23 06:14	2058-94-8-EI	
M8FOSA	23	%	50-150		1	06/30/23 11:34	07/11/23 06:14	754-91-6-EI	
M8PFOA	102	%	50-150		1	06/30/23 11:34	07/11/23 06:14	335-67-1-EI	
M8PFOS	88	%	50-150		1	06/30/23 11:34	07/11/23 06:14	1763-23-1-EI	
M9PFNA	100	%	50-150		1	06/30/23 11:34	07/11/23 06:14	375-95-1-EI	
MPFBA	87	%	50-150		1	06/30/23 11:34	07/11/23 06:14	375-22-4-EI	
MPFDoA	49	%	50-150		1	06/30/23 11:34	07/11/23 06:14	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-01-WG-20230620 Lab ID: 40264224006 Collected: 06/20/23 09:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 15:30	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	101	%	70-130		1		06/27/23 15:30		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 10:02	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 10:02	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 10:02	75-35-4	
cis-1,2-Dichloroethene	1.6	ug/L	1.0	0.47	1		06/29/23 10:02	156-59-2	
trans-1,2-Dichloroethene	1.6	ug/L	1.0	0.53	1		06/29/23 10:02	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 10:02	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 10:02	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 10:02	79-00-5	
Trichloroethene	16.8	ug/L	1.0	0.32	1		06/29/23 10:02	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 10:02	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 10:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/29/23 10:02	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/29/23 10:02	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.594	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 06:29	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.718	ng/L	1.91	0.718	1	06/30/23 11:34	07/11/23 06:29	27619-97-2	
8:2 FTS	<0.507	ng/L	1.91	0.507	1	06/30/23 11:34	07/11/23 06:29	39108-34-4	
9CI-PF3ONS	<0.431	ng/L	1.91	0.431	1	06/30/23 11:34	07/11/23 06:29	756426-58-1	
11CI-PF3OUdS	<0.431	ng/L	1.91	0.431	1	06/30/23 11:34	07/11/23 06:29	763051-92-9	
ADONA	<0.412	ng/L	1.91	0.412	1	06/30/23 11:34	07/11/23 06:29	919005-14-4	
Perfluorooctanesulfonamide	<0.354	ng/L	1.91	0.354	1	06/30/23 11:34	07/11/23 06:29	754-91-6	
HFPO-DA	<3.19	ng/L	9.57	3.19	1	06/30/23 11:34	07/11/23 06:29	13252-13-6	
NEtFOSA	<0.670	ng/L	3.83	0.670	1	06/30/23 11:34	07/11/23 06:29	4151-50-2	
NEtFOSAA	<0.756	ng/L	3.83	0.756	1	06/30/23 11:34	07/11/23 06:29	2991-50-6	
NEtFOSE	<0.483	ng/L	3.83	0.483	1	06/30/23 11:34	07/11/23 06:29	1691-99-2	
NMeFOSA	<0.795	ng/L	3.83	0.795	1	06/30/23 11:34	07/11/23 06:29	31506-32-8	
NMeFOSAA	<0.431	ng/L	3.83	0.431	1	06/30/23 11:34	07/11/23 06:29	2355-31-9	
NMeFOSE	<0.622	ng/L	3.83	0.622	1	06/30/23 11:34	07/11/23 06:29	24448-09-7	
Perfluorobutanoic acid	9.74	ng/L	1.91	0.728	1	06/30/23 11:34	07/11/23 06:29	375-22-4	
Perfluorobutanesulfonic acid	8.54	ng/L	1.91	0.297	1	06/30/23 11:34	07/11/23 06:29	375-73-5	
Perfluorodecanoic acid	<0.689	ng/L	1.91	0.689	1	06/30/23 11:34	07/11/23 06:29	335-76-2	
Perfluorododecanoic acid	<0.622	ng/L	1.91	0.622	1	06/30/23 11:34	07/11/23 06:29	307-55-1	
PFDoS	<0.627	ng/L	1.91	0.627	1	06/30/23 11:34	07/11/23 06:29	79780-39-5	
PFDS	<0.584	ng/L	1.91	0.584	1	06/30/23 11:34	07/11/23 06:29	335-77-3	
Perfluoroheptanoic acid	5.48	ng/L	1.91	0.555	1	06/30/23 11:34	07/11/23 06:29	375-85-9	
PFHpS	<0.584	ng/L	1.91	0.584	1	06/30/23 11:34	07/11/23 06:29	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-01-WG-20230620 Lab ID: 40264224006 Collected: 06/20/23 09:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	4.25	ng/L	1.91	0.450	1	06/30/23 11:34	07/11/23 06:29	307-24-4	
Perfluorohexanesulfonic acid	3.09	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 06:29	355-46-4	
Perfluorononanoic acid	<0.469	ng/L	1.91	0.469	1	06/30/23 11:34	07/11/23 06:29	375-95-1	
PFNS	<0.833	ng/L	1.91	0.833	1	06/30/23 11:34	07/11/23 06:29	68259-12-1	
Perfluorooctanoic acid	71.8	ng/L	1.91	0.402	1	06/30/23 11:34	07/11/23 06:29	335-67-1	
Perfluorooctanesulfonic acid	<0.364	ng/L	1.91	0.364	1	06/30/23 11:34	07/11/23 06:29	1763-23-1	
Perfluoropentanoic acid	6.10	ng/L	1.91	0.421	1	06/30/23 11:34	07/11/23 06:29	2706-90-3	
PFPeS	2.37	ng/L	1.91	0.488	1	06/30/23 11:34	07/11/23 06:29	2706-91-4	
Perfluorotetradecanoic acid	<0.546	ng/L	1.91	0.546	1	06/30/23 11:34	07/11/23 06:29	376-06-7	
Perfluorotridecanoic acid	<0.589	ng/L	1.91	0.589	1	06/30/23 11:34	07/11/23 06:29	72629-94-8	
Perfluoroundecanoic acid	<0.594	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 06:29	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 06:29	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 06:29	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	79	%	50-150		1	06/30/23 11:34	07/11/23 06:29	2355-31-9-EI	
d5-NEtFOSAA	78	%	50-150		1	06/30/23 11:34	07/11/23 06:29	2991-50-6-EI	
d7-NMeFOSE	9	%	50-150		1	06/30/23 11:34	07/11/23 06:29	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	6	%	50-150		1	06/30/23 11:34	07/11/23 06:29	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	139	%	50-150		1	06/30/23 11:34	07/11/23 06:29	757124-72-4	
M2 6:2 FTS	122	%	50-150		1	06/30/23 11:34	07/11/23 06:29	27619-97-2-	
M2 8:2 FTS	99	%	50-150		1	06/30/23 11:34	07/11/23 06:29	39108-34-4-	
M2PFHxDA	28	%	50-150		1	06/30/23 11:34	07/11/23 06:29	67905-19-5-	
M2PFTeDA	53	%	50-150		1	06/30/23 11:34	07/11/23 06:29	376-06-7-EI	
M3HFPODA	75	%	50-150		1	06/30/23 11:34	07/11/23 06:29	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 06:29	375-73-5-EI	
M3PFHxS	86	%	50-150		1	06/30/23 11:34	07/11/23 06:29	355-46-4-EI	
M4PFHpA	92	%	50-150		1	06/30/23 11:34	07/11/23 06:29	375-85-9-EI	
M5PFHxA	96	%	50-150		1	06/30/23 11:34	07/11/23 06:29	307-24-4-EI	
M5PFPeA	82	%	50-150		1	06/30/23 11:34	07/11/23 06:29	2706-90-3-EI	
M6PFDA	88	%	50-150		1	06/30/23 11:34	07/11/23 06:29	335-76-2-EI	
M7PFUdA	80	%	50-150		1	06/30/23 11:34	07/11/23 06:29	2058-94-8-EI	
M8FOSA	65	%	50-150		1	06/30/23 11:34	07/11/23 06:29	754-91-6-EI	
M8PFOA	93	%	50-150		1	06/30/23 11:34	07/11/23 06:29	335-67-1-EI	
M8PFOS	83	%	50-150		1	06/30/23 11:34	07/11/23 06:29	1763-23-1-EI	
M9PFNA	92	%	50-150		1	06/30/23 11:34	07/11/23 06:29	375-95-1-EI	
MPFBA	83	%	50-150		1	06/30/23 11:34	07/11/23 06:29	375-22-4-EI	
MPFDoA	69	%	50-150		1	06/30/23 11:34	07/11/23 06:29	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-26-WG-20230620 Lab ID: 40264224007 Collected: 06/20/23 11:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 15:49	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	98	%	70-130		1		06/27/23 15:49		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 10:22	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 10:22	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 10:22	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/23 10:22	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/23 10:22	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 10:22	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 10:22	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 10:22	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/23 10:22	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 10:22	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 10:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 10:22	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/29/23 10:22	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.669	ng/L	2.16	0.669	1	06/30/23 11:34	07/11/23 06:45	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.809	ng/L	2.16	0.809	1	06/30/23 11:34	07/11/23 06:45	27619-97-2	
8:2 FTS	<0.572	ng/L	2.16	0.572	1	06/30/23 11:34	07/11/23 06:45	39108-34-4	
9Cl-PF3ONS	<0.485	ng/L	2.16	0.485	1	06/30/23 11:34	07/11/23 06:45	756426-58-1	
11Cl-PF3OUdS	<0.485	ng/L	2.16	0.485	1	06/30/23 11:34	07/11/23 06:45	763051-92-9	
ADONA	<0.464	ng/L	2.16	0.464	1	06/30/23 11:34	07/11/23 06:45	919005-14-4	
Perfluorooctanesulfonamide	<0.399	ng/L	2.16	0.399	1	06/30/23 11:34	07/11/23 06:45	754-91-6	
HFPO-DA	<3.60	ng/L	10.8	3.60	1	06/30/23 11:34	07/11/23 06:45	13252-13-6	
NEtFOSA	<0.755	ng/L	4.31	0.755	1	06/30/23 11:34	07/11/23 06:45	4151-50-2	
NEtFOSAA	<0.852	ng/L	4.31	0.852	1	06/30/23 11:34	07/11/23 06:45	2991-50-6	
NEtFOSE	<0.545	ng/L	4.31	0.545	1	06/30/23 11:34	07/11/23 06:45	1691-99-2	
NMeFOSA	<0.895	ng/L	4.31	0.895	1	06/30/23 11:34	07/11/23 06:45	31506-32-8	
NMeFOSAA	<0.485	ng/L	4.31	0.485	1	06/30/23 11:34	07/11/23 06:45	2355-31-9	
NMeFOSE	<0.701	ng/L	4.31	0.701	1	06/30/23 11:34	07/11/23 06:45	24448-09-7	
Perfluorobutanoic acid	7.60	ng/L	2.16	0.820	1	06/30/23 11:34	07/11/23 06:45	375-22-4	
Perfluorobutanesulfonic acid	6.85	ng/L	2.16	0.334	1	06/30/23 11:34	07/11/23 06:45	375-73-5	
Perfluorodecanoic acid	<0.776	ng/L	2.16	0.776	1	06/30/23 11:34	07/11/23 06:45	335-76-2	
Perfluorododecanoic acid	<0.701	ng/L	2.16	0.701	1	06/30/23 11:34	07/11/23 06:45	307-55-1	
PFDoS	<0.706	ng/L	2.16	0.706	1	06/30/23 11:34	07/11/23 06:45	79780-39-5	
PFDS	<0.658	ng/L	2.16	0.658	1	06/30/23 11:34	07/11/23 06:45	335-77-3	
Perfluoroheptanoic acid	6.29	ng/L	2.16	0.625	1	06/30/23 11:34	07/11/23 06:45	375-85-9	
PFHpS	<0.658	ng/L	2.16	0.658	1	06/30/23 11:34	07/11/23 06:45	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-26-WG-20230620 Lab ID: 40264224007 Collected: 06/20/23 11:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	6.22	ng/L	2.16	0.507	1	06/30/23 11:34	07/11/23 06:45	307-24-4	
Perfluorohexanesulfonic acid	4.72	ng/L	2.16	0.669	1	06/30/23 11:34	07/11/23 06:45	355-46-4	
Perfluorononanoic acid	<0.528	ng/L	2.16	0.528	1	06/30/23 11:34	07/11/23 06:45	375-95-1	
PFNS	<0.938	ng/L	2.16	0.938	1	06/30/23 11:34	07/11/23 06:45	68259-12-1	
Perfluorooctanoic acid	73.4	ng/L	2.16	0.453	1	06/30/23 11:34	07/11/23 06:45	335-67-1	
Perfluorooctanesulfonic acid	<0.410	ng/L	2.16	0.410	1	06/30/23 11:34	07/11/23 06:45	1763-23-1	
Perfluoropentanoic acid	4.27	ng/L	2.16	0.474	1	06/30/23 11:34	07/11/23 06:45	2706-90-3	
PFPeS	<0.550	ng/L	2.16	0.550	1	06/30/23 11:34	07/11/23 06:45	2706-91-4	
Perfluorotetradecanoic acid	<0.615	ng/L	2.16	0.615	1	06/30/23 11:34	07/11/23 06:45	376-06-7	
Perfluorotridecanoic acid	<0.663	ng/L	2.16	0.663	1	06/30/23 11:34	07/11/23 06:45	72629-94-8	
Perfluoroundecanoic acid	<0.669	ng/L	2.16	0.669	1	06/30/23 11:34	07/11/23 06:45	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.4	%	50-150		1	06/30/23 11:34	07/11/23 06:45	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.5	%	50-150		1	06/30/23 11:34	07/11/23 06:45	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	63	%	50-150		1	06/30/23 11:34	07/11/23 06:45	2355-31-9-EI	
d5-NEtFOSAA	56	%	50-150		1	06/30/23 11:34	07/11/23 06:45	2991-50-6-EI	
d7-NMeFOSE	5	%	50-150		1	06/30/23 11:34	07/11/23 06:45	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	3	%	50-150		1	06/30/23 11:34	07/11/23 06:45	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	119	%	50-150		1	06/30/23 11:34	07/11/23 06:45	757124-72-4	
M2 6:2 FTS	111	%	50-150		1	06/30/23 11:34	07/11/23 06:45	27619-97-2-	
M2 8:2 FTS	82	%	50-150		1	06/30/23 11:34	07/11/23 06:45	39108-34-4-	
M2PFHxDA	0.7	%	50-150		1	06/30/23 11:34	07/11/23 06:45	67905-19-5-	MSSV1 2.3
M2PFTeDA	12	%	50-150		1	06/30/23 11:34	07/11/23 06:45	376-06-7-EI	MSSV1 2.3
M3HFPODA	76	%	50-150		1	06/30/23 11:34	07/11/23 06:45	13252-13-6-	
M3PFBS	82	%	50-150		1	06/30/23 11:34	07/11/23 06:45	375-73-5-EI	
M3PFHxS	78	%	50-150		1	06/30/23 11:34	07/11/23 06:45	355-46-4-EI	
M4PFHpA	82	%	50-150		1	06/30/23 11:34	07/11/23 06:45	375-85-9-EI	
M5PFHxA	84	%	50-150		1	06/30/23 11:34	07/11/23 06:45	307-24-4-EI	
M5PFPeA	86	%	50-150		1	06/30/23 11:34	07/11/23 06:45	2706-90-3-EI	
M6PFDA	77	%	50-150		1	06/30/23 11:34	07/11/23 06:45	335-76-2-EI	
M7PFUdA	64	%	50-150		1	06/30/23 11:34	07/11/23 06:45	2058-94-8-EI	
M8FOSA	47	%	50-150		1	06/30/23 11:34	07/11/23 06:45	754-91-6-EI	
M8PFOA	85	%	50-150		1	06/30/23 11:34	07/11/23 06:45	335-67-1-EI	
M8PFOS	78	%	50-150		1	06/30/23 11:34	07/11/23 06:45	1763-23-1-EI	
M9PFNA	84	%	50-150		1	06/30/23 11:34	07/11/23 06:45	375-95-1-EI	
MPFBA	79	%	50-150		1	06/30/23 11:34	07/11/23 06:45	375-22-4-EI	
MPFDoA	42	%	50-150		1	06/30/23 11:34	07/11/23 06:45	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-21S-WG-20230620 Lab ID: 40264224008 Collected: 06/20/23 14:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 16:08	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	105	%	70-130		1		06/27/23 16:08		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 17:15	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 17:15	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 17:15	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 17:15	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 17:15	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 17:15	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/28/23 17:15	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 17:15	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 17:15	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 17:15	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/28/23 17:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/28/23 17:15	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/28/23 17:15	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.594	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 07:00	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.718	ng/L	1.91	0.718	1	06/30/23 11:34	07/11/23 07:00	27619-97-2	
8:2 FTS	<0.507	ng/L	1.91	0.507	1	06/30/23 11:34	07/11/23 07:00	39108-34-4	
9Cl-PF3ONS	<0.431	ng/L	1.91	0.431	1	06/30/23 11:34	07/11/23 07:00	756426-58-1	
11Cl-PF3OUdS	<0.431	ng/L	1.91	0.431	1	06/30/23 11:34	07/11/23 07:00	763051-92-9	
ADONA	<0.412	ng/L	1.91	0.412	1	06/30/23 11:34	07/11/23 07:00	919005-14-4	
Perfluorooctanesulfonamide	<0.354	ng/L	1.91	0.354	1	06/30/23 11:34	07/11/23 07:00	754-91-6	
HFPO-DA	<3.19	ng/L	9.57	3.19	1	06/30/23 11:34	07/11/23 07:00	13252-13-6	
NEtFOSA	<0.670	ng/L	3.83	0.670	1	06/30/23 11:34	07/11/23 07:00	4151-50-2	
NEtFOSAA	<0.756	ng/L	3.83	0.756	1	06/30/23 11:34	07/11/23 07:00	2991-50-6	
NEtFOSE	<0.483	ng/L	3.83	0.483	1	06/30/23 11:34	07/11/23 07:00	1691-99-2	
NMeFOSA	<0.795	ng/L	3.83	0.795	1	06/30/23 11:34	07/11/23 07:00	31506-32-8	
NMeFOSAA	<0.431	ng/L	3.83	0.431	1	06/30/23 11:34	07/11/23 07:00	2355-31-9	
NMeFOSE	<0.622	ng/L	3.83	0.622	1	06/30/23 11:34	07/11/23 07:00	24448-09-7	
Perfluorobutanoic acid	7.17	ng/L	1.91	0.728	1	06/30/23 11:34	07/11/23 07:00	375-22-4	
Perfluorobutanesulfonic acid	1.94	ng/L	1.91	0.297	1	06/30/23 11:34	07/11/23 07:00	375-73-5	
Perfluorodecanoic acid	<0.689	ng/L	1.91	0.689	1	06/30/23 11:34	07/11/23 07:00	335-76-2	
Perfluorododecanoic acid	<0.622	ng/L	1.91	0.622	1	06/30/23 11:34	07/11/23 07:00	307-55-1	
PFDoS	<0.627	ng/L	1.91	0.627	1	06/30/23 11:34	07/11/23 07:00	79780-39-5	
PFDS	<0.584	ng/L	1.91	0.584	1	06/30/23 11:34	07/11/23 07:00	335-77-3	
Perfluoroheptanoic acid	<0.555	ng/L	1.91	0.555	1	06/30/23 11:34	07/11/23 07:00	375-85-9	
PFHpS	<0.584	ng/L	1.91	0.584	1	06/30/23 11:34	07/11/23 07:00	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-21S-WG-20230620 Lab ID: 40264224008 Collected: 06/20/23 14:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	2.65	ng/L	1.91	0.450	1	06/30/23 11:34	07/11/23 07:00	307-24-4	
Perfluorohexanesulfonic acid	<0.594	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 07:00	355-46-4	
Perfluorononanoic acid	<0.469	ng/L	1.91	0.469	1	06/30/23 11:34	07/11/23 07:00	375-95-1	
PFNS	<0.833	ng/L	1.91	0.833	1	06/30/23 11:34	07/11/23 07:00	68259-12-1	
Perfluorooctanoic acid	34.6	ng/L	1.91	0.402	1	06/30/23 11:34	07/11/23 07:00	335-67-1	
Perfluorooctanesulfonic acid	<0.364	ng/L	1.91	0.364	1	06/30/23 11:34	07/11/23 07:00	1763-23-1	
Perfluoropentanoic acid	1.94	ng/L	1.91	0.421	1	06/30/23 11:34	07/11/23 07:00	2706-90-3	
PFPeS	<0.488	ng/L	1.91	0.488	1	06/30/23 11:34	07/11/23 07:00	2706-91-4	
Perfluorotetradecanoic acid	<0.546	ng/L	1.91	0.546	1	06/30/23 11:34	07/11/23 07:00	376-06-7	
Perfluorotridecanoic acid	<0.589	ng/L	1.91	0.589	1	06/30/23 11:34	07/11/23 07:00	72629-94-8	
Perfluoroundecanoic acid	<0.594	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 07:00	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:00	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:00	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	68	%	50-150		1	06/30/23 11:34	07/11/23 07:00	2355-31-9-EI	
d5-NEtFOSAA	71	%	50-150		1	06/30/23 11:34	07/11/23 07:00	2991-50-6-EI	
d7-NMeFOSE	14	%	50-150		1	06/30/23 11:34	07/11/23 07:00	24448-09-7-	
d9-NEtFOSE	12	%	50-150		1	06/30/23 11:34	07/11/23 07:00	1691-99-2-EI	
M2 4:2 FTS	107	%	50-150		1	06/30/23 11:34	07/11/23 07:00	757124-72-4	
M2 6:2 FTS	95	%	50-150		1	06/30/23 11:34	07/11/23 07:00	27619-97-2-	
M2 8:2 FTS	80	%	50-150		1	06/30/23 11:34	07/11/23 07:00	39108-34-4-	
M2PFHxDA	53	%	50-150		1	06/30/23 11:34	07/11/23 07:00	67905-19-5-	
M2PFTeDA	56	%	50-150		1	06/30/23 11:34	07/11/23 07:00	376-06-7-EI	
M3HFPODA	76	%	50-150		1	06/30/23 11:34	07/11/23 07:00	13252-13-6-	
M3PFBS	77	%	50-150		1	06/30/23 11:34	07/11/23 07:00	375-73-5-EI	
M3PFHxS	78	%	50-150		1	06/30/23 11:34	07/11/23 07:00	355-46-4-EI	
M4PFHpA	81	%	50-150		1	06/30/23 11:34	07/11/23 07:00	375-85-9-EI	
M5PFHxA	81	%	50-150		1	06/30/23 11:34	07/11/23 07:00	307-24-4-EI	
M5PFPeA	85	%	50-150		1	06/30/23 11:34	07/11/23 07:00	2706-90-3-EI	
M6PFDA	81	%	50-150		1	06/30/23 11:34	07/11/23 07:00	335-76-2-EI	
M7PFUdA	75	%	50-150		1	06/30/23 11:34	07/11/23 07:00	2058-94-8-EI	
M8FOSA	46	%	50-150		1	06/30/23 11:34	07/11/23 07:00	754-91-6-EI	
M8PFOA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:00	335-67-1-EI	
M8PFOS	77	%	50-150		1	06/30/23 11:34	07/11/23 07:00	1763-23-1-EI	
M9PFNA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:00	375-95-1-EI	
MPFBA	77	%	50-150		1	06/30/23 11:34	07/11/23 07:00	375-22-4-EI	
MPFDoA	63	%	50-150		1	06/30/23 11:34	07/11/23 07:00	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-16-WG-20230620 Lab ID: 40264224009 Collected: 06/20/23 14:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 17:06	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	107	%	70-130		1		06/27/23 17:06		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 10:43	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 10:43	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 10:43	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/23 10:43	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/23 10:43	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 10:43	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 10:43	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 10:43	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/23 10:43	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 10:43	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/29/23 10:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/29/23 10:43	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/29/23 10:43	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.596	ng/L	1.92	0.596	1	06/30/23 11:34	07/11/23 07:15	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.720	ng/L	1.92	0.720	1	06/30/23 11:34	07/11/23 07:15	27619-97-2	
8:2 FTS	<0.509	ng/L	1.92	0.509	1	06/30/23 11:34	07/11/23 07:15	39108-34-4	
9CI-PF3ONS	<0.432	ng/L	1.92	0.432	1	06/30/23 11:34	07/11/23 07:15	756426-58-1	
11CI-PF3OUdS	<0.432	ng/L	1.92	0.432	1	06/30/23 11:34	07/11/23 07:15	763051-92-9	
ADONA	<0.413	ng/L	1.92	0.413	1	06/30/23 11:34	07/11/23 07:15	919005-14-4	
Perfluorooctanesulfonamide	<0.355	ng/L	1.92	0.355	1	06/30/23 11:34	07/11/23 07:15	754-91-6	
HFPO-DA	<3.20	ng/L	9.61	3.20	1	06/30/23 11:34	07/11/23 07:15	13252-13-6	
NEtFOSA	<0.672	ng/L	3.84	0.672	1	06/30/23 11:34	07/11/23 07:15	4151-50-2	
NEtFOSAA	<0.759	ng/L	3.84	0.759	1	06/30/23 11:34	07/11/23 07:15	2991-50-6	
NEtFOSE	<0.485	ng/L	3.84	0.485	1	06/30/23 11:34	07/11/23 07:15	1691-99-2	
NMeFOSA	<0.797	ng/L	3.84	0.797	1	06/30/23 11:34	07/11/23 07:15	31506-32-8	
NMeFOSAA	<0.432	ng/L	3.84	0.432	1	06/30/23 11:34	07/11/23 07:15	2355-31-9	
NMeFOSE	<0.624	ng/L	3.84	0.624	1	06/30/23 11:34	07/11/23 07:15	24448-09-7	
Perfluorobutanoic acid	11.0	ng/L	1.92	0.730	1	06/30/23 11:34	07/11/23 07:15	375-22-4	
Perfluorobutanesulfonic acid	37.1	ng/L	1.92	0.298	1	06/30/23 11:34	07/11/23 07:15	375-73-5	
Perfluorodecanoic acid	<0.692	ng/L	1.92	0.692	1	06/30/23 11:34	07/11/23 07:15	335-76-2	
Perfluorododecanoic acid	<0.624	ng/L	1.92	0.624	1	06/30/23 11:34	07/11/23 07:15	307-55-1	
PFDoS	<0.629	ng/L	1.92	0.629	1	06/30/23 11:34	07/11/23 07:15	79780-39-5	
PFDS	<0.586	ng/L	1.92	0.586	1	06/30/23 11:34	07/11/23 07:15	335-77-3	
Perfluoroheptanoic acid	<0.557	ng/L	1.92	0.557	1	06/30/23 11:34	07/11/23 07:15	375-85-9	
PFHpS	<0.586	ng/L	1.92	0.586	1	06/30/23 11:34	07/11/23 07:15	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-16-WG-20230620 Lab ID: 40264224009 Collected: 06/20/23 14:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.451	ng/L	1.92	0.451	1	06/30/23 11:34	07/11/23 07:15	307-24-4	
Perfluorohexanesulfonic acid	2.02	ng/L	1.92	0.596	1	06/30/23 11:34	07/11/23 07:15	355-46-4	
Perfluorononanoic acid	<0.471	ng/L	1.92	0.471	1	06/30/23 11:34	07/11/23 07:15	375-95-1	
PFNS	<0.836	ng/L	1.92	0.836	1	06/30/23 11:34	07/11/23 07:15	68259-12-1	
Perfluorooctanoic acid	10.1	ng/L	1.92	0.403	1	06/30/23 11:34	07/11/23 07:15	335-67-1	
Perfluorooctanesulfonic acid	<0.365	ng/L	1.92	0.365	1	06/30/23 11:34	07/11/23 07:15	1763-23-1	
Perfluoropentanoic acid	<0.423	ng/L	1.92	0.423	1	06/30/23 11:34	07/11/23 07:15	2706-90-3	
PFPeS	<0.490	ng/L	1.92	0.490	1	06/30/23 11:34	07/11/23 07:15	2706-91-4	
Perfluorotetradecanoic acid	<0.548	ng/L	1.92	0.548	1	06/30/23 11:34	07/11/23 07:15	376-06-7	
Perfluorotridecanoic acid	<0.591	ng/L	1.92	0.591	1	06/30/23 11:34	07/11/23 07:15	72629-94-8	
Perfluoroundecanoic acid	<0.596	ng/L	1.92	0.596	1	06/30/23 11:34	07/11/23 07:15	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 07:15	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:15	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	73	%	50-150		1	06/30/23 11:34	07/11/23 07:15	2355-31-9-EI	
d5-NEtFOSAA	73	%	50-150		1	06/30/23 11:34	07/11/23 07:15	2991-50-6-EI	
d7-NMeFOSE	7	%	50-150		1	06/30/23 11:34	07/11/23 07:15	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	8	%	50-150		1	06/30/23 11:34	07/11/23 07:15	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	114	%	50-150		1	06/30/23 11:34	07/11/23 07:15	757124-72-4	
M2 6:2 FTS	111	%	50-150		1	06/30/23 11:34	07/11/23 07:15	27619-97-2-	
M2 8:2 FTS	88	%	50-150		1	06/30/23 11:34	07/11/23 07:15	39108-34-4-	
M2PFHxDA	78	%	50-150		1	06/30/23 11:34	07/11/23 07:15	67905-19-5-	
M2PFTeDA	70	%	50-150		1	06/30/23 11:34	07/11/23 07:15	376-06-7-EI	
M3HFPODA	77	%	50-150		1	06/30/23 11:34	07/11/23 07:15	13252-13-6-	
M3PFBS	81	%	50-150		1	06/30/23 11:34	07/11/23 07:15	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 07:15	355-46-4-EI	
M4PFHpA	85	%	50-150		1	06/30/23 11:34	07/11/23 07:15	375-85-9-EI	
M5PFHxA	87	%	50-150		1	06/30/23 11:34	07/11/23 07:15	307-24-4-EI	
M5PFPeA	89	%	50-150		1	06/30/23 11:34	07/11/23 07:15	2706-90-3-EI	
M6PFDA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:15	335-76-2-EI	
M7PFUdA	79	%	50-150		1	06/30/23 11:34	07/11/23 07:15	2058-94-8-EI	
M8FOSA	30	%	50-150		1	06/30/23 11:34	07/11/23 07:15	754-91-6-EI	
M8PFOA	87	%	50-150		1	06/30/23 11:34	07/11/23 07:15	335-67-1-EI	
M8PFOS	77	%	50-150		1	06/30/23 11:34	07/11/23 07:15	1763-23-1-EI	
M9PFNA	86	%	50-150		1	06/30/23 11:34	07/11/23 07:15	375-95-1-EI	
MPFBA	80	%	50-150		1	06/30/23 11:34	07/11/23 07:15	375-22-4-EI	
MPFDoA	72	%	50-150		1	06/30/23 11:34	07/11/23 07:15	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-10S-WG-20230620 Lab ID: 40264224010 Collected: 06/20/23 16:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 17:25	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	106	%	70-130		1		06/27/23 17:25		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	0.45J	ug/L	1.0	0.30	1		06/28/23 17:35	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 17:35	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 17:35	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 17:35	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 17:35	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 17:35	127-18-4	
Trichloroethene	2.0	ug/L	1.0	0.32	1		06/28/23 17:35	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 17:35	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 17:35	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 17:35	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/28/23 17:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		06/28/23 17:35	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/28/23 17:35	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.611	ng/L	1.97	0.611	1	06/30/23 11:34	07/11/23 07:31	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.739	ng/L	1.97	0.739	1	06/30/23 11:34	07/11/23 07:31	27619-97-2	
8:2 FTS	<0.522	ng/L	1.97	0.522	1	06/30/23 11:34	07/11/23 07:31	39108-34-4	
9Cl-PF3ONS	<0.444	ng/L	1.97	0.444	1	06/30/23 11:34	07/11/23 07:31	756426-58-1	
11Cl-PF3OUdS	<0.444	ng/L	1.97	0.444	1	06/30/23 11:34	07/11/23 07:31	763051-92-9	
ADONA	<0.424	ng/L	1.97	0.424	1	06/30/23 11:34	07/11/23 07:31	919005-14-4	
Perfluorooctanesulfonamide	<0.365	ng/L	1.97	0.365	1	06/30/23 11:34	07/11/23 07:31	754-91-6	
HFPO-DA	<3.29	ng/L	9.86	3.29	1	06/30/23 11:34	07/11/23 07:31	13252-13-6	
NEtFOSA	<0.690	ng/L	3.94	0.690	1	06/30/23 11:34	07/11/23 07:31	4151-50-2	
NEtFOSAA	<0.779	ng/L	3.94	0.779	1	06/30/23 11:34	07/11/23 07:31	2991-50-6	
NEtFOSE	<0.498	ng/L	3.94	0.498	1	06/30/23 11:34	07/11/23 07:31	1691-99-2	
NMeFOSA	<0.818	ng/L	3.94	0.818	1	06/30/23 11:34	07/11/23 07:31	31506-32-8	
NMeFOSAA	<0.444	ng/L	3.94	0.444	1	06/30/23 11:34	07/11/23 07:31	2355-31-9	
NMeFOSE	<0.641	ng/L	3.94	0.641	1	06/30/23 11:34	07/11/23 07:31	24448-09-7	
Perfluorobutanoic acid	5.69	ng/L	1.97	0.749	1	06/30/23 11:34	07/11/23 07:31	375-22-4	
Perfluorobutanesulfonic acid	<0.306	ng/L	1.97	0.306	1	06/30/23 11:34	07/11/23 07:31	375-73-5	
Perfluorodecanoic acid	<0.710	ng/L	1.97	0.710	1	06/30/23 11:34	07/11/23 07:31	335-76-2	
Perfluorododecanoic acid	<0.641	ng/L	1.97	0.641	1	06/30/23 11:34	07/11/23 07:31	307-55-1	
PFDoS	<0.646	ng/L	1.97	0.646	1	06/30/23 11:34	07/11/23 07:31	79780-39-5	
PFDS	<0.601	ng/L	1.97	0.601	1	06/30/23 11:34	07/11/23 07:31	335-77-3	
Perfluoroheptanoic acid	2.35	ng/L	1.97	0.572	1	06/30/23 11:34	07/11/23 07:31	375-85-9	
PFHpS	<0.601	ng/L	1.97	0.601	1	06/30/23 11:34	07/11/23 07:31	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-10S-WG-20230620 Lab ID: 40264224010 Collected: 06/20/23 16:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	2.28	ng/L	1.97	0.463	1	06/30/23 11:34	07/11/23 07:31	307-24-4	
Perfluorohexanesulfonic acid	<0.611	ng/L	1.97	0.611	1	06/30/23 11:34	07/11/23 07:31	355-46-4	
Perfluorononanoic acid	<0.483	ng/L	1.97	0.483	1	06/30/23 11:34	07/11/23 07:31	375-95-1	
PFNS	<0.858	ng/L	1.97	0.858	1	06/30/23 11:34	07/11/23 07:31	68259-12-1	
Perfluorooctanoic acid	25.6	ng/L	1.97	0.414	1	06/30/23 11:34	07/11/23 07:31	335-67-1	
Perfluorooctanesulfonic acid	<0.375	ng/L	1.97	0.375	1	06/30/23 11:34	07/11/23 07:31	1763-23-1	
Perfluoropentanoic acid	<0.434	ng/L	1.97	0.434	1	06/30/23 11:34	07/11/23 07:31	2706-90-3	
PFPeS	<0.503	ng/L	1.97	0.503	1	06/30/23 11:34	07/11/23 07:31	2706-91-4	
Perfluorotetradecanoic acid	<0.562	ng/L	1.97	0.562	1	06/30/23 11:34	07/11/23 07:31	376-06-7	
Perfluorotridecanoic acid	<0.606	ng/L	1.97	0.606	1	06/30/23 11:34	07/11/23 07:31	72629-94-8	
Perfluoroundecanoic acid	<0.611	ng/L	1.97	0.611	1	06/30/23 11:34	07/11/23 07:31	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 07:31	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.08	%	50-150		1	06/30/23 11:34	07/11/23 07:31	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	38	%	50-150		1	06/30/23 11:34	07/11/23 07:31	2355-31-9-EI	
d5-NEtFOSAA	28	%	50-150		1	06/30/23 11:34	07/11/23 07:31	2991-50-6-EI	
d7-NMeFOSE	0.1	%	50-150		1	06/30/23 11:34	07/11/23 07:31	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.04	%	50-150		1	06/30/23 11:34	07/11/23 07:31	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	119	%	50-150		1	06/30/23 11:34	07/11/23 07:31	757124-72-4	
M2 6:2 FTS	110	%	50-150		1	06/30/23 11:34	07/11/23 07:31	27619-97-2-	
M2 8:2 FTS	63	%	50-150		1	06/30/23 11:34	07/11/23 07:31	39108-34-4-	
M2PFHxDA	0.5	%	50-150		1	06/30/23 11:34	07/11/23 07:31	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 07:31	376-06-7-EI	MSSV1 2.3
M3HFPODA	80	%	50-150		1	06/30/23 11:34	07/11/23 07:31	13252-13-6-	
M3PFBS	84	%	50-150		1	06/30/23 11:34	07/11/23 07:31	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 07:31	355-46-4-EI	
M4PFHpA	87	%	50-150		1	06/30/23 11:34	07/11/23 07:31	375-85-9-EI	
M5PFHxA	89	%	50-150		1	06/30/23 11:34	07/11/23 07:31	307-24-4-EI	
M5PFPeA	93	%	50-150		1	06/30/23 11:34	07/11/23 07:31	2706-90-3-EI	
M6PFDA	56	%	50-150		1	06/30/23 11:34	07/11/23 07:31	335-76-2-EI	
M7PFUdA	26	%	50-150		1	06/30/23 11:34	07/11/23 07:31	2058-94-8-EI	
M8FOSA	4	%	50-150		1	06/30/23 11:34	07/11/23 07:31	754-91-6-EI	MSSV1 2.3
M8PFOA	86	%	50-150		1	06/30/23 11:34	07/11/23 07:31	335-67-1-EI	
M8PFOS	67	%	50-150		1	06/30/23 11:34	07/11/23 07:31	1763-23-1-EI	
M9PFNA	78	%	50-150		1	06/30/23 11:34	07/11/23 07:31	375-95-1-EI	
MPFBA	84	%	50-150		1	06/30/23 11:34	07/11/23 07:31	375-22-4-EI	
MPFDoA	6	%	50-150		1	06/30/23 11:34	07/11/23 07:31	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-18S-WG-20230620 Lab ID: 40264224011 Collected: 06/20/23 16:35 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 17:44	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	111	%	70-130		1		06/27/23 17:44		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 17:56	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 17:56	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 17:56	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 17:56	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 17:56	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 17:56	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/28/23 17:56	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 17:56	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 17:56	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 17:56	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/28/23 17:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/28/23 17:56	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/28/23 17:56	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.575	ng/L	1.85	0.575	1	06/30/23 11:34	07/11/23 07:46	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.696	ng/L	1.85	0.696	1	06/30/23 11:34	07/11/23 07:46	27619-97-2	
8:2 FTS	<0.492	ng/L	1.85	0.492	1	06/30/23 11:34	07/11/23 07:46	39108-34-4	
9CI-PF3ONS	<0.417	ng/L	1.85	0.417	1	06/30/23 11:34	07/11/23 07:46	756426-58-1	
11CI-PF3OUdS	<0.417	ng/L	1.85	0.417	1	06/30/23 11:34	07/11/23 07:46	763051-92-9	
ADONA	<0.399	ng/L	1.85	0.399	1	06/30/23 11:34	07/11/23 07:46	919005-14-4	
Perfluorooctanesulfonamide	<0.343	ng/L	1.85	0.343	1	06/30/23 11:34	07/11/23 07:46	754-91-6	
HFPO-DA	<3.09	ng/L	9.27	3.09	1	06/30/23 11:34	07/11/23 07:46	13252-13-6	
NEtFOSA	<0.649	ng/L	3.71	0.649	1	06/30/23 11:34	07/11/23 07:46	4151-50-2	
NEtFOSAA	<0.733	ng/L	3.71	0.733	1	06/30/23 11:34	07/11/23 07:46	2991-50-6	
NEtFOSE	<0.468	ng/L	3.71	0.468	1	06/30/23 11:34	07/11/23 07:46	1691-99-2	
NMeFOSA	<0.770	ng/L	3.71	0.770	1	06/30/23 11:34	07/11/23 07:46	31506-32-8	
NMeFOSAA	<0.417	ng/L	3.71	0.417	1	06/30/23 11:34	07/11/23 07:46	2355-31-9	
NMeFOSE	<0.603	ng/L	3.71	0.603	1	06/30/23 11:34	07/11/23 07:46	24448-09-7	
Perfluorobutanoic acid	2.34	ng/L	1.85	0.705	1	06/30/23 11:34	07/11/23 07:46	375-22-4	
Perfluorobutanesulfonic acid	3.02	ng/L	1.85	0.287	1	06/30/23 11:34	07/11/23 07:46	375-73-5	
Perfluorodecanoic acid	<0.668	ng/L	1.85	0.668	1	06/30/23 11:34	07/11/23 07:46	335-76-2	
Perfluorododecanoic acid	<0.603	ng/L	1.85	0.603	1	06/30/23 11:34	07/11/23 07:46	307-55-1	
PFDoS	<0.607	ng/L	1.85	0.607	1	06/30/23 11:34	07/11/23 07:46	79780-39-5	
PFDS	<0.566	ng/L	1.85	0.566	1	06/30/23 11:34	07/11/23 07:46	335-77-3	
Perfluoroheptanoic acid	<0.538	ng/L	1.85	0.538	1	06/30/23 11:34	07/11/23 07:46	375-85-9	
PFHpS	<0.566	ng/L	1.85	0.566	1	06/30/23 11:34	07/11/23 07:46	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-18S-WG-20230620 Lab ID: 40264224011 Collected: 06/20/23 16:35 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.436	ng/L	1.85	0.436	1	06/30/23 11:34	07/11/23 07:46	307-24-4	
Perfluorohexanesulfonic acid	<0.575	ng/L	1.85	0.575	1	06/30/23 11:34	07/11/23 07:46	355-46-4	
Perfluorononanoic acid	<0.454	ng/L	1.85	0.454	1	06/30/23 11:34	07/11/23 07:46	375-95-1	
PFNS	<0.807	ng/L	1.85	0.807	1	06/30/23 11:34	07/11/23 07:46	68259-12-1	
Perfluorooctanoic acid	13.3	ng/L	1.85	0.389	1	06/30/23 11:34	07/11/23 07:46	335-67-1	
Perfluorooctanesulfonic acid	11.5	ng/L	1.85	0.352	1	06/30/23 11:34	07/11/23 07:46	1763-23-1	
Perfluoropentanoic acid	<0.408	ng/L	1.85	0.408	1	06/30/23 11:34	07/11/23 07:46	2706-90-3	
PFPeS	<0.473	ng/L	1.85	0.473	1	06/30/23 11:34	07/11/23 07:46	2706-91-4	
Perfluorotetradecanoic acid	<0.529	ng/L	1.85	0.529	1	06/30/23 11:34	07/11/23 07:46	376-06-7	
Perfluorotridecanoic acid	<0.570	ng/L	1.85	0.570	1	06/30/23 11:34	07/11/23 07:46	72629-94-8	
Perfluoroundecanoic acid	<0.575	ng/L	1.85	0.575	1	06/30/23 11:34	07/11/23 07:46	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:46	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:46	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:46	2355-31-9-EI	
d5-NEtFOSAA	79	%	50-150		1	06/30/23 11:34	07/11/23 07:46	2991-50-6-EI	
d7-NMeFOSE	18	%	50-150		1	06/30/23 11:34	07/11/23 07:46	24448-09-7-	
d9-NEtFOSE	13	%	50-150		1	06/30/23 11:34	07/11/23 07:46	1691-99-2-EI	
M2 4:2 FTS	131	%	50-150		1	06/30/23 11:34	07/11/23 07:46	757124-72-4	
M2 6:2 FTS	125	%	50-150		1	06/30/23 11:34	07/11/23 07:46	27619-97-2-	
M2 8:2 FTS	103	%	50-150		1	06/30/23 11:34	07/11/23 07:46	39108-34-4-	
M2PFHxDA	71	%	50-150		1	06/30/23 11:34	07/11/23 07:46	67905-19-5-	
M2PFTeDA	72	%	50-150		1	06/30/23 11:34	07/11/23 07:46	376-06-7-EI	
M3HFPODA	75	%	50-150		1	06/30/23 11:34	07/11/23 07:46	13252-13-6-	
M3PFBS	81	%	50-150		1	06/30/23 11:34	07/11/23 07:46	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 07:46	355-46-4-EI	
M4PFHpA	92	%	50-150		1	06/30/23 11:34	07/11/23 07:46	375-85-9-EI	
M5PFHxA	92	%	50-150		1	06/30/23 11:34	07/11/23 07:46	307-24-4-EI	
M5PFPeA	84	%	50-150		1	06/30/23 11:34	07/11/23 07:46	2706-90-3-EI	
M6PFDA	85	%	50-150		1	06/30/23 11:34	07/11/23 07:46	335-76-2-EI	
M7PFUdA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:46	2058-94-8-EI	
M8FOSA	51	%	50-150		1	06/30/23 11:34	07/11/23 07:46	754-91-6-EI	
M8PFOA	90	%	50-150		1	06/30/23 11:34	07/11/23 07:46	335-67-1-EI	
M8PFOS	80	%	50-150		1	06/30/23 11:34	07/11/23 07:46	1763-23-1-EI	
M9PFNA	90	%	50-150		1	06/30/23 11:34	07/11/23 07:46	375-95-1-EI	
MPFBA	81	%	50-150		1	06/30/23 11:34	07/11/23 07:46	375-22-4-EI	
MPFDoA	74	%	50-150		1	06/30/23 11:34	07/11/23 07:46	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-08-WG-20230621 Lab ID: 40264224012 Collected: 06/21/23 08:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 18:03	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	109	%	70-130		1		06/27/23 18:03		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 18:16	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 18:16	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 18:16	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 18:16	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 18:16	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 18:16	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/28/23 18:16	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 18:16	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 18:16	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 18:16	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/28/23 18:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		06/28/23 18:16	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		06/28/23 18:16	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.601	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 08:01	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.727	ng/L	1.94	0.727	1	06/30/23 11:34	07/11/23 08:01	27619-97-2	
8:2 FTS	<0.513	ng/L	1.94	0.513	1	06/30/23 11:34	07/11/23 08:01	39108-34-4	
9Cl-PF3ONS	<0.436	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 08:01	756426-58-1	
11Cl-PF3OUdS	<0.436	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 08:01	763051-92-9	
ADONA	<0.417	ng/L	1.94	0.417	1	06/30/23 11:34	07/11/23 08:01	919005-14-4	
Perfluorooctanesulfonamide	<0.358	ng/L	1.94	0.358	1	06/30/23 11:34	07/11/23 08:01	754-91-6	
HFPO-DA	<3.23	ng/L	9.69	3.23	1	06/30/23 11:34	07/11/23 08:01	13252-13-6	
NEtFOSA	<0.678	ng/L	3.87	0.678	1	06/30/23 11:34	07/11/23 08:01	4151-50-2	
NEtFOSAA	<0.765	ng/L	3.87	0.765	1	06/30/23 11:34	07/11/23 08:01	2991-50-6	
NEtFOSE	<0.489	ng/L	3.87	0.489	1	06/30/23 11:34	07/11/23 08:01	1691-99-2	
NMeFOSA	<0.804	ng/L	3.87	0.804	1	06/30/23 11:34	07/11/23 08:01	31506-32-8	
NMeFOSAA	<0.436	ng/L	3.87	0.436	1	06/30/23 11:34	07/11/23 08:01	2355-31-9	
NMeFOSE	<0.630	ng/L	3.87	0.630	1	06/30/23 11:34	07/11/23 08:01	24448-09-7	
Perfluorobutanoic acid	107	ng/L	1.94	0.736	1	06/30/23 11:34	07/11/23 08:01	375-22-4	
Perfluorobutanesulfonic acid	5.84	ng/L	1.94	0.300	1	06/30/23 11:34	07/11/23 08:01	375-73-5	
Perfluorodecanoic acid	<0.697	ng/L	1.94	0.697	1	06/30/23 11:34	07/11/23 08:01	335-76-2	
Perfluorododecanoic acid	<0.630	ng/L	1.94	0.630	1	06/30/23 11:34	07/11/23 08:01	307-55-1	
PFDoS	<0.635	ng/L	1.94	0.635	1	06/30/23 11:34	07/11/23 08:01	79780-39-5	
PFDS	<0.591	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 08:01	335-77-3	
Perfluoroheptanoic acid	53.2	ng/L	1.94	0.562	1	06/30/23 11:34	07/11/23 08:01	375-85-9	
PFHpS	<0.591	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 08:01	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-08-WG-20230621 Lab ID: 40264224012 Collected: 06/21/23 08:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	339	ng/L	1.94	0.455	1	06/30/23 11:34	07/11/23 08:01	307-24-4	
Perfluorohexanesulfonic acid	4.00	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 08:01	355-46-4	
Perfluorononanoic acid	<0.475	ng/L	1.94	0.475	1	06/30/23 11:34	07/11/23 08:01	375-95-1	
PFNS	<0.843	ng/L	1.94	0.843	1	06/30/23 11:34	07/11/23 08:01	68259-12-1	
Perfluorooctanoic acid	28.8	ng/L	1.94	0.407	1	06/30/23 11:34	07/11/23 08:01	335-67-1	
Perfluorooctanesulfonic acid	<0.368	ng/L	1.94	0.368	1	06/30/23 11:34	07/11/23 08:01	1763-23-1	
Perfluoropentanoic acid	409	ng/L	1.94	0.426	1	06/30/23 11:34	07/11/23 08:01	2706-90-3	
PFPeS	<0.494	ng/L	1.94	0.494	1	06/30/23 11:34	07/11/23 08:01	2706-91-4	
Perfluorotetradecanoic acid	<0.552	ng/L	1.94	0.552	1	06/30/23 11:34	07/11/23 08:01	376-06-7	
Perfluorotridecanoic acid	<0.596	ng/L	1.94	0.596	1	06/30/23 11:34	07/11/23 08:01	72629-94-8	
Perfluoroundecanoic acid	<0.601	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 08:01	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.1	%	50-150		1	06/30/23 11:34	07/11/23 08:01	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 08:01	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	44	%	50-150		1	06/30/23 11:34	07/11/23 08:01	2355-31-9-EI	
d5-NEtFOSAA	28	%	50-150		1	06/30/23 11:34	07/11/23 08:01	2991-50-6-EI	
d7-NMeFOSE	0.06	%	50-150		1	06/30/23 11:34	07/11/23 08:01	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.09	%	50-150		1	06/30/23 11:34	07/11/23 08:01	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	130	%	50-150		1	06/30/23 11:34	07/11/23 08:01	757124-72-4	
M2 6:2 FTS	110	%	50-150		1	06/30/23 11:34	07/11/23 08:01	27619-97-2-	
M2 8:2 FTS	71	%	50-150		1	06/30/23 11:34	07/11/23 08:01	39108-34-4-	
M2PFHxDA	0.6	%	50-150		1	06/30/23 11:34	07/11/23 08:01	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.4	%	50-150		1	06/30/23 11:34	07/11/23 08:01	376-06-7-EI	MSSV1 2.3
M3HFPODA	82	%	50-150		1	06/30/23 11:34	07/11/23 08:01	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 08:01	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 08:01	355-46-4-EI	
M4PFHpA	90	%	50-150		1	06/30/23 11:34	07/11/23 08:01	375-85-9-EI	
M5PFHxA	90	%	50-150		1	06/30/23 11:34	07/11/23 08:01	307-24-4-EI	
M5PFPeA	91	%	50-150		1	06/30/23 11:34	07/11/23 08:01	2706-90-3-EI	
M6PFDA	67	%	50-150		1	06/30/23 11:34	07/11/23 08:01	335-76-2-EI	
M7PFUdA	28	%	50-150		1	06/30/23 11:34	07/11/23 08:01	2058-94-8-EI	
M8FOSA	12	%	50-150		1	06/30/23 11:34	07/11/23 08:01	754-91-6-EI	
M8PFOA	92	%	50-150		1	06/30/23 11:34	07/11/23 08:01	335-67-1-EI	
M8PFOS	78	%	50-150		1	06/30/23 11:34	07/11/23 08:01	1763-23-1-EI	
M9PFNA	93	%	50-150		1	06/30/23 11:34	07/11/23 08:01	375-95-1-EI	
MPFBA	88	%	50-150		1	06/30/23 11:34	07/11/23 08:01	375-22-4-EI	
MPFDoA	5	%	50-150		1	06/30/23 11:34	07/11/23 08:01	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-19S-WG-20230621 Lab ID: 40264224013 Collected: 06/21/23 08:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 18:22	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	109	%	70-130		1		06/27/23 18:22		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 08:39	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 08:39	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 08:39	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/23 08:39	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/23 08:39	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 08:39	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 08:39	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 08:39	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/23 08:39	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 08:39	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 08:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 08:39	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/29/23 08:39	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.594	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 08:47	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.719	ng/L	1.92	0.719	1	06/30/23 11:34	07/11/23 08:47	27619-97-2	
8:2 FTS	<0.508	ng/L	1.92	0.508	1	06/30/23 11:34	07/11/23 08:47	39108-34-4	
9Cl-PF3ONS	<0.431	ng/L	1.92	0.431	1	06/30/23 11:34	07/11/23 08:47	756426-58-1	
11Cl-PF3OUdS	<0.431	ng/L	1.92	0.431	1	06/30/23 11:34	07/11/23 08:47	763051-92-9	
ADONA	<0.412	ng/L	1.92	0.412	1	06/30/23 11:34	07/11/23 08:47	919005-14-4	
Perfluorooctanesulfonamide	2.09	ng/L	1.92	0.354	1	06/30/23 11:34	07/11/23 08:47	754-91-6	
HFPO-DA	<3.20	ng/L	9.58	3.20	1	06/30/23 11:34	07/11/23 08:47	13252-13-6	
NEtFOSA	<0.671	ng/L	3.83	0.671	1	06/30/23 11:34	07/11/23 08:47	4151-50-2	
NEtFOSAA	<0.757	ng/L	3.83	0.757	1	06/30/23 11:34	07/11/23 08:47	2991-50-6	
NEtFOSE	<0.484	ng/L	3.83	0.484	1	06/30/23 11:34	07/11/23 08:47	1691-99-2	
NMeFOSA	<0.795	ng/L	3.83	0.795	1	06/30/23 11:34	07/11/23 08:47	31506-32-8	
NMeFOSAA	8.41	ng/L	3.83	0.431	1	06/30/23 11:34	07/11/23 08:47	2355-31-9	
NMeFOSE	<0.623	ng/L	3.83	0.623	1	06/30/23 11:34	07/11/23 08:47	24448-09-7	
Perfluorobutanoic acid	<0.728	ng/L	1.92	0.728	1	06/30/23 11:34	07/11/23 08:47	375-22-4	
Perfluorobutanesulfonic acid	15.8	ng/L	1.92	0.297	1	06/30/23 11:34	07/11/23 08:47	375-73-5	
Perfluorodecanoic acid	<0.690	ng/L	1.92	0.690	1	06/30/23 11:34	07/11/23 08:47	335-76-2	
Perfluorododecanoic acid	<0.623	ng/L	1.92	0.623	1	06/30/23 11:34	07/11/23 08:47	307-55-1	
PFDoS	<0.628	ng/L	1.92	0.628	1	06/30/23 11:34	07/11/23 08:47	79780-39-5	
PFDS	<0.584	ng/L	1.92	0.584	1	06/30/23 11:34	07/11/23 08:47	335-77-3	
Perfluoroheptanoic acid	2.95	ng/L	1.92	0.556	1	06/30/23 11:34	07/11/23 08:47	375-85-9	
PFHpS	<0.584	ng/L	1.92	0.584	1	06/30/23 11:34	07/11/23 08:47	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-19S-WG-20230621 Lab ID: 40264224013 Collected: 06/21/23 08:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.450	ng/L	1.92	0.450	1	06/30/23 11:34	07/11/23 08:47	307-24-4	
Perfluorohexanesulfonic acid	6.40	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 08:47	355-46-4	
Perfluorononanoic acid	<0.469	ng/L	1.92	0.469	1	06/30/23 11:34	07/11/23 08:47	375-95-1	
PFNS	<0.833	ng/L	1.92	0.833	1	06/30/23 11:34	07/11/23 08:47	68259-12-1	
Perfluorooctanoic acid	24.1	ng/L	1.92	0.402	1	06/30/23 11:34	07/11/23 08:47	335-67-1	
Perfluorooctanesulfonic acid	21.4	ng/L	1.92	0.364	1	06/30/23 11:34	07/11/23 08:47	1763-23-1	
Perfluoropentanoic acid	<0.422	ng/L	1.92	0.422	1	06/30/23 11:34	07/11/23 08:47	2706-90-3	
PFPeS	3.34	ng/L	1.92	0.489	1	06/30/23 11:34	07/11/23 08:47	2706-91-4	
Perfluorotetradecanoic acid	<0.546	ng/L	1.92	0.546	1	06/30/23 11:34	07/11/23 08:47	376-06-7	
Perfluorotridecanoic acid	<0.589	ng/L	1.92	0.589	1	06/30/23 11:34	07/11/23 08:47	72629-94-8	
Perfluoroundecanoic acid	<0.594	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 08:47	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.07	%	50-150		1	06/30/23 11:34	07/11/23 08:47	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.07	%	50-150		1	06/30/23 11:34	07/11/23 08:47	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	35	%	50-150		1	06/30/23 11:34	07/11/23 08:47	2355-31-9-EI	
d5-NEtFOSAA	28	%	50-150		1	06/30/23 11:34	07/11/23 08:47	2991-50-6-EI	
d7-NMeFOSE	0.3	%	50-150		1	06/30/23 11:34	07/11/23 08:47	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.2	%	50-150		1	06/30/23 11:34	07/11/23 08:47	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	178	%	50-150		1	06/30/23 11:34	07/11/23 08:47	757124-72-4	MSSV1 2.5
M2 6:2 FTS	128	%	50-150		1	06/30/23 11:34	07/11/23 08:47	27619-97-2-	
M2 8:2 FTS	65	%	50-150		1	06/30/23 11:34	07/11/23 08:47	39108-34-4-	
M2PFHxDA	0.8	%	50-150		1	06/30/23 11:34	07/11/23 08:47	67905-19-5-	MSSV1 2.3
M2PFTeDA	1	%	50-150		1	06/30/23 11:34	07/11/23 08:47	376-06-7-EI	MSSV1 2.3
M3HFPODA	61	%	50-150		1	06/30/23 11:34	07/11/23 08:47	13252-13-6-	
M3PFBS	74	%	50-150		1	06/30/23 11:34	07/11/23 08:47	375-73-5-EI	
M3PFHxS	76	%	50-150		1	06/30/23 11:34	07/11/23 08:47	355-46-4-EI	
M4PFHpA	90	%	50-150		1	06/30/23 11:34	07/11/23 08:47	375-85-9-EI	
M5PFHxA	88	%	50-150		1	06/30/23 11:34	07/11/23 08:47	307-24-4-EI	
M5PFPeA	68	%	50-150		1	06/30/23 11:34	07/11/23 08:47	2706-90-3-EI	
M6PFDA	42	%	50-150		1	06/30/23 11:34	07/11/23 08:47	335-76-2-EI	
M7PFUdA	21	%	50-150		1	06/30/23 11:34	07/11/23 08:47	2058-94-8-EI	MSSV1 2.3
M8FOSA	26	%	50-150		1	06/30/23 11:34	07/11/23 08:47	754-91-6-EI	
M8PFOA	86	%	50-150		1	06/30/23 11:34	07/11/23 08:47	335-67-1-EI	
M8PFOS	52	%	50-150		1	06/30/23 11:34	07/11/23 08:47	1763-23-1-EI	
M9PFNA	70	%	50-150		1	06/30/23 11:34	07/11/23 08:47	375-95-1-EI	
MPFBA	71	%	50-150		1	06/30/23 11:34	07/11/23 08:47	375-22-4-EI	
MPFDoA	9	%	50-150		1	06/30/23 11:34	07/11/23 08:47	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-8S-WG-20230621 Lab ID: 40264224014 Collected: 06/21/23 09:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 18:41	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	107	%	70-130		1		06/27/23 18:41		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 11:04	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 11:04	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 11:04	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/23 11:04	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/23 11:04	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 11:04	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 11:04	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 11:04	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/23 11:04	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 11:04	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 11:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/29/23 11:04	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/29/23 11:04	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.608	ng/L	1.96	0.608	1	06/30/23 11:34	07/11/23 09:03	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.736	ng/L	1.96	0.736	1	06/30/23 11:34	07/11/23 09:03	27619-97-2	
8:2 FTS	<0.520	ng/L	1.96	0.520	1	06/30/23 11:34	07/11/23 09:03	39108-34-4	
9Cl-PF3ONS	<0.441	ng/L	1.96	0.441	1	06/30/23 11:34	07/11/23 09:03	756426-58-1	
11Cl-PF3OUdS	<0.441	ng/L	1.96	0.441	1	06/30/23 11:34	07/11/23 09:03	763051-92-9	
ADONA	<0.422	ng/L	1.96	0.422	1	06/30/23 11:34	07/11/23 09:03	919005-14-4	
Perfluorooctanesulfonamide	<0.363	ng/L	1.96	0.363	1	06/30/23 11:34	07/11/23 09:03	754-91-6	
HFPO-DA	<3.27	ng/L	9.81	3.27	1	06/30/23 11:34	07/11/23 09:03	13252-13-6	
NEtFOSA	<0.687	ng/L	3.92	0.687	1	06/30/23 11:34	07/11/23 09:03	4151-50-2	
NEtFOSAA	<0.775	ng/L	3.92	0.775	1	06/30/23 11:34	07/11/23 09:03	2991-50-6	
NEtFOSE	<0.495	ng/L	3.92	0.495	1	06/30/23 11:34	07/11/23 09:03	1691-99-2	
NMeFOSA	<0.814	ng/L	3.92	0.814	1	06/30/23 11:34	07/11/23 09:03	31506-32-8	
NMeFOSAA	<0.441	ng/L	3.92	0.441	1	06/30/23 11:34	07/11/23 09:03	2355-31-9	
NMeFOSE	<0.637	ng/L	3.92	0.637	1	06/30/23 11:34	07/11/23 09:03	24448-09-7	
Perfluorobutanoic acid	19.1	ng/L	1.96	0.745	1	06/30/23 11:34	07/11/23 09:03	375-22-4	
Perfluorobutanesulfonic acid	22.0	ng/L	1.96	0.304	1	06/30/23 11:34	07/11/23 09:03	375-73-5	
Perfluorodecanoic acid	<0.706	ng/L	1.96	0.706	1	06/30/23 11:34	07/11/23 09:03	335-76-2	
Perfluorododecanoic acid	<0.637	ng/L	1.96	0.637	1	06/30/23 11:34	07/11/23 09:03	307-55-1	
PFDoS	<0.642	ng/L	1.96	0.642	1	06/30/23 11:34	07/11/23 09:03	79780-39-5	
PFDS	<0.598	ng/L	1.96	0.598	1	06/30/23 11:34	07/11/23 09:03	335-77-3	
Perfluoroheptanoic acid	3.85	ng/L	1.96	0.569	1	06/30/23 11:34	07/11/23 09:03	375-85-9	
PFHpS	<0.598	ng/L	1.96	0.598	1	06/30/23 11:34	07/11/23 09:03	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

**Sample: MW-8S-WG-20230621**      **Lab ID: 40264224014**      Collected: 06/21/23 09:40      Received: 06/23/23 10:37      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified    Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	19.4	ng/L	1.96	0.461	1	06/30/23 11:34	07/11/23 09:03	307-24-4	
Perfluorohexanesulfonic acid	2.13	ng/L	1.96	0.608	1	06/30/23 11:34	07/11/23 09:03	355-46-4	
Perfluorononanoic acid	<0.481	ng/L	1.96	0.481	1	06/30/23 11:34	07/11/23 09:03	375-95-1	
PFNS	<0.853	ng/L	1.96	0.853	1	06/30/23 11:34	07/11/23 09:03	68259-12-1	
Perfluorooctanoic acid	10.6	ng/L	1.96	0.412	1	06/30/23 11:34	07/11/23 09:03	335-67-1	
Perfluorooctanesulfonic acid	<0.373	ng/L	1.96	0.373	1	06/30/23 11:34	07/11/23 09:03	1763-23-1	
Perfluoropentanoic acid	7.06	ng/L	1.96	0.432	1	06/30/23 11:34	07/11/23 09:03	2706-90-3	
PFPeS	6.34	ng/L	1.96	0.500	1	06/30/23 11:34	07/11/23 09:03	2706-91-4	
Perfluorotetradecanoic acid	<0.559	ng/L	1.96	0.559	1	06/30/23 11:34	07/11/23 09:03	376-06-7	
Perfluorotridecanoic acid	<0.603	ng/L	1.96	0.603	1	06/30/23 11:34	07/11/23 09:03	72629-94-8	
Perfluoroundecanoic acid	<0.608	ng/L	1.96	0.608	1	06/30/23 11:34	07/11/23 09:03	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 09:03	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.05	%	50-150		1	06/30/23 11:34	07/11/23 09:03	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	33	%	50-150		1	06/30/23 11:34	07/11/23 09:03	2355-31-9-EI	
d5-NEtFOSAA	26	%	50-150		1	06/30/23 11:34	07/11/23 09:03	2991-50-6-EI	
d7-NMeFOSE	0.1	%	50-150		1	06/30/23 11:34	07/11/23 09:03	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.04	%	50-150		1	06/30/23 11:34	07/11/23 09:03	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	160	%	50-150		1	06/30/23 11:34	07/11/23 09:03	757124-72-4	MSSV1 2.5
M2 6:2 FTS	111	%	50-150		1	06/30/23 11:34	07/11/23 09:03	27619-97-2-	
M2 8:2 FTS	53	%	50-150		1	06/30/23 11:34	07/11/23 09:03	39108-34-4-	
M2PFHxDA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 09:03	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.5	%	50-150		1	06/30/23 11:34	07/11/23 09:03	376-06-7-EI	MSSV1 2.3
M3HFPODA	66	%	50-150		1	06/30/23 11:34	07/11/23 09:03	13252-13-6-	
M3PFBS	77	%	50-150		1	06/30/23 11:34	07/11/23 09:03	375-73-5-EI	
M3PFHxS	75	%	50-150		1	06/30/23 11:34	07/11/23 09:03	355-46-4-EI	
M4PFHpA	88	%	50-150		1	06/30/23 11:34	07/11/23 09:03	375-85-9-EI	
M5PFHxA	90	%	50-150		1	06/30/23 11:34	07/11/23 09:03	307-24-4-EI	
M5PFPeA	67	%	50-150		1	06/30/23 11:34	07/11/23 09:03	2706-90-3-EI	
M6PFDA	43	%	50-150		1	06/30/23 11:34	07/11/23 09:03	335-76-2-EI	
M7PFUdA	22	%	50-150		1	06/30/23 11:34	07/11/23 09:03	2058-94-8-EI	MSSV1 2.3
M8FOSA	4	%	50-150		1	06/30/23 11:34	07/11/23 09:03	754-91-6-EI	MSSV1 2.3
M8PFOA	80	%	50-150		1	06/30/23 11:34	07/11/23 09:03	335-67-1-EI	
M8PFOS	53	%	50-150		1	06/30/23 11:34	07/11/23 09:03	1763-23-1-EI	
M9PFNA	64	%	50-150		1	06/30/23 11:34	07/11/23 09:03	375-95-1-EI	
MPFBA	71	%	50-150		1	06/30/23 11:34	07/11/23 09:03	375-22-4-EI	
MPFDoA	7	%	50-150		1	06/30/23 11:34	07/11/23 09:03	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-05-WG-20230621 Lab ID: 40264224015 Collected: 06/21/23 11:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<b>0.19J</b>	ug/L	0.20	0.057	1		06/27/23 19:00	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	111	%	70-130		1		06/27/23 19:00		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/29/23 08:59	75-34-3	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		06/29/23 08:59	107-06-2	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		06/29/23 08:59	75-35-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		06/29/23 08:59	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		06/29/23 08:59	156-60-5	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		06/29/23 08:59	127-18-4	
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/29/23 08:59	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	1.0	0.34	1		06/29/23 08:59	79-00-5	
Trichloroethene	<b>0.33J</b>	ug/L	1.0	0.32	1		06/29/23 08:59	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		06/29/23 08:59	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/29/23 08:59	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 08:59	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/29/23 08:59	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<b>&lt;0.613</b>	ng/L	1.98	0.613	1	06/30/23 11:34	07/11/23 09:18	757124-72-4	
6:2 Fluorotelomer sulfonate	<b>&lt;0.742</b>	ng/L	1.98	0.742	1	06/30/23 11:34	07/11/23 09:18	27619-97-2	
8:2 FTS	<b>&lt;0.524</b>	ng/L	1.98	0.524	1	06/30/23 11:34	07/11/23 09:18	39108-34-4	
9CI-PF3ONS	<b>&lt;0.445</b>	ng/L	1.98	0.445	1	06/30/23 11:34	07/11/23 09:18	756426-58-1	
11CI-PF3OUdS	<b>&lt;0.445</b>	ng/L	1.98	0.445	1	06/30/23 11:34	07/11/23 09:18	763051-92-9	
ADONA	<b>&lt;0.425</b>	ng/L	1.98	0.425	1	06/30/23 11:34	07/11/23 09:18	919005-14-4	
Perfluorooctanesulfonamide	<b>&lt;0.366</b>	ng/L	1.98	0.366	1	06/30/23 11:34	07/11/23 09:18	754-91-6	
HFPO-DA	<b>&lt;3.30</b>	ng/L	9.89	3.30	1	06/30/23 11:34	07/11/23 09:18	13252-13-6	
NEtFOSA	<b>&lt;0.693</b>	ng/L	3.96	0.693	1	06/30/23 11:34	07/11/23 09:18	4151-50-2	
NEtFOSAA	<b>&lt;0.782</b>	ng/L	3.96	0.782	1	06/30/23 11:34	07/11/23 09:18	2991-50-6	
NEtFOSE	<b>&lt;0.500</b>	ng/L	3.96	0.500	1	06/30/23 11:34	07/11/23 09:18	1691-99-2	
NMeFOSA	<b>&lt;0.821</b>	ng/L	3.96	0.821	1	06/30/23 11:34	07/11/23 09:18	31506-32-8	
NMeFOSAA	<b>&lt;0.445</b>	ng/L	3.96	0.445	1	06/30/23 11:34	07/11/23 09:18	2355-31-9	
NMeFOSE	<b>&lt;0.643</b>	ng/L	3.96	0.643	1	06/30/23 11:34	07/11/23 09:18	24448-09-7	
Perfluorobutanoic acid	<b>3.47</b>	ng/L	1.98	0.752	1	06/30/23 11:34	07/11/23 09:18	375-22-4	
Perfluorobutanesulfonic acid	<b>2.47</b>	ng/L	1.98	0.307	1	06/30/23 11:34	07/11/23 09:18	375-73-5	
Perfluorodecanoic acid	<b>&lt;0.712</b>	ng/L	1.98	0.712	1	06/30/23 11:34	07/11/23 09:18	335-76-2	
Perfluorododecanoic acid	<b>&lt;0.643</b>	ng/L	1.98	0.643	1	06/30/23 11:34	07/11/23 09:18	307-55-1	
PFDoS	<b>&lt;0.648</b>	ng/L	1.98	0.648	1	06/30/23 11:34	07/11/23 09:18	79780-39-5	
PFDS	<b>&lt;0.604</b>	ng/L	1.98	0.604	1	06/30/23 11:34	07/11/23 09:18	335-77-3	
Perfluoroheptanoic acid	<b>&lt;0.574</b>	ng/L	1.98	0.574	1	06/30/23 11:34	07/11/23 09:18	375-85-9	
PFHpS	<b>&lt;0.604</b>	ng/L	1.98	0.604	1	06/30/23 11:34	07/11/23 09:18	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-05-WG-20230621 Lab ID: 40264224015 Collected: 06/21/23 11:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.465	ng/L	1.98	0.465	1	06/30/23 11:34	07/11/23 09:18	307-24-4	
Perfluorohexanesulfonic acid	<0.613	ng/L	1.98	0.613	1	06/30/23 11:34	07/11/23 09:18	355-46-4	
Perfluorononanoic acid	<0.485	ng/L	1.98	0.485	1	06/30/23 11:34	07/11/23 09:18	375-95-1	
PFNS	<0.861	ng/L	1.98	0.861	1	06/30/23 11:34	07/11/23 09:18	68259-12-1	
Perfluorooctanoic acid	12.4	ng/L	1.98	0.416	1	06/30/23 11:34	07/11/23 09:18	335-67-1	
Perfluorooctanesulfonic acid	2.64	ng/L	1.98	0.376	1	06/30/23 11:34	07/11/23 09:18	1763-23-1	
Perfluoropentanoic acid	<0.435	ng/L	1.98	0.435	1	06/30/23 11:34	07/11/23 09:18	2706-90-3	
PFPeS	<0.505	ng/L	1.98	0.505	1	06/30/23 11:34	07/11/23 09:18	2706-91-4	
Perfluorotetradecanoic acid	<0.564	ng/L	1.98	0.564	1	06/30/23 11:34	07/11/23 09:18	376-06-7	
Perfluorotridecanoic acid	<0.609	ng/L	1.98	0.609	1	06/30/23 11:34	07/11/23 09:18	72629-94-8	
Perfluoroundecanoic acid	<0.613	ng/L	1.98	0.613	1	06/30/23 11:34	07/11/23 09:18	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 09:18	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.04	%	50-150		1	06/30/23 11:34	07/11/23 09:18	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	23	%	50-150		1	06/30/23 11:34	07/11/23 09:18	2355-31-9-EI	MSSV1 2.3
d5-NEtFOSAA	15	%	50-150		1	06/30/23 11:34	07/11/23 09:18	2991-50-6-EI	MSSV1 2.3
d7-NMeFOSE	0.005	%	50-150		1	06/30/23 11:34	07/11/23 09:18	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.007	%	50-150		1	06/30/23 11:34	07/11/23 09:18	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	124	%	50-150		1	06/30/23 11:34	07/11/23 09:18	757124-72-4	
M2 6:2 FTS	111	%	50-150		1	06/30/23 11:34	07/11/23 09:18	27619-97-2-	
M2 8:2 FTS	43	%	50-150		1	06/30/23 11:34	07/11/23 09:18	39108-34-4-	
M2PFHxDA	1	%	50-150		1	06/30/23 11:34	07/11/23 09:18	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.8	%	50-150		1	06/30/23 11:34	07/11/23 09:18	376-06-7-EI	MSSV1 2.3
M3HFPODA	74	%	50-150		1	06/30/23 11:34	07/11/23 09:18	13252-13-6-	
M3PFBS	78	%	50-150		1	06/30/23 11:34	07/11/23 09:18	375-73-5-EI	
M3PFHxS	72	%	50-150		1	06/30/23 11:34	07/11/23 09:18	355-46-4-EI	
M4PFHpA	83	%	50-150		1	06/30/23 11:34	07/11/23 09:18	375-85-9-EI	
M5PFHxA	91	%	50-150		1	06/30/23 11:34	07/11/23 09:18	307-24-4-EI	
M5PFPeA	88	%	50-150		1	06/30/23 11:34	07/11/23 09:18	2706-90-3-EI	
M6PFDA	36	%	50-150		1	06/30/23 11:34	07/11/23 09:18	335-76-2-EI	
M7PFUdA	16	%	50-150		1	06/30/23 11:34	07/11/23 09:18	2058-94-8-EI	MSSV1 2.3
M8FOSA	12	%	50-150		1	06/30/23 11:34	07/11/23 09:18	754-91-6-EI	
M8PFOA	80	%	50-150		1	06/30/23 11:34	07/11/23 09:18	335-67-1-EI	
M8PFOS	49	%	50-150		1	06/30/23 11:34	07/11/23 09:18	1763-23-1-EI	
M9PFNA	65	%	50-150		1	06/30/23 11:34	07/11/23 09:18	375-95-1-EI	
MPFBA	84	%	50-150		1	06/30/23 11:34	07/11/23 09:18	375-22-4-EI	
MPFDoA	4	%	50-150		1	06/30/23 11:34	07/11/23 09:18	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-24S-WG-20230621 Lab ID: 40264224016 Collected: 06/21/23 10:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 19:19	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	111	%	70-130		1		06/27/23 19:19		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 11:24	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 11:24	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 11:24	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/23 11:24	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/23 11:24	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 11:24	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 11:24	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 11:24	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/23 11:24	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 11:24	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 11:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 11:24	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		06/29/23 11:24	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.603	ng/L	1.94	0.603	1	06/30/23 11:34	07/11/23 09:33	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.729	ng/L	1.94	0.729	1	06/30/23 11:34	07/11/23 09:33	27619-97-2	
8:2 FTS	<0.515	ng/L	1.94	0.515	1	06/30/23 11:34	07/11/23 09:33	39108-34-4	
9CI-PF3ONS	<0.437	ng/L	1.94	0.437	1	06/30/23 11:34	07/11/23 09:33	756426-58-1	
11CI-PF3OUdS	<0.437	ng/L	1.94	0.437	1	06/30/23 11:34	07/11/23 09:33	763051-92-9	
ADONA	<0.418	ng/L	1.94	0.418	1	06/30/23 11:34	07/11/23 09:33	919005-14-4	
Perfluorooctanesulfonamide	<0.360	ng/L	1.94	0.360	1	06/30/23 11:34	07/11/23 09:33	754-91-6	
HFPO-DA	<3.24	ng/L	9.72	3.24	1	06/30/23 11:34	07/11/23 09:33	13252-13-6	
NEtFOSA	<0.680	ng/L	3.89	0.680	1	06/30/23 11:34	07/11/23 09:33	4151-50-2	
NEtFOSAA	<0.768	ng/L	3.89	0.768	1	06/30/23 11:34	07/11/23 09:33	2991-50-6	
NEtFOSE	<0.491	ng/L	3.89	0.491	1	06/30/23 11:34	07/11/23 09:33	1691-99-2	
NMeFOSA	<0.807	ng/L	3.89	0.807	1	06/30/23 11:34	07/11/23 09:33	31506-32-8	
NMeFOSAA	<0.437	ng/L	3.89	0.437	1	06/30/23 11:34	07/11/23 09:33	2355-31-9	
NMeFOSE	<0.632	ng/L	3.89	0.632	1	06/30/23 11:34	07/11/23 09:33	24448-09-7	
Perfluorobutanoic acid	7.13	ng/L	1.94	0.739	1	06/30/23 11:34	07/11/23 09:33	375-22-4	
Perfluorobutanesulfonic acid	7.26	ng/L	1.94	0.301	1	06/30/23 11:34	07/11/23 09:33	375-73-5	
Perfluorodecanoic acid	<0.700	ng/L	1.94	0.700	1	06/30/23 11:34	07/11/23 09:33	335-76-2	
Perfluorododecanoic acid	<0.632	ng/L	1.94	0.632	1	06/30/23 11:34	07/11/23 09:33	307-55-1	
PFDoS	<0.637	ng/L	1.94	0.637	1	06/30/23 11:34	07/11/23 09:33	79780-39-5	
PFDS	<0.593	ng/L	1.94	0.593	1	06/30/23 11:34	07/11/23 09:33	335-77-3	
Perfluoroheptanoic acid	5.24	ng/L	1.94	0.564	1	06/30/23 11:34	07/11/23 09:33	375-85-9	
PFHpS	<0.593	ng/L	1.94	0.593	1	06/30/23 11:34	07/11/23 09:33	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-24S-WG-20230621 Lab ID: 40264224016 Collected: 06/21/23 10:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	4.37	ng/L	1.94	0.457	1	06/30/23 11:34	07/11/23 09:33	307-24-4	
Perfluorohexanesulfonic acid	2.32	ng/L	1.94	0.603	1	06/30/23 11:34	07/11/23 09:33	355-46-4	
Perfluorononanoic acid	<0.476	ng/L	1.94	0.476	1	06/30/23 11:34	07/11/23 09:33	375-95-1	
PFNS	<0.846	ng/L	1.94	0.846	1	06/30/23 11:34	07/11/23 09:33	68259-12-1	
Perfluorooctanoic acid	63.6	ng/L	1.94	0.408	1	06/30/23 11:34	07/11/23 09:33	335-67-1	
Perfluorooctanesulfonic acid	2.37	ng/L	1.94	0.369	1	06/30/23 11:34	07/11/23 09:33	1763-23-1	
Perfluoropentanoic acid	2.84	ng/L	1.94	0.428	1	06/30/23 11:34	07/11/23 09:33	2706-90-3	
PFPeS	<0.496	ng/L	1.94	0.496	1	06/30/23 11:34	07/11/23 09:33	2706-91-4	
Perfluorotetradecanoic acid	<0.554	ng/L	1.94	0.554	1	06/30/23 11:34	07/11/23 09:33	376-06-7	
Perfluorotridecanoic acid	<0.598	ng/L	1.94	0.598	1	06/30/23 11:34	07/11/23 09:33	72629-94-8	
Perfluoroundecanoic acid	<0.603	ng/L	1.94	0.603	1	06/30/23 11:34	07/11/23 09:33	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 09:33	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 09:33	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	87	%	50-150		1	06/30/23 11:34	07/11/23 09:33	2355-31-9-EI	
d5-NEtFOSAA	85	%	50-150		1	06/30/23 11:34	07/11/23 09:33	2991-50-6-EI	
d7-NMeFOSE	19	%	50-150		1	06/30/23 11:34	07/11/23 09:33	24448-09-7-	
d9-NEtFOSE	13	%	50-150		1	06/30/23 11:34	07/11/23 09:33	1691-99-2-EI	
M2 4:2 FTS	136	%	50-150		1	06/30/23 11:34	07/11/23 09:33	757124-72-4	
M2 6:2 FTS	116	%	50-150		1	06/30/23 11:34	07/11/23 09:33	27619-97-2-	
M2 8:2 FTS	95	%	50-150		1	06/30/23 11:34	07/11/23 09:33	39108-34-4-	
M2PFHxDA	28	%	50-150		1	06/30/23 11:34	07/11/23 09:33	67905-19-5-	
M2PFTeDA	67	%	50-150		1	06/30/23 11:34	07/11/23 09:33	376-06-7-EI	
M3HFPODA	95	%	50-150		1	06/30/23 11:34	07/11/23 09:33	13252-13-6-	
M3PFBS	94	%	50-150		1	06/30/23 11:34	07/11/23 09:33	375-73-5-EI	
M3PFHxS	93	%	50-150		1	06/30/23 11:34	07/11/23 09:33	355-46-4-EI	
M4PFHpA	98	%	50-150		1	06/30/23 11:34	07/11/23 09:33	375-85-9-EI	
M5PFHxA	101	%	50-150		1	06/30/23 11:34	07/11/23 09:33	307-24-4-EI	
M5PFPeA	106	%	50-150		1	06/30/23 11:34	07/11/23 09:33	2706-90-3-EI	
M6PFDA	94	%	50-150		1	06/30/23 11:34	07/11/23 09:33	335-76-2-EI	
M7PFUdA	89	%	50-150		1	06/30/23 11:34	07/11/23 09:33	2058-94-8-EI	
M8FOSA	53	%	50-150		1	06/30/23 11:34	07/11/23 09:33	754-91-6-EI	
M8PFOA	100	%	50-150		1	06/30/23 11:34	07/11/23 09:33	335-67-1-EI	
M8PFOS	91	%	50-150		1	06/30/23 11:34	07/11/23 09:33	1763-23-1-EI	
M9PFNA	101	%	50-150		1	06/30/23 11:34	07/11/23 09:33	375-95-1-EI	
MPFBA	96	%	50-150		1	06/30/23 11:34	07/11/23 09:33	375-22-4-EI	
MPFDoA	78	%	50-150		1	06/30/23 11:34	07/11/23 09:33	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-25S-WG-20230621 Lab ID: 40264224017 Collected: 06/21/23 12:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 19:38	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	110	%	70-130		1		06/27/23 19:38		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 11:45	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 11:45	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 11:45	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/23 11:45	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/23 11:45	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 11:45	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 11:45	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 11:45	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/23 11:45	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 11:45	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/29/23 11:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/29/23 11:45	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		06/29/23 11:45	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.639	ng/L	2.06	0.639	1	06/30/23 11:34	07/11/23 09:49	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.772	ng/L	2.06	0.772	1	06/30/23 11:34	07/11/23 09:49	27619-97-2	
8:2 FTS	<0.546	ng/L	2.06	0.546	1	06/30/23 11:34	07/11/23 09:49	39108-34-4	
9CI-PF3ONS	<0.463	ng/L	2.06	0.463	1	06/30/23 11:34	07/11/23 09:49	756426-58-1	
11CI-PF3OUdS	<0.463	ng/L	2.06	0.463	1	06/30/23 11:34	07/11/23 09:49	763051-92-9	
ADONA	<0.443	ng/L	2.06	0.443	1	06/30/23 11:34	07/11/23 09:49	919005-14-4	
Perfluorooctanesulfonamide	<0.381	ng/L	2.06	0.381	1	06/30/23 11:34	07/11/23 09:49	754-91-6	
HFPO-DA	<3.43	ng/L	10.3	3.43	1	06/30/23 11:34	07/11/23 09:49	13252-13-6	
NEtFOSA	<0.721	ng/L	4.12	0.721	1	06/30/23 11:34	07/11/23 09:49	4151-50-2	
NEtFOSAA	<0.814	ng/L	4.12	0.814	1	06/30/23 11:34	07/11/23 09:49	2991-50-6	
NEtFOSE	<0.520	ng/L	4.12	0.520	1	06/30/23 11:34	07/11/23 09:49	1691-99-2	
NMeFOSA	<0.855	ng/L	4.12	0.855	1	06/30/23 11:34	07/11/23 09:49	31506-32-8	
NMeFOSAA	<0.463	ng/L	4.12	0.463	1	06/30/23 11:34	07/11/23 09:49	2355-31-9	
NMeFOSE	<0.669	ng/L	4.12	0.669	1	06/30/23 11:34	07/11/23 09:49	24448-09-7	
Perfluorobutanoic acid	5.37	ng/L	2.06	0.783	1	06/30/23 11:34	07/11/23 09:49	375-22-4	
Perfluorobutanesulfonic acid	4.19	ng/L	2.06	0.319	1	06/30/23 11:34	07/11/23 09:49	375-73-5	
Perfluorodecanoic acid	<0.742	ng/L	2.06	0.742	1	06/30/23 11:34	07/11/23 09:49	335-76-2	
Perfluorododecanoic acid	<0.669	ng/L	2.06	0.669	1	06/30/23 11:34	07/11/23 09:49	307-55-1	
PFDoS	<0.675	ng/L	2.06	0.675	1	06/30/23 11:34	07/11/23 09:49	79780-39-5	
PFDS	<0.628	ng/L	2.06	0.628	1	06/30/23 11:34	07/11/23 09:49	335-77-3	
Perfluoroheptanoic acid	4.00	ng/L	2.06	0.597	1	06/30/23 11:34	07/11/23 09:49	375-85-9	
PFHpS	<0.628	ng/L	2.06	0.628	1	06/30/23 11:34	07/11/23 09:49	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-25S-WG-20230621 Lab ID: 40264224017 Collected: 06/21/23 12:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	4.46	ng/L	2.06	0.484	1	06/30/23 11:34	07/11/23 09:49	307-24-4	
Perfluorohexanesulfonic acid	2.66	ng/L	2.06	0.639	1	06/30/23 11:34	07/11/23 09:49	355-46-4	
Perfluorononanoic acid	<0.505	ng/L	2.06	0.505	1	06/30/23 11:34	07/11/23 09:49	375-95-1	
PFNS	<0.896	ng/L	2.06	0.896	1	06/30/23 11:34	07/11/23 09:49	68259-12-1	
Perfluorooctanoic acid	43.4	ng/L	2.06	0.433	1	06/30/23 11:34	07/11/23 09:49	335-67-1	
Perfluorooctanesulfonic acid	<0.391	ng/L	2.06	0.391	1	06/30/23 11:34	07/11/23 09:49	1763-23-1	
Perfluoropentanoic acid	3.01	ng/L	2.06	0.453	1	06/30/23 11:34	07/11/23 09:49	2706-90-3	
PFPeS	<0.525	ng/L	2.06	0.525	1	06/30/23 11:34	07/11/23 09:49	2706-91-4	
Perfluorotetradecanoic acid	<0.587	ng/L	2.06	0.587	1	06/30/23 11:34	07/11/23 09:49	376-06-7	
Perfluorotridecanoic acid	<0.633	ng/L	2.06	0.633	1	06/30/23 11:34	07/11/23 09:49	72629-94-8	
Perfluoroundecanoic acid	<0.639	ng/L	2.06	0.639	1	06/30/23 11:34	07/11/23 09:49	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.1	%	50-150		1	06/30/23 11:34	07/11/23 09:49	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 09:49	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	42	%	50-150		1	06/30/23 11:34	07/11/23 09:49	2355-31-9-EI	
d5-NEtFOSAA	36	%	50-150		1	06/30/23 11:34	07/11/23 09:49	2991-50-6-EI	
d7-NMeFOSE	0.5	%	50-150		1	06/30/23 11:34	07/11/23 09:49	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.2	%	50-150		1	06/30/23 11:34	07/11/23 09:49	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	108	%	50-150		1	06/30/23 11:34	07/11/23 09:49	757124-72-4	
M2 6:2 FTS	99	%	50-150		1	06/30/23 11:34	07/11/23 09:49	27619-97-2-	
M2 8:2 FTS	66	%	50-150		1	06/30/23 11:34	07/11/23 09:49	39108-34-4-	
M2PFHxDA	0.6	%	50-150		1	06/30/23 11:34	07/11/23 09:49	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.9	%	50-150		1	06/30/23 11:34	07/11/23 09:49	376-06-7-EI	MSSV1 2.3
M3HFPODA	73	%	50-150		1	06/30/23 11:34	07/11/23 09:49	13252-13-6-	
M3PFBS	71	%	50-150		1	06/30/23 11:34	07/11/23 09:49	375-73-5-EI	
M3PFHxS	70	%	50-150		1	06/30/23 11:34	07/11/23 09:49	355-46-4-EI	
M4PFHpA	78	%	50-150		1	06/30/23 11:34	07/11/23 09:49	375-85-9-EI	
M5PFHxA	82	%	50-150		1	06/30/23 11:34	07/11/23 09:49	307-24-4-EI	
M5PFPeA	80	%	50-150		1	06/30/23 11:34	07/11/23 09:49	2706-90-3-EI	
M6PFDA	56	%	50-150		1	06/30/23 11:34	07/11/23 09:49	335-76-2-EI	
M7PFUdA	34	%	50-150		1	06/30/23 11:34	07/11/23 09:49	2058-94-8-EI	
M8FOSA	39	%	50-150		1	06/30/23 11:34	07/11/23 09:49	754-91-6-EI	
M8PFOA	77	%	50-150		1	06/30/23 11:34	07/11/23 09:49	335-67-1-EI	
M8PFOS	62	%	50-150		1	06/30/23 11:34	07/11/23 09:49	1763-23-1-EI	
M9PFNA	71	%	50-150		1	06/30/23 11:34	07/11/23 09:49	375-95-1-EI	
MPFBA	78	%	50-150		1	06/30/23 11:34	07/11/23 09:49	375-22-4-EI	
MPFDoA	12	%	50-150		1	06/30/23 11:34	07/11/23 09:49	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-10D-WG-20230621 Lab ID: 40264224018 Collected: 06/21/23 13:15 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/27/23 19:57	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	107	%	70-130		1		06/27/23 19:57		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 09:20	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 09:20	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 09:20	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/23 09:20	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/23 09:20	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 09:20	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 09:20	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 09:20	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/23 09:20	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 09:20	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/29/23 09:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 09:20	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/29/23 09:20	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.601	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 10:04	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.727	ng/L	1.94	0.727	1	06/30/23 11:34	07/11/23 10:04	27619-97-2	
8:2 FTS	<0.514	ng/L	1.94	0.514	1	06/30/23 11:34	07/11/23 10:04	39108-34-4	
9CI-PF3ONS	<0.436	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 10:04	756426-58-1	
11CI-PF3OUdS	<0.436	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 10:04	763051-92-9	
ADONA	<0.417	ng/L	1.94	0.417	1	06/30/23 11:34	07/11/23 10:04	919005-14-4	
Perfluorooctanesulfonamide	<0.359	ng/L	1.94	0.359	1	06/30/23 11:34	07/11/23 10:04	754-91-6	
HFPO-DA	<3.23	ng/L	9.69	3.23	1	06/30/23 11:34	07/11/23 10:04	13252-13-6	
NEtFOSA	<0.678	ng/L	3.88	0.678	1	06/30/23 11:34	07/11/23 10:04	4151-50-2	
NEtFOSAA	<0.766	ng/L	3.88	0.766	1	06/30/23 11:34	07/11/23 10:04	2991-50-6	
NEtFOSE	<0.489	ng/L	3.88	0.489	1	06/30/23 11:34	07/11/23 10:04	1691-99-2	
NMeFOSA	<0.804	ng/L	3.88	0.804	1	06/30/23 11:34	07/11/23 10:04	31506-32-8	
NMeFOSAA	<0.436	ng/L	3.88	0.436	1	06/30/23 11:34	07/11/23 10:04	2355-31-9	
NMeFOSE	<0.630	ng/L	3.88	0.630	1	06/30/23 11:34	07/11/23 10:04	24448-09-7	
Perfluorobutanoic acid	<0.736	ng/L	1.94	0.736	1	06/30/23 11:34	07/11/23 10:04	375-22-4	
Perfluorobutanesulfonic acid	<0.300	ng/L	1.94	0.300	1	06/30/23 11:34	07/11/23 10:04	375-73-5	
Perfluorodecanoic acid	<0.698	ng/L	1.94	0.698	1	06/30/23 11:34	07/11/23 10:04	335-76-2	
Perfluorododecanoic acid	<0.630	ng/L	1.94	0.630	1	06/30/23 11:34	07/11/23 10:04	307-55-1	
PFDoS	<0.635	ng/L	1.94	0.635	1	06/30/23 11:34	07/11/23 10:04	79780-39-5	
PFDS	<0.591	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 10:04	335-77-3	
Perfluoroheptanoic acid	<0.562	ng/L	1.94	0.562	1	06/30/23 11:34	07/11/23 10:04	375-85-9	
PFHpS	<0.591	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 10:04	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-10D-WG-20230621 Lab ID: 40264224018 Collected: 06/21/23 13:15 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.455	ng/L	1.94	0.455	1	06/30/23 11:34	07/11/23 10:04	307-24-4	
Perfluorohexanesulfonic acid	<0.601	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 10:04	355-46-4	
Perfluorononanoic acid	<0.475	ng/L	1.94	0.475	1	06/30/23 11:34	07/11/23 10:04	375-95-1	
PFNS	<0.843	ng/L	1.94	0.843	1	06/30/23 11:34	07/11/23 10:04	68259-12-1	
Perfluorooctanoic acid	<0.407	ng/L	1.94	0.407	1	06/30/23 11:34	07/11/23 10:04	335-67-1	
Perfluorooctanesulfonic acid	<0.368	ng/L	1.94	0.368	1	06/30/23 11:34	07/11/23 10:04	1763-23-1	
Perfluoropentanoic acid	<0.426	ng/L	1.94	0.426	1	06/30/23 11:34	07/11/23 10:04	2706-90-3	
PFPeS	<0.494	ng/L	1.94	0.494	1	06/30/23 11:34	07/11/23 10:04	2706-91-4	
Perfluorotetradecanoic acid	<0.552	ng/L	1.94	0.552	1	06/30/23 11:34	07/11/23 10:04	376-06-7	
Perfluorotridecanoic acid	<0.596	ng/L	1.94	0.596	1	06/30/23 11:34	07/11/23 10:04	72629-94-8	
Perfluoroundecanoic acid	<0.601	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 10:04	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 10:04	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.08	%	50-150		1	06/30/23 11:34	07/11/23 10:04	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	36	%	50-150		1	06/30/23 11:34	07/11/23 10:04	2355-31-9-EI	
d5-NEtFOSAA	28	%	50-150		1	06/30/23 11:34	07/11/23 10:04	2991-50-6-EI	
d7-NMeFOSE	0.4	%	50-150		1	06/30/23 11:34	07/11/23 10:04	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.2	%	50-150		1	06/30/23 11:34	07/11/23 10:04	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	134	%	50-150		1	06/30/23 11:34	07/11/23 10:04	757124-72-4	
M2 6:2 FTS	109	%	50-150		1	06/30/23 11:34	07/11/23 10:04	27619-97-2-	
M2 8:2 FTS	51	%	50-150		1	06/30/23 11:34	07/11/23 10:04	39108-34-4-	
M2PFHxDA	5	%	50-150		1	06/30/23 11:34	07/11/23 10:04	67905-19-5-	MSSV1 2.3
M2PFTeDA	3	%	50-150		1	06/30/23 11:34	07/11/23 10:04	376-06-7-EI	MSSV1 2.3
M3HFPODA	71	%	50-150		1	06/30/23 11:34	07/11/23 10:04	13252-13-6-	
M3PFBS	73	%	50-150		1	06/30/23 11:34	07/11/23 10:04	375-73-5-EI	
M3PFHxS	73	%	50-150		1	06/30/23 11:34	07/11/23 10:04	355-46-4-EI	
M4PFHpA	80	%	50-150		1	06/30/23 11:34	07/11/23 10:04	375-85-9-EI	
M5PFHxA	84	%	50-150		1	06/30/23 11:34	07/11/23 10:04	307-24-4-EI	
M5PFPeA	81	%	50-150		1	06/30/23 11:34	07/11/23 10:04	2706-90-3-EI	
M6PFDA	41	%	50-150		1	06/30/23 11:34	07/11/23 10:04	335-76-2-EI	
M7PFUdA	23	%	50-150		1	06/30/23 11:34	07/11/23 10:04	2058-94-8-EI	MSSV1 2.3
M8FOSA	8	%	50-150		1	06/30/23 11:34	07/11/23 10:04	754-91-6-EI	MSSV1 2.3
M8PFOA	77	%	50-150		1	06/30/23 11:34	07/11/23 10:04	335-67-1-EI	
M8PFOS	53	%	50-150		1	06/30/23 11:34	07/11/23 10:04	1763-23-1-EI	
M9PFNA	64	%	50-150		1	06/30/23 11:34	07/11/23 10:04	375-95-1-EI	
MPFBA	74	%	50-150		1	06/30/23 11:34	07/11/23 10:04	375-22-4-EI	
MPFDoA	9	%	50-150		1	06/30/23 11:34	07/11/23 10:04	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-12S-WG-20230621 Lab ID: 40264224019 Collected: 06/21/23 15:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/29/23 17:53	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	96	%	70-130		1		06/29/23 17:53		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 09:41	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/29/23 09:41	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/29/23 09:41	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/29/23 09:41	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/29/23 09:41	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/29/23 09:41	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/29/23 09:41	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/29/23 09:41	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/29/23 09:41	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/29/23 09:41	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1		06/29/23 09:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/29/23 09:41	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/29/23 09:41	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.581	ng/L	1.88	0.581	1	06/30/23 11:34	07/11/23 10:19	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.703	ng/L	1.88	0.703	1	06/30/23 11:34	07/11/23 10:19	27619-97-2	
8:2 FTS	<0.497	ng/L	1.88	0.497	1	06/30/23 11:34	07/11/23 10:19	39108-34-4	
9CI-PF3ONS	<0.422	ng/L	1.88	0.422	1	06/30/23 11:34	07/11/23 10:19	756426-58-1	
11CI-PF3OUdS	<0.422	ng/L	1.88	0.422	1	06/30/23 11:34	07/11/23 10:19	763051-92-9	
ADONA	<0.403	ng/L	1.88	0.403	1	06/30/23 11:34	07/11/23 10:19	919005-14-4	
Perfluorooctanesulfonamide	<0.347	ng/L	1.88	0.347	1	06/30/23 11:34	07/11/23 10:19	754-91-6	
HFPO-DA	<3.13	ng/L	9.38	3.13	1	06/30/23 11:34	07/11/23 10:19	13252-13-6	
NEtFOSA	<0.656	ng/L	3.75	0.656	1	06/30/23 11:34	07/11/23 10:19	4151-50-2	
NEtFOSAA	<0.741	ng/L	3.75	0.741	1	06/30/23 11:34	07/11/23 10:19	2991-50-6	
NEtFOSE	<0.474	ng/L	3.75	0.474	1	06/30/23 11:34	07/11/23 10:19	1691-99-2	
NMeFOSA	<0.778	ng/L	3.75	0.778	1	06/30/23 11:34	07/11/23 10:19	31506-32-8	
NMeFOSAA	<0.422	ng/L	3.75	0.422	1	06/30/23 11:34	07/11/23 10:19	2355-31-9	
NMeFOSE	<0.610	ng/L	3.75	0.610	1	06/30/23 11:34	07/11/23 10:19	24448-09-7	
Perfluorobutanoic acid	4.60	ng/L	1.88	0.713	1	06/30/23 11:34	07/11/23 10:19	375-22-4	
Perfluorobutanesulfonic acid	5.80	ng/L	1.88	0.291	1	06/30/23 11:34	07/11/23 10:19	375-73-5	
Perfluorodecanoic acid	<0.675	ng/L	1.88	0.675	1	06/30/23 11:34	07/11/23 10:19	335-76-2	
Perfluorododecanoic acid	<0.610	ng/L	1.88	0.610	1	06/30/23 11:34	07/11/23 10:19	307-55-1	
PFDoS	<0.614	ng/L	1.88	0.614	1	06/30/23 11:34	07/11/23 10:19	79780-39-5	
PFDS	<0.572	ng/L	1.88	0.572	1	06/30/23 11:34	07/11/23 10:19	335-77-3	
Perfluoroheptanoic acid	3.12	ng/L	1.88	0.544	1	06/30/23 11:34	07/11/23 10:19	375-85-9	
PFHpS	<0.572	ng/L	1.88	0.572	1	06/30/23 11:34	07/11/23 10:19	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

**Sample: MW-12S-WG-20230621**      **Lab ID: 40264224019**      Collected: 06/21/23 15:10      Received: 06/23/23 10:37      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified    Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	3.24	ng/L	1.88	0.441	1	06/30/23 11:34	07/11/23 10:19	307-24-4	
Perfluorohexanesulfonic acid	<0.581	ng/L	1.88	0.581	1	06/30/23 11:34	07/11/23 10:19	355-46-4	
Perfluorononanoic acid	<0.460	ng/L	1.88	0.460	1	06/30/23 11:34	07/11/23 10:19	375-95-1	
PFNS	<0.816	ng/L	1.88	0.816	1	06/30/23 11:34	07/11/23 10:19	68259-12-1	
Perfluorooctanoic acid	17.9	ng/L	1.88	0.394	1	06/30/23 11:34	07/11/23 10:19	335-67-1	
Perfluorooctanesulfonic acid	<0.356	ng/L	1.88	0.356	1	06/30/23 11:34	07/11/23 10:19	1763-23-1	
Perfluoropentanoic acid	3.77	ng/L	1.88	0.413	1	06/30/23 11:34	07/11/23 10:19	2706-90-3	
PFPeS	<0.478	ng/L	1.88	0.478	1	06/30/23 11:34	07/11/23 10:19	2706-91-4	
Perfluorotetradecanoic acid	<0.535	ng/L	1.88	0.535	1	06/30/23 11:34	07/11/23 10:19	376-06-7	
Perfluorotridecanoic acid	<0.577	ng/L	1.88	0.577	1	06/30/23 11:34	07/11/23 10:19	72629-94-8	
Perfluoroundecanoic acid	<0.581	ng/L	1.88	0.581	1	06/30/23 11:34	07/11/23 10:19	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 10:19	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 10:19	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	59	%	50-150		1	06/30/23 11:34	07/11/23 10:19	2355-31-9-EI	
d5-NEtFOSAA	50	%	50-150		1	06/30/23 11:34	07/11/23 10:19	2991-50-6-EI	
d7-NMeFOSE	4	%	50-150		1	06/30/23 11:34	07/11/23 10:19	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	1	%	50-150		1	06/30/23 11:34	07/11/23 10:19	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	137	%	50-150		1	06/30/23 11:34	07/11/23 10:19	757124-72-4	
M2 6:2 FTS	130	%	50-150		1	06/30/23 11:34	07/11/23 10:19	27619-97-2-	
M2 8:2 FTS	85	%	50-150		1	06/30/23 11:34	07/11/23 10:19	39108-34-4-	
M2PFHxDA	0.5	%	50-150		1	06/30/23 11:34	07/11/23 10:19	67905-19-5-	MSSV1 2.3
M2PFTeDA	2	%	50-150		1	06/30/23 11:34	07/11/23 10:19	376-06-7-EI	MSSV1 2.3
M3HFPODA	79	%	50-150		1	06/30/23 11:34	07/11/23 10:19	13252-13-6-	
M3PFBS	86	%	50-150		1	06/30/23 11:34	07/11/23 10:19	375-73-5-EI	
M3PFHxS	84	%	50-150		1	06/30/23 11:34	07/11/23 10:19	355-46-4-EI	
M4PFHpA	95	%	50-150		1	06/30/23 11:34	07/11/23 10:19	375-85-9-EI	
M5PFHxA	97	%	50-150		1	06/30/23 11:34	07/11/23 10:19	307-24-4-EI	
M5PFPeA	87	%	50-150		1	06/30/23 11:34	07/11/23 10:19	2706-90-3-EI	
M6PFDA	72	%	50-150		1	06/30/23 11:34	07/11/23 10:19	335-76-2-EI	
M7PFUdA	48	%	50-150		1	06/30/23 11:34	07/11/23 10:19	2058-94-8-EI	
M8FOSA	31	%	50-150		1	06/30/23 11:34	07/11/23 10:19	754-91-6-EI	
M8PFOA	91	%	50-150		1	06/30/23 11:34	07/11/23 10:19	335-67-1-EI	
M8PFOS	73	%	50-150		1	06/30/23 11:34	07/11/23 10:19	1763-23-1-EI	
M9PFNA	85	%	50-150		1	06/30/23 11:34	07/11/23 10:19	375-95-1-EI	
MPFBA	90	%	50-150		1	06/30/23 11:34	07/11/23 10:19	375-22-4-EI	
MPFDoA	24	%	50-150		1	06/30/23 11:34	07/11/23 10:19	307-55-1-EI	MSSV1 2.3

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: **FB-01-WQ-20230621** Lab ID: **40264224020** Collected: 06/21/23 16:10 Received: 06/23/23 10:37 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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 15:52	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/28/23 15:52	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/28/23 15:52	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/28/23 15:52	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/28/23 15:52	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/28/23 15:52	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/28/23 15:52	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/28/23 15:52	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/28/23 15:52	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/28/23 15:52	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/28/23 15:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/28/23 15:52	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/28/23 15:52	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: **FB-02-WQ-20230621** Lab ID: **40264224021** Collected: 06/21/23 16:10 Received: 06/23/23 10:37 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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 19:32	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 19:32	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 19:32	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 19:32	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 19:32	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 19:32	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/27/23 19:32	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 19:32	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 19:32	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 19:32	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/27/23 19:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		06/27/23 19:32	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 19:32	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-9S-WG-20230621 Lab ID: 40264224022 Collected: 06/21/23 15:35 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/29/23 18:12	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	97	%	70-130		1		06/29/23 18:12		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 20:11	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 20:11	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 20:11	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 20:11	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 20:11	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 20:11	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 20:11	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 20:11	79-00-5	
Trichloroethene	0.56J	ug/L	1.0	0.32	1		06/27/23 20:11	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 20:11	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	107	%	70-130		1		06/27/23 20:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		06/27/23 20:11	2199-69-1	
Toluene-d8 (S)	105	%	70-130		1		06/27/23 20:11	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.624	ng/L	2.01	0.624	1	06/30/23 11:34	07/11/23 10:35	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.755	ng/L	2.01	0.755	1	06/30/23 11:34	07/11/23 10:35	27619-97-2	
8:2 FTS	<0.533	ng/L	2.01	0.533	1	06/30/23 11:34	07/11/23 10:35	39108-34-4	
9CI-PF3ONS	<0.453	ng/L	2.01	0.453	1	06/30/23 11:34	07/11/23 10:35	756426-58-1	
11CI-PF3OUdS	<0.453	ng/L	2.01	0.453	1	06/30/23 11:34	07/11/23 10:35	763051-92-9	
ADONA	<0.433	ng/L	2.01	0.433	1	06/30/23 11:34	07/11/23 10:35	919005-14-4	
Perfluorooctanesulfonamide	<0.372	ng/L	2.01	0.372	1	06/30/23 11:34	07/11/23 10:35	754-91-6	
HFPO-DA	<3.36	ng/L	10.1	3.36	1	06/30/23 11:34	07/11/23 10:35	13252-13-6	
NEtFOSA	<0.705	ng/L	4.03	0.705	1	06/30/23 11:34	07/11/23 10:35	4151-50-2	
NEtFOSAA	<0.795	ng/L	4.03	0.795	1	06/30/23 11:34	07/11/23 10:35	2991-50-6	
NEtFOSE	<0.508	ng/L	4.03	0.508	1	06/30/23 11:34	07/11/23 10:35	1691-99-2	
NMeFOSA	<0.835	ng/L	4.03	0.835	1	06/30/23 11:34	07/11/23 10:35	31506-32-8	
NMeFOSAA	<0.453	ng/L	4.03	0.453	1	06/30/23 11:34	07/11/23 10:35	2355-31-9	
NMeFOSE	<0.654	ng/L	4.03	0.654	1	06/30/23 11:34	07/11/23 10:35	24448-09-7	
Perfluorobutanoic acid	6.78	ng/L	2.01	0.765	1	06/30/23 11:34	07/11/23 10:35	375-22-4	
Perfluorobutanesulfonic acid	2.66	ng/L	2.01	0.312	1	06/30/23 11:34	07/11/23 10:35	375-73-5	
Perfluorodecanoic acid	<0.725	ng/L	2.01	0.725	1	06/30/23 11:34	07/11/23 10:35	335-76-2	
Perfluorododecanoic acid	<0.654	ng/L	2.01	0.654	1	06/30/23 11:34	07/11/23 10:35	307-55-1	
PFDoS	<0.659	ng/L	2.01	0.659	1	06/30/23 11:34	07/11/23 10:35	79780-39-5	
PFDS	<0.614	ng/L	2.01	0.614	1	06/30/23 11:34	07/11/23 10:35	335-77-3	
Perfluoroheptanoic acid	<0.584	ng/L	2.01	0.584	1	06/30/23 11:34	07/11/23 10:35	375-85-9	
PFHpS	<0.614	ng/L	2.01	0.614	1	06/30/23 11:34	07/11/23 10:35	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-9S-WG-20230621 Lab ID: 40264224022 Collected: 06/21/23 15:35 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.473	ng/L	2.01	0.473	1	06/30/23 11:34	07/11/23 10:35	307-24-4	
Perfluorohexanesulfonic acid	<0.624	ng/L	2.01	0.624	1	06/30/23 11:34	07/11/23 10:35	355-46-4	
Perfluorononanoic acid	<0.493	ng/L	2.01	0.493	1	06/30/23 11:34	07/11/23 10:35	375-95-1	
PFNS	<0.876	ng/L	2.01	0.876	1	06/30/23 11:34	07/11/23 10:35	68259-12-1	
Perfluorooctanoic acid	4.79	ng/L	2.01	0.423	1	06/30/23 11:34	07/11/23 10:35	335-67-1	
Perfluorooctanesulfonic acid	3.95	ng/L	2.01	0.382	1	06/30/23 11:34	07/11/23 10:35	1763-23-1	
Perfluoropentanoic acid	<0.443	ng/L	2.01	0.443	1	06/30/23 11:34	07/11/23 10:35	2706-90-3	
PFPeS	<0.513	ng/L	2.01	0.513	1	06/30/23 11:34	07/11/23 10:35	2706-91-4	
Perfluorotetradecanoic acid	<0.574	ng/L	2.01	0.574	1	06/30/23 11:34	07/11/23 10:35	376-06-7	
Perfluorotridecanoic acid	<0.619	ng/L	2.01	0.619	1	06/30/23 11:34	07/11/23 10:35	72629-94-8	
Perfluoroundecanoic acid	<0.624	ng/L	2.01	0.624	1	06/30/23 11:34	07/11/23 10:35	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.05	%	50-150		1	06/30/23 11:34	07/11/23 10:35	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.07	%	50-150		1	06/30/23 11:34	07/11/23 10:35	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	32	%	50-150		1	06/30/23 11:34	07/11/23 10:35	2355-31-9-EI	
d5-NEtFOSAA	23	%	50-150		1	06/30/23 11:34	07/11/23 10:35	2991-50-6-EI	MSSV1 2.3
d7-NMeFOSE	0.08	%	50-150		1	06/30/23 11:34	07/11/23 10:35	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.1	%	50-150		1	06/30/23 11:34	07/11/23 10:35	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	141	%	50-150		1	06/30/23 11:34	07/11/23 10:35	757124-72-4	
M2 6:2 FTS	137	%	50-150		1	06/30/23 11:34	07/11/23 10:35	27619-97-2-	
M2 8:2 FTS	69	%	50-150		1	06/30/23 11:34	07/11/23 10:35	39108-34-4-	
M2PFHxDA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 10:35	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 10:35	376-06-7-EI	MSSV1 2.3
M3HFPODA	73	%	50-150		1	06/30/23 11:34	07/11/23 10:35	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 10:35	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 10:35	355-46-4-EI	
M4PFHpA	97	%	50-150		1	06/30/23 11:34	07/11/23 10:35	375-85-9-EI	
M5PFHxA	100	%	50-150		1	06/30/23 11:34	07/11/23 10:35	307-24-4-EI	
M5PFPeA	87	%	50-150		1	06/30/23 11:34	07/11/23 10:35	2706-90-3-EI	
M6PFDA	47	%	50-150		1	06/30/23 11:34	07/11/23 10:35	335-76-2-EI	
M7PFUdA	21	%	50-150		1	06/30/23 11:34	07/11/23 10:35	2058-94-8-EI	MSSV1 2.3
M8FOSA	27	%	50-150		1	06/30/23 11:34	07/11/23 10:35	754-91-6-EI	
M8PFOA	92	%	50-150		1	06/30/23 11:34	07/11/23 10:35	335-67-1-EI	
M8PFOS	57	%	50-150		1	06/30/23 11:34	07/11/23 10:35	1763-23-1-EI	
M9PFNA	75	%	50-150		1	06/30/23 11:34	07/11/23 10:35	375-95-1-EI	
MPFBA	89	%	50-150		1	06/30/23 11:34	07/11/23 10:35	375-22-4-EI	
MPFDoA	5	%	50-150		1	06/30/23 11:34	07/11/23 10:35	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-09-WG-20230622 Lab ID: 40264224023 Collected: 06/22/23 08:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<b>0.080J</b>	ug/L	0.20	0.057	1		06/28/23 22:31	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		1		06/28/23 22:31		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/27/23 20:31	75-34-3	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		06/27/23 20:31	107-06-2	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		06/27/23 20:31	75-35-4	
cis-1,2-Dichloroethene	<b>&lt;0.47</b>	ug/L	1.0	0.47	1		06/27/23 20:31	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		06/27/23 20:31	156-60-5	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		06/27/23 20:31	127-18-4	
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		06/27/23 20:31	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	1.0	0.34	1		06/27/23 20:31	79-00-5	
Trichloroethene	<b>&lt;0.32</b>	ug/L	1.0	0.32	1		06/27/23 20:31	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		06/27/23 20:31	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/27/23 20:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 20:31	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		06/27/23 20:31	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<b>&lt;0.564</b>	ng/L	1.82	0.564	1	06/30/23 11:34	07/11/23 10:50	757124-72-4	
6:2 Fluorotelomer sulfonate	<b>&lt;0.683</b>	ng/L	1.82	0.683	1	06/30/23 11:34	07/11/23 10:50	27619-97-2	
8:2 FTS	<b>&lt;0.482</b>	ng/L	1.82	0.482	1	06/30/23 11:34	07/11/23 10:50	39108-34-4	
9CI-PF3ONS	<b>&lt;0.410</b>	ng/L	1.82	0.410	1	06/30/23 11:34	07/11/23 10:50	756426-58-1	
11CI-PF3OUdS	<b>&lt;0.410</b>	ng/L	1.82	0.410	1	06/30/23 11:34	07/11/23 10:50	763051-92-9	
ADONA	<b>&lt;0.391</b>	ng/L	1.82	0.391	1	06/30/23 11:34	07/11/23 10:50	919005-14-4	
Perfluorooctanesulfonamide	<b>&lt;0.337</b>	ng/L	1.82	0.337	1	06/30/23 11:34	07/11/23 10:50	754-91-6	
HFPO-DA	<b>&lt;3.04</b>	ng/L	9.10	3.04	1	06/30/23 11:34	07/11/23 10:50	13252-13-6	
NEtFOSA	<b>&lt;0.637</b>	ng/L	3.64	0.637	1	06/30/23 11:34	07/11/23 10:50	4151-50-2	
NEtFOSAA	<b>&lt;0.719</b>	ng/L	3.64	0.719	1	06/30/23 11:34	07/11/23 10:50	2991-50-6	
NEtFOSE	<b>&lt;0.460</b>	ng/L	3.64	0.460	1	06/30/23 11:34	07/11/23 10:50	1691-99-2	
NMeFOSA	<b>&lt;0.756</b>	ng/L	3.64	0.756	1	06/30/23 11:34	07/11/23 10:50	31506-32-8	
NMeFOSAA	<b>&lt;0.410</b>	ng/L	3.64	0.410	1	06/30/23 11:34	07/11/23 10:50	2355-31-9	
NMeFOSE	<b>&lt;0.592</b>	ng/L	3.64	0.592	1	06/30/23 11:34	07/11/23 10:50	24448-09-7	
Perfluorobutanoic acid	<b>1.85</b>	ng/L	1.82	0.692	1	06/30/23 11:34	07/11/23 10:50	375-22-4	
Perfluorobutanesulfonic acid	<b>2.18</b>	ng/L	1.82	0.282	1	06/30/23 11:34	07/11/23 10:50	375-73-5	
Perfluorodecanoic acid	<b>&lt;0.655</b>	ng/L	1.82	0.655	1	06/30/23 11:34	07/11/23 10:50	335-76-2	
Perfluorododecanoic acid	<b>&lt;0.592</b>	ng/L	1.82	0.592	1	06/30/23 11:34	07/11/23 10:50	307-55-1	
PFDoS	<b>&lt;0.596</b>	ng/L	1.82	0.596	1	06/30/23 11:34	07/11/23 10:50	79780-39-5	
PFDS	<b>&lt;0.555</b>	ng/L	1.82	0.555	1	06/30/23 11:34	07/11/23 10:50	335-77-3	
Perfluoroheptanoic acid	<b>&lt;0.528</b>	ng/L	1.82	0.528	1	06/30/23 11:34	07/11/23 10:50	375-85-9	
PFHpS	<b>&lt;0.555</b>	ng/L	1.82	0.555	1	06/30/23 11:34	07/11/23 10:50	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-09-WG-20230622 Lab ID: 40264224023 Collected: 06/22/23 08:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.428	ng/L	1.82	0.428	1	06/30/23 11:34	07/11/23 10:50	307-24-4	
Perfluorohexanesulfonic acid	<0.564	ng/L	1.82	0.564	1	06/30/23 11:34	07/11/23 10:50	355-46-4	
Perfluorononanoic acid	<0.446	ng/L	1.82	0.446	1	06/30/23 11:34	07/11/23 10:50	375-95-1	
PFNS	<0.792	ng/L	1.82	0.792	1	06/30/23 11:34	07/11/23 10:50	68259-12-1	
Perfluorooctanoic acid	5.09	ng/L	1.82	0.382	1	06/30/23 11:34	07/11/23 10:50	335-67-1	
Perfluorooctanesulfonic acid	1.94	ng/L	1.82	0.346	1	06/30/23 11:34	07/11/23 10:50	1763-23-1	
Perfluoropentanoic acid	<0.401	ng/L	1.82	0.401	1	06/30/23 11:34	07/11/23 10:50	2706-90-3	
PFPeS	<0.464	ng/L	1.82	0.464	1	06/30/23 11:34	07/11/23 10:50	2706-91-4	
Perfluorotetradecanoic acid	<0.519	ng/L	1.82	0.519	1	06/30/23 11:34	07/11/23 10:50	376-06-7	
Perfluorotridecanoic acid	<0.560	ng/L	1.82	0.560	1	06/30/23 11:34	07/11/23 10:50	72629-94-8	
Perfluoroundecanoic acid	<0.564	ng/L	1.82	0.564	1	06/30/23 11:34	07/11/23 10:50	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.09	%	50-150		1	06/30/23 11:34	07/11/23 10:50	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.07	%	50-150		1	06/30/23 11:34	07/11/23 10:50	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	33	%	50-150		1	06/30/23 11:34	07/11/23 10:50	2355-31-9-EI	
d5-NEtFOSAA	22	%	50-150		1	06/30/23 11:34	07/11/23 10:50	2991-50-6-EI	MSSV1 2.3
d7-NMeFOSE	0.2	%	50-150		1	06/30/23 11:34	07/11/23 10:50	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.05	%	50-150		1	06/30/23 11:34	07/11/23 10:50	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	137	%	50-150		1	06/30/23 11:34	07/11/23 10:50	757124-72-4	
M2 6:2 FTS	116	%	50-150		1	06/30/23 11:34	07/11/23 10:50	27619-97-2-	
M2 8:2 FTS	54	%	50-150		1	06/30/23 11:34	07/11/23 10:50	39108-34-4-	
M2PFHxDA	1	%	50-150		1	06/30/23 11:34	07/11/23 10:50	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.6	%	50-150		1	06/30/23 11:34	07/11/23 10:50	376-06-7-EI	MSSV1 2.3
M3HFPODA	90	%	50-150		1	06/30/23 11:34	07/11/23 10:50	13252-13-6-	
M3PFBS	92	%	50-150		1	06/30/23 11:34	07/11/23 10:50	375-73-5-EI	
M3PFHxS	89	%	50-150		1	06/30/23 11:34	07/11/23 10:50	355-46-4-EI	
M4PFHpA	97	%	50-150		1	06/30/23 11:34	07/11/23 10:50	375-85-9-EI	
M5PFHxA	99	%	50-150		1	06/30/23 11:34	07/11/23 10:50	307-24-4-EI	
M5PFPeA	103	%	50-150		1	06/30/23 11:34	07/11/23 10:50	2706-90-3-EI	
M6PFDA	49	%	50-150		1	06/30/23 11:34	07/11/23 10:50	335-76-2-EI	
M7PFUdA	17	%	50-150		1	06/30/23 11:34	07/11/23 10:50	2058-94-8-EI	MSSV1 2.3
M8FOSA	8	%	50-150		1	06/30/23 11:34	07/11/23 10:50	754-91-6-EI	MSSV1 2.3
M8PFOA	94	%	50-150		1	06/30/23 11:34	07/11/23 10:50	335-67-1-EI	
M8PFOS	66	%	50-150		1	06/30/23 11:34	07/11/23 10:50	1763-23-1-EI	
M9PFNA	79	%	50-150		1	06/30/23 11:34	07/11/23 10:50	375-95-1-EI	
MPFBA	92	%	50-150		1	06/30/23 11:34	07/11/23 10:50	375-22-4-EI	
MPFDoA	2	%	50-150		1	06/30/23 11:34	07/11/23 10:50	307-55-1-EI	MSSV1 2.3

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-15S-WG-20230622 Lab ID: 40264224024 Collected: 06/22/23 09:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/28/23 22:50	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	101	%	70-130		1		06/28/23 22:50		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 20:50	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 20:50	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 20:50	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 20:50	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 20:50	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 20:50	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 20:50	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 20:50	79-00-5	
Trichloroethene	1.7	ug/L	1.0	0.32	1		06/27/23 20:50	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 20:50	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		06/27/23 20:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 20:50	2199-69-1	
Toluene-d8 (S)	106	%	70-130		1		06/27/23 20:50	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.583	ng/L	1.88	0.583	1	06/30/23 11:34	07/11/23 11:06	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.705	ng/L	1.88	0.705	1	06/30/23 11:34	07/11/23 11:06	27619-97-2	
8:2 FTS	<0.498	ng/L	1.88	0.498	1	06/30/23 11:34	07/11/23 11:06	39108-34-4	
9CI-PF3ONS	<0.423	ng/L	1.88	0.423	1	06/30/23 11:34	07/11/23 11:06	756426-58-1	
11CI-PF3OUdS	<0.423	ng/L	1.88	0.423	1	06/30/23 11:34	07/11/23 11:06	763051-92-9	
ADONA	<0.404	ng/L	1.88	0.404	1	06/30/23 11:34	07/11/23 11:06	919005-14-4	
Perfluorooctanesulfonamide	<0.348	ng/L	1.88	0.348	1	06/30/23 11:34	07/11/23 11:06	754-91-6	
HFPO-DA	<3.13	ng/L	9.40	3.13	1	06/30/23 11:34	07/11/23 11:06	13252-13-6	
NEtFOSA	<0.658	ng/L	3.76	0.658	1	06/30/23 11:34	07/11/23 11:06	4151-50-2	
NEtFOSAA	<0.742	ng/L	3.76	0.742	1	06/30/23 11:34	07/11/23 11:06	2991-50-6	
NEtFOSE	<0.475	ng/L	3.76	0.475	1	06/30/23 11:34	07/11/23 11:06	1691-99-2	
NMeFOSA	<0.780	ng/L	3.76	0.780	1	06/30/23 11:34	07/11/23 11:06	31506-32-8	
NMeFOSAA	<0.423	ng/L	3.76	0.423	1	06/30/23 11:34	07/11/23 11:06	2355-31-9	
NMeFOSE	<0.611	ng/L	3.76	0.611	1	06/30/23 11:34	07/11/23 11:06	24448-09-7	
Perfluorobutanoic acid	4.32	ng/L	1.88	0.714	1	06/30/23 11:34	07/11/23 11:06	375-22-4	
Perfluorobutanesulfonic acid	<0.291	ng/L	1.88	0.291	1	06/30/23 11:34	07/11/23 11:06	375-73-5	
Perfluorodecanoic acid	<0.677	ng/L	1.88	0.677	1	06/30/23 11:34	07/11/23 11:06	335-76-2	
Perfluorododecanoic acid	<0.611	ng/L	1.88	0.611	1	06/30/23 11:34	07/11/23 11:06	307-55-1	
PFDoS	<0.616	ng/L	1.88	0.616	1	06/30/23 11:34	07/11/23 11:06	79780-39-5	
PFDS	<0.573	ng/L	1.88	0.573	1	06/30/23 11:34	07/11/23 11:06	335-77-3	
Perfluoroheptanoic acid	4.50	ng/L	1.88	0.545	1	06/30/23 11:34	07/11/23 11:06	375-85-9	
PFHpS	<0.573	ng/L	1.88	0.573	1	06/30/23 11:34	07/11/23 11:06	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

**Sample: MW-15S-WG-20230622**    **Lab ID: 40264224024**    Collected: 06/22/23 09:25    Received: 06/23/23 10:37    Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified    Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	3.39	ng/L	1.88	0.442	1	06/30/23 11:34	07/11/23 11:06	307-24-4	
Perfluorohexanesulfonic acid	<0.583	ng/L	1.88	0.583	1	06/30/23 11:34	07/11/23 11:06	355-46-4	
Perfluorononanoic acid	<0.460	ng/L	1.88	0.460	1	06/30/23 11:34	07/11/23 11:06	375-95-1	
PFNS	<0.818	ng/L	1.88	0.818	1	06/30/23 11:34	07/11/23 11:06	68259-12-1	
Perfluorooctanoic acid	101	ng/L	1.88	0.395	1	06/30/23 11:34	07/11/23 11:06	335-67-1	
Perfluorooctanesulfonic acid	3.79	ng/L	1.88	0.357	1	06/30/23 11:34	07/11/23 11:06	1763-23-1	
Perfluoropentanoic acid	2.62	ng/L	1.88	0.413	1	06/30/23 11:34	07/11/23 11:06	2706-90-3	
PFPeS	<0.479	ng/L	1.88	0.479	1	06/30/23 11:34	07/11/23 11:06	2706-91-4	
Perfluorotetradecanoic acid	<0.536	ng/L	1.88	0.536	1	06/30/23 11:34	07/11/23 11:06	376-06-7	
Perfluorotridecanoic acid	<0.578	ng/L	1.88	0.578	1	06/30/23 11:34	07/11/23 11:06	72629-94-8	
Perfluoroundecanoic acid	<0.583	ng/L	1.88	0.583	1	06/30/23 11:34	07/11/23 11:06	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.9	%	50-150		1	06/30/23 11:34	07/11/23 11:06	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 11:06	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	94	%	50-150		1	06/30/23 11:34	07/11/23 11:06	2355-31-9-EI	
d5-NEtFOSAA	89	%	50-150		1	06/30/23 11:34	07/11/23 11:06	2991-50-6-EI	
d7-NMeFOSE	14	%	50-150		1	06/30/23 11:34	07/11/23 11:06	24448-09-7-	
d9-NEtFOSE	11	%	50-150		1	06/30/23 11:34	07/11/23 11:06	1691-99-2-EI	
M2 4:2 FTS	157	%	50-150		1	06/30/23 11:34	07/11/23 11:06	757124-72-4	MSSV1 2.5
M2 6:2 FTS	149	%	50-150		1	06/30/23 11:34	07/11/23 11:06	27619-97-2-	
M2 8:2 FTS	115	%	50-150		1	06/30/23 11:34	07/11/23 11:06	39108-34-4-	
M2PFHxDA	4	%	50-150		1	06/30/23 11:34	07/11/23 11:06	67905-19-5-	MSSV1 2.3
M2PFTeDA	30	%	50-150		1	06/30/23 11:34	07/11/23 11:06	376-06-7-EI	
M3HFPODA	96	%	50-150		1	06/30/23 11:34	07/11/23 11:06	13252-13-6-	
M3PFBS	98	%	50-150		1	06/30/23 11:34	07/11/23 11:06	375-73-5-EI	
M3PFHxS	97	%	50-150		1	06/30/23 11:34	07/11/23 11:06	355-46-4-EI	
M4PFHpA	110	%	50-150		1	06/30/23 11:34	07/11/23 11:06	375-85-9-EI	
M5PFHxA	113	%	50-150		1	06/30/23 11:34	07/11/23 11:06	307-24-4-EI	
M5PFPeA	106	%	50-150		1	06/30/23 11:34	07/11/23 11:06	2706-90-3-EI	
M6PFDA	100	%	50-150		1	06/30/23 11:34	07/11/23 11:06	335-76-2-EI	
M7PFUdA	92	%	50-150		1	06/30/23 11:34	07/11/23 11:06	2058-94-8-EI	
M8FOSA	46	%	50-150		1	06/30/23 11:34	07/11/23 11:06	754-91-6-EI	
M8PFOA	108	%	50-150		1	06/30/23 11:34	07/11/23 11:06	335-67-1-EI	
M8PFOS	95	%	50-150		1	06/30/23 11:34	07/11/23 11:06	1763-23-1-EI	
M9PFNA	108	%	50-150		1	06/30/23 11:34	07/11/23 11:06	375-95-1-EI	
MPFBA	102	%	50-150		1	06/30/23 11:34	07/11/23 11:06	375-22-4-EI	
MPFDoA	75	%	50-150		1	06/30/23 11:34	07/11/23 11:06	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-17S-WG-20230622 Lab ID: 40264224025 Collected: 06/22/23 08:45 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082A GCS PCB</b>									
Analytical Method: EPA 8082A Preparation Method: EPA 3510									
Pace Analytical Services - Green Bay									
PCB-1016 (Aroclor 1016)	<0.11	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.11	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.11	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.11	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.11	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.11	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.11	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	11096-82-5	
PCB, Total	<0.11	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	92	%	20-128		1	06/27/23 13:44	06/28/23 07:18	877-09-8	
Decachlorobiphenyl (S)	79	%	10-120		1	06/27/23 13:44	06/28/23 07:18	2051-24-3	
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/28/23 23:09	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	102	%	70-130		1		06/28/23 23:09		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 12:36	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 12:36	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 12:36	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 12:36	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 12:36	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 12:36	127-18-4	
Trichloroethene	2.0	ug/L	1.0	0.32	1		06/27/23 12:36	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 12:36	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 12:36	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 12:36	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/27/23 12:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		06/27/23 12:36	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 12:36	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.583	ng/L	1.88	0.583	1	07/01/23 11:00	07/11/23 00:06	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.705	ng/L	1.88	0.705	1	07/01/23 11:00	07/11/23 00:06	27619-97-2	
8:2 FTS	<0.498	ng/L	1.88	0.498	1	07/01/23 11:00	07/11/23 00:06	39108-34-4	
9CI-PF3ONS	<0.423	ng/L	1.88	0.423	1	07/01/23 11:00	07/11/23 00:06	756426-58-1	
11CI-PF3OUdS	<0.423	ng/L	1.88	0.423	1	07/01/23 11:00	07/11/23 00:06	763051-92-9	
ADONA	<0.404	ng/L	1.88	0.404	1	07/01/23 11:00	07/11/23 00:06	919005-14-4	
Perfluorooctanesulfonamide	<0.348	ng/L	1.88	0.348	1	07/01/23 11:00	07/11/23 00:06	754-91-6	
HFPO-DA	<3.13	ng/L	9.40	3.13	1	07/01/23 11:00	07/11/23 00:06	13252-13-6	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-17S-WG-20230622 Lab ID: 40264224025 Collected: 06/22/23 08:45 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
NEtFOSA	<0.658	ng/L	3.76	0.658	1	07/01/23 11:00	07/11/23 00:06	4151-50-2	
NEtFOSAA	<0.742	ng/L	3.76	0.742	1	07/01/23 11:00	07/11/23 00:06	2991-50-6	
NEtFOSE	<0.475	ng/L	3.76	0.475	1	07/01/23 11:00	07/11/23 00:06	1691-99-2	
NMeFOSA	<0.780	ng/L	3.76	0.780	1	07/01/23 11:00	07/11/23 00:06	31506-32-8	
NMeFOSAA	<0.423	ng/L	3.76	0.423	1	07/01/23 11:00	07/11/23 00:06	2355-31-9	
NMeFOSE	<0.611	ng/L	3.76	0.611	1	07/01/23 11:00	07/11/23 00:06	24448-09-7	
Perfluorobutanoic acid	4.36	ng/L	1.88	0.714	1	07/01/23 11:00	07/11/23 00:06	375-22-4	
Perfluorobutanesulfonic acid	37.8	ng/L	1.88	0.291	1	07/01/23 11:00	07/11/23 00:06	375-73-5	
Perfluorodecanoic acid	<0.677	ng/L	1.88	0.677	1	07/01/23 11:00	07/11/23 00:06	335-76-2	
Perfluorododecanoic acid	<0.611	ng/L	1.88	0.611	1	07/01/23 11:00	07/11/23 00:06	307-55-1	
PFDoS	<0.616	ng/L	1.88	0.616	1	07/01/23 11:00	07/11/23 00:06	79780-39-5	
PFDS	<0.573	ng/L	1.88	0.573	1	07/01/23 11:00	07/11/23 00:06	335-77-3	
Perfluoroheptanoic acid	2.80	ng/L	1.88	0.545	1	07/01/23 11:00	07/11/23 00:06	375-85-9	
PFHpS	<0.573	ng/L	1.88	0.573	1	07/01/23 11:00	07/11/23 00:06	375-92-8	
Perfluorohexanoic acid	4.17	ng/L	1.88	0.442	1	07/01/23 11:00	07/11/23 00:06	307-24-4	
Perfluorohexanesulfonic acid	9.80	ng/L	1.88	0.583	1	07/01/23 11:00	07/11/23 00:06	355-46-4	
Perfluorononanoic acid	<0.460	ng/L	1.88	0.460	1	07/01/23 11:00	07/11/23 00:06	375-95-1	
PFNS	<0.818	ng/L	1.88	0.818	1	07/01/23 11:00	07/11/23 00:06	68259-12-1	
Perfluorooctanoic acid	16.3	ng/L	1.88	0.395	1	07/01/23 11:00	07/11/23 00:06	335-67-1	
Perfluorooctanesulfonic acid	2.81	ng/L	1.88	0.357	1	07/01/23 11:00	07/11/23 00:06	1763-23-1	
Perfluoropentanoic acid	5.31	ng/L	1.88	0.413	1	07/01/23 11:00	07/11/23 00:06	2706-90-3	
PFPeS	<0.479	ng/L	1.88	0.479	1	07/01/23 11:00	07/11/23 00:06	2706-91-4	
Perfluorotetradecanoic acid	<0.536	ng/L	1.88	0.536	1	07/01/23 11:00	07/11/23 00:06	376-06-7	
Perfluorotridecanoic acid	<0.578	ng/L	1.88	0.578	1	07/01/23 11:00	07/11/23 00:06	72629-94-8	
Perfluoroundecanoic acid	<0.583	ng/L	1.88	0.583	1	07/01/23 11:00	07/11/23 00:06	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	46	%	50-150		1	07/01/23 11:00	07/11/23 00:06	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	50	%	50-150		1	07/01/23 11:00	07/11/23 00:06	31506-32-8-	
d3-NMeFOSAA	92	%	50-150		1	07/01/23 11:00	07/11/23 00:06	2355-31-9-EI	
d5-NEtFOSAA	88	%	50-150		1	07/01/23 11:00	07/11/23 00:06	2991-50-6-EI	
d7-NMeFOSE	79	%	50-150		1	07/01/23 11:00	07/11/23 00:06	24448-09-7-	
d9-NEtFOSE	78	%	50-150		1	07/01/23 11:00	07/11/23 00:06	1691-99-2-EI	
M2 4:2 FTS	154	%	50-150		1	07/01/23 11:00	07/11/23 00:06	757124-72-4	MSSV1 2.5
M2 6:2 FTS	144	%	50-150		1	07/01/23 11:00	07/11/23 00:06	27619-97-2-	
M2 8:2 FTS	130	%	50-150		1	07/01/23 11:00	07/11/23 00:06	39108-34-4-	
M2PFHxDA	80	%	50-150		1	07/01/23 11:00	07/11/23 00:06	67905-19-5-	
M2PFTeDA	77	%	50-150		1	07/01/23 11:00	07/11/23 00:06	376-06-7-EI	
M3HFPODA	67	%	50-150		1	07/01/23 11:00	07/11/23 00:06	13252-13-6-	
M3PFBS	84	%	50-150		1	07/01/23 11:00	07/11/23 00:06	375-73-5-EI	
M3PFHxS	88	%	50-150		1	07/01/23 11:00	07/11/23 00:06	355-46-4-EI	
M4PFHpA	96	%	50-150		1	07/01/23 11:00	07/11/23 00:06	375-85-9-EI	
M5PFHxA	95	%	50-150		1	07/01/23 11:00	07/11/23 00:06	307-24-4-EI	
M5PFPeA	77	%	50-150		1	07/01/23 11:00	07/11/23 00:06	2706-90-3-EI	
M6PFDA	98	%	50-150		1	07/01/23 11:00	07/11/23 00:06	335-76-2-EI	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-17S-WG-20230622 Lab ID: 40264224025 Collected: 06/22/23 08:45 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>		Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast							
<b>Surrogates</b>									
M7PFUdA	93	%	50-150		1	07/01/23 11:00	07/11/23 00:06	2058-94-8-EI	
M8FOSA	91	%	50-150		1	07/01/23 11:00	07/11/23 00:06	754-91-6-EI	
M8PFOA	98	%	50-150		1	07/01/23 11:00	07/11/23 00:06	335-67-1-EI	
M8PFOS	89	%	50-150		1	07/01/23 11:00	07/11/23 00:06	1763-23-1-EI	
M9PFNA	101	%	50-150		1	07/01/23 11:00	07/11/23 00:06	375-95-1-EI	
MPFBA	85	%	50-150		1	07/01/23 11:00	07/11/23 00:06	375-22-4-EI	
MPFDoA	86	%	50-150		1	07/01/23 11:00	07/11/23 00:06	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-14S-WG-20230622 Lab ID: 40264224026 Collected: 06/22/23 10:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/28/23 23:28	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	102	%	70-130		1		06/28/23 23:28		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 12:56	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 12:56	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 12:56	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 12:56	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 12:56	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 12:56	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 12:56	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 12:56	79-00-5	
Trichloroethene	1.2	ug/L	1.0	0.32	1		06/27/23 12:56	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 12:56	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/27/23 12:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 12:56	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 12:56	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.567	ng/L	1.83	0.567	1	07/01/23 11:00	07/11/23 00:21	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.686	ng/L	1.83	0.686	1	07/01/23 11:00	07/11/23 00:21	27619-97-2	
8:2 FTS	<0.485	ng/L	1.83	0.485	1	07/01/23 11:00	07/11/23 00:21	39108-34-4	
9CI-PF3ONS	<0.412	ng/L	1.83	0.412	1	07/01/23 11:00	07/11/23 00:21	756426-58-1	
11CI-PF3OUdS	<0.412	ng/L	1.83	0.412	1	07/01/23 11:00	07/11/23 00:21	763051-92-9	
ADONA	<0.393	ng/L	1.83	0.393	1	07/01/23 11:00	07/11/23 00:21	919005-14-4	
Perfluorooctanesulfonamide	<0.338	ng/L	1.83	0.338	1	07/01/23 11:00	07/11/23 00:21	754-91-6	
HFPO-DA	<3.05	ng/L	9.15	3.05	1	07/01/23 11:00	07/11/23 00:21	13252-13-6	
NEtFOSA	<0.640	ng/L	3.66	0.640	1	07/01/23 11:00	07/11/23 00:21	4151-50-2	
NEtFOSAA	<0.723	ng/L	3.66	0.723	1	07/01/23 11:00	07/11/23 00:21	2991-50-6	
NEtFOSE	<0.462	ng/L	3.66	0.462	1	07/01/23 11:00	07/11/23 00:21	1691-99-2	
NMeFOSA	<0.759	ng/L	3.66	0.759	1	07/01/23 11:00	07/11/23 00:21	31506-32-8	
NMeFOSAA	<0.412	ng/L	3.66	0.412	1	07/01/23 11:00	07/11/23 00:21	2355-31-9	
NMeFOSE	<0.595	ng/L	3.66	0.595	1	07/01/23 11:00	07/11/23 00:21	24448-09-7	
Perfluorobutanoic acid	4.43	ng/L	1.83	0.695	1	07/01/23 11:00	07/11/23 00:21	375-22-4	
Perfluorobutanesulfonic acid	5.32	ng/L	1.83	0.284	1	07/01/23 11:00	07/11/23 00:21	375-73-5	
Perfluorodecanoic acid	<0.659	ng/L	1.83	0.659	1	07/01/23 11:00	07/11/23 00:21	335-76-2	
Perfluorododecanoic acid	<0.595	ng/L	1.83	0.595	1	07/01/23 11:00	07/11/23 00:21	307-55-1	
PFDoS	<0.599	ng/L	1.83	0.599	1	07/01/23 11:00	07/11/23 00:21	79780-39-5	
PFDS	<0.558	ng/L	1.83	0.558	1	07/01/23 11:00	07/11/23 00:21	335-77-3	
Perfluoroheptanoic acid	<0.530	ng/L	1.83	0.530	1	07/01/23 11:00	07/11/23 00:21	375-85-9	
PFHpS	<0.558	ng/L	1.83	0.558	1	07/01/23 11:00	07/11/23 00:21	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-14S-WG-20230622 Lab ID: 40264224026 Collected: 06/22/23 10:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	2.05	ng/L	1.83	0.430	1	07/01/23 11:00	07/11/23 00:21	307-24-4	
Perfluorohexanesulfonic acid	<0.567	ng/L	1.83	0.567	1	07/01/23 11:00	07/11/23 00:21	355-46-4	
Perfluorononanoic acid	<0.448	ng/L	1.83	0.448	1	07/01/23 11:00	07/11/23 00:21	375-95-1	
PFNS	<0.796	ng/L	1.83	0.796	1	07/01/23 11:00	07/11/23 00:21	68259-12-1	
Perfluorooctanoic acid	57.7	ng/L	1.83	0.384	1	07/01/23 11:00	07/11/23 00:21	335-67-1	
Perfluorooctanesulfonic acid	<0.348	ng/L	1.83	0.348	1	07/01/23 11:00	07/11/23 00:21	1763-23-1	
Perfluoropentanoic acid	2.31	ng/L	1.83	0.402	1	07/01/23 11:00	07/11/23 00:21	2706-90-3	
PFPeS	<0.466	ng/L	1.83	0.466	1	07/01/23 11:00	07/11/23 00:21	2706-91-4	
Perfluorotetradecanoic acid	<0.521	ng/L	1.83	0.521	1	07/01/23 11:00	07/11/23 00:21	376-06-7	
Perfluorotridecanoic acid	<0.563	ng/L	1.83	0.563	1	07/01/23 11:00	07/11/23 00:21	72629-94-8	
Perfluoroundecanoic acid	<0.567	ng/L	1.83	0.567	1	07/01/23 11:00	07/11/23 00:21	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	43	%	50-150		1	07/01/23 11:00	07/11/23 00:21	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	48	%	50-150		1	07/01/23 11:00	07/11/23 00:21	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	92	%	50-150		1	07/01/23 11:00	07/11/23 00:21	2355-31-9-EI	
d5-NEtFOSAA	94	%	50-150		1	07/01/23 11:00	07/11/23 00:21	2991-50-6-EI	
d7-NMeFOSE	78	%	50-150		1	07/01/23 11:00	07/11/23 00:21	24448-09-7-	
d9-NEtFOSE	75	%	50-150		1	07/01/23 11:00	07/11/23 00:21	1691-99-2-EI	
M2 4:2 FTS	165	%	50-150		1	07/01/23 11:00	07/11/23 00:21	757124-72-4	MSSV1 2.5
M2 6:2 FTS	141	%	50-150		1	07/01/23 11:00	07/11/23 00:21	27619-97-2-	
M2 8:2 FTS	138	%	50-150		1	07/01/23 11:00	07/11/23 00:21	39108-34-4-	
M2PFHxDA	41	%	50-150		1	07/01/23 11:00	07/11/23 00:21	67905-19-5-	MSSV1 2.7
M2PFTeDA	68	%	50-150		1	07/01/23 11:00	07/11/23 00:21	376-06-7-EI	
M3HFPODA	56	%	50-150		1	07/01/23 11:00	07/11/23 00:21	13252-13-6-	
M3PFBS	75	%	50-150		1	07/01/23 11:00	07/11/23 00:21	375-73-5-EI	
M3PFHxS	83	%	50-150		1	07/01/23 11:00	07/11/23 00:21	355-46-4-EI	
M4PFHpA	92	%	50-150		1	07/01/23 11:00	07/11/23 00:21	375-85-9-EI	
M5PFHxA	84	%	50-150		1	07/01/23 11:00	07/11/23 00:21	307-24-4-EI	
M5PFPeA	59	%	50-150		1	07/01/23 11:00	07/11/23 00:21	2706-90-3-EI	
M6PFDA	98	%	50-150		1	07/01/23 11:00	07/11/23 00:21	335-76-2-EI	
M7PFUdA	92	%	50-150		1	07/01/23 11:00	07/11/23 00:21	2058-94-8-EI	
M8FOSA	89	%	50-150		1	07/01/23 11:00	07/11/23 00:21	754-91-6-EI	
M8PFOA	97	%	50-150		1	07/01/23 11:00	07/11/23 00:21	335-67-1-EI	
M8PFOS	89	%	50-150		1	07/01/23 11:00	07/11/23 00:21	1763-23-1-EI	
M9PFNA	100	%	50-150		1	07/01/23 11:00	07/11/23 00:21	375-95-1-EI	
MPFBA	72	%	50-150		1	07/01/23 11:00	07/11/23 00:21	375-22-4-EI	
MPFDoA	83	%	50-150		1	07/01/23 11:00	07/11/23 00:21	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-20S-WG-20230622 Lab ID: 40264224027 Collected: 06/22/23 11:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/29/23 10:55	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	95	%	70-130		1		06/29/23 10:55		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 09:38	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 09:38	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 09:38	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 09:38	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 09:38	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 09:38	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 09:38	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 09:38	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		06/27/23 09:38	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 09:38	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/27/23 09:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		06/27/23 09:38	2199-69-1	
Toluene-d8 (S)	106	%	70-130		1		06/27/23 09:38	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.574	ng/L	1.85	0.574	1	07/01/23 11:00	07/11/23 00:36	757124-72-4	
6:2 Fluorotelomer sulfonate	2.19	ng/L	1.85	0.694	1	07/01/23 11:00	07/11/23 00:36	27619-97-2	
8:2 FTS	<0.491	ng/L	1.85	0.491	1	07/01/23 11:00	07/11/23 00:36	39108-34-4	
9CI-PF3ONS	<0.416	ng/L	1.85	0.416	1	07/01/23 11:00	07/11/23 00:36	756426-58-1	
11CI-PF3OUdS	<0.416	ng/L	1.85	0.416	1	07/01/23 11:00	07/11/23 00:36	763051-92-9	
ADONA	<0.398	ng/L	1.85	0.398	1	07/01/23 11:00	07/11/23 00:36	919005-14-4	
Perfluorooctanesulfonamide	<0.342	ng/L	1.85	0.342	1	07/01/23 11:00	07/11/23 00:36	754-91-6	
HFPO-DA	<3.09	ng/L	9.26	3.09	1	07/01/23 11:00	07/11/23 00:36	13252-13-6	
NEtFOSA	<0.648	ng/L	3.70	0.648	1	07/01/23 11:00	07/11/23 00:36	4151-50-2	
NEtFOSAA	<0.731	ng/L	3.70	0.731	1	07/01/23 11:00	07/11/23 00:36	2991-50-6	
NEtFOSE	<0.467	ng/L	3.70	0.467	1	07/01/23 11:00	07/11/23 00:36	1691-99-2	
NMeFOSA	<0.768	ng/L	3.70	0.768	1	07/01/23 11:00	07/11/23 00:36	31506-32-8	
NMeFOSAA	<0.416	ng/L	3.70	0.416	1	07/01/23 11:00	07/11/23 00:36	2355-31-9	
NMeFOSE	<0.602	ng/L	3.70	0.602	1	07/01/23 11:00	07/11/23 00:36	24448-09-7	
Perfluorobutanoic acid	8.32	ng/L	1.85	0.703	1	07/01/23 11:00	07/11/23 00:36	375-22-4	
Perfluorobutanesulfonic acid	4.09	ng/L	1.85	0.287	1	07/01/23 11:00	07/11/23 00:36	375-73-5	
Perfluorodecanoic acid	<0.666	ng/L	1.85	0.666	1	07/01/23 11:00	07/11/23 00:36	335-76-2	
Perfluorododecanoic acid	<0.602	ng/L	1.85	0.602	1	07/01/23 11:00	07/11/23 00:36	307-55-1	
PFDoS	<0.606	ng/L	1.85	0.606	1	07/01/23 11:00	07/11/23 00:36	79780-39-5	
PFDS	<0.565	ng/L	1.85	0.565	1	07/01/23 11:00	07/11/23 00:36	335-77-3	
Perfluoroheptanoic acid	3.06	ng/L	1.85	0.537	1	07/01/23 11:00	07/11/23 00:36	375-85-9	
PFHpS	<0.565	ng/L	1.85	0.565	1	07/01/23 11:00	07/11/23 00:36	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-20S-WG-20230622 Lab ID: 40264224027 Collected: 06/22/23 11:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	3.30	ng/L	1.85	0.435	1	07/01/23 11:00	07/11/23 00:36	307-24-4	
Perfluorohexanesulfonic acid	5.94	ng/L	1.85	0.574	1	07/01/23 11:00	07/11/23 00:36	355-46-4	
Perfluorononanoic acid	<0.454	ng/L	1.85	0.454	1	07/01/23 11:00	07/11/23 00:36	375-95-1	
PFNS	<0.805	ng/L	1.85	0.805	1	07/01/23 11:00	07/11/23 00:36	68259-12-1	
Perfluorooctanoic acid	24.4	ng/L	1.85	0.389	1	07/01/23 11:00	07/11/23 00:36	335-67-1	
Perfluorooctanesulfonic acid	14.8	ng/L	1.85	0.352	1	07/01/23 11:00	07/11/23 00:36	1763-23-1	
Perfluoropentanoic acid	3.13	ng/L	1.85	0.407	1	07/01/23 11:00	07/11/23 00:36	2706-90-3	
PFPeS	<0.472	ng/L	1.85	0.472	1	07/01/23 11:00	07/11/23 00:36	2706-91-4	
Perfluorotetradecanoic acid	<0.528	ng/L	1.85	0.528	1	07/01/23 11:00	07/11/23 00:36	376-06-7	
Perfluorotridecanoic acid	<0.569	ng/L	1.85	0.569	1	07/01/23 11:00	07/11/23 00:36	72629-94-8	
Perfluoroundecanoic acid	<0.574	ng/L	1.85	0.574	1	07/01/23 11:00	07/11/23 00:36	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	60	%	50-150		1	07/01/23 11:00	07/11/23 00:36	4151-50-2-EI	
d-NMeFOSA	65	%	50-150		1	07/01/23 11:00	07/11/23 00:36	31506-32-8-	
d3-NMeFOSAA	86	%	50-150		1	07/01/23 11:00	07/11/23 00:36	2355-31-9-EI	
d5-NEtFOSAA	86	%	50-150		1	07/01/23 11:00	07/11/23 00:36	2991-50-6-EI	
d7-NMeFOSE	83	%	50-150		1	07/01/23 11:00	07/11/23 00:36	24448-09-7-	
d9-NEtFOSE	84	%	50-150		1	07/01/23 11:00	07/11/23 00:36	1691-99-2-EI	
M2 4:2 FTS	130	%	50-150		1	07/01/23 11:00	07/11/23 00:36	757124-72-4	
M2 6:2 FTS	117	%	50-150		1	07/01/23 11:00	07/11/23 00:36	27619-97-2-	
M2 8:2 FTS	100	%	50-150		1	07/01/23 11:00	07/11/23 00:36	39108-34-4-	
M2PFHxDA	95	%	50-150		1	07/01/23 11:00	07/11/23 00:36	67905-19-5-	
M2PFTeDA	83	%	50-150		1	07/01/23 11:00	07/11/23 00:36	376-06-7-EI	
M3HFPODA	87	%	50-150		1	07/01/23 11:00	07/11/23 00:36	13252-13-6-	
M3PFBS	90	%	50-150		1	07/01/23 11:00	07/11/23 00:36	375-73-5-EI	
M3PFHxS	91	%	50-150		1	07/01/23 11:00	07/11/23 00:36	355-46-4-EI	
M4PFHpA	94	%	50-150		1	07/01/23 11:00	07/11/23 00:36	375-85-9-EI	
M5PFHxA	96	%	50-150		1	07/01/23 11:00	07/11/23 00:36	307-24-4-EI	
M5PFPeA	97	%	50-150		1	07/01/23 11:00	07/11/23 00:36	2706-90-3-EI	
M6PFDA	96	%	50-150		1	07/01/23 11:00	07/11/23 00:36	335-76-2-EI	
M7PFUdA	94	%	50-150		1	07/01/23 11:00	07/11/23 00:36	2058-94-8-EI	
M8FOSA	89	%	50-150		1	07/01/23 11:00	07/11/23 00:36	754-91-6-EI	
M8PFOA	98	%	50-150		1	07/01/23 11:00	07/11/23 00:36	335-67-1-EI	
M8PFOS	91	%	50-150		1	07/01/23 11:00	07/11/23 00:36	1763-23-1-EI	
M9PFNA	97	%	50-150		1	07/01/23 11:00	07/11/23 00:36	375-95-1-EI	
MPFBA	90	%	50-150		1	07/01/23 11:00	07/11/23 00:36	375-22-4-EI	
MPFDoA	87	%	50-150		1	07/01/23 11:00	07/11/23 00:36	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-15D-WG-20230622 Lab ID: 40264224028 Collected: 06/22/23 12:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	5.3	ug/L	0.20	0.057	1		06/29/23 11:14	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	92	%	70-130		1		06/29/23 11:14		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 09:58	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 09:58	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 09:58	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 09:58	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 09:58	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 09:58	127-18-4	
Trichloroethene	1.6	ug/L	1.0	0.32	1		06/27/23 09:58	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 09:58	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 09:58	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 09:58	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/27/23 09:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		06/27/23 09:58	2199-69-1	
Toluene-d8 (S)	109	%	70-130		1		06/27/23 09:58	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.600	ng/L	1.94	0.600	1	07/01/23 11:00	07/11/23 00:52	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.726	ng/L	1.94	0.726	1	07/01/23 11:00	07/11/23 00:52	27619-97-2	
8:2 FTS	<0.513	ng/L	1.94	0.513	1	07/01/23 11:00	07/11/23 00:52	39108-34-4	
9CI-PF3ONS	<0.436	ng/L	1.94	0.436	1	07/01/23 11:00	07/11/23 00:52	756426-58-1	
11CI-PF3OUdS	<0.436	ng/L	1.94	0.436	1	07/01/23 11:00	07/11/23 00:52	763051-92-9	
ADONA	<0.416	ng/L	1.94	0.416	1	07/01/23 11:00	07/11/23 00:52	919005-14-4	
Perfluorooctanesulfonamide	<0.358	ng/L	1.94	0.358	1	07/01/23 11:00	07/11/23 00:52	754-91-6	
HFPO-DA	<3.23	ng/L	9.68	3.23	1	07/01/23 11:00	07/11/23 00:52	13252-13-6	
NEtFOSA	<0.677	ng/L	3.87	0.677	1	07/01/23 11:00	07/11/23 00:52	4151-50-2	
NEtFOSAA	<0.765	ng/L	3.87	0.765	1	07/01/23 11:00	07/11/23 00:52	2991-50-6	
NEtFOSE	<0.489	ng/L	3.87	0.489	1	07/01/23 11:00	07/11/23 00:52	1691-99-2	
NMeFOSA	<0.803	ng/L	3.87	0.803	1	07/01/23 11:00	07/11/23 00:52	31506-32-8	
NMeFOSAA	<0.436	ng/L	3.87	0.436	1	07/01/23 11:00	07/11/23 00:52	2355-31-9	
NMeFOSE	<0.629	ng/L	3.87	0.629	1	07/01/23 11:00	07/11/23 00:52	24448-09-7	
Perfluorobutanoic acid	<0.736	ng/L	1.94	0.736	1	07/01/23 11:00	07/11/23 00:52	375-22-4	
Perfluorobutanesulfonic acid	<0.300	ng/L	1.94	0.300	1	07/01/23 11:00	07/11/23 00:52	375-73-5	
Perfluorodecanoic acid	<0.697	ng/L	1.94	0.697	1	07/01/23 11:00	07/11/23 00:52	335-76-2	
Perfluorododecanoic acid	<0.629	ng/L	1.94	0.629	1	07/01/23 11:00	07/11/23 00:52	307-55-1	
PFDoS	<0.634	ng/L	1.94	0.634	1	07/01/23 11:00	07/11/23 00:52	79780-39-5	
PFDS	<0.590	ng/L	1.94	0.590	1	07/01/23 11:00	07/11/23 00:52	335-77-3	
Perfluoroheptanoic acid	<0.561	ng/L	1.94	0.561	1	07/01/23 11:00	07/11/23 00:52	375-85-9	
PFHpS	<0.590	ng/L	1.94	0.590	1	07/01/23 11:00	07/11/23 00:52	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-15D-WG-20230622 Lab ID: 40264224028 Collected: 06/22/23 12:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.455	ng/L	1.94	0.455	1	07/01/23 11:00	07/11/23 00:52	307-24-4	
Perfluorohexanesulfonic acid	<0.600	ng/L	1.94	0.600	1	07/01/23 11:00	07/11/23 00:52	355-46-4	
Perfluorononanoic acid	<0.474	ng/L	1.94	0.474	1	07/01/23 11:00	07/11/23 00:52	375-95-1	
PFNS	<0.842	ng/L	1.94	0.842	1	07/01/23 11:00	07/11/23 00:52	68259-12-1	
Perfluorooctanoic acid	<0.406	ng/L	1.94	0.406	1	07/01/23 11:00	07/11/23 00:52	335-67-1	
Perfluorooctanesulfonic acid	<0.368	ng/L	1.94	0.368	1	07/01/23 11:00	07/11/23 00:52	1763-23-1	
Perfluoropentanoic acid	<0.426	ng/L	1.94	0.426	1	07/01/23 11:00	07/11/23 00:52	2706-90-3	
PFPeS	<0.494	ng/L	1.94	0.494	1	07/01/23 11:00	07/11/23 00:52	2706-91-4	
Perfluorotetradecanoic acid	<0.552	ng/L	1.94	0.552	1	07/01/23 11:00	07/11/23 00:52	376-06-7	
Perfluorotridecanoic acid	<0.595	ng/L	1.94	0.595	1	07/01/23 11:00	07/11/23 00:52	72629-94-8	
Perfluoroundecanoic acid	<0.600	ng/L	1.94	0.600	1	07/01/23 11:00	07/11/23 00:52	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	42	%	50-150		1	07/01/23 11:00	07/11/23 00:52	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	44	%	50-150		1	07/01/23 11:00	07/11/23 00:52	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	58	%	50-150		1	07/01/23 11:00	07/11/23 00:52	2355-31-9-EI	
d5-NEtFOSAA	64	%	50-150		1	07/01/23 11:00	07/11/23 00:52	2991-50-6-EI	
d7-NMeFOSE	56	%	50-150		1	07/01/23 11:00	07/11/23 00:52	24448-09-7-	
d9-NEtFOSE	51	%	50-150		1	07/01/23 11:00	07/11/23 00:52	1691-99-2-EI	
M2 4:2 FTS	95	%	50-150		1	07/01/23 11:00	07/11/23 00:52	757124-72-4	
M2 6:2 FTS	93	%	50-150		1	07/01/23 11:00	07/11/23 00:52	27619-97-2-	
M2 8:2 FTS	73	%	50-150		1	07/01/23 11:00	07/11/23 00:52	39108-34-4-	
M2PFHxDA	28	%	50-150		1	07/01/23 11:00	07/11/23 00:52	67905-19-5-	MSSV1 2.7
M2PFTeDA	53	%	50-150		1	07/01/23 11:00	07/11/23 00:52	376-06-7-EI	
M3HFPODA	54	%	50-150		1	07/01/23 11:00	07/11/23 00:52	13252-13-6-	
M3PFBS	58	%	50-150		1	07/01/23 11:00	07/11/23 00:52	375-73-5-EI	
M3PFHxS	59	%	50-150		1	07/01/23 11:00	07/11/23 00:52	355-46-4-EI	
M4PFHpA	61	%	50-150		1	07/01/23 11:00	07/11/23 00:52	375-85-9-EI	
M5PFHxA	63	%	50-150		1	07/01/23 11:00	07/11/23 00:52	307-24-4-EI	
M5PFPeA	61	%	50-150		1	07/01/23 11:00	07/11/23 00:52	2706-90-3-EI	
M6PFDA	63	%	50-150		1	07/01/23 11:00	07/11/23 00:52	335-76-2-EI	
M7PFUdA	62	%	50-150		1	07/01/23 11:00	07/11/23 00:52	2058-94-8-EI	
M8FOSA	57	%	50-150		1	07/01/23 11:00	07/11/23 00:52	754-91-6-EI	
M8PFOA	64	%	50-150		1	07/01/23 11:00	07/11/23 00:52	335-67-1-EI	
M8PFOS	62	%	50-150		1	07/01/23 11:00	07/11/23 00:52	1763-23-1-EI	
M9PFNA	64	%	50-150		1	07/01/23 11:00	07/11/23 00:52	375-95-1-EI	
MPFBA	54	%	50-150		1	07/01/23 11:00	07/11/23 00:52	375-22-4-EI	
MPFDoA	57	%	50-150		1	07/01/23 11:00	07/11/23 00:52	307-55-1-EI	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-13S-WG-20230622 Lab ID: 40264224029 Collected: 06/22/23 14:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8082A GCS PCB</b>									
Analytical Method: EPA 8082A Preparation Method: EPA 3510									
Pace Analytical Services - Green Bay									
PCB-1016 (Aroclor 1016)	<0.11	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.11	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.11	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.11	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.11	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.11	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.11	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	11096-82-5	
PCB, Total	<0.11	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	1336-36-3	
<b>Surrogates</b>									
Tetrachloro-m-xylene (S)	94	%	20-128		1	06/27/23 13:44	06/28/23 07:42	877-09-8	
Decachlorobiphenyl (S)	79	%	10-120		1	06/27/23 13:44	06/28/23 07:42	2051-24-3	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-6S-WG-20230622 Lab ID: 40264224030 Collected: 06/22/23 12:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/29/23 11:33	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	96	%	70-130		1		06/29/23 11:33		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 13:15	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 13:15	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 13:15	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 13:15	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 13:15	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 13:15	127-18-4	
Trichloroethene	4.9	ug/L	1.0	0.32	1		06/27/23 13:15	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 13:15	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 13:15	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 13:15	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/27/23 13:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		06/27/23 13:15	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		06/27/23 13:15	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.421	ng/L	1.36	0.421	1	07/01/23 11:00	07/11/23 01:38	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.510	ng/L	1.36	0.510	1	07/01/23 11:00	07/11/23 01:38	27619-97-2	
8:2 FTS	<0.360	ng/L	1.36	0.360	1	07/01/23 11:00	07/11/23 01:38	39108-34-4	
9CI-PF3ONS	<0.306	ng/L	1.36	0.306	1	07/01/23 11:00	07/11/23 01:38	756426-58-1	
11CI-PF3OUdS	<0.306	ng/L	1.36	0.306	1	07/01/23 11:00	07/11/23 01:38	763051-92-9	
ADONA	<0.292	ng/L	1.36	0.292	1	07/01/23 11:00	07/11/23 01:38	919005-14-4	
Perfluorooctanesulfonamide	<0.252	ng/L	1.36	0.252	1	07/01/23 11:00	07/11/23 01:38	754-91-6	
HFPO-DA	<2.27	ng/L	6.80	2.27	1	07/01/23 11:00	07/11/23 01:38	13252-13-6	
NEtFOSA	<0.476	ng/L	2.72	0.476	1	07/01/23 11:00	07/11/23 01:38	4151-50-2	
NEtFOSAA	<0.537	ng/L	2.72	0.537	1	07/01/23 11:00	07/11/23 01:38	2991-50-6	
NEtFOSE	<0.343	ng/L	2.72	0.343	1	07/01/23 11:00	07/11/23 01:38	1691-99-2	
NMeFOSA	<0.564	ng/L	2.72	0.564	1	07/01/23 11:00	07/11/23 01:38	31506-32-8	
NMeFOSAA	<0.306	ng/L	2.72	0.306	1	07/01/23 11:00	07/11/23 01:38	2355-31-9	
NMeFOSE	<0.442	ng/L	2.72	0.442	1	07/01/23 11:00	07/11/23 01:38	24448-09-7	
Perfluorobutanoic acid	1.64	ng/L	1.36	0.517	1	07/01/23 11:00	07/11/23 01:38	375-22-4	
Perfluorobutanesulfonic acid	<0.211	ng/L	1.36	0.211	1	07/01/23 11:00	07/11/23 01:38	375-73-5	
Perfluorodecanoic acid	<0.489	ng/L	1.36	0.489	1	07/01/23 11:00	07/11/23 01:38	335-76-2	
Perfluorododecanoic acid	<0.442	ng/L	1.36	0.442	1	07/01/23 11:00	07/11/23 01:38	307-55-1	
PFDoS	<0.445	ng/L	1.36	0.445	1	07/01/23 11:00	07/11/23 01:38	79780-39-5	
PFDS	<0.415	ng/L	1.36	0.415	1	07/01/23 11:00	07/11/23 01:38	335-77-3	
Perfluoroheptanoic acid	2.60	ng/L	1.36	0.394	1	07/01/23 11:00	07/11/23 01:38	375-85-9	
PFHpS	<0.415	ng/L	1.36	0.415	1	07/01/23 11:00	07/11/23 01:38	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-6S-WG-20230622 Lab ID: 40264224030 Collected: 06/22/23 12:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	1.65	ng/L	1.36	0.319	1	07/01/23 11:00	07/11/23 01:38	307-24-4	
Perfluorohexanesulfonic acid	1.53	ng/L	1.36	0.421	1	07/01/23 11:00	07/11/23 01:38	355-46-4	
Perfluorononanoic acid	<0.333	ng/L	1.36	0.333	1	07/01/23 11:00	07/11/23 01:38	375-95-1	
PFNS	<0.591	ng/L	1.36	0.591	1	07/01/23 11:00	07/11/23 01:38	68259-12-1	
Perfluorooctanoic acid	32.3	ng/L	1.36	0.285	1	07/01/23 11:00	07/11/23 01:38	335-67-1	
Perfluorooctanesulfonic acid	<0.258	ng/L	1.36	0.258	1	07/01/23 11:00	07/11/23 01:38	1763-23-1	
Perfluoropentanoic acid	1.43	ng/L	1.36	0.299	1	07/01/23 11:00	07/11/23 01:38	2706-90-3	
PFPeS	<0.347	ng/L	1.36	0.347	1	07/01/23 11:00	07/11/23 01:38	2706-91-4	
Perfluorotetradecanoic acid	<0.387	ng/L	1.36	0.387	1	07/01/23 11:00	07/11/23 01:38	376-06-7	
Perfluorotridecanoic acid	<0.418	ng/L	1.36	0.418	1	07/01/23 11:00	07/11/23 01:38	72629-94-8	
Perfluoroundecanoic acid	<0.421	ng/L	1.36	0.421	1	07/01/23 11:00	07/11/23 01:38	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	55	%	50-150		1	07/01/23 11:00	07/11/23 01:38	4151-50-2-EI	
d-NMeFOSA	57	%	50-150		1	07/01/23 11:00	07/11/23 01:38	31506-32-8-	
d3-NMeFOSAA	82	%	50-150		1	07/01/23 11:00	07/11/23 01:38	2355-31-9-EI	
d5-NEtFOSAA	85	%	50-150		1	07/01/23 11:00	07/11/23 01:38	2991-50-6-EI	
d7-NMeFOSE	81	%	50-150		1	07/01/23 11:00	07/11/23 01:38	24448-09-7-	
d9-NEtFOSE	79	%	50-150		1	07/01/23 11:00	07/11/23 01:38	1691-99-2-EI	
M2 4:2 FTS	125	%	50-150		1	07/01/23 11:00	07/11/23 01:38	757124-72-4	
M2 6:2 FTS	119	%	50-150		1	07/01/23 11:00	07/11/23 01:38	27619-97-2-	
M2 8:2 FTS	99	%	50-150		1	07/01/23 11:00	07/11/23 01:38	39108-34-4-	
M2PFHxDA	75	%	50-150		1	07/01/23 11:00	07/11/23 01:38	67905-19-5-	
M2PFTeDA	74	%	50-150		1	07/01/23 11:00	07/11/23 01:38	376-06-7-EI	
M3HFPODA	85	%	50-150		1	07/01/23 11:00	07/11/23 01:38	13252-13-6-	
M3PFBS	86	%	50-150		1	07/01/23 11:00	07/11/23 01:38	375-73-5-EI	
M3PFHxS	85	%	50-150		1	07/01/23 11:00	07/11/23 01:38	355-46-4-EI	
M4PFHpA	93	%	50-150		1	07/01/23 11:00	07/11/23 01:38	375-85-9-EI	
M5PFHxA	98	%	50-150		1	07/01/23 11:00	07/11/23 01:38	307-24-4-EI	
M5PFPeA	89	%	50-150		1	07/01/23 11:00	07/11/23 01:38	2706-90-3-EI	
M6PFDA	91	%	50-150		1	07/01/23 11:00	07/11/23 01:38	335-76-2-EI	
M7PFUdA	87	%	50-150		1	07/01/23 11:00	07/11/23 01:38	2058-94-8-EI	
M8FOSA	84	%	50-150		1	07/01/23 11:00	07/11/23 01:38	754-91-6-EI	
M8PFOA	94	%	50-150		1	07/01/23 11:00	07/11/23 01:38	335-67-1-EI	
M8PFOS	82	%	50-150		1	07/01/23 11:00	07/11/23 01:38	1763-23-1-EI	
M9PFNA	93	%	50-150		1	07/01/23 11:00	07/11/23 01:38	375-95-1-EI	
MPFBA	91	%	50-150		1	07/01/23 11:00	07/11/23 01:38	375-22-4-EI	
MPFDoA	80	%	50-150		1	07/01/23 11:00	07/11/23 01:38	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-7S-WG-20230622 Lab ID: 40264224031 Collected: 06/22/23 14:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/29/23 11:52	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	96	%	70-130		1		06/29/23 11:52		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 13:35	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 13:35	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 13:35	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 13:35	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 13:35	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 13:35	127-18-4	
Trichloroethene	17.4	ug/L	1.0	0.32	1		06/27/23 13:35	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 13:35	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 13:35	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 13:35	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	107	%	70-130		1		06/27/23 13:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		1		06/27/23 13:35	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 13:35	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.587	ng/L	1.89	0.587	1	06/28/23 14:05	06/30/23 03:09	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.710	ng/L	1.89	0.710	1	06/28/23 14:05	06/30/23 03:09	27619-97-2	
8:2 FTS	<0.502	ng/L	1.89	0.502	1	06/28/23 14:05	06/30/23 03:09	39108-34-4	
9CI-PF3ONS	<0.426	ng/L	1.89	0.426	1	06/28/23 14:05	06/30/23 03:09	756426-58-1	
11CI-PF3OUdS	<0.426	ng/L	1.89	0.426	1	06/28/23 14:05	06/30/23 03:09	763051-92-9	
ADONA	<0.407	ng/L	1.89	0.407	1	06/28/23 14:05	06/30/23 03:09	919005-14-4	
Perfluorooctanesulfonamide	<0.338	ng/L	1.83	0.338	1	07/01/23 11:00	07/12/23 18:04	754-91-6	
HFPO-DA	<3.16	ng/L	9.46	3.16	1	06/28/23 14:05	06/30/23 03:09	13252-13-6	
NEtFOSA	<0.662	ng/L	3.79	0.662	1	06/28/23 14:05	06/30/23 03:09	4151-50-2	
NEtFOSAA	<0.721	ng/L	3.65	0.721	1	07/01/23 11:00	07/12/23 18:04	2991-50-6	
NEtFOSE	<0.478	ng/L	3.79	0.478	1	06/28/23 14:05	06/30/23 03:09	1691-99-2	
NMeFOSA	<0.785	ng/L	3.79	0.785	1	06/28/23 14:05	06/30/23 03:09	31506-32-8	
NMeFOSAA	<0.411	ng/L	3.65	0.411	1	07/01/23 11:00	07/12/23 18:04	2355-31-9	
NMeFOSE	<0.615	ng/L	3.79	0.615	1	06/28/23 14:05	06/30/23 03:09	24448-09-7	
Perfluorobutanoic acid	9.96	ng/L	1.89	0.719	1	06/28/23 14:05	06/30/23 03:09	375-22-4	
Perfluorobutanesulfonic acid	3.36	ng/L	1.89	0.293	1	06/28/23 14:05	06/30/23 03:09	375-73-5	
Perfluorodecanoic acid	<0.657	ng/L	1.83	0.657	1	07/01/23 11:00	07/12/23 18:04	335-76-2	
Perfluorododecanoic acid	<0.615	ng/L	1.89	0.615	1	06/28/23 14:05	06/30/23 03:09	307-55-1	
PFDoS	<0.620	ng/L	1.89	0.620	1	06/28/23 14:05	06/30/23 03:09	79780-39-5	
PFDS	<0.577	ng/L	1.89	0.577	1	06/28/23 14:05	06/30/23 03:09	335-77-3	
Perfluoroheptanoic acid	6.80	ng/L	1.89	0.549	1	06/28/23 14:05	06/30/23 03:09	375-85-9	
PFHpS	<0.577	ng/L	1.89	0.577	1	06/28/23 14:05	06/30/23 03:09	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-7S-WG-20230622 Lab ID: 40264224031 Collected: 06/22/23 14:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	11.6	ng/L	1.89	0.445	1	06/28/23 14:05	06/30/23 03:09	307-24-4	
Perfluorohexanesulfonic acid	<0.587	ng/L	1.89	0.587	1	06/28/23 14:05	06/30/23 03:09	355-46-4	
Perfluorononanoic acid	<0.464	ng/L	1.89	0.464	1	06/28/23 14:05	06/30/23 03:09	375-95-1	
PFNS	<0.823	ng/L	1.89	0.823	1	06/28/23 14:05	06/30/23 03:09	68259-12-1	
Perfluorooctanoic acid	19.8	ng/L	1.89	0.397	1	06/28/23 14:05	06/30/23 03:09	335-67-1	
Perfluorooctanesulfonic acid	<0.360	ng/L	1.89	0.360	1	06/28/23 14:05	06/30/23 03:09	1763-23-1	
Perfluoropentanoic acid	17.0	ng/L	1.89	0.416	1	06/28/23 14:05	06/30/23 03:09	2706-90-3	
PFPeS	<0.483	ng/L	1.89	0.483	1	06/28/23 14:05	06/30/23 03:09	2706-91-4	
Perfluorotetradecanoic acid	<0.539	ng/L	1.89	0.539	1	06/28/23 14:05	06/30/23 03:09	376-06-7	
Perfluorotridecanoic acid	<0.582	ng/L	1.89	0.582	1	06/28/23 14:05	06/30/23 03:09	72629-94-8	
Perfluoroundecanoic acid	<0.566	ng/L	1.83	0.566	1	07/01/23 11:00	07/12/23 18:04	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.1	%	50-150		1	06/28/23 14:05	06/30/23 03:09	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	0.09	%	50-150		1	06/28/23 14:05	06/30/23 03:09	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	67	%	50-150		1	07/01/23 11:00	07/12/23 18:04	2355-31-9-EI	
d5-NEtFOSAA	66	%	50-150		1	07/01/23 11:00	07/12/23 18:04	2991-50-6-EI	
d7-NMeFOSE	1	%	50-150		1	06/28/23 14:05	06/30/23 03:09	24448-09-7-	MSSV1 2.7
d9-NEtFOSE	0.3	%	50-150		1	06/28/23 14:05	06/30/23 03:09	1691-99-2-EI	MSSV1 2.7
M2 4:2 FTS	96	%	50-150		1	06/28/23 14:05	06/30/23 03:09	757124-72-4	
M2 6:2 FTS	86	%	50-150		1	06/28/23 14:05	06/30/23 03:09	27619-97-2-	
M2 8:2 FTS	50	%	50-150		1	06/28/23 14:05	06/30/23 03:09	39108-34-4-	
M2PFHxDA	0.4	%	50-150		1	06/28/23 14:05	06/30/23 03:09	67905-19-5-	MSSV1 2.7
M2PFTeDA	0.8	%	50-150		1	06/28/23 14:05	06/30/23 03:09	376-06-7-EI	MSSV1 2.7
M3HFPODA	71	%	50-150		1	06/28/23 14:05	06/30/23 03:09	13252-13-6-	
M3PFBS	71	%	50-150		1	06/28/23 14:05	06/30/23 03:09	375-73-5-EI	
M3PFHxS	69	%	50-150		1	06/28/23 14:05	06/30/23 03:09	355-46-4-EI	
M4PFHpA	73	%	50-150		1	06/28/23 14:05	06/30/23 03:09	375-85-9-EI	
M5PFHxA	75	%	50-150		1	06/28/23 14:05	06/30/23 03:09	307-24-4-EI	
M5PFPeA	77	%	50-150		1	06/28/23 14:05	06/30/23 03:09	2706-90-3-EI	
M6PFDA	74	%	50-150		1	07/01/23 11:00	07/12/23 18:04	335-76-2-EI	
M7PFUdA	61	%	50-150		1	07/01/23 11:00	07/12/23 18:04	2058-94-8-EI	
M8FOSA	60	%	50-150		1	07/01/23 11:00	07/12/23 18:04	754-91-6-EI	
M8PFOA	70	%	50-150		1	06/28/23 14:05	06/30/23 03:09	335-67-1-EI	
M8PFOS	56	%	50-150		1	06/28/23 14:05	06/30/23 03:09	1763-23-1-EI	
M9PFNA	63	%	50-150		1	06/28/23 14:05	06/30/23 03:09	375-95-1-EI	
MPFBA	69	%	50-150		1	06/28/23 14:05	06/30/23 03:09	375-22-4-EI	
MPFDoA	11	%	50-150		1	06/28/23 14:05	06/30/23 03:09	307-55-1-EI	MSSV1 2.7

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-04-WG-20230622 Lab ID: 40264224032 Collected: 06/22/23 16:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.28	ug/L	1.0	0.28	5		06/29/23 20:45	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		5		06/29/23 20:45		D3
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 16:36	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 16:36	107-06-2	
1,1-Dichloroethene	1.0	ug/L	1.0	0.58	1		06/27/23 16:36	75-35-4	
cis-1,2-Dichloroethene	29.8	ug/L	1.0	0.47	1		06/27/23 16:36	156-59-2	
trans-1,2-Dichloroethene	20.4	ug/L	1.0	0.53	1		06/27/23 16:36	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 16:36	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 16:36	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 16:36	79-00-5	
Trichloroethene	172	ug/L	1.0	0.32	1		06/27/23 16:36	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 16:36	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/27/23 16:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 16:36	2199-69-1	
Toluene-d8 (S)	108	%	70-130		1		06/27/23 16:36	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.582	ng/L	1.88	0.582	1	07/01/23 11:00	07/11/23 02:08	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.704	ng/L	1.88	0.704	1	07/01/23 11:00	07/11/23 02:08	27619-97-2	
8:2 FTS	<0.498	ng/L	1.88	0.498	1	07/01/23 11:00	07/11/23 02:08	39108-34-4	
9CI-PF3ONS	<0.422	ng/L	1.88	0.422	1	07/01/23 11:00	07/11/23 02:08	756426-58-1	
11CI-PF3OUdS	<0.422	ng/L	1.88	0.422	1	07/01/23 11:00	07/11/23 02:08	763051-92-9	
ADONA	<0.404	ng/L	1.88	0.404	1	07/01/23 11:00	07/11/23 02:08	919005-14-4	
Perfluorooctanesulfonamide	<0.347	ng/L	1.88	0.347	1	07/01/23 11:00	07/11/23 02:08	754-91-6	
HFPO-DA	<3.13	ng/L	9.39	3.13	1	07/01/23 11:00	07/11/23 02:08	13252-13-6	
NEtFOSA	<0.657	ng/L	3.76	0.657	1	07/01/23 11:00	07/11/23 02:08	4151-50-2	
NEtFOSAA	<0.742	ng/L	3.76	0.742	1	07/01/23 11:00	07/11/23 02:08	2991-50-6	
NEtFOSE	<0.474	ng/L	3.76	0.474	1	07/01/23 11:00	07/11/23 02:08	1691-99-2	
NMeFOSA	<0.779	ng/L	3.76	0.779	1	07/01/23 11:00	07/11/23 02:08	31506-32-8	
NMeFOSAA	<0.422	ng/L	3.76	0.422	1	07/01/23 11:00	07/11/23 02:08	2355-31-9	
NMeFOSE	<0.610	ng/L	3.76	0.610	1	07/01/23 11:00	07/11/23 02:08	24448-09-7	
Perfluorobutanoic acid	11.9	ng/L	1.88	0.714	1	07/01/23 11:00	07/11/23 02:08	375-22-4	
Perfluorobutanesulfonic acid	8.65	ng/L	1.88	0.291	1	07/01/23 11:00	07/11/23 02:08	375-73-5	
Perfluorodecanoic acid	<0.676	ng/L	1.88	0.676	1	07/01/23 11:00	07/11/23 02:08	335-76-2	
Perfluorododecanoic acid	<0.610	ng/L	1.88	0.610	1	07/01/23 11:00	07/11/23 02:08	307-55-1	
PFDoS	<0.615	ng/L	1.88	0.615	1	07/01/23 11:00	07/11/23 02:08	79780-39-5	
PFDS	<0.573	ng/L	1.88	0.573	1	07/01/23 11:00	07/11/23 02:08	335-77-3	
Perfluoroheptanoic acid	15.2	ng/L	1.88	0.545	1	07/01/23 11:00	07/11/23 02:08	375-85-9	
PFHpS	3.90	ng/L	1.88	0.573	1	07/01/23 11:00	07/11/23 02:08	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-04-WG-20230622 Lab ID: 40264224032 Collected: 06/22/23 16:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	21.7	ng/L	1.88	0.441	1	07/01/23 11:00	07/11/23 02:08	307-24-4	
Perfluorohexanesulfonic acid	64.4	ng/L	1.88	0.582	1	07/01/23 11:00	07/11/23 02:08	355-46-4	
Perfluorononanoic acid	<0.460	ng/L	1.88	0.460	1	07/01/23 11:00	07/11/23 02:08	375-95-1	
PFNS	<0.817	ng/L	1.88	0.817	1	07/01/23 11:00	07/11/23 02:08	68259-12-1	
Perfluorooctanoic acid	40.5	ng/L	1.88	0.394	1	07/01/23 11:00	07/11/23 02:08	335-67-1	
Perfluorooctanesulfonic acid	18.9	ng/L	1.88	0.357	1	07/01/23 11:00	07/11/23 02:08	1763-23-1	
Perfluoropentanoic acid	23.8	ng/L	1.88	0.413	1	07/01/23 11:00	07/11/23 02:08	2706-90-3	
PFPeS	8.55	ng/L	1.88	0.479	1	07/01/23 11:00	07/11/23 02:08	2706-91-4	
Perfluorotetradecanoic acid	<0.535	ng/L	1.88	0.535	1	07/01/23 11:00	07/11/23 02:08	376-06-7	
Perfluorotridecanoic acid	<0.577	ng/L	1.88	0.577	1	07/01/23 11:00	07/11/23 02:08	72629-94-8	
Perfluoroundecanoic acid	<0.582	ng/L	1.88	0.582	1	07/01/23 11:00	07/11/23 02:08	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	0.7	%	50-150		1	07/01/23 11:00	07/11/23 02:08	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	2	%	50-150		1	07/01/23 11:00	07/11/23 02:08	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	65	%	50-150		1	07/01/23 11:00	07/11/23 02:08	2355-31-9-EI	
d5-NEtFOSAA	65	%	50-150		1	07/01/23 11:00	07/11/23 02:08	2991-50-6-EI	
d7-NMeFOSE	24	%	50-150		1	07/01/23 11:00	07/11/23 02:08	24448-09-7-	MSSV1 2.7
d9-NEtFOSE	13	%	50-150		1	07/01/23 11:00	07/11/23 02:08	1691-99-2-EI	MSSV1 2.7
M2 4:2 FTS	127	%	50-150		1	07/01/23 11:00	07/11/23 02:08	757124-72-4	
M2 6:2 FTS	114	%	50-150		1	07/01/23 11:00	07/11/23 02:08	27619-97-2-	
M2 8:2 FTS	84	%	50-150		1	07/01/23 11:00	07/11/23 02:08	39108-34-4-	
M2PFHxDA	2	%	50-150		1	07/01/23 11:00	07/11/23 02:08	67905-19-5-	MSSV1 2.7
M2PFTeDA	4	%	50-150		1	07/01/23 11:00	07/11/23 02:08	376-06-7-EI	MSSV1 2.7
M3HFPODA	84	%	50-150		1	07/01/23 11:00	07/11/23 02:08	13252-13-6-	
M3PFBS	84	%	50-150		1	07/01/23 11:00	07/11/23 02:08	375-73-5-EI	
M3PFHxS	86	%	50-150		1	07/01/23 11:00	07/11/23 02:08	355-46-4-EI	
M4PFHpA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:08	375-85-9-EI	
M5PFHxA	94	%	50-150		1	07/01/23 11:00	07/11/23 02:08	307-24-4-EI	
M5PFPeA	94	%	50-150		1	07/01/23 11:00	07/11/23 02:08	2706-90-3-EI	
M6PFDA	76	%	50-150		1	07/01/23 11:00	07/11/23 02:08	335-76-2-EI	
M7PFUdA	59	%	50-150		1	07/01/23 11:00	07/11/23 02:08	2058-94-8-EI	
M8FOSA	51	%	50-150		1	07/01/23 11:00	07/11/23 02:08	754-91-6-EI	
M8PFOA	91	%	50-150		1	07/01/23 11:00	07/11/23 02:08	335-67-1-EI	
M8PFOS	80	%	50-150		1	07/01/23 11:00	07/11/23 02:08	1763-23-1-EI	
M9PFNA	88	%	50-150		1	07/01/23 11:00	07/11/23 02:08	375-95-1-EI	
MPFBA	87	%	50-150		1	07/01/23 11:00	07/11/23 02:08	375-22-4-EI	
MPFDoA	35	%	50-150		1	07/01/23 11:00	07/11/23 02:08	307-55-1-EI	MSSV1 2.7

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-15I-WG-20230623 Lab ID: 40264224033 Collected: 06/23/23 09:05 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	27.8	ug/L	2.0	0.57	10		06/29/23 21:04	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	106	%	70-130		10		06/29/23 21:04		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<3.0	ug/L	10.0	3.0	10		06/27/23 16:55	71-55-6	
1,1,2-Trichloroethane	<3.4	ug/L	10.0	3.4	10		06/27/23 16:55	79-00-5	
1,1-Dichloroethane	<3.0	ug/L	10.0	3.0	10		06/27/23 16:55	75-34-3	
1,1-Dichloroethene	<5.8	ug/L	10.0	5.8	10		06/27/23 16:55	75-35-4	
1,2-Dichloroethane	<2.9	ug/L	10.0	2.9	10		06/27/23 16:55	107-06-2	
Tetrachloroethene	<4.1	ug/L	10.0	4.1	10		06/27/23 16:55	127-18-4	
Trichloroethene	739	ug/L	10.0	3.2	10		06/27/23 16:55	79-01-6	
Vinyl chloride	<1.7	ug/L	10.0	1.7	10		06/27/23 16:55	75-01-4	
cis-1,2-Dichloroethene	8.7J	ug/L	10.0	4.7	10		06/27/23 16:55	156-59-2	
trans-1,2-Dichloroethene	<5.3	ug/L	10.0	5.3	10		06/27/23 16:55	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	107	%	70-130		10		06/27/23 16:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		10		06/27/23 16:55	2199-69-1	
Toluene-d8 (S)	105	%	70-130		10		06/27/23 16:55	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.594	ng/L	1.92	0.594	1	07/01/23 11:00	07/11/23 02:24	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.719	ng/L	1.92	0.719	1	07/01/23 11:00	07/11/23 02:24	27619-97-2	
8:2 FTS	<0.508	ng/L	1.92	0.508	1	07/01/23 11:00	07/11/23 02:24	39108-34-4	
9CI-PF3ONS	<0.431	ng/L	1.92	0.431	1	07/01/23 11:00	07/11/23 02:24	756426-58-1	
11CI-PF3OUdS	<0.431	ng/L	1.92	0.431	1	07/01/23 11:00	07/11/23 02:24	763051-92-9	
ADONA	<0.412	ng/L	1.92	0.412	1	07/01/23 11:00	07/11/23 02:24	919005-14-4	
Perfluorooctanesulfonamide	<0.355	ng/L	1.92	0.355	1	07/01/23 11:00	07/11/23 02:24	754-91-6	
HFPO-DA	<3.20	ng/L	9.58	3.20	1	07/01/23 11:00	07/11/23 02:24	13252-13-6	
NEtFOSA	<0.671	ng/L	3.83	0.671	1	07/01/23 11:00	07/11/23 02:24	4151-50-2	
NEtFOSAA	<0.757	ng/L	3.83	0.757	1	07/01/23 11:00	07/11/23 02:24	2991-50-6	
NEtFOSE	<0.484	ng/L	3.83	0.484	1	07/01/23 11:00	07/11/23 02:24	1691-99-2	
NMeFOSA	<0.795	ng/L	3.83	0.795	1	07/01/23 11:00	07/11/23 02:24	31506-32-8	
NMeFOSAA	<0.431	ng/L	3.83	0.431	1	07/01/23 11:00	07/11/23 02:24	2355-31-9	
NMeFOSE	<0.623	ng/L	3.83	0.623	1	07/01/23 11:00	07/11/23 02:24	24448-09-7	
Perfluorobutanoic acid	10.4	ng/L	1.92	0.728	1	07/01/23 11:00	07/11/23 02:24	375-22-4	
Perfluorobutanesulfonic acid	11.6	ng/L	1.92	0.297	1	07/01/23 11:00	07/11/23 02:24	375-73-5	
Perfluorodecanoic acid	<0.690	ng/L	1.92	0.690	1	07/01/23 11:00	07/11/23 02:24	335-76-2	
Perfluorododecanoic acid	<0.623	ng/L	1.92	0.623	1	07/01/23 11:00	07/11/23 02:24	307-55-1	
PFDoS	<0.628	ng/L	1.92	0.628	1	07/01/23 11:00	07/11/23 02:24	79780-39-5	
PFDS	<0.585	ng/L	1.92	0.585	1	07/01/23 11:00	07/11/23 02:24	335-77-3	
Perfluoroheptanoic acid	3.95	ng/L	1.92	0.556	1	07/01/23 11:00	07/11/23 02:24	375-85-9	
PFHpS	<0.585	ng/L	1.92	0.585	1	07/01/23 11:00	07/11/23 02:24	375-92-8	

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### ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-15I-WG-20230623 Lab ID: 40264224033 Collected: 06/23/23 09:05 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	5.13	ng/L	1.92	0.450	1	07/01/23 11:00	07/11/23 02:24	307-24-4	
Perfluorohexanesulfonic acid	<0.594	ng/L	1.92	0.594	1	07/01/23 11:00	07/11/23 02:24	355-46-4	
Perfluorononanoic acid	<0.470	ng/L	1.92	0.470	1	07/01/23 11:00	07/11/23 02:24	375-95-1	
PFNS	<0.834	ng/L	1.92	0.834	1	07/01/23 11:00	07/11/23 02:24	68259-12-1	
Perfluorooctanoic acid	12.8	ng/L	1.92	0.402	1	07/01/23 11:00	07/11/23 02:24	335-67-1	
Perfluorooctanesulfonic acid	<0.364	ng/L	1.92	0.364	1	07/01/23 11:00	07/11/23 02:24	1763-23-1	
Perfluoropentanoic acid	5.78	ng/L	1.92	0.422	1	07/01/23 11:00	07/11/23 02:24	2706-90-3	
PFPeS	<0.489	ng/L	1.92	0.489	1	07/01/23 11:00	07/11/23 02:24	2706-91-4	
Perfluorotetradecanoic acid	<0.546	ng/L	1.92	0.546	1	07/01/23 11:00	07/11/23 02:24	376-06-7	
Perfluorotridecanoic acid	<0.589	ng/L	1.92	0.589	1	07/01/23 11:00	07/11/23 02:24	72629-94-8	
Perfluoroundecanoic acid	<0.594	ng/L	1.92	0.594	1	07/01/23 11:00	07/11/23 02:24	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	54	%	50-150		1	07/01/23 11:00	07/11/23 02:24	4151-50-2-EI	
d-NMeFOSA	58	%	50-150		1	07/01/23 11:00	07/11/23 02:24	31506-32-8-	
d3-NMeFOSAA	81	%	50-150		1	07/01/23 11:00	07/11/23 02:24	2355-31-9-EI	
d5-NEtFOSAA	78	%	50-150		1	07/01/23 11:00	07/11/23 02:24	2991-50-6-EI	
d7-NMeFOSE	76	%	50-150		1	07/01/23 11:00	07/11/23 02:24	24448-09-7-	
d9-NEtFOSE	70	%	50-150		1	07/01/23 11:00	07/11/23 02:24	1691-99-2-EI	
M2 4:2 FTS	150	%	50-150		1	07/01/23 11:00	07/11/23 02:24	757124-72-4	
M2 6:2 FTS	116	%	50-150		1	07/01/23 11:00	07/11/23 02:24	27619-97-2-	
M2 8:2 FTS	91	%	50-150		1	07/01/23 11:00	07/11/23 02:24	39108-34-4-	
M2PFHxDA	63	%	50-150		1	07/01/23 11:00	07/11/23 02:24	67905-19-5-	
M2PFTeDA	63	%	50-150		1	07/01/23 11:00	07/11/23 02:24	376-06-7-EI	
M3HFPODA	75	%	50-150		1	07/01/23 11:00	07/11/23 02:24	13252-13-6-	
M3PFBS	82	%	50-150		1	07/01/23 11:00	07/11/23 02:24	375-73-5-EI	
M3PFHxS	83	%	50-150		1	07/01/23 11:00	07/11/23 02:24	355-46-4-EI	
M4PFHpA	93	%	50-150		1	07/01/23 11:00	07/11/23 02:24	375-85-9-EI	
M5PFHxA	97	%	50-150		1	07/01/23 11:00	07/11/23 02:24	307-24-4-EI	
M5PFPeA	77	%	50-150		1	07/01/23 11:00	07/11/23 02:24	2706-90-3-EI	
M6PFDA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:24	335-76-2-EI	
M7PFUdA	84	%	50-150		1	07/01/23 11:00	07/11/23 02:24	2058-94-8-EI	
M8FOSA	84	%	50-150		1	07/01/23 11:00	07/11/23 02:24	754-91-6-EI	
M8PFOA	93	%	50-150		1	07/01/23 11:00	07/11/23 02:24	335-67-1-EI	
M8PFOS	83	%	50-150		1	07/01/23 11:00	07/11/23 02:24	1763-23-1-EI	
M9PFNA	92	%	50-150		1	07/01/23 11:00	07/11/23 02:24	375-95-1-EI	
MPFBA	78	%	50-150		1	07/01/23 11:00	07/11/23 02:24	375-22-4-EI	
MPFDoA	71	%	50-150		1	07/01/23 11:00	07/11/23 02:24	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-23S-WG-20230621 Lab ID: 40264224034 Collected: 06/21/23 14:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		06/29/23 18:31	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	97	%	70-130		1		06/29/23 18:31		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 13:55	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 13:55	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 13:55	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 13:55	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 13:55	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 13:55	127-18-4	
Trichloroethene	2.1	ug/L	1.0	0.32	1		06/27/23 13:55	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 13:55	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 13:55	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 13:55	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/27/23 13:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		06/27/23 13:55	2199-69-1	
Toluene-d8 (S)	105	%	70-130		1		06/27/23 13:55	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.629	ng/L	2.03	0.629	1	06/28/23 14:05	06/30/23 03:57	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.761	ng/L	2.03	0.761	1	06/28/23 14:05	06/30/23 03:57	27619-97-2	
8:2 FTS	<0.538	ng/L	2.03	0.538	1	06/28/23 14:05	06/30/23 03:57	39108-34-4	
9CI-PF3ONS	<0.457	ng/L	2.03	0.457	1	06/28/23 14:05	06/30/23 03:57	756426-58-1	
11CI-PF3OUdS	<0.457	ng/L	2.03	0.457	1	06/28/23 14:05	06/30/23 03:57	763051-92-9	
ADONA	<0.436	ng/L	2.03	0.436	1	06/28/23 14:05	06/30/23 03:57	919005-14-4	
Perfluorooctanesulfonamide	<0.375	ng/L	2.03	0.375	1	06/28/23 14:05	06/30/23 03:57	754-91-6	
HFPO-DA	<3.38	ng/L	10.1	3.38	1	06/28/23 14:05	06/30/23 03:57	13252-13-6	
NEtFOSA	<0.710	ng/L	4.06	0.710	1	06/28/23 14:05	06/30/23 03:57	4151-50-2	
NEtFOSAA	<0.801	ng/L	4.06	0.801	1	06/28/23 14:05	06/30/23 03:57	2991-50-6	
NEtFOSE	<0.542	ng/L	4.29	0.542	1	07/05/23 14:30	07/12/23 19:36	1691-99-2	
NMeFOSA	<0.842	ng/L	4.06	0.842	1	06/28/23 14:05	06/30/23 03:57	31506-32-8	
NMeFOSAA	<0.457	ng/L	4.06	0.457	1	06/28/23 14:05	06/30/23 03:57	2355-31-9	
NMeFOSE	<0.697	ng/L	4.29	0.697	1	07/05/23 14:30	07/12/23 19:36	24448-09-7	
Perfluorobutanoic acid	3.03	ng/L	2.03	0.771	1	06/28/23 14:05	06/30/23 03:57	375-22-4	
Perfluorobutanesulfonic acid	4.27	ng/L	2.03	0.315	1	06/28/23 14:05	06/30/23 03:57	375-73-5	
Perfluorodecanoic acid	<0.730	ng/L	2.03	0.730	1	06/28/23 14:05	06/30/23 03:57	335-76-2	
Perfluorododecanoic acid	<0.659	ng/L	2.03	0.659	1	06/28/23 14:05	06/30/23 03:57	307-55-1	
PFDoS	<0.665	ng/L	2.03	0.665	1	06/28/23 14:05	06/30/23 03:57	79780-39-5	
PFDS	<0.619	ng/L	2.03	0.619	1	06/28/23 14:05	06/30/23 03:57	335-77-3	
Perfluoroheptanoic acid	3.49	ng/L	2.03	0.588	1	06/28/23 14:05	06/30/23 03:57	375-85-9	
PFHpS	<0.619	ng/L	2.03	0.619	1	06/28/23 14:05	06/30/23 03:57	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: MW-23S-WG-20230621 Lab ID: 40264224034 Collected: 06/21/23 14:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	3.09	ng/L	2.03	0.477	1	06/28/23 14:05	06/30/23 03:57	307-24-4	
Perfluorohexanesulfonic acid	2.91	ng/L	2.03	0.629	1	06/28/23 14:05	06/30/23 03:57	355-46-4	
Perfluorononanoic acid	<0.497	ng/L	2.03	0.497	1	06/28/23 14:05	06/30/23 03:57	375-95-1	
PFNS	<0.883	ng/L	2.03	0.883	1	06/28/23 14:05	06/30/23 03:57	68259-12-1	
Perfluorooctanoic acid	37.0	ng/L	2.03	0.426	1	06/28/23 14:05	06/30/23 03:57	335-67-1	
Perfluorooctanesulfonic acid	3.11	ng/L	2.03	0.386	1	06/28/23 14:05	06/30/23 03:57	1763-23-1	
Perfluoropentanoic acid	<0.446	ng/L	2.03	0.446	1	06/28/23 14:05	06/30/23 03:57	2706-90-3	
PFPeS	<0.517	ng/L	2.03	0.517	1	06/28/23 14:05	06/30/23 03:57	2706-91-4	
Perfluorotetradecanoic acid	<0.578	ng/L	2.03	0.578	1	06/28/23 14:05	06/30/23 03:57	376-06-7	
Perfluorotridecanoic acid	<0.624	ng/L	2.03	0.624	1	06/28/23 14:05	06/30/23 03:57	72629-94-8	
Perfluoroundecanoic acid	<0.629	ng/L	2.03	0.629	1	06/28/23 14:05	06/30/23 03:57	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	5	%	50-150		1	06/28/23 14:05	06/30/23 03:57	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	9	%	50-150		1	06/28/23 14:05	06/30/23 03:57	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	74	%	50-150		1	06/28/23 14:05	06/30/23 03:57	2355-31-9-EI	
d5-NEtFOSAA	82	%	50-150		1	06/28/23 14:05	06/30/23 03:57	2991-50-6-EI	
d7-NMeFOSE	74	%	50-150		1	07/05/23 14:30	07/12/23 19:36	24448-09-7-	
d9-NEtFOSE	66	%	50-150		1	07/05/23 14:30	07/12/23 19:36	1691-99-2-EI	
M2 4:2 FTS	107	%	50-150		1	06/28/23 14:05	06/30/23 03:57	757124-72-4	
M2 6:2 FTS	99	%	50-150		1	06/28/23 14:05	06/30/23 03:57	27619-97-2-	
M2 8:2 FTS	86	%	50-150		1	06/28/23 14:05	06/30/23 03:57	39108-34-4-	
M2PFHxDA	9	%	50-150		1	06/28/23 14:05	06/30/23 03:57	67905-19-5-	MSSV1 2.7
M2PFTeDA	48	%	50-150		1	06/28/23 14:05	06/30/23 03:57	376-06-7-EI	MSSV1 2.7
M3HFPODA	80	%	50-150		1	06/28/23 14:05	06/30/23 03:57	13252-13-6-	
M3PFBS	81	%	50-150		1	06/28/23 14:05	06/30/23 03:57	375-73-5-EI	
M3PFHxS	79	%	50-150		1	06/28/23 14:05	06/30/23 03:57	355-46-4-EI	
M4PFHpA	82	%	50-150		1	06/28/23 14:05	06/30/23 03:57	375-85-9-EI	
M5PFHxA	85	%	50-150		1	06/28/23 14:05	06/30/23 03:57	307-24-4-EI	
M5PFPeA	87	%	50-150		1	06/28/23 14:05	06/30/23 03:57	2706-90-3-EI	
M6PFDA	78	%	50-150		1	06/28/23 14:05	06/30/23 03:57	335-76-2-EI	
M7PFUdA	91	%	50-150		1	06/28/23 14:05	06/30/23 03:57	2058-94-8-EI	
M8FOSA	71	%	50-150		1	06/28/23 14:05	06/30/23 03:57	754-91-6-EI	
M8PFOA	83	%	50-150		1	06/28/23 14:05	06/30/23 03:57	335-67-1-EI	
M8PFOS	78	%	50-150		1	06/28/23 14:05	06/30/23 03:57	1763-23-1-EI	
M9PFNA	83	%	50-150		1	06/28/23 14:05	06/30/23 03:57	375-95-1-EI	
MPFBA	81	%	50-150		1	06/28/23 14:05	06/30/23 03:57	375-22-4-EI	
MPFDoA	77	%	50-150		1	06/28/23 14:05	06/30/23 03:57	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: DUP-01-WG-20230622 Lab ID: 40264224035 Collected: 06/22/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	5.5	ug/L	0.20	0.057	1		06/29/23 12:49	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	95	%	70-130		1		06/29/23 12:49		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 15:37	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 15:37	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		06/27/23 15:37	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		06/27/23 15:37	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		06/27/23 15:37	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 15:37	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 15:37	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 15:37	79-00-5	
Trichloroethene	1.6	ug/L	1.0	0.32	1		06/27/23 15:37	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 15:37	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		06/27/23 15:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		1		06/27/23 15:37	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 15:37	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.590	ng/L	1.90	0.590	1	06/28/23 14:05	06/30/23 04:13	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.714	ng/L	1.90	0.714	1	06/28/23 14:05	06/30/23 04:13	27619-97-2	
8:2 FTS	<0.505	ng/L	1.90	0.505	1	06/28/23 14:05	06/30/23 04:13	39108-34-4	
9CI-PF3ONS	<0.429	ng/L	1.90	0.429	1	06/28/23 14:05	06/30/23 04:13	756426-58-1	
11CI-PF3OUdS	<0.429	ng/L	1.90	0.429	1	06/28/23 14:05	06/30/23 04:13	763051-92-9	
ADONA	<0.409	ng/L	1.90	0.409	1	06/28/23 14:05	06/30/23 04:13	919005-14-4	
Perfluorooctanesulfonamide	<0.352	ng/L	1.90	0.352	1	06/28/23 14:05	06/30/23 04:13	754-91-6	
HFPO-DA	<3.18	ng/L	9.52	3.18	1	06/28/23 14:05	06/30/23 04:13	13252-13-6	
NEtFOSA	<0.667	ng/L	3.81	0.667	1	06/28/23 14:05	06/30/23 04:13	4151-50-2	
NEtFOSAA	<0.752	ng/L	3.81	0.752	1	06/28/23 14:05	06/30/23 04:13	2991-50-6	
NEtFOSE	<0.481	ng/L	3.81	0.481	1	06/28/23 14:05	06/30/23 04:13	1691-99-2	
NMeFOSA	<0.790	ng/L	3.81	0.790	1	06/28/23 14:05	06/30/23 04:13	31506-32-8	
NMeFOSAA	<0.429	ng/L	3.81	0.429	1	06/28/23 14:05	06/30/23 04:13	2355-31-9	
NMeFOSE	<0.619	ng/L	3.81	0.619	1	06/28/23 14:05	06/30/23 04:13	24448-09-7	
Perfluorobutanoic acid	<0.724	ng/L	1.90	0.724	1	06/28/23 14:05	06/30/23 04:13	375-22-4	
Perfluorobutanesulfonic acid	<0.295	ng/L	1.90	0.295	1	06/28/23 14:05	06/30/23 04:13	375-73-5	
Perfluorodecanoic acid	<0.686	ng/L	1.90	0.686	1	06/28/23 14:05	06/30/23 04:13	335-76-2	
Perfluorododecanoic acid	<0.619	ng/L	1.90	0.619	1	06/28/23 14:05	06/30/23 04:13	307-55-1	
PFDoS	<0.624	ng/L	1.90	0.624	1	06/28/23 14:05	06/30/23 04:13	79780-39-5	
PFDS	<0.581	ng/L	1.90	0.581	1	06/28/23 14:05	06/30/23 04:13	335-77-3	
Perfluoroheptanoic acid	<0.552	ng/L	1.90	0.552	1	06/28/23 14:05	06/30/23 04:13	375-85-9	
PFHpS	<0.581	ng/L	1.90	0.581	1	06/28/23 14:05	06/30/23 04:13	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: DUP-01-WG-20230622 Lab ID: 40264224035 Collected: 06/22/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	<0.448	ng/L	1.90	0.448	1	06/28/23 14:05	06/30/23 04:13	307-24-4	
Perfluorohexanesulfonic acid	<0.590	ng/L	1.90	0.590	1	06/28/23 14:05	06/30/23 04:13	355-46-4	
Perfluorononanoic acid	<0.467	ng/L	1.90	0.467	1	06/28/23 14:05	06/30/23 04:13	375-95-1	
PFNS	<0.828	ng/L	1.90	0.828	1	06/28/23 14:05	06/30/23 04:13	68259-12-1	
Perfluorooctanoic acid	<0.400	ng/L	1.90	0.400	1	06/28/23 14:05	06/30/23 04:13	335-67-1	
Perfluorooctanesulfonic acid	<0.362	ng/L	1.90	0.362	1	06/28/23 14:05	06/30/23 04:13	1763-23-1	
Perfluoropentanoic acid	<0.419	ng/L	1.90	0.419	1	06/28/23 14:05	06/30/23 04:13	2706-90-3	
PFPeS	<0.486	ng/L	1.90	0.486	1	06/28/23 14:05	06/30/23 04:13	2706-91-4	
Perfluorotetradecanoic acid	<0.543	ng/L	1.90	0.543	1	06/28/23 14:05	06/30/23 04:13	376-06-7	
Perfluorotridecanoic acid	<0.586	ng/L	1.90	0.586	1	06/28/23 14:05	06/30/23 04:13	72629-94-8	
Perfluoroundecanoic acid	<0.590	ng/L	1.90	0.590	1	06/28/23 14:05	06/30/23 04:13	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	1	%	50-150		1	06/28/23 14:05	06/30/23 04:13	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	2	%	50-150		1	06/28/23 14:05	06/30/23 04:13	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	69	%	50-150		1	06/28/23 14:05	06/30/23 04:13	2355-31-9-EI	
d5-NEtFOSAA	69	%	50-150		1	06/28/23 14:05	06/30/23 04:13	2991-50-6-EI	
d7-NMeFOSE	14	%	50-150		1	06/28/23 14:05	06/30/23 04:13	24448-09-7-	MSSV1 2.7
d9-NEtFOSE	9	%	50-150		1	06/28/23 14:05	06/30/23 04:13	1691-99-2-EI	MSSV1 2.7
M2 4:2 FTS	114	%	50-150		1	06/28/23 14:05	06/30/23 04:13	757124-72-4	
M2 6:2 FTS	102	%	50-150		1	06/28/23 14:05	06/30/23 04:13	27619-97-2-	
M2 8:2 FTS	80	%	50-150		1	06/28/23 14:05	06/30/23 04:13	39108-34-4-	
M2PFHxDA	11	%	50-150		1	06/28/23 14:05	06/30/23 04:13	67905-19-5-	MSSV1 2.7
M2PFTeDA	26	%	50-150		1	06/28/23 14:05	06/30/23 04:13	376-06-7-EI	MSSV1 2.7
M3HFPODA	69	%	50-150		1	06/28/23 14:05	06/30/23 04:13	13252-13-6-	
M3PFBS	75	%	50-150		1	06/28/23 14:05	06/30/23 04:13	375-73-5-EI	
M3PFHxS	75	%	50-150		1	06/28/23 14:05	06/30/23 04:13	355-46-4-EI	
M4PFHpA	77	%	50-150		1	06/28/23 14:05	06/30/23 04:13	375-85-9-EI	
M5PFHxA	80	%	50-150		1	06/28/23 14:05	06/30/23 04:13	307-24-4-EI	
M5PFPeA	80	%	50-150		1	06/28/23 14:05	06/30/23 04:13	2706-90-3-EI	
M6PFDA	73	%	50-150		1	06/28/23 14:05	06/30/23 04:13	335-76-2-EI	
M7PFUdA	73	%	50-150		1	06/28/23 14:05	06/30/23 04:13	2058-94-8-EI	
M8FOSA	45	%	50-150		1	06/28/23 14:05	06/30/23 04:13	754-91-6-EI	MSSV1 2.7
M8PFOA	77	%	50-150		1	06/28/23 14:05	06/30/23 04:13	335-67-1-EI	
M8PFOS	76	%	50-150		1	06/28/23 14:05	06/30/23 04:13	1763-23-1-EI	
M9PFNA	79	%	50-150		1	06/28/23 14:05	06/30/23 04:13	375-95-1-EI	
MPFBA	68	%	50-150		1	06/28/23 14:05	06/30/23 04:13	375-22-4-EI	
MPFDoA	53	%	50-150		1	06/28/23 14:05	06/30/23 04:13	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: DUP-02-WG-20230622 Lab ID: 40264224036 Collected: 06/22/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.28	ug/L	1.0	0.28	5		06/29/23 21:23	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		5		06/29/23 21:23		D3
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 15:57	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 15:57	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		06/27/23 15:57	75-34-3	
1,1-Dichloroethene	0.99J	ug/L	1.0	0.58	1		06/27/23 15:57	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 15:57	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		06/27/23 15:57	127-18-4	
Trichloroethene	213	ug/L	1.0	0.32	1		06/27/23 15:57	79-01-6	
Vinyl chloride	0.25J	ug/L	1.0	0.17	1		06/27/23 15:57	75-01-4	
cis-1,2-Dichloroethene	31.4	ug/L	1.0	0.47	1		06/27/23 15:57	156-59-2	
trans-1,2-Dichloroethene	22.4	ug/L	1.0	0.53	1		06/27/23 15:57	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/27/23 15:57	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/27/23 15:57	2199-69-1	
Toluene-d8 (S)	108	%	70-130		1		06/27/23 15:57	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.611	ng/L	1.97	0.611	1	07/01/23 11:00	07/11/23 02:54	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.739	ng/L	1.97	0.739	1	07/01/23 11:00	07/11/23 02:54	27619-97-2	
8:2 FTS	<0.522	ng/L	1.97	0.522	1	07/01/23 11:00	07/11/23 02:54	39108-34-4	
9Cl-PF3ONS	<0.443	ng/L	1.97	0.443	1	07/01/23 11:00	07/11/23 02:54	756426-58-1	
11Cl-PF3OUdS	<0.443	ng/L	1.97	0.443	1	07/01/23 11:00	07/11/23 02:54	763051-92-9	
ADONA	<0.424	ng/L	1.97	0.424	1	07/01/23 11:00	07/11/23 02:54	919005-14-4	
Perfluorooctanesulfonamide	<0.365	ng/L	1.97	0.365	1	07/01/23 11:00	07/11/23 02:54	754-91-6	
HFPO-DA	<3.29	ng/L	9.85	3.29	1	07/01/23 11:00	07/11/23 02:54	13252-13-6	
NEtFOSA	<0.690	ng/L	3.94	0.690	1	07/01/23 11:00	07/11/23 02:54	4151-50-2	
NEtFOSAA	<0.779	ng/L	3.94	0.779	1	07/01/23 11:00	07/11/23 02:54	2991-50-6	
NEtFOSE	<0.498	ng/L	3.94	0.498	1	07/01/23 11:00	07/11/23 02:54	1691-99-2	
NMeFOSA	<0.818	ng/L	3.94	0.818	1	07/01/23 11:00	07/11/23 02:54	31506-32-8	
NMeFOSAA	<0.443	ng/L	3.94	0.443	1	07/01/23 11:00	07/11/23 02:54	2355-31-9	
NMeFOSE	<0.641	ng/L	3.94	0.641	1	07/01/23 11:00	07/11/23 02:54	24448-09-7	
Perfluorobutanoic acid	11.9	ng/L	1.97	0.749	1	07/01/23 11:00	07/11/23 02:54	375-22-4	
Perfluorobutanesulfonic acid	8.78	ng/L	1.97	0.306	1	07/01/23 11:00	07/11/23 02:54	375-73-5	
Perfluorodecanoic acid	<0.710	ng/L	1.97	0.710	1	07/01/23 11:00	07/11/23 02:54	335-76-2	
Perfluorododecanoic acid	<0.641	ng/L	1.97	0.641	1	07/01/23 11:00	07/11/23 02:54	307-55-1	
PFDoS	<0.645	ng/L	1.97	0.645	1	07/01/23 11:00	07/11/23 02:54	79780-39-5	
PFDS	<0.601	ng/L	1.97	0.601	1	07/01/23 11:00	07/11/23 02:54	335-77-3	
Perfluoroheptanoic acid	16.3	ng/L	1.97	0.572	1	07/01/23 11:00	07/11/23 02:54	375-85-9	
PFHpS	4.26	ng/L	1.97	0.601	1	07/01/23 11:00	07/11/23 02:54	375-92-8	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: DUP-02-WG-20230622 Lab ID: 40264224036 Collected: 06/22/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	23.3	ng/L	1.97	0.463	1	07/01/23 11:00	07/11/23 02:54	307-24-4	
Perfluorohexanesulfonic acid	72.6	ng/L	1.97	0.611	1	07/01/23 11:00	07/11/23 02:54	355-46-4	
Perfluorononanoic acid	<0.483	ng/L	1.97	0.483	1	07/01/23 11:00	07/11/23 02:54	375-95-1	
PFNS	<0.857	ng/L	1.97	0.857	1	07/01/23 11:00	07/11/23 02:54	68259-12-1	
Perfluorooctanoic acid	41.5	ng/L	1.97	0.414	1	07/01/23 11:00	07/11/23 02:54	335-67-1	
Perfluorooctanesulfonic acid	19.8	ng/L	1.97	0.374	1	07/01/23 11:00	07/11/23 02:54	1763-23-1	
Perfluoropentanoic acid	25.9	ng/L	1.97	0.434	1	07/01/23 11:00	07/11/23 02:54	2706-90-3	
PFPeS	9.43	ng/L	1.97	0.503	1	07/01/23 11:00	07/11/23 02:54	2706-91-4	
Perfluorotetradecanoic acid	<0.562	ng/L	1.97	0.562	1	07/01/23 11:00	07/11/23 02:54	376-06-7	
Perfluorotridecanoic acid	<0.606	ng/L	1.97	0.606	1	07/01/23 11:00	07/11/23 02:54	72629-94-8	
Perfluoroundecanoic acid	<0.611	ng/L	1.97	0.611	1	07/01/23 11:00	07/11/23 02:54	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	58	%	50-150		1	07/01/23 11:00	07/11/23 02:54	4151-50-2-EI	
d-NMeFOSA	59	%	50-150		1	07/01/23 11:00	07/11/23 02:54	31506-32-8-	
d3-NMeFOSAA	85	%	50-150		1	07/01/23 11:00	07/11/23 02:54	2355-31-9-EI	
d5-NEtFOSAA	81	%	50-150		1	07/01/23 11:00	07/11/23 02:54	2991-50-6-EI	
d7-NMeFOSE	85	%	50-150		1	07/01/23 11:00	07/11/23 02:54	24448-09-7-	
d9-NEtFOSE	79	%	50-150		1	07/01/23 11:00	07/11/23 02:54	1691-99-2-EI	
M2 4:2 FTS	129	%	50-150		1	07/01/23 11:00	07/11/23 02:54	757124-72-4	
M2 6:2 FTS	119	%	50-150		1	07/01/23 11:00	07/11/23 02:54	27619-97-2-	
M2 8:2 FTS	101	%	50-150		1	07/01/23 11:00	07/11/23 02:54	39108-34-4-	
M2PFHxDA	91	%	50-150		1	07/01/23 11:00	07/11/23 02:54	67905-19-5-	
M2PFTeDA	80	%	50-150		1	07/01/23 11:00	07/11/23 02:54	376-06-7-EI	
M3HFPODA	86	%	50-150		1	07/01/23 11:00	07/11/23 02:54	13252-13-6-	
M3PFBS	87	%	50-150		1	07/01/23 11:00	07/11/23 02:54	375-73-5-EI	
M3PFHxS	90	%	50-150		1	07/01/23 11:00	07/11/23 02:54	355-46-4-EI	
M4PFHpA	94	%	50-150		1	07/01/23 11:00	07/11/23 02:54	375-85-9-EI	
M5PFHxA	96	%	50-150		1	07/01/23 11:00	07/11/23 02:54	307-24-4-EI	
M5PFPeA	96	%	50-150		1	07/01/23 11:00	07/11/23 02:54	2706-90-3-EI	
M6PFDA	93	%	50-150		1	07/01/23 11:00	07/11/23 02:54	335-76-2-EI	
M7PFUdA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:54	2058-94-8-EI	
M8FOSA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:54	754-91-6-EI	
M8PFOA	98	%	50-150		1	07/01/23 11:00	07/11/23 02:54	335-67-1-EI	
M8PFOS	91	%	50-150		1	07/01/23 11:00	07/11/23 02:54	1763-23-1-EI	
M9PFNA	96	%	50-150		1	07/01/23 11:00	07/11/23 02:54	375-95-1-EI	
MPFBA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:54	375-22-4-EI	
MPFDoA	82	%	50-150		1	07/01/23 11:00	07/11/23 02:54	307-55-1-EI	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: DUP-03-WG-20230623 Lab ID: 40264224037 Collected: 06/23/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	30.1	ug/L	2.0	0.57	10		06/29/23 21:42	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	105	%	70-130		10		06/29/23 21:42		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	2.9	ug/L	1.0	0.30	1		06/27/23 16:16	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		06/27/23 16:16	79-00-5	
1,1-Dichloroethane	1.1	ug/L	1.0	0.30	1		06/27/23 16:16	75-34-3	
1,1-Dichloroethene	0.91J	ug/L	1.0	0.58	1		06/27/23 16:16	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		06/27/23 16:16	107-06-2	
Tetrachloroethene	0.56J	ug/L	1.0	0.41	1		06/27/23 16:16	127-18-4	
Trichloroethene	691	ug/L	20.0	6.4	20		06/28/23 10:28	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		06/27/23 16:16	75-01-4	
cis-1,2-Dichloroethene	9.5	ug/L	1.0	0.47	1		06/27/23 16:16	156-59-2	
trans-1,2-Dichloroethene	1.6	ug/L	1.0	0.53	1		06/27/23 16:16	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109	%	70-130		1		06/27/23 16:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 16:16	2199-69-1	
Toluene-d8 (S)	106	%	70-130		1		06/27/23 16:16	2037-26-5	
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.572	ng/L	1.85	0.572	1	07/01/23 11:00	07/11/23 03:10	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.692	ng/L	1.85	0.692	1	07/01/23 11:00	07/11/23 03:10	27619-97-2	
8:2 FTS	<0.489	ng/L	1.85	0.489	1	07/01/23 11:00	07/11/23 03:10	39108-34-4	
9CI-PF3ONS	<0.415	ng/L	1.85	0.415	1	07/01/23 11:00	07/11/23 03:10	756426-58-1	
11CI-PF3OUdS	<0.415	ng/L	1.85	0.415	1	07/01/23 11:00	07/11/23 03:10	763051-92-9	
ADONA	<0.397	ng/L	1.85	0.397	1	07/01/23 11:00	07/11/23 03:10	919005-14-4	
Perfluorooctanesulfonamide	<0.342	ng/L	1.85	0.342	1	07/01/23 11:00	07/11/23 03:10	754-91-6	
HFPO-DA	<3.08	ng/L	9.23	3.08	1	07/01/23 11:00	07/11/23 03:10	13252-13-6	
NEtFOSA	<0.646	ng/L	3.69	0.646	1	07/01/23 11:00	07/11/23 03:10	4151-50-2	
NEtFOSAA	<0.729	ng/L	3.69	0.729	1	07/01/23 11:00	07/11/23 03:10	2991-50-6	
NEtFOSE	<0.466	ng/L	3.69	0.466	1	07/01/23 11:00	07/11/23 03:10	1691-99-2	
NMeFOSA	<0.766	ng/L	3.69	0.766	1	07/01/23 11:00	07/11/23 03:10	31506-32-8	
NMeFOSAA	<0.415	ng/L	3.69	0.415	1	07/01/23 11:00	07/11/23 03:10	2355-31-9	
NMeFOSE	<0.600	ng/L	3.69	0.600	1	07/01/23 11:00	07/11/23 03:10	24448-09-7	
Perfluorobutanoic acid	10.1	ng/L	1.85	0.701	1	07/01/23 11:00	07/11/23 03:10	375-22-4	
Perfluorobutanesulfonic acid	11.0	ng/L	1.85	0.286	1	07/01/23 11:00	07/11/23 03:10	375-73-5	
Perfluorodecanoic acid	<0.665	ng/L	1.85	0.665	1	07/01/23 11:00	07/11/23 03:10	335-76-2	
Perfluorododecanoic acid	<0.600	ng/L	1.85	0.600	1	07/01/23 11:00	07/11/23 03:10	307-55-1	
PFDoS	<0.605	ng/L	1.85	0.605	1	07/01/23 11:00	07/11/23 03:10	79780-39-5	
PFDS	<0.563	ng/L	1.85	0.563	1	07/01/23 11:00	07/11/23 03:10	335-77-3	
Perfluoroheptanoic acid	3.82	ng/L	1.85	0.535	1	07/01/23 11:00	07/11/23 03:10	375-85-9	
PFHpS	<0.563	ng/L	1.85	0.563	1	07/01/23 11:00	07/11/23 03:10	375-92-8	

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## ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Sample: DUP-03-WG-20230623 Lab ID: 40264224037 Collected: 06/23/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>EPA 537 Mod Full Water</b>									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Perfluorohexanoic acid	5.18	ng/L	1.85	0.434	1	07/01/23 11:00	07/11/23 03:10	307-24-4	
Perfluorohexanesulfonic acid	<0.572	ng/L	1.85	0.572	1	07/01/23 11:00	07/11/23 03:10	355-46-4	
Perfluorononanoic acid	<0.452	ng/L	1.85	0.452	1	07/01/23 11:00	07/11/23 03:10	375-95-1	
PFNS	<0.803	ng/L	1.85	0.803	1	07/01/23 11:00	07/11/23 03:10	68259-12-1	
Perfluorooctanoic acid	12.4	ng/L	1.85	0.388	1	07/01/23 11:00	07/11/23 03:10	335-67-1	
Perfluorooctanesulfonic acid	<0.351	ng/L	1.85	0.351	1	07/01/23 11:00	07/11/23 03:10	1763-23-1	
Perfluoropentanoic acid	5.91	ng/L	1.85	0.406	1	07/01/23 11:00	07/11/23 03:10	2706-90-3	
PFPeS	<0.471	ng/L	1.85	0.471	1	07/01/23 11:00	07/11/23 03:10	2706-91-4	
Perfluorotetradecanoic acid	<0.526	ng/L	1.85	0.526	1	07/01/23 11:00	07/11/23 03:10	376-06-7	
Perfluorotridecanoic acid	<0.568	ng/L	1.85	0.568	1	07/01/23 11:00	07/11/23 03:10	72629-94-8	
Perfluoroundecanoic acid	<0.572	ng/L	1.85	0.572	1	07/01/23 11:00	07/11/23 03:10	2058-94-8	
<b>Surrogates</b>									
d-NEtFOSA	57	%	50-150		1	07/01/23 11:00	07/11/23 03:10	4151-50-2-EI	
d-NMeFOSA	61	%	50-150		1	07/01/23 11:00	07/11/23 03:10	31506-32-8-	
d3-NMeFOSAA	76	%	50-150		1	07/01/23 11:00	07/11/23 03:10	2355-31-9-EI	
d5-NEtFOSAA	83	%	50-150		1	07/01/23 11:00	07/11/23 03:10	2991-50-6-EI	
d7-NMeFOSE	80	%	50-150		1	07/01/23 11:00	07/11/23 03:10	24448-09-7-	
d9-NEtFOSE	79	%	50-150		1	07/01/23 11:00	07/11/23 03:10	1691-99-2-EI	
M2 4:2 FTS	146	%	50-150		1	07/01/23 11:00	07/11/23 03:10	757124-72-4	
M2 6:2 FTS	123	%	50-150		1	07/01/23 11:00	07/11/23 03:10	27619-97-2-	
M2 8:2 FTS	93	%	50-150		1	07/01/23 11:00	07/11/23 03:10	39108-34-4-	
M2PFHxDA	70	%	50-150		1	07/01/23 11:00	07/11/23 03:10	67905-19-5-	
M2PFTeDA	73	%	50-150		1	07/01/23 11:00	07/11/23 03:10	376-06-7-EI	
M3HFPODA	75	%	50-150		1	07/01/23 11:00	07/11/23 03:10	13252-13-6-	
M3PFBS	81	%	50-150		1	07/01/23 11:00	07/11/23 03:10	375-73-5-EI	
M3PFHxS	89	%	50-150		1	07/01/23 11:00	07/11/23 03:10	355-46-4-EI	
M4PFHpA	96	%	50-150		1	07/01/23 11:00	07/11/23 03:10	375-85-9-EI	
M5PFHxA	96	%	50-150		1	07/01/23 11:00	07/11/23 03:10	307-24-4-EI	
M5PFPeA	76	%	50-150		1	07/01/23 11:00	07/11/23 03:10	2706-90-3-EI	
M6PFDA	93	%	50-150		1	07/01/23 11:00	07/11/23 03:10	335-76-2-EI	
M7PFUdA	85	%	50-150		1	07/01/23 11:00	07/11/23 03:10	2058-94-8-EI	
M8FOSA	85	%	50-150		1	07/01/23 11:00	07/11/23 03:10	754-91-6-EI	
M8PFOA	96	%	50-150		1	07/01/23 11:00	07/11/23 03:10	335-67-1-EI	
M8PFOS	89	%	50-150		1	07/01/23 11:00	07/11/23 03:10	1763-23-1-EI	
M9PFNA	97	%	50-150		1	07/01/23 11:00	07/11/23 03:10	375-95-1-EI	
MPFBA	78	%	50-150		1	07/01/23 11:00	07/11/23 03:10	375-22-4-EI	
MPFD0A	75	%	50-150		1	07/01/23 11:00	07/11/23 03:10	307-55-1-EI	

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 448365 Analysis Method: ASTM 6520 / EPA 8260 (SIM)  
 QC Batch Method: ASTM 6520 / EPA 8260 (SIM) Analysis Description: 8260D (SIM) SPME 1,4-Dioxane  
 Laboratory: Pace Analytical Services - Green Bay  
 Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009,  
 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016,  
 40264224017, 40264224018

METHOD BLANK: 2575359 Matrix: Water  
 Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009,  
 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016,  
 40264224017, 40264224018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	06/27/23 13:17	
1,3-Dioxane (S)	%	113	70-130	06/27/23 13:17	

LABORATORY CONTROL SAMPLE: 2575360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	29.3	117	70-130	
1,3-Dioxane (S)	%			113	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575361 2575362

Parameter	Units	40264224001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	25	25	31.1	30.3	124	121	70-130	3	20	
1,3-Dioxane (S)	%						111	112	70-130			

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 448378 Analysis Method: ASTM 6520 / EPA 8260 (SIM)  
 QC Batch Method: ASTM 6520 / EPA 8260 (SIM) Analysis Description: 8260D (SIM) SPME 1,4-Dioxane  
 Laboratory: Pace Analytical Services - Green Bay  
 Associated Lab Samples: 40264224023, 40264224024, 40264224025, 40264224026, 40264224027, 40264224028, 40264224030,  
 40264224031, 40264224032, 40264224033, 40264224035, 40264224036, 40264224037

METHOD BLANK: 2575397 Matrix: Water  
 Associated Lab Samples: 40264224023, 40264224024, 40264224025, 40264224026, 40264224027, 40264224028, 40264224030,  
 40264224031, 40264224032, 40264224033, 40264224035, 40264224036, 40264224037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	06/29/23 10:36	
1,3-Dioxane (S)	%	102	70-130	06/29/23 10:36	

LABORATORY CONTROL SAMPLE: 2575398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	24.1	96	70-130	
1,3-Dioxane (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575399 2575400

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40264255017 Result	Spike Conc.	Spike Conc.	Result								
1,4-Dioxane (p-Dioxane)	ug/L	0.15J	25	25	21.3	22.6	84	90	70-130	6	20		
1,3-Dioxane (S)	%						99	97	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.

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 448659 Analysis Method: ASTM 6520 / EPA 8260 (SIM)  
 QC Batch Method: ASTM 6520 / EPA 8260 (SIM) Analysis Description: 8260D (SIM) SPME 1,4-Dioxane  
 Laboratory: Pace Analytical Services - Green Bay  
 Associated Lab Samples: 40264224019, 40264224022, 40264224034

METHOD BLANK: 2577094 Matrix: Water  
 Associated Lab Samples: 40264224019, 40264224022, 40264224034

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	06/29/23 15:40	
1,3-Dioxane (S)	%	102	70-130	06/29/23 15:40	

LABORATORY CONTROL SAMPLE: 2577095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	24.1	96	70-130	
1,3-Dioxane (S)	%			106	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2577096 2577097

Parameter	Units	40264224019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	25	25	24.7	23.9	99	96	70-130	3	20	
1,3-Dioxane (S)	%						97	96	70-130			

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 448258 Analysis Method: EPA 8260  
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
 Laboratory: Pace Analytical Services - Green Bay  
 Associated Lab Samples: 40264224001, 40264224002, 40264224003, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224020

METHOD BLANK: 2575040 Matrix: Water  
 Associated Lab Samples: 40264224001, 40264224002, 40264224003, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/28/23 07:56	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	06/28/23 07:56	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/28/23 07:56	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/28/23 07:56	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/28/23 07:56	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/28/23 07:56	
Tetrachloroethene	ug/L	<0.41	1.0	06/28/23 07:56	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/28/23 07:56	
Trichloroethene	ug/L	<0.32	1.0	06/28/23 07:56	
Vinyl chloride	ug/L	<0.17	1.0	06/28/23 07:56	
1,2-Dichlorobenzene-d4 (S)	%	102	70-130	06/28/23 07:56	
4-Bromofluorobenzene (S)	%	103	70-130	06/28/23 07:56	
Toluene-d8 (S)	%	100	70-130	06/28/23 07:56	

LABORATORY CONTROL SAMPLE: 2575041

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-Trichloroethane	ug/L	50	52.9	106	70-130	
1,1-Dichloroethane	ug/L	50	56.6	113	70-130	
1,1-Dichloroethene	ug/L	50	57.6	115	74-131	
1,2-Dichloroethane	ug/L	50	57.8	116	70-137	
cis-1,2-Dichloroethene	ug/L	50	54.5	109	70-130	
Tetrachloroethene	ug/L	50	49.5	99	70-130	
trans-1,2-Dichloroethene	ug/L	50	56.4	113	70-130	
Trichloroethene	ug/L	50	53.8	108	70-130	
Vinyl chloride	ug/L	50	52.9	106	63-134	
1,2-Dichlorobenzene-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			104	70-130	

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Parameter	Units	2575994		2575995		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40264224001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
1,1,1-Trichloroethane	ug/L	<0.30	50	50	55.3	55.0	111	110	70-134	0	20		
1,1,2-Trichloroethane	ug/L	<0.34	50	50	53.4	55.7	107	111	70-130	4	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	56.6	57.8	113	116	70-130	2	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	57.9	59.5	116	119	71-130	3	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	57.6	58.1	115	116	70-137	1	20		
cis-1,2-Dichloroethene	ug/L	0.85J	50	50	55.7	56.8	110	112	70-130	2	20		
Tetrachloroethene	ug/L	<0.41	50	50	51.0	51.7	102	103	70-130	1	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	55.6	57.1	111	114	70-130	3	20		
Trichloroethene	ug/L	0.55J	50	50	54.2	56.0	107	111	70-130	3	20		
Vinyl chloride	ug/L	<0.17	50	50	52.6	53.4	105	107	60-137	1	20		
1,2-Dichlorobenzene-d4 (S)	%						102	102	70-130				
4-Bromofluorobenzene (S)	%						104	104	70-130				
Toluene-d8 (S)	%						104	107	70-130				

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch:	448259	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40264224021, 40264224022, 40264224023, 40264224024

METHOD BLANK: 2575042 Matrix: Water

Associated Lab Samples: 40264224021, 40264224022, 40264224023, 40264224024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/27/23 15:18	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	06/27/23 15:18	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/27/23 15:18	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/27/23 15:18	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/27/23 15:18	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/27/23 15:18	
Tetrachloroethene	ug/L	<0.41	1.0	06/27/23 15:18	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/27/23 15:18	
Trichloroethene	ug/L	<0.32	1.0	06/27/23 15:18	
Vinyl chloride	ug/L	<0.17	1.0	06/27/23 15:18	
1,2-Dichlorobenzene-d4 (S)	%	105	70-130	06/27/23 15:18	
4-Bromofluorobenzene (S)	%	107	70-130	06/27/23 15:18	
Toluene-d8 (S)	%	107	70-130	06/27/23 15:18	

LABORATORY CONTROL SAMPLE: 2575043

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.7	115	70-134	
1,1,2-Trichloroethane	ug/L	50	55.8	112	70-130	
1,1-Dichloroethane	ug/L	50	62.3	125	70-130	
1,1-Dichloroethene	ug/L	50	53.7	107	74-131	
1,2-Dichloroethane	ug/L	50	59.6	119	70-137	
cis-1,2-Dichloroethene	ug/L	50	49.7	99	70-130	
Tetrachloroethene	ug/L	50	50.9	102	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.6	107	70-130	
Trichloroethene	ug/L	50	55.1	110	70-130	
Vinyl chloride	ug/L	50	55.7	111	63-134	
1,2-Dichlorobenzene-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			105	70-130	
Toluene-d8 (S)	%			105	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575803 2575804

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		40264224022	Result	Conc.	Conc.							
1,1,1-Trichloroethane	ug/L	<0.30	50	50	57.6	57.1	115	114	70-134	1	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	57.4	57.0	115	114	70-130	1	20	

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Parameter	Units	2575803		2575804		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40264224022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
1,1-Dichloroethane	ug/L	<0.30	50	50	62.5	61.7	125	123	70-130	1	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	53.5	51.8	107	104	71-130	3	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	61.5	61.0	123	122	70-137	1	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	51.0	51.2	102	102	70-130	0	20		
Tetrachloroethene	ug/L	<0.41	50	50	50.1	50.2	100	100	70-130	0	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	53.3	52.8	107	106	70-130	1	20		
Trichloroethene	ug/L	0.56J	50	50	54.2	55.4	107	110	70-130	2	20		
Vinyl chloride	ug/L	<0.17	50	50	56.2	55.1	112	110	60-137	2	20		
1,2-Dichlorobenzene-d4 (S)	%						99	98	70-130				
4-Bromofluorobenzene (S)	%						103	106	70-130				
Toluene-d8 (S)	%						105	106	70-130				

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch:	448314	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224034, 40264224035, 40264224036, 40264224037

METHOD BLANK: 2575211 Matrix: Water  
 Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224034, 40264224035, 40264224036, 40264224037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/27/23 07:20	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	06/27/23 07:20	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/27/23 07:20	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/27/23 07:20	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/27/23 07:20	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/27/23 07:20	
Tetrachloroethene	ug/L	<0.41	1.0	06/27/23 07:20	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/27/23 07:20	
Trichloroethene	ug/L	<0.32	1.0	06/27/23 07:20	
Vinyl chloride	ug/L	<0.17	1.0	06/27/23 07:20	
1,2-Dichlorobenzene-d4 (S)	%	102	70-130	06/27/23 07:20	
4-Bromofluorobenzene (S)	%	105	70-130	06/27/23 07:20	
Toluene-d8 (S)	%	106	70-130	06/27/23 07:20	

LABORATORY CONTROL SAMPLE: 2575212

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	56.9	114	70-134	
1,1,2-Trichloroethane	ug/L	50	55.2	110	70-130	
1,1-Dichloroethane	ug/L	50	60.5	121	70-130	
1,1-Dichloroethene	ug/L	50	53.2	106	74-131	
1,2-Dichloroethane	ug/L	50	57.8	116	70-137	
cis-1,2-Dichloroethene	ug/L	50	51.0	102	70-130	
Tetrachloroethene	ug/L	50	51.2	102	70-130	
trans-1,2-Dichloroethene	ug/L	50	52.3	105	70-130	
Trichloroethene	ug/L	50	54.0	108	70-130	
Vinyl chloride	ug/L	50	56.5	113	63-134	
1,2-Dichlorobenzene-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	
Toluene-d8 (S)	%			107	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575331 2575332

Parameter	Units	40264224027 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
1,1,1-Trichloroethane	ug/L	<0.30	50	50	59.3	57.8	119	116	70-134	3	20	

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575331		2575332		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40264224027 Result	MS Spike Conc.	MSD Spike Conc.									
1,1,2-Trichloroethane	ug/L	<0.34	50	50	57.2	55.1	114	110	70-130	4	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	62.1	61.6	124	123	70-130	1	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	54.7	53.6	109	107	71-130	2	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	61.2	59.0	122	118	70-137	4	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	51.6	50.9	103	102	70-130	1	20		
Tetrachloroethene	ug/L	<0.41	50	50	52.3	49.1	105	98	70-130	6	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	54.6	54.4	109	109	70-130	0	20		
Trichloroethene	ug/L	<0.32	50	50	55.8	55.4	112	111	70-130	1	20		
Vinyl chloride	ug/L	<0.17	50	50	59.4	57.8	119	116	60-137	3	20		
1,2-Dichlorobenzene-d4 (S)	%						102	101	70-130				
4-Bromofluorobenzene (S)	%						111	108	70-130				
Toluene-d8 (S)	%						107	106	70-130				

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 448387	Analysis Method: EPA 8082A
QC Batch Method: EPA 3510	Analysis Description: 8082A GCS PCB
	Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40264224025, 40264224029

METHOD BLANK: 2575451 Matrix: Water

Associated Lab Samples: 40264224025, 40264224029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1221 (Aroclor 1221)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1232 (Aroclor 1232)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1242 (Aroclor 1242)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1248 (Aroclor 1248)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1254 (Aroclor 1254)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1260 (Aroclor 1260)	ug/L	<0.11	0.50	06/28/23 01:36	
Decachlorobiphenyl (S)	%	48	10-120	06/28/23 01:36	
Tetrachloro-m-xylene (S)	%	87	20-128	06/28/23 01:36	

METHOD BLANK: 2575454 Matrix: Water

Associated Lab Samples: 40264224025, 40264224029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1221 (Aroclor 1221)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1232 (Aroclor 1232)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1242 (Aroclor 1242)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1248 (Aroclor 1248)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1254 (Aroclor 1254)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1260 (Aroclor 1260)	ug/L	<0.56	2.5	06/28/23 06:08	
Decachlorobiphenyl (S)	%	61	10-120	06/28/23 06:08	
Tetrachloro-m-xylene (S)	%	83	20-128	06/28/23 06:08	

LABORATORY CONTROL SAMPLE & LCSD: 2575452 2575453

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L		<0.11	<0.11					20	
PCB-1221 (Aroclor 1221)	ug/L		<0.11	<0.11					20	
PCB-1232 (Aroclor 1232)	ug/L		<0.11	<0.11					20	
PCB-1242 (Aroclor 1242)	ug/L		<0.11	<0.11					20	
PCB-1248 (Aroclor 1248)	ug/L		<0.11	<0.11					20	
PCB-1254 (Aroclor 1254)	ug/L		<0.11	<0.11					20	
PCB-1260 (Aroclor 1260)	ug/L	5	4.8	4.5	95	90	67-120	5	20	
Decachlorobiphenyl (S)	%				75	56	10-120			
Tetrachloro-m-xylene (S)	%				92	88	20-128			

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### QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

MATRIX SPIKE SAMPLE:		2575455					
Parameter	Units	40264041006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.56		<0.56			
PCB-1221 (Aroclor 1221)	ug/L	<0.56		<0.56			
PCB-1232 (Aroclor 1232)	ug/L	<0.56		<0.56			
PCB-1242 (Aroclor 1242)	ug/L	<0.56		<0.56			
PCB-1248 (Aroclor 1248)	ug/L	<0.56		<0.56			
PCB-1254 (Aroclor 1254)	ug/L	<0.56		<0.56			
PCB-1260 (Aroclor 1260)	ug/L	<0.56	25	23.4	94	29-131	
Decachlorobiphenyl (S)	%				73	10-120	
Tetrachloro-m-xylene (S)	%				96	20-128	

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## QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 768209 Analysis Method: EPA 537 Modified  
 QC Batch Method: METHOD Analysis Description: PFAS 537 Mod Analysis Water  
 Laboratory: Pace Analytical Gulf Coast

Associated Lab Samples: 40264224031, 40264224034, 40264224035

METHOD BLANK: 2496231 Matrix: Water

Associated Lab Samples: 40264224031, 40264224034, 40264224035

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	06/30/23 00:47	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	06/30/23 00:47	
8:2 FTS	ng/L	<1.06	4.00	06/30/23 00:47	
9Cl-PF3ONS	ng/L	<0.900	4.00	06/30/23 00:47	
11Cl-PF3OUdS	ng/L	<0.900	4.00	06/30/23 00:47	
ADONA	ng/L	<0.860	4.00	06/30/23 00:47	
Perfluorooctanesulfonamide	ng/L	<0.740	4.00	06/30/23 00:47	
HFPO-DA	ng/L	<6.67	20.0	06/30/23 00:47	
NEtFOSA	ng/L	<1.40	8.00	06/30/23 00:47	
NEtFOSAA	ng/L	<1.58	8.00	06/30/23 00:47	
NEtFOSE	ng/L	<1.01	8.00	06/30/23 00:47	
NMeFOSA	ng/L	<1.66	8.00	06/30/23 00:47	
NMeFOSAA	ng/L	<0.900	8.00	06/30/23 00:47	
NMeFOSE	ng/L	<1.30	8.00	06/30/23 00:47	
Perfluorobutanoic acid	ng/L	<1.52	4.00	06/30/23 00:47	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	06/30/23 00:47	
Perfluorodecanoic acid	ng/L	<1.44	4.00	06/30/23 00:47	
Perfluorododecanoic acid	ng/L	<1.30	4.00	06/30/23 00:47	
PFDoS	ng/L	<1.31	4.00	06/30/23 00:47	
PFDS	ng/L	<1.22	4.00	06/30/23 00:47	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	06/30/23 00:47	
PFHpS	ng/L	<1.22	4.00	06/30/23 00:47	
Perfluorohexanoic acid	ng/L	<0.940	4.00	06/30/23 00:47	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	06/30/23 00:47	
Perfluorononanoic acid	ng/L	<0.980	4.00	06/30/23 00:47	
PFNS	ng/L	<1.74	4.00	06/30/23 00:47	
Perfluorooctanoic acid	ng/L	<0.840	4.00	06/30/23 00:47	
Perfluorooctanesulfonic acid	ng/L	<0.760	4.00	06/30/23 00:47	
Perfluoropentanoic acid	ng/L	<0.880	4.00	06/30/23 00:47	
PFPeS	ng/L	<1.02	4.00	06/30/23 00:47	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	06/30/23 00:47	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	06/30/23 00:47	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	06/30/23 00:47	
d-NEtFOSA	%	5	50-150	06/30/23 00:47	MSSV12.3
d-NMeFOSA	%	9	50-150	06/30/23 00:47	MSSV12.3
d3-NMeFOSAA	%	78	50-150	06/30/23 00:47	
d5-NEtFOSAA	%	74	50-150	06/30/23 00:47	
d7-NMeFOSE	%	33	50-150	06/30/23 00:47	MSSV12.3
d9-NEtFOSE	%	30	50-150	06/30/23 00:47	MSSV12.3
M2 4:2 FTS	%	93	50-150	06/30/23 00:47	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

METHOD BLANK: 2496231

Matrix: Water

Associated Lab Samples: 40264224031, 40264224034, 40264224035

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
M2 6:2 FTS	%	85	50-150	06/30/23 00:47	
M2 8:2 FTS	%	79	50-150	06/30/23 00:47	
M2PFHxDA	%	16	50-150	06/30/23 00:47	MSSV12.3
M2PFTeDA	%	73	50-150	06/30/23 00:47	
M3HFPODA	%	85	50-150	06/30/23 00:47	
M3PFBS	%	83	50-150	06/30/23 00:47	
M3PFHxS	%	80	50-150	06/30/23 00:47	
M4PFHpA	%	84	50-150	06/30/23 00:47	
M5PFHxA	%	85	50-150	06/30/23 00:47	
M5PFPeA	%	85	50-150	06/30/23 00:47	
M6PFDA	%	82	50-150	06/30/23 00:47	
M7PFUdA	%	87	50-150	06/30/23 00:47	
M8FOSA	%	68	50-150	06/30/23 00:47	
M8PFOA	%	83	50-150	06/30/23 00:47	
M8PFOS	%	80	50-150	06/30/23 00:47	
M9PFNA	%	84	50-150	06/30/23 00:47	
MPFBA	%	84	50-150	06/30/23 00:47	
MPFD <sub>o</sub> A	%	83	50-150	06/30/23 00:47	

LABORATORY CONTROL SAMPLE: 2496234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4:2 FTS	ng/L	7.5	7.13	95	70-130	
6:2 Fluorotelomer sulfonate	ng/L	7.61	7.50	99	70-130	
8:2 FTS	ng/L	7.68	7.93	103	70-130	
9Cl-PF3ONS	ng/L	7.46	6.93	93	70-130	
11Cl-PF3OUdS	ng/L	7.54	6.60	88	70-130	
ADONA	ng/L	7.56	6.63	88	70-130	
Perfluorooctanesulfonamide	ng/L	8	7.96	100	70-130	
HFPO-DA	ng/L	16	<6.67	93	70-130	
NEtFOSA	ng/L	8	<1.40	83	70-130	
NEtFOSAA	ng/L	8	<1.58	93	70-130	
NEtFOSE	ng/L	8	<1.01	96	70-130	
NMeFOSA	ng/L	8	8.25	103	70-130	
NMeFOSAA	ng/L	8	<0.900	97	70-130	
NMeFOSE	ng/L	8	<1.30	93	70-130	
Perfluorobutanoic acid	ng/L	8	7.35	92	70-130	
Perfluorobutanesulfonic acid	ng/L	7.1	6.58	93	70-130	
Perfluorodecanoic acid	ng/L	8	7.38	92	70-130	
Perfluorododecanoic acid	ng/L	8	7.29	91	70-130	
PFDoS	ng/L	7.76	5.97	77	70-130	
PFDS	ng/L	7.72	6.92	90	70-130	
Perfluoroheptanoic acid	ng/L	8	7.30	91	70-130	
PFHpS	ng/L	7.62	7.22	95	70-130	

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

LABORATORY CONTROL SAMPLE: 2496234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Perfluorohexanoic acid	ng/L	8	7.16	90	70-130	
Perfluorohexanesulfonic acid	ng/L	7.31	6.65	91	70-130	
Perfluorononanoic acid	ng/L	8	7.20	90	70-130	
PFNS	ng/L	7.7	6.74	88	70-130	
Perfluorooctanoic acid	ng/L	8	7.31	91	70-130	
Perfluorooctanesulfonic acid	ng/L	7.42	7.07	95	70-130	
Perfluoropentanoic acid	ng/L	8	7.32	92	70-130	
PFPeS	ng/L	7.53	6.54	87	70-130	
Perfluorotetradecanoic acid	ng/L	8	7.41	93	70-130	
Perfluorotridecanoic acid	ng/L	8	7.20	90	70-130	
Perfluoroundecanoic acid	ng/L	8	7.24	90	70-130	
d-NEtFOSA	%			3	50-150	MSSV12.3
d-NMeFOSA	%			5	50-150	MSSV12.3
d3-NMeFOSAA	%			73	50-150	
d5-NEtFOSAA	%			74	50-150	
d7-NMeFOSE	%			30	50-150	MSSV12.3
d9-NEtFOSE	%			25	50-150	MSSV12.3
M2 4:2 FTS	%			87	50-150	
M2 6:2 FTS	%			81	50-150	
M2 8:2 FTS	%			73	50-150	
M2PFHxDA	%			50	50-150	
M2PFTeDA	%			67	50-150	
M3HFPODA	%			81	50-150	
M3PFBS	%			79	50-150	
M3PFHxS	%			78	50-150	
M4PFHpA	%			80	50-150	
M5PFHxA	%			82	50-150	
M5PFPeA	%			81	50-150	
M6PFDA	%			77	50-150	
M7PFUdA	%			81	50-150	
M8FOSA	%			63	50-150	
M8PFOA	%			81	50-150	
M8PFOS	%			77	50-150	
M9PFNA	%			81	50-150	
MPFBA	%			80	50-150	
MPFD <sub>o</sub> A	%			75	50-150	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 768293 Analysis Method: EPA 537 Modified
QC Batch Method: METHOD Analysis Description: PFAS 537 Mod Analysis Water
Laboratory: Pace Analytical Gulf Coast

Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224022, 40264224023, 40264224024

METHOD BLANK: 2496834 Matrix: Water

Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224022, 40264224023, 40264224024

Table with 6 columns: Parameter, Units, Blank Result, Reporting Limit, Analyzed, Qualifiers. Lists various chemical compounds and their detection results.

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

METHOD BLANK: 2496834

Matrix: Water

Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224022, 40264224023, 40264224024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
d7-NMeFOSE	%	9	50-150	07/11/23 04:42	MSSV12.3
d9-NEtFOSE	%	6	50-150	07/11/23 04:42	MSSV12.3
M2 4:2 FTS	%	103	50-150	07/11/23 04:42	
M2 6:2 FTS	%	93	50-150	07/11/23 04:42	
M2 8:2 FTS	%	87	50-150	07/11/23 04:42	
M2PFHxDA	%	10	50-150	07/11/23 04:42	MSSV12.3
M2PFTeDA	%	61	50-150	07/11/23 04:42	
M3HFPODA	%	93	50-150	07/11/23 04:42	
M3PFBS	%	90	50-150	07/11/23 04:42	
M3PFHxS	%	86	50-150	07/11/23 04:42	
M4PFHpA	%	94	50-150	07/11/23 04:42	
M5PFHxA	%	96	50-150	07/11/23 04:42	
M5PFPeA	%	96	50-150	07/11/23 04:42	
M6PFDA	%	89	50-150	07/11/23 04:42	
M7PFUdA	%	85	50-150	07/11/23 04:42	
M8FOSA	%	65	50-150	07/11/23 04:42	
M8PFOA	%	95	50-150	07/11/23 04:42	
M8PFOS	%	84	50-150	07/11/23 04:42	
M9PFNA	%	94	50-150	07/11/23 04:42	
MPFBA	%	96	50-150	07/11/23 04:42	
MPFD <sub>o</sub> A	%	76	50-150	07/11/23 04:42	

LABORATORY CONTROL SAMPLE: 2496837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4:2 FTS	ng/L	7.5	9.03	120	70-130	
6:2 Fluorotelomer sulfonate	ng/L	7.61	9.42	124	70-130	
8:2 FTS	ng/L	7.68	9.47	123	70-130	
9Cl-PF3ONS	ng/L	7.46	8.30	111	70-130	
11Cl-PF3OUdS	ng/L	7.54	7.85	104	70-130	
ADONA	ng/L	7.56	8.04	106	70-130	
Perfluorooctanesulfonamide	ng/L	8	9.71	121	70-130	
HFPO-DA	ng/L	16	<6.67	100	70-130	
NEtFOSA	ng/L	8	10.6	133	70-130	L3
NEtFOSAA	ng/L	8	8.49	106	70-130	
NEtFOSE	ng/L	8	9.19	115	70-130	
NMeFOSA	ng/L	8	10.8	135	70-130	L3
NMeFOSAA	ng/L	8	9.20	115	70-130	
NMeFOSE	ng/L	8	8.08	101	70-130	
Perfluorobutanoic acid	ng/L	8	8.83	110	70-130	
Perfluorobutanesulfonic acid	ng/L	7.1	7.92	112	70-130	
Perfluorodecanoic acid	ng/L	8	8.61	108	70-130	

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### QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

LABORATORY CONTROL SAMPLE: 2496837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Perfluorododecanoic acid	ng/L	8	9.32	116	70-130	
PFDoS	ng/L	7.76	8.45	109	70-130	
PFDS	ng/L	7.72	8.02	104	70-130	
Perfluoroheptanoic acid	ng/L	8	8.83	110	70-130	
PFHpS	ng/L	7.62	8.59	113	70-130	
Perfluorohexanoic acid	ng/L	8	8.95	112	70-130	
Perfluorohexanesulfonic acid	ng/L	7.31	8.22	112	70-130	
Perfluorononanoic acid	ng/L	8	8.83	110	70-130	
PFNS	ng/L	7.7	8.57	111	70-130	
Perfluorooctanoic acid	ng/L	8	8.81	110	70-130	
Perfluorooctanesulfonic acid	ng/L	7.42	8.73	118	70-130	
Perfluoropentanoic acid	ng/L	8	8.74	109	70-130	
PFPeS	ng/L	7.53	8.40	112	70-130	
Perfluorotetradecanoic acid	ng/L	8	8.99	112	70-130	
Perfluorotridecanoic acid	ng/L	8	8.50	106	70-130	
Perfluoroundecanoic acid	ng/L	8	8.73	109	70-130	
d-NEtFOSA	%			2	50-150	MSSV12.3
d-NMeFOSA	%			3	50-150	MSSV12.3
d3-NMeFOSAA	%			79	50-150	
d5-NEtFOSAA	%			80	50-150	
d7-NMeFOSE	%			26	50-150	MSSV12.6
d9-NEtFOSE	%			19	50-150	MSSV12.6
M2 4:2 FTS	%			99	50-150	
M2 6:2 FTS	%			91	50-150	
M2 8:2 FTS	%			82	50-150	
M2PFHxDA	%			52	50-150	
M2PFTeDA	%			70	50-150	
M3HFPODA	%			92	50-150	
M3PFBS	%			88	50-150	
M3PFHxS	%			88	50-150	
M4PFHpA	%			93	50-150	
M5PFHxA	%			94	50-150	
M5PFPeA	%			92	50-150	
M6PFDA	%			88	50-150	
M7PFUdA	%			85	50-150	
M8FOSA	%			72	50-150	
M8PFOA	%			96	50-150	
M8PFOS	%			82	50-150	
M9PFNA	%			94	50-150	
MPFBA	%			93	50-150	
MPFD <sub>o</sub> A	%			78	50-150	

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## QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 768332 Analysis Method: EPA 537 Modified  
 QC Batch Method: METHOD Analysis Description: PFAS 537 Mod Analysis Water  
 Laboratory: Pace Analytical Gulf Coast

Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224036, 40264224037

METHOD BLANK: 2496941

Matrix: Water

Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224036, 40264224037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	07/10/23 22:03	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	07/10/23 22:03	
8:2 FTS	ng/L	<1.06	4.00	07/10/23 22:03	
9Cl-PF3ONS	ng/L	<0.900	4.00	07/10/23 22:03	
11Cl-PF3OUdS	ng/L	<0.900	4.00	07/10/23 22:03	
ADONA	ng/L	<0.860	4.00	07/10/23 22:03	
Perfluorooctanesulfonamide	ng/L	<0.740	4.00	07/10/23 22:03	
HFPO-DA	ng/L	<6.67	20.0	07/10/23 22:03	
NEtFOSA	ng/L	<1.40	8.00	07/10/23 22:03	
NEtFOSAA	ng/L	<1.58	8.00	07/10/23 22:03	
NEtFOSE	ng/L	<1.01	8.00	07/10/23 22:03	
NMeFOSA	ng/L	<1.66	8.00	07/10/23 22:03	
NMeFOSAA	ng/L	<0.900	8.00	07/10/23 22:03	
NMeFOSE	ng/L	<1.30	8.00	07/10/23 22:03	
Perfluorobutanoic acid	ng/L	<1.52	4.00	07/10/23 22:03	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	07/10/23 22:03	
Perfluorodecanoic acid	ng/L	<1.44	4.00	07/10/23 22:03	
Perfluorododecanoic acid	ng/L	<1.30	4.00	07/10/23 22:03	
PFDoS	ng/L	<1.31	4.00	07/10/23 22:03	
PFDS	ng/L	<1.22	4.00	07/10/23 22:03	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	07/10/23 22:03	
PFHpS	ng/L	<1.22	4.00	07/10/23 22:03	
Perfluorohexanoic acid	ng/L	<0.940	4.00	07/10/23 22:03	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	07/10/23 22:03	
Perfluorononanoic acid	ng/L	<0.980	4.00	07/10/23 22:03	
PFNS	ng/L	<1.74	4.00	07/10/23 22:03	
Perfluorooctanoic acid	ng/L	<0.840	4.00	07/10/23 22:03	
Perfluorooctanesulfonic acid	ng/L	<0.760	4.00	07/10/23 22:03	
Perfluoropentanoic acid	ng/L	<0.880	4.00	07/10/23 22:03	
PFPeS	ng/L	<1.02	4.00	07/10/23 22:03	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	07/10/23 22:03	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	07/10/23 22:03	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	07/10/23 22:03	
d-NEtFOSA	%	55	50-150	07/10/23 22:03	
d-NMeFOSA	%	51	50-150	07/10/23 22:03	
d3-NMeFOSAA	%	87	50-150	07/10/23 22:03	
d5-NEtFOSAA	%	90	50-150	07/10/23 22:03	
d7-NMeFOSE	%	68	50-150	07/10/23 22:03	
d9-NEtFOSE	%	71	50-150	07/10/23 22:03	

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**QUALITY CONTROL DATA**

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

METHOD BLANK: 2496941

Matrix: Water

Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224036, 40264224037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
M2 4:2 FTS	%	110	50-150	07/10/23 22:03	
M2 6:2 FTS	%	102	50-150	07/10/23 22:03	
M2 8:2 FTS	%	96	50-150	07/10/23 22:03	
M2PFHxDA	%	55	50-150	07/10/23 22:03	
M2PFTeDA	%	61	50-150	07/10/23 22:03	
M3HFPODA	%	95	50-150	07/10/23 22:03	
M3PFBS	%	97	50-150	07/10/23 22:03	
M3PFHxS	%	95	50-150	07/10/23 22:03	
M4PFHpA	%	97	50-150	07/10/23 22:03	
M5PFHxA	%	100	50-150	07/10/23 22:03	
M5PFPeA	%	98	50-150	07/10/23 22:03	
M6PFDA	%	97	50-150	07/10/23 22:03	
M7PFUdA	%	98	50-150	07/10/23 22:03	
M8FOSA	%	86	50-150	07/10/23 22:03	
M8PFOA	%	102	50-150	07/10/23 22:03	
M8PFOS	%	97	50-150	07/10/23 22:03	
M9PFNA	%	101	50-150	07/10/23 22:03	
MPFBA	%	98	50-150	07/10/23 22:03	
MPFD <sub>o</sub> A	%	90	50-150	07/10/23 22:03	

LABORATORY CONTROL SAMPLE & LCSD: 2496942

2496943

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Perfluorooctanesulfonamide	ng/L	80	92.6	94.5	116	118	70-130	2	30	
NEtFOSAA	ng/L	80	88.7	87.4	111	109	70-130	2	30	
NMeFOSAA	ng/L	80	93.7	90.6	117	113	70-130	3	30	
Perfluorodecanoic acid	ng/L	80	91.1	89.1	114	111	70-130	2	30	
Perfluoroundecanoic acid	ng/L	80	89.9	89.4	112	112	70-130	1	30	
d3-NMeFOSAA	%				90	76	50-150			
d5-NEtFOSAA	%				90	78	50-150			
M6PFDA	%				96	83	50-150			
M7PFUdA	%				95	81	50-150			
M8FOSA	%				89	75	50-150			

LABORATORY CONTROL SAMPLE: 2497078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4:2 FTS	ng/L	7.5	8.30	111	70-130	
6:2 Fluorotelomer sulfonate	ng/L	7.61	8.46	111	70-130	
8:2 FTS	ng/L	7.68	8.42	110	70-130	
9Cl-PF3ONS	ng/L	7.46	7.95	107	70-130	
11Cl-PF3OUdS	ng/L	7.54	7.23	96	70-130	

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**REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

LABORATORY CONTROL SAMPLE: 2497078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
ADONA	ng/L	7.56	7.50	99	70-130	
Perfluorooctanesulfonamide	ng/L	8	9.21	115	70-130	
HFPO-DA	ng/L	16	<6.67	99	70-130	
NEtFOSA	ng/L	8	<1.40	93	70-130	
NEtFOSAA	ng/L	8	8.75	109	70-130	
NEtFOSE	ng/L	8	<1.01	94	70-130	
NMeFOSA	ng/L	8	<1.66	83	70-130	
NMeFOSAA	ng/L	8	8.95	112	70-130	
NMeFOSE	ng/L	8	<1.30	93	70-130	
Perfluorobutanoic acid	ng/L	8	8.60	107	70-130	
Perfluorobutanesulfonic acid	ng/L	7.1	7.82	110	70-130	
Perfluorodecanoic acid	ng/L	8	8.60	108	70-130	
Perfluorododecanoic acid	ng/L	8	8.79	110	70-130	
PFDoS	ng/L	7.76	7.08	91	70-130	
PFDS	ng/L	7.72	8.09	105	70-130	
Perfluoroheptanoic acid	ng/L	8	8.62	108	70-130	
PFHpS	ng/L	7.62	8.52	112	70-130	
Perfluorohexanoic acid	ng/L	8	8.63	108	70-130	
Perfluorohexanesulfonic acid	ng/L	7.31	8.12	111	70-130	
Perfluorononanoic acid	ng/L	8	8.59	107	70-130	
PFNS	ng/L	7.7	8.14	106	70-130	
Perfluorooctanoic acid	ng/L	8	8.70	109	70-130	
Perfluorooctanesulfonic acid	ng/L	7.42	8.47	114	70-130	
Perfluoropentanoic acid	ng/L	8	8.62	108	70-130	
PFPeS	ng/L	7.53	7.97	106	70-130	
Perfluorotetradecanoic acid	ng/L	8	8.47	106	70-130	
Perfluorotridecanoic acid	ng/L	8	7.81	98	70-130	
Perfluoroundecanoic acid	ng/L	8	8.27	103	70-130	
d-NEtFOSA	%			76	50-150	
d-NMeFOSA	%			79	50-150	
d3-NMeFOSAA	%			81	50-150	
d5-NEtFOSAA	%			84	50-150	
d7-NMeFOSE	%			71	50-150	
d9-NEtFOSE	%			73	50-150	
M2 4:2 FTS	%			102	50-150	
M2 6:2 FTS	%			99	50-150	
M2 8:2 FTS	%			96	50-150	
M2PFHxDA	%			68	50-150	
M2PFTeDA	%			68	50-150	
M3HFPODA	%			92	50-150	
M3PFBS	%			91	50-150	
M3PFHxS	%			90	50-150	
M4PFHpA	%			93	50-150	
M5PFHxA	%			95	50-150	
M5PFPeA	%			93	50-150	
M6PFDA	%			94	50-150	
M7PFUdA	%			92	50-150	

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### QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

LABORATORY CONTROL SAMPLE: 2497078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
M8FOSA	%			82	50-150	
M8PFOA	%			97	50-150	
M8PFOS	%			90	50-150	
M9PFNA	%			96	50-150	
MPFBA	%			94	50-150	
MPFD <sub>o</sub> A	%			87	50-150	

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### QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

QC Batch: 768505

Analysis Method: EPA 537 Modified

QC Batch Method: METHOD

Analysis Description: PFAS 537 Mod Analysis Water

Laboratory: Pace Analytical Gulf Coast

Associated Lab Samples: 40264224034

METHOD BLANK: 2497826

Matrix: Water

Associated Lab Samples: 40264224034

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
NEtFOSE	ng/L	<1.01	8.00	07/12/23 18:35	
NMeFOSE	ng/L	<1.30	8.00	07/12/23 18:35	
d7-NMeFOSE	%	64	50-150	07/12/23 18:35	
d9-NEtFOSE	%	67	50-150	07/12/23 18:35	

LABORATORY CONTROL SAMPLE: 2497829

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
NEtFOSE	ng/L	8	9.73	122	70-130	
NMeFOSE	ng/L	8	8.09	101	70-130	
d7-NMeFOSE	%			18	50-150 MSSV12.6	
d9-NEtFOSE	%			12	50-150 MSSV12.6	

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## QUALIFIERS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

### 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.

DL - Adjusted Method Detection Limit.

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.

### WORKORDER QUALIFIERS

WO: 40264224

[1] In the EPA 537 Mod Isotope Dilution analysis in the prep batch 768208, the sample 22306280411 (MW-19S-WG-20230621) was originally extracted without low level LCS, which is a requirement for Wisconsin samples.

The recoveries for extraction internal standards associated with multiple compounds were lower than the control limits in the sample 22306280411 (MW-19S-WG-20230621).

[2] Samples 22306280401 (MW-03-WG-20230619), 22306280402 (MW-13D-WG-20230620), 22306280403 (MW-13S-WG-20230620), 22306280404 (MW-01-WG-20230620), 22306280405 (MW-26-WG-20230620), 22306280406 (MW-21S-WG-20230620), 22306280407 (MW-16-WG-20230620), 22306280408 (MW-10S-WG-20230620), 22306280409 (MW-18S-WG-20230620), 22306280410 (MW-08-WG-20230621), 22306280411 (MW-19S-WG-20230621), 22306280412 (MW-8S-WG-20230621), 22306280413 (MW-05-WG-20230621), 22306280414 (MW-24S-WG-20230621), 22306280415 (MW-25S-WG-20230621), 22306280416 (MW-10D-WG-20230621), 22306280417 (MW-12S-WG-20230621), 22306280418 (MW-9S-WG-20230621), 22306280419 (MW-09-WG-20230622) and 22306280420 (MW-15S-WG-20230622) were originally extracted without a LLLCS. The original extracts also contained multiple extracted internal standard failures.

### ANALYTE QUALIFIERS

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

HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.

MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).

MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).

MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280405 (MW-26-WG-20230620).

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## QUALIFIERS

Project: 0383990-THERMOFISHER

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### ANALYTE QUALIFIERS

- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280420 (MW-15S-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).

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## QUALIFIERS

Project: 0383990-THERMOFISHER

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### ANALYTE QUALIFIERS

- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280401 (MW-03-WG-20230619).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280404 (MW-01-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280406 (MW-21S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280407 (MW-16-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280409 (MW-18S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).

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## QUALIFIERS

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

### ANALYTE QUALIFIERS

- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280414 (MW-24S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280420 (MW-15S-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496233 (LCSD for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496234 (LCS for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496837 (LCS for HBN 768293 [LCMS/8204]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280401 (MW-03-WG-20230619).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280404 (MW-01-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280406 (MW-21S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280407 (MW-16-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280409 (MW-18S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280414 (MW-24S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).

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- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280420 (MW-15S-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496233 (LCSD for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496234 (LCS for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496837 (LCS for HBN 768293 [LCMS/8204]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d3-NMeFOSAA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d5-NEtFOSAA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d5-NEtFOSAA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d5-NEtFOSAA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280404 (MW-01-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280407 (MW-16-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).

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- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496234 (LCS for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280404 (MW-01-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280407 (MW-16-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496234 (LCS for HBN 768209 [LCMS/8191]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280403 (MW-13S-WG-20230620). There are no target hits for the associated compounds.
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280411 (MW-19S-WG-20230621). There are no target hits for the associated compounds.
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280412 (MW-8S-WG-20230621). There are no target hits for the associated compounds.
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280420 (MW-15S-WG-20230622). There are no target hits for the associated compounds.
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280421 (MW-17S-WG-20230622). There are no target hits for the associated compounds.
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280422 (MW-14S-WG-20230622). There are no target hits for the associated compounds.

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- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2496943 (LCSD for HBN 768332 [LCMS/8212]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 2496943 (LCSD for HBN 768332 [LCMS/8212]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496836 (LCSD for HBN 768293 [LCMS/8204]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496943 (LCSD for HBN 768332 [LCMS/8212]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496836 (LCSD for HBN 768293 [LCMS/8204]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496943 (LCSD for HBN 768332 [LCMS/8212]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496836 (LCSD for HBN 768293 [LCMS/8204]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496837 (LCS for HBN 768293 [LCMS/8204]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2497829 (LCS for HBN 768505 [LCMS/8225]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496836 (LCSD for HBN 768293 [LCMS/8204]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496837 (LCS for HBN 768293 [LCMS/8204]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2497829 (LCS for HBN 768505 [LCMS/8225]). The recovery of the associated compounds is within control limits.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280422 (MW-14S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280424 (MW-15D-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280429 (MW-23S-WG-20230621). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

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- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280429 (MW-23S-WG-20230621). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280421 (MW-17S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280422 (MW-14S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280424 (MW-15D-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280429 (MW-23S-WG-20230621). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280422 (MW-14S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280424 (MW-15D-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280429 (MW-23S-WG-20230621). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

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- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

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Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40264224025	MW-17S-WG-20230622	EPA 3510	448387	EPA 8082A	448485
40264224029	MW-13S-WG-20230622	EPA 3510	448387	EPA 8082A	448485
40264224001	MW-03-WG-20230619	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224004	MW-13D-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224005	MW-13S-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224006	MW-01-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224007	MW-26-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224008	MW-21S-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224009	MW-16-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224010	MW-10S-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224011	MW-18S-WG-20230620	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224012	MW-08-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224013	MW-19S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224014	MW-8S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224015	MW-05-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224016	MW-24S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224017	MW-25S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224018	MW-10D-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224019	MW-12S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448659		
40264224022	MW-9S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448659		
40264224023	MW-09-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224024	MW-15S-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224025	MW-17S-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224026	MW-14S-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224027	MW-20S-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224028	MW-15D-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224030	MW-6S-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224031	MW-7S-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40264224032	MW-04-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224033	MW-15I-WG-20230623	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224034	MW-23S-WG-20230621	ASTM 6520 / EPA 8260 (SIM)	448659		
40264224035	DUP-01-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224036	DUP-02-WG-20230622	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224037	DUP-03-WG-20230623	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224001	MW-03-WG-20230619	EPA 8260	448258		
40264224002	TB-01-WQ-20230620	EPA 8260	448258		
40264224003	TB-02-WQ-20230620	EPA 8260	448258		
40264224004	MW-13D-WG-20230620	EPA 8260	448258		
40264224005	MW-13S-WG-20230620	EPA 8260	448258		
40264224006	MW-01-WG-20230620	EPA 8260	448258		
40264224007	MW-26-WG-20230620	EPA 8260	448258		
40264224008	MW-21S-WG-20230620	EPA 8260	448258		
40264224009	MW-16-WG-20230620	EPA 8260	448258		
40264224010	MW-10S-WG-20230620	EPA 8260	448258		
40264224011	MW-18S-WG-20230620	EPA 8260	448258		
40264224012	MW-08-WG-20230621	EPA 8260	448258		
40264224013	MW-19S-WG-20230621	EPA 8260	448258		
40264224014	MW-8S-WG-20230621	EPA 8260	448258		
40264224015	MW-05-WG-20230621	EPA 8260	448258		
40264224016	MW-24S-WG-20230621	EPA 8260	448258		
40264224017	MW-25S-WG-20230621	EPA 8260	448258		
40264224018	MW-10D-WG-20230621	EPA 8260	448258		
40264224019	MW-12S-WG-20230621	EPA 8260	448258		
40264224020	FB-01-WQ-20230621	EPA 8260	448258		
40264224021	FB-02-WQ-20230621	EPA 8260	448259		
40264224022	MW-9S-WG-20230621	EPA 8260	448259		
40264224023	MW-09-WG-20230622	EPA 8260	448259		
40264224024	MW-15S-WG-20230622	EPA 8260	448259		
40264224025	MW-17S-WG-20230622	EPA 8260	448314		
40264224026	MW-14S-WG-20230622	EPA 8260	448314		
40264224027	MW-20S-WG-20230622	EPA 8260	448314		
40264224028	MW-15D-WG-20230622	EPA 8260	448314		
40264224030	MW-6S-WG-20230622	EPA 8260	448314		
40264224031	MW-7S-WG-20230622	EPA 8260	448314		
40264224032	MW-04-WG-20230622	EPA 8260	448314		
40264224033	MW-15I-WG-20230623	EPA 8260	448314		
40264224034	MW-23S-WG-20230621	EPA 8260	448314		
40264224035	DUP-01-WG-20230622	EPA 8260	448314		
40264224036	DUP-02-WG-20230622	EPA 8260	448314		
40264224037	DUP-03-WG-20230623	EPA 8260	448314		

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990-THERMOFISHER

Pace Project No.: 40264224

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40264224001	MW-03-WG-20230619	METHOD	768293	EPA 537 Modified	768736
40264224004	MW-13D-WG-20230620	METHOD	768293	EPA 537 Modified	768736
40264224005	MW-13S-WG-20230620	METHOD	768293	EPA 537 Modified	768736
40264224006	MW-01-WG-20230620	METHOD	768293	EPA 537 Modified	768736
40264224007	MW-26-WG-20230620	METHOD	768293	EPA 537 Modified	768736
40264224008	MW-21S-WG-20230620	METHOD	768293	EPA 537 Modified	768736
40264224009	MW-16-WG-20230620	METHOD	768293	EPA 537 Modified	768736
40264224010	MW-10S-WG-20230620	METHOD	768293	EPA 537 Modified	768736
40264224011	MW-18S-WG-20230620	METHOD	768293	EPA 537 Modified	768736
40264224012	MW-08-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224013	MW-19S-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224014	MW-8S-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224015	MW-05-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224016	MW-24S-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224017	MW-25S-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224018	MW-10D-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224019	MW-12S-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224022	MW-9S-WG-20230621	METHOD	768293	EPA 537 Modified	768736
40264224023	MW-09-WG-20230622	METHOD	768293	EPA 537 Modified	768736
40264224024	MW-15S-WG-20230622	METHOD	768293	EPA 537 Modified	768736
40264224025	MW-17S-WG-20230622	METHOD	768332	EPA 537 Modified	768734
40264224026	MW-14S-WG-20230622	METHOD	768332	EPA 537 Modified	768734
40264224027	MW-20S-WG-20230622	METHOD	768332	EPA 537 Modified	768734
40264224028	MW-15D-WG-20230622	METHOD	768332	EPA 537 Modified	768734
40264224030	MW-6S-WG-20230622	METHOD	768332	EPA 537 Modified	768734
40264224031	MW-7S-WG-20230622	METHOD	768209	EPA 537 Modified	768324
40264224031	MW-7S-WG-20230622	METHOD	768332	EPA 537 Modified	768871
40264224032	MW-04-WG-20230622	METHOD	768332	EPA 537 Modified	768734
40264224033	MW-15I-WG-20230623	METHOD	768332	EPA 537 Modified	768734
40264224034	MW-23S-WG-20230621	METHOD	768209	EPA 537 Modified	768324
40264224034	MW-23S-WG-20230621	METHOD	768505	EPA 537 Modified	768871
40264224035	DUP-01-WG-20230622	METHOD	768209	EPA 537 Modified	768324
40264224036	DUP-02-WG-20230622	METHOD	768332	EPA 537 Modified	768734
40264224037	DUP-03-WG-20230623	METHOD	768332	EPA 537 Modified	768734

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40264224

ALL SHADED AREAS are for LAB USE ONLY

Company: ERM Billing Information:

Address: 7311 W Greenfield Ave Milwaukee WI 53214

Report To: John Roberts Email To:

Copy To: Site Collection Info/Address:

Container Preservative Type \*\*

Lab Project Manager:

\*\* Preservative Types (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Customer Project Name/Number: D383990 - ThermaBher State: \_\_\_\_\_ County/City: \_\_\_\_\_ Time Zone Collected: [ ] PT [ ] MT [ X ] ET

Phone: \_\_\_\_\_ Site/Facility ID #: \_\_\_\_\_ Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): Leann Graham Purchase Order #: \_\_\_\_\_ DW PWS ID #: \_\_\_\_\_  
Quote #: \_\_\_\_\_ DW Location Code: \_\_\_\_\_

Collected By (signature): [Signature] Turnaround Date Required: Standard Immediately Packed on Ice: [ X ] Yes [ ] No

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: \_\_\_\_\_ Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day [ ] Hold: \_\_\_\_\_ Field Filtered (if applicable): [ ] Yes [ X ] No

Analyses										Lab Profile/Line:
										Lab Sample Receipt Checklist:
										Custody Seals Present/Intact Y N NA
										Custody Signatures Present Y N NA
										Collector Signature Present Y N NA
										Bottles Intact Y N NA
										Correct Bottles Y N NA
										Sufficient Volume Y N NA
										Samples Received on Ice Y N NA
										VOA - Headspace Acceptable Y N NA
										USDA Regulated Soils Y N NA
										Samples in Holding Time Y N NA
										Residual Chlorine Present Y N NA
										Cl Strips:
										Sample pH Acceptable Y N NA
										pH Strips:
										Sulfide Present Y N NA
										Lead Acetate Strips:

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp/Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-03-WG-20230619	GW		6/19	12:38:20			8	X X X
TB-01-WQ-20230620			6/20	9:25			3	X
TB-02-WQ-20230620			6/20	9:25			3	
MW-13D-WG-20230620			6/20	10:10			8	X X X
MW-13S-WG-20230620			6/20	1:40			1	X X X
MW-01-WG-20230620			6/20	9:30			1	X X X
MW-20-WG-20230620			6/20	1:50			1	X X X
MW-21S-WG-20230620			6/20	1:43:00			1	X X X
MW-16-WG-20230620			6/20	1:45:00			1	X X X
MW-10S-WG-20230620			6/20	1:02:50			1	X X X

LAB USE ONLY:

Lab Sample # / Comments:

8260 VOLS  
1-4 Picograms  
PFAS

001  
002  
003  
004  
005  
006  
007  
008  
009  
010

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: Wet Blue Dry None

Packing Material Used: bubble wrap and bags

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2891994

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: 128

Cooler 1 Temp Upon Receipt: 0.5 °C

Cooler 1 Therm Corr. Factor: 0.2 °C

Cooler 1 Corrected Temp: 0.3 °C

Comments:

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): Page 111 of 117

YES / NO of: 4

Relinquished by/Company: (Signature) Leann Graham Date/Time: 6/23/23 10:37

Received by/Company: (Signature) Matt Vansombeck Date/Time: 06/23/2023 10:37

MTJL LAB USE ONLY

Table #: \_\_\_\_\_

Acctnum: \_\_\_\_\_

Template: \_\_\_\_\_

Prelogin: \_\_\_\_\_

PM: \_\_\_\_\_

PB: \_\_\_\_\_



# CHAIN-OF-CUSTODY Analytical Request Document

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40264224

ALL SHADED AREAS are for LAB USE ONLY

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: Bkm Billing Information:

Address: 731 W Greenfield Ave Milwaukee WI 53214

Report To: Email To:

Copy To: Site Collection Info/Address:

Container Preservative Type \*\*

Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Customer Project Name/Number: 0383910 - Thermo ARW State: WI County/City: \_\_\_\_\_ Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone: \_\_\_\_\_ Site/Facility ID #: \_\_\_\_\_ Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): Leann Graham Purchase Order #: \_\_\_\_\_ DW PWS ID #: \_\_\_\_\_  
GLW H2O2K Quote #: \_\_\_\_\_ DW Location Code: \_\_\_\_\_

Collected By (signature): [Signature] Turnaround Date Required: Standard Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: \_\_\_\_\_ Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day [ ] Hold: \_\_\_\_\_ Field Filtered (if applicable): [ ] Yes [X] No

[ ] Dispose as appropriate [ ] Return [ ] Archive: \_\_\_\_\_ [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day Analysis: \_\_\_\_\_  
 (Expedite Charges Apply)

Analyses										Lab Profile/Line:
Lab Sample Receipt Checklist:										
Custody Seals Present/Intact Y N NA										
Custody Signatures Present Y N NA										
Collector Signatures Present Y N NA										
Bottles Intact Y N NA										
Correct Bottles Y N NA										
Sufficient Volume Y N NA										
Samples Received on Ice Y N NA										
VOA - Headspace Acceptable Y N NA										
USDA Regulated Soils Y N NA										
Samples in Holding Time Y N NA										
Residual Chlorine Present Y N NA										
Cl Strips: _____										
Sample pH Acceptable Y N NA										
pH Strips: _____										
Sulfide Present Y N NA										
Lead Acetate Strips: _____										

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-485-WG-20230620	GW		06/20	11:35				8
MW-085-WG-20230621			06/21	08:30				
MW-195-WG-20230621			06/21	08:50				
MW-85-WG-20230621			06/21	09:40				
MW-05-WG-20230621			06/21	11:30				
MW-245-WG-20230621			06/21	10:20				
MW-255-WG-20230621			06/21	12:10				
MW-100-WG-20230621			06/21	13:15				
MW-125-WG-20230621			06/21	15:10				
FB-01-WQ-20230621			06/21	16:10				3

8200 VCS  
1-400000  
PPAS

Customer Remarks / Special Conditions / Possible Hazards: \_\_\_\_\_

Type of Ice Used: Wet Blue Dry None

Packing Material Used: bubble wrap and bags

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2891997

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: 118

Cooler 1 Temp Upon Receipt: 0.5 °C

Cooler 1 Therm Corr. Factor: 0.5 °C

Cooler 1 Corrected Temp: 0.5 °C

Comments: \_\_\_\_\_

Relinquished by/Company: (Signature) [Signature] Date/Time: 06/23/23

Received by/Company: (Signature) [Signature] Date/Time: 06/23/2023 10:37

MTJL LAB USE ONLY

Table #: \_\_\_\_\_

Acctnum: \_\_\_\_\_

Template: \_\_\_\_\_

Prelogin: \_\_\_\_\_

PM: \_\_\_\_\_

PB: \_\_\_\_\_

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): Page 118 of 117  
 YES / NO of: 4



# CHAIN-OF-CUSTODY Analytical Request Document

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LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40264224

**ALL SHADED AREAS are for LAB USE ONLY**

Company: ERM Billing Information:

Address: 7311 W Greenfield Ave Milwaukee WI 53214

Report To: John Roberts Email To:

Copy To: Site Collection Info/Address:

Customer Project Name/Number: 0383990-thermo fisher w/1 State: County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone: Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): Lanning Purchase Order #: DW PWS ID #: DW Location Code:

Collected By (signature): [Signature] Turnaround Date Required: Standard Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold: [ ] Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [X] No Analysis:

Container Preservative Type \*\*

Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
FB-02-WG-20230021	RW		06/21	1610				3
MW-9S-WG-20230021			06/21	1535				8
MW-09-WG-20230021			06/22	0825				
MW-15S-WG-20230022			06/22	0925				
MW-17S-WG-20230022			06/22	0845				
MW-14S-WG-20230022			06/22	1030				
MW-20S-WG-20230022			06/22	1100				
MW-15D-WG-20230022			06/22	1240				
MW-1352-WG-20230022			06/22	1440				
MW-08-WG-20230022			06/22	1210				

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact Y N NA

Custody Signatures Present Y N NA

Collector Signature Present Y N NA

Bottles Intact Y N NA

Correct Bottles Y N NA

Sufficient Volume Y N NA

Samples Received on Ice Y N NA

VOA - Headspace Acceptable Y N NA

USDA Regulated Soils Y N NA

Samples in Holding Time Y N NA

Residual Chlorine Present Y N NA

Cl Strips: \_\_\_\_\_

Sample pH Acceptable Y N NA

pH Strips: \_\_\_\_\_

Sulfide Present Y N NA

Lead Acetate Strips: \_\_\_\_\_

LAB USE ONLY: Lab Sample # / Comments:

8200 VOCs  
1-4 Pesticides  
PFS

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: Wet Blue Dry None

Packing Material Used: bubble wrap and bags

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N NA

Lab Tracking #: 2891995

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: 128

Cooler 1 Temp Upon Receipt: 0.5 °C

Cooler 1 Therm Corr. Factor: 0.0 °C

Cooler 1 Corrected Temp: 0.5 °C

Comments:

Relinquished by/Company: (Signature) Lanning ERM Date/Time: 10:37 6/23/23

Relinquished by/Company: (Signature) Date/Time: Received by/Company: (Signature) Matt VanSambreek Date/Time: 06/23/2023 10:37

Relinquished by/Company: (Signature) Date/Time: Received by/Company: (Signature) Date/Time:

MTJL LAB USE ONLY

Table #: \_\_\_\_\_

Acctnum: \_\_\_\_\_

Template: \_\_\_\_\_

Prelogin: \_\_\_\_\_

PM: \_\_\_\_\_

PB: \_\_\_\_\_

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): Page 113 of 117

YES / NO of: 4



# CHAIN-OF-CUSTODY Analytical Request Document

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LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40264224

**ALL SHADED AREAS are for LAB USE ONLY**

Company: **ERM**

Address: **7311 Wagner Field Ave Milwaukee WI 53214**

Report To:

Copy To:

Customer Project Name/Number: **0383990 - Thermofisher**

State: **WI** County/City: \_\_\_\_\_ Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone: \_\_\_\_\_ Site/Facility ID #: \_\_\_\_\_ Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): **Leann Gable** Purchase Order #: \_\_\_\_\_ DW PWS ID #: \_\_\_\_\_  
Quote #: \_\_\_\_\_ DW Location Code: \_\_\_\_\_

Collected By (signature): **[Signature]** Turnaround Date Required: **Standard** Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Same Day [ ] Next Day  
[ ] Archive: [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day [ ] Hold: (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [X] No  
Analysis: \_\_\_\_\_

Container Preservative Type \*\*

Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses										Lab Profile/Line:
<p>Lab Sample Receipt Checklist:</p> <p>Custody Seals Present/Intact Y N NA</p> <p>Custody Signatures Present Y N NA</p> <p>Collector Signature Present Y N NA</p> <p>Bottles Intact Y N NA</p> <p>Correct Bottles Y N NA</p> <p>Sufficient Volume Y N NA</p> <p>Samples Received on Ice Y N NA</p> <p>VOA - Headspace Acceptable Y N NA</p> <p>USDA Regulated Soils Y N NA</p> <p>Samples in Holding Time Y N NA</p> <p>Residual Chlorine Present Y N NA</p> <p>Cl Strips: _____</p> <p>Sample pH Acceptable Y N NA</p> <p>pH Strips: _____</p> <p>Sulfide Present Y N NA</p> <p>Lead Acetate Strips: _____</p>										LAB USE ONLY:
										Lab Sample # / Comments:

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
<b>mw-75-WG-20230622</b>	<b>GW</b>		<b>06/22</b>	<b>1420</b>				
<b>mw-04-WG-20230622</b>			<b>06/22</b>	<b>1600</b>				
<b>mw-15I-WG-20230623</b>			<b>06/23</b>	<b>0905</b>				
<b>DMW-235-WG-20230621</b>			<b>06/21</b>	<b>1410</b>				
<b>Dup-01-WG-20230622</b>			<b>06/22</b>					
<b>Dup-02-WG-20230622</b>			<b>06/22</b>					
<b>Dup-03-WG-20230623</b>			<b>06/23</b>					

8240 VOCs  
1-4 Dioxane  
PFAS

6/23/23

030 031

031 032

032 033

033 034

034 035

035 036

036 037

034 035

035 036

036 037

034 035

035 036

036 037

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: **Wet** Blue Dry None

Packing Material Used: **bubble wrap and bags**

Radchem sample(s) screened (<500 cpm): Y N **NA**

SHORT HOLDS PRESENT (<72 hours): Y **N** N/A

Lab Tracking #: **2891996**

Samples received via: **Client** Courier Pace Courier

Lab Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: **128**

Cooler 1 Temp Upon Receipt: **0.5** oC

Cooler 1 Therm Corr. Factor: **0.0** oC

Cooler 1 Corrected Temp: **0.5** oC

Comments:

Relinquished by/Company: (Signature) **Leann Gable** Date/Time: **03-7 6/23/23**

Received by/Company: (Signature) **Matt Pansambek Pace** Date/Time: **06/23/2023 10:37**

MTJL LAB USE ONLY

Table #: \_\_\_\_\_

Acctnum: \_\_\_\_\_

Template: \_\_\_\_\_

Prelogin: \_\_\_\_\_

PM: \_\_\_\_\_

PB: \_\_\_\_\_

Trip Blank Received: Y N NA

HCL MeOH TSP Other

Non Conformance(s): Page 114 of 117  
YES / NO of: **4**

Effective Date: 8/16/2022

Client Name: ERM

Sample Preservation Receipt Form  
Project # 40264224

All containers needing preservation have been checked and noted below.  
Lab Lot# of pH paper.

Yes  No  N/A  
Lab Std #ID of preservation (if pH adjusted).

Initial when completed: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Pace Lab #	Glass						Plastic						Vials					Jars				General		VOA Vials (>6mm)*	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)							
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU								SP5T	ZPLC	GN 1	GN 2			
001								2																													2.5 / 5
002								2																													2.5 / 5
003								2																													2.5 / 5
004								2																													2.5 / 5
005								2																													2.5 / 5
006								2																													2.5 / 5
007								2																													2.5 / 5
008								2																													2.5 / 5
009								2																													2.5 / 5
010								2																													2.5 / 5
011								2																													2.5 / 5
012								2																													2.5 / 5
013								2																													2.5 / 5
014								2																													2.5 / 5
015								2																													2.5 / 5
016								2																													2.5 / 5
017								2																													2.5 / 5
018								2																													2.5 / 5
019								2																													2.5 / 5
020								2																													2.5 / 5

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

<b>AG1U</b> 1 liter amber glass	<b>BP1U</b> 1 liter plastic unpres	<b>VG9C</b> 40 mL clear ascorbic w/ HCl	<b>JGFU</b> 4 oz amber jar unpres
<b>BG1U</b> 1 liter clear glass	<b>BP3U</b> 250 mL plastic unpres	<b>DG9T</b> 40 mL amber Na Thio	<b>JG9U</b> 9 oz amber jar unpres
<b>AG1H</b> 1 liter amber glass HCL	<b>BP3B</b> 250 mL plastic NaOH	<b>VG9U</b> 40 mL clear vial unpres	<b>WGFU</b> 4 oz clear jar unpres
<b>AG4S</b> 125 mL amber glass H2SO4	<b>BP3N</b> 250 mL plastic HNO3	<b>VG9H</b> 40 mL clear vial HCL	<b>WPFU</b> 4 oz plastic jar unpres
<b>AG5U</b> 100 mL amber glass unpres	<b>BP3S</b> 250 mL plastic H2SO4	<b>VG9M</b> 40 mL clear vial MeOH	<b>SP5T</b> 120 mL plastic Na Thiosulfate
<b>AG2S</b> 500 mL amber glass H2SO4	<b>BP2Z</b> 500 mL plastic NaOH + Zn	<b>VG9D</b> 40 mL clear vial DI	<b>ZPLC</b> ziploc bag
<b>BG3U</b> 250 mL clear glass unpres			<b>GN 1</b>
			<b>GN 2</b>



Date: 8/17/2022

### Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: ERM

WO#: **40264224**



Carrier:  CS Logistics  Fed Ex  Speedee  UPS  Waltco

Client  Pace Other: \_\_\_\_\_

Tracking #: \_\_\_\_\_

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

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

Shipping Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used: SR - 1281 Type of Ice: Wet Blue Dry None  Meltwater Only

Cooler Temperature: Uncorr: 0.5 / Corr: 0.5

Temp Blank Present:  yes  no

Biological Tissue is Frozen:  yes  no

Person examining contents:

Date: 6/23/23 Initials: SG

Labeled By Initials: ARJ

Temp should be above freezing to 6°C.

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

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- DI VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Correct Type: <u>Pace Green Bay</u> , 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 checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>WJ 6/23/23 SG</u>	<u>001 time "11620"</u> <u>007 time "11100" more bottles</u> <u>6/23/23 SG</u>	
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>503</u>		

#### Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution:

Did not receive "MW-1392-W6-20230622" VOCs or P-TAs 6/23/23 SG

oil one was received empty 6/23/23 SG

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





September 11, 2023

Andrew Roberts  
ERM, INC.  
1701 Golf Road  
Rolling Meadows, IL 60008

RE: Project: 0383990-THERMO FISHER  
Pace Project No.: 40267414

Dear Andrew Roberts:

Enclosed are the analytical results for sample(s) received by the laboratory on August 30, 2023. 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,

A handwritten signature in black ink that reads "Dan Milewsky".

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

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

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### **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

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40267414001	MW-7S-WG-20230828	Water	08/28/23 16:20	08/30/23 15:24
40267414002	MW-6S-WG-20230828	Water	08/28/23 16:25	08/30/23 15:24
40267414003	MW-20S-WG-20230829	Water	08/29/23 10:05	08/30/23 15:24
40267414004	MW-01-WG-20230829	Water	08/29/23 10:20	08/30/23 15:24
40267414005	MW-04-WG-20230829	Water	08/29/23 11:10	08/30/23 15:24
40267414006	MW-03-WG-20230829	Water	08/29/23 11:55	08/30/23 15:24
40267414007	MW-13S-WG-20230829	Water	08/29/23 12:30	08/30/23 15:24
40267414008	MW-13D-WG-20230829	Water	08/29/23 15:20	08/30/23 15:24
40267414009	MW-23S-WG-20230830	Water	08/30/23 09:50	08/30/23 15:24
40267414010	MW-15I-WG-20230830	Water	08/30/23 10:25	08/30/23 15:24
40267414011	MW-26S-WG-20230830	Water	08/30/23 11:20	08/30/23 15:24
40267414012	MW-15D-WG-20230830	Water	08/30/23 12:05	08/30/23 15:24
40267414013	MW-15I-WG-20230830	Water	08/30/23 13:40	08/30/23 15:24
40267414014	DUP-01-WG-20230829	Water	08/29/23 00:00	08/30/23 15:24
40267414015	DUP-02-WG-20230830	Water	08/30/23 00:00	08/30/23 15:24
40267414016	TB-01-WG-20230830	Water	08/30/23 00:00	08/30/23 15:24
40267414017	MW-09-WG-20230829	Water	08/29/23 15:00	08/30/23 15:24
40267414018	FB-01-WG-20230830	Water	08/30/23 15:16	08/30/23 15:24

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### SAMPLE ANALYTE COUNT

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40267414001	MW-7S-WG-20230828	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414002	MW-6S-WG-20230828	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414003	MW-20S-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414004	MW-01-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414005	MW-04-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414006	MW-03-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414007	MW-13S-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414008	MW-13D-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414009	MW-23S-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40267414010	MW-15I-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	13	PASI-G
40267414011	MW-26S-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	13	PASI-G
40267414012	MW-15D-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	13	PASI-G
40267414013	MW-15I-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	13	PASI-G
40267414014	DUP-01-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	13	PASI-G
40267414015	DUP-02-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	13	PASI-G
40267414016	TB-01-WG-20230830	EPA 8260	CXJ	13	PASI-G
40267414017	MW-09-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	CXJ	13	PASI-G
40267414018	FB-01-WG-20230830	EPA 8260	CXJ	13	PASI-G

PASI-G = Pace Analytical Services - Green Bay

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-7S-WG-20230828 Lab ID: 40267414001 Collected: 08/28/23 16:20 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 09:31	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	107	%	70-130		1		09/01/23 09:31		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 18:20	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/01/23 18:20	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/01/23 18:20	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/01/23 18:20	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/01/23 18:20	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/01/23 18:20	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 18:20	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/01/23 18:20	79-00-5	
Trichloroethene	14.1	ug/L	1.0	0.32	1		09/01/23 18:20	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/01/23 18:20	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	101	%	70-130		1		09/01/23 18:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		09/01/23 18:20	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		09/01/23 18:20	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-6S-WG-20230828 Lab ID: 40267414002 Collected: 08/28/23 16:25 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 09:50	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	106	%	70-130		1		09/01/23 09:50		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 18:39	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/01/23 18:39	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/01/23 18:39	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/01/23 18:39	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/01/23 18:39	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/01/23 18:39	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 18:39	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/01/23 18:39	79-00-5	
Trichloroethene	11.7	ug/L	1.0	0.32	1		09/01/23 18:39	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/01/23 18:39	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	101	%	70-130		1		09/01/23 18:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		09/01/23 18:39	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		09/01/23 18:39	2037-26-5	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-20S-WG-20230829 Lab ID: 40267414003 Collected: 08/29/23 10:05 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 10:09	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	109	%	70-130		1		09/01/23 10:09		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 12:29	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/01/23 12:29	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/01/23 12:29	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/01/23 12:29	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/01/23 12:29	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/01/23 12:29	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 12:29	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/01/23 12:29	79-00-5	
Trichloroethene	1.5	ug/L	1.0	0.32	1		09/01/23 12:29	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/01/23 12:29	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	101	%	70-130		1		09/01/23 12:29	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		09/01/23 12:29	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		09/01/23 12:29	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-01-WG-20230829 Lab ID: 40267414004 Collected: 08/29/23 10:20 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 10:28	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	106	%	70-130		1		09/01/23 10:28		
<b>8260 MSV</b>	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 18:59	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/01/23 18:59	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/01/23 18:59	75-35-4	
cis-1,2-Dichloroethene	0.67J	ug/L	1.0	0.47	1		09/01/23 18:59	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/01/23 18:59	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/01/23 18:59	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 18:59	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/01/23 18:59	79-00-5	
Trichloroethene	6.6	ug/L	1.0	0.32	1		09/01/23 18:59	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/01/23 18:59	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		09/01/23 18:59	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		09/01/23 18:59	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		09/01/23 18:59	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-04-WG-20230829 Lab ID: 40267414005 Collected: 08/29/23 11:10 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 10:47	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	107	%	70-130		1		09/01/23 10:47		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 19:38	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/01/23 19:38	107-06-2	
1,1-Dichloroethene	0.66J	ug/L	1.0	0.58	1		09/01/23 19:38	75-35-4	
cis-1,2-Dichloroethene	22.7	ug/L	1.0	0.47	1		09/01/23 19:38	156-59-2	
trans-1,2-Dichloroethene	17.7	ug/L	1.0	0.53	1		09/01/23 19:38	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/01/23 19:38	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 19:38	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/01/23 19:38	79-00-5	
Trichloroethene	199	ug/L	1.0	0.32	1		09/01/23 19:38	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/01/23 19:38	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		1		09/01/23 19:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		09/01/23 19:38	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		09/01/23 19:38	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-03-WG-20230829 Lab ID: 40267414006 Collected: 08/29/23 11:55 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<b>0.12J</b>	ug/L	0.20	0.057	1		09/01/23 11:06	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	109	%	70-130		1		09/01/23 11:06		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		09/01/23 12:49	75-34-3	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		09/01/23 12:49	107-06-2	
1,1-Dichloroethene	<b>&lt;0.58</b>	ug/L	1.0	0.58	1		09/01/23 12:49	75-35-4	
cis-1,2-Dichloroethene	<b>1.7</b>	ug/L	1.0	0.47	1		09/01/23 12:49	156-59-2	
trans-1,2-Dichloroethene	<b>&lt;0.53</b>	ug/L	1.0	0.53	1		09/01/23 12:49	156-60-5	
Tetrachloroethene	<b>&lt;0.41</b>	ug/L	1.0	0.41	1		09/01/23 12:49	127-18-4	
1,1,1-Trichloroethane	<b>&lt;0.30</b>	ug/L	1.0	0.30	1		09/01/23 12:49	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	1.0	0.34	1		09/01/23 12:49	79-00-5	
Trichloroethene	<b>&lt;0.32</b>	ug/L	1.0	0.32	1		09/01/23 12:49	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		09/01/23 12:49	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/01/23 12:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		09/01/23 12:49	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		09/01/23 12:49	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-13S-WG-20230829 Lab ID: 40267414007 Collected: 08/29/23 12:30 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	11.8	ug/L	0.20	0.057	1		09/01/23 11:25	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	104	%	70-130		1		09/01/23 11:25		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	0.84J	ug/L	1.0	0.30	1		09/01/23 19:18	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/01/23 19:18	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/01/23 19:18	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/01/23 19:18	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/01/23 19:18	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/01/23 19:18	127-18-4	
1,1,1-Trichloroethane	2.2	ug/L	1.0	0.30	1		09/01/23 19:18	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/01/23 19:18	79-00-5	
Trichloroethene	80.2	ug/L	1.0	0.32	1		09/01/23 19:18	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/01/23 19:18	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/01/23 19:18	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		09/01/23 19:18	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		09/01/23 19:18	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-13D-WG-20230829 Lab ID: 40267414008 Collected: 08/29/23 15:20 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	0.46	ug/L	0.20	0.057	1		09/01/23 11:44	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	105	%	70-130		1		09/01/23 11:44		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 13:08	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/01/23 13:08	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/01/23 13:08	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/01/23 13:08	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/01/23 13:08	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/01/23 13:08	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 13:08	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/01/23 13:08	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/01/23 13:08	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/01/23 13:08	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	102	%	70-130		1		09/01/23 13:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		09/01/23 13:08	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		09/01/23 13:08	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-23S-WG-20230830 Lab ID: 40267414009 Collected: 08/30/23 09:50 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 12:41	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	104	%	70-130		1		09/01/23 12:41		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 13:28	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/01/23 13:28	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/01/23 13:28	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/01/23 13:28	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/01/23 13:28	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/01/23 13:28	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/01/23 13:28	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/01/23 13:28	79-00-5	
Trichloroethene	0.81J	ug/L	1.0	0.32	1		09/01/23 13:28	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/01/23 13:28	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/01/23 13:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		09/01/23 13:28	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		09/01/23 13:28	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-15I-WG-20230830 Lab ID: 40267414010 Collected: 08/30/23 10:25 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	33.5	ug/L	0.20	0.057	1		09/01/23 13:00	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	104	%	70-130		1		09/01/23 13:00		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<3.0	ug/L	10.0	3.0	10		09/05/23 20:45	75-34-3	
1,2-Dichloroethane	<2.9	ug/L	10.0	2.9	10		09/05/23 20:45	107-06-2	
1,1-Dichloroethene	<5.8	ug/L	10.0	5.8	10		09/05/23 20:45	75-35-4	
cis-1,2-Dichloroethene	11.4	ug/L	10.0	4.7	10		09/05/23 20:45	156-59-2	
trans-1,2-Dichloroethene	<5.3	ug/L	10.0	5.3	10		09/05/23 20:45	156-60-5	
Tetrachloroethene	<4.1	ug/L	10.0	4.1	10		09/05/23 20:45	127-18-4	
1,1,1-Trichloroethane	<3.0	ug/L	10.0	3.0	10		09/05/23 20:45	71-55-6	
1,1,2-Trichloroethane	<3.4	ug/L	10.0	3.4	10		09/05/23 20:45	79-00-5	
Trichloroethene	845	ug/L	10.0	3.2	10		09/05/23 20:45	79-01-6	
Vinyl chloride	<1.7	ug/L	10.0	1.7	10		09/05/23 20:45	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		10		09/05/23 20:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		10		09/05/23 20:45	2199-69-1	
Toluene-d8 (S)	97	%	70-130		10		09/05/23 20:45	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-26S-WG-20230830 Lab ID: 40267414011 Collected: 08/30/23 11:20 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 13:19	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	107	%	70-130		1		09/01/23 13:19		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 19:54	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/05/23 19:54	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 19:54	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/05/23 19:54	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/05/23 19:54	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/05/23 19:54	127-18-4	
Trichloroethene	0.39J	ug/L	1.0	0.32	1		09/05/23 19:54	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/05/23 19:54	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/05/23 19:54	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/05/23 19:54	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		09/05/23 19:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		09/05/23 19:54	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		09/05/23 19:54	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-15D-WG-20230830 Lab ID: 40267414012 Collected: 08/30/23 12:05 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	4.4	ug/L	0.20	0.057	1		09/01/23 13:39	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	106	%	70-130		1		09/01/23 13:39		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 14:43	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/05/23 14:43	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/05/23 14:43	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/05/23 14:43	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/05/23 14:43	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/05/23 14:43	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 14:43	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/05/23 14:43	79-00-5	
Trichloroethene	1.6	ug/L	1.0	0.32	1		09/05/23 14:43	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/05/23 14:43	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		09/05/23 14:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		09/05/23 14:43	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		09/05/23 14:43	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-15I-WG-20230830 Lab ID: 40267414013 Collected: 08/30/23 13:40 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 13:58	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	105	%	70-130		1		09/01/23 13:58		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/06/23 12:04	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/06/23 12:04	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/06/23 12:04	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/06/23 12:04	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/06/23 12:04	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/06/23 12:04	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/06/23 12:04	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/06/23 12:04	79-00-5	
Trichloroethene	1.9	ug/L	1.0	0.32	1		09/06/23 12:04	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/06/23 12:04	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		09/06/23 12:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		09/06/23 12:04	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		09/06/23 12:04	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: DUP-01-WG-20230829 Lab ID: 40267414014 Collected: 08/29/23 00:00 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	0.57	ug/L	0.20	0.057	1		09/01/23 14:17	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	105	%	70-130		1		09/01/23 14:17		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 20:11	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/05/23 20:11	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/05/23 20:11	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/05/23 20:11	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/05/23 20:11	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/05/23 20:11	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 20:11	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/05/23 20:11	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/05/23 20:11	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/05/23 20:11	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	90	%	70-130		1		09/05/23 20:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		09/05/23 20:11	2199-69-1	
Toluene-d8 (S)	95	%	70-130		1		09/05/23 20:11	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: DUP-02-WG-20230830 Lab ID: 40267414015 Collected: 08/30/23 00:00 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	4.9	ug/L	0.20	0.057	1		09/01/23 14:36	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	106	%	70-130		1		09/01/23 14:36		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 20:28	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/05/23 20:28	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/05/23 20:28	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/05/23 20:28	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/05/23 20:28	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/05/23 20:28	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 20:28	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/05/23 20:28	79-00-5	
Trichloroethene	1.6	ug/L	1.0	0.32	1		09/05/23 20:28	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/05/23 20:28	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	70-130		1		09/05/23 20:28	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		09/05/23 20:28	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		09/05/23 20:28	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: **TB-01-WG-20230830** Lab ID: **40267414016** Collected: 08/30/23 00:00 Received: 08/30/23 15:24 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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 13:51	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/05/23 13:51	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 13:51	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/05/23 13:51	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/05/23 13:51	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/05/23 13:51	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/05/23 13:51	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/05/23 13:51	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/05/23 13:51	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/05/23 13:51	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		09/05/23 13:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		09/05/23 13:51	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		09/05/23 13:51	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: MW-09-WG-20230829 Lab ID: 40267414017 Collected: 08/29/23 15:00 Received: 08/30/23 15:24 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		09/01/23 14:55	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	106	%	70-130		1		09/01/23 14:55		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 15:00	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/05/23 15:00	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/05/23 15:00	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/05/23 15:00	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/05/23 15:00	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/05/23 15:00	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 15:00	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/05/23 15:00	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/05/23 15:00	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/05/23 15:00	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		09/05/23 15:00	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		09/05/23 15:00	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		09/05/23 15:00	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Sample: **FB-01-WG-20230830** Lab ID: **40267414018** Collected: 08/30/23 15:16 Received: 08/30/23 15:24 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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 14:08	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		09/05/23 14:08	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		09/05/23 14:08	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		09/05/23 14:08	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		09/05/23 14:08	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		09/05/23 14:08	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		09/05/23 14:08	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		09/05/23 14:08	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		09/05/23 14:08	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		09/05/23 14:08	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		09/05/23 14:08	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		09/05/23 14:08	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		09/05/23 14:08	2037-26-5	

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**QUALITY CONTROL DATA**

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

QC Batch: 453785 Analysis Method: ASTM 6520 / EPA 8260 (SIM)  
 QC Batch Method: ASTM 6520 / EPA 8260 (SIM) Analysis Description: 8260D (SIM) SPME 1,4-Dioxane  
 Laboratory: Pace Analytical Services - Green Bay  
 Associated Lab Samples: 40267414001, 40267414002, 40267414003, 40267414004, 40267414005, 40267414006, 40267414007,  
 40267414008, 40267414009, 40267414010, 40267414011, 40267414012, 40267414013, 40267414014,  
 40267414015, 40267414017

METHOD BLANK: 2606609 Matrix: Water  
 Associated Lab Samples: 40267414001, 40267414002, 40267414003, 40267414004, 40267414005, 40267414006, 40267414007,  
 40267414008, 40267414009, 40267414010, 40267414011, 40267414012, 40267414013, 40267414014,  
 40267414015, 40267414017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	09/01/23 07:36	
1,3-Dioxane (S)	%	108	70-130	09/01/23 07:36	

LABORATORY CONTROL SAMPLE: 2606610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	22.5	90	70-130	
1,3-Dioxane (S)	%			109	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2606611 2606612

Parameter	Units	40267394001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	0.90U	25	25	25.7	24.5	103	98	70-130	5	20	
1,3-Dioxane (S)	%						107	106	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.

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**QUALITY CONTROL DATA**

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

QC Batch:	453802	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40267414001, 40267414002, 40267414003, 40267414004, 40267414005, 40267414006, 40267414007, 40267414008, 40267414009

METHOD BLANK: 2606663 Matrix: Water  
 Associated Lab Samples: 40267414001, 40267414002, 40267414003, 40267414004, 40267414005, 40267414006, 40267414007, 40267414008, 40267414009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	09/01/23 09:34	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	09/01/23 09:34	
1,1-Dichloroethane	ug/L	<0.30	1.0	09/01/23 09:34	
1,1-Dichloroethene	ug/L	<0.58	1.0	09/01/23 09:34	
1,2-Dichloroethane	ug/L	<0.29	1.0	09/01/23 09:34	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	09/01/23 09:34	
Tetrachloroethene	ug/L	<0.41	1.0	09/01/23 09:34	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	09/01/23 09:34	
Trichloroethene	ug/L	<0.32	1.0	09/01/23 09:34	
Vinyl chloride	ug/L	<0.17	1.0	09/01/23 09:34	
1,2-Dichlorobenzene-d4 (S)	%	100	70-130	09/01/23 09:34	
4-Bromofluorobenzene (S)	%	102	70-130	09/01/23 09:34	
Toluene-d8 (S)	%	102	70-130	09/01/23 09:34	

LABORATORY CONTROL SAMPLE: 2606664

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	59.6	119	70-134	
1,1,2-Trichloroethane	ug/L	50	51.6	103	70-130	
1,1-Dichloroethane	ug/L	50	59.3	119	70-130	
1,1-Dichloroethene	ug/L	50	50.3	101	74-131	
1,2-Dichloroethane	ug/L	50	54.0	108	70-137	
cis-1,2-Dichloroethene	ug/L	50	54.4	109	70-130	
Tetrachloroethene	ug/L	50	54.3	109	70-130	
trans-1,2-Dichloroethene	ug/L	50	48.8	98	70-130	
Trichloroethene	ug/L	50	56.7	113	70-130	
Vinyl chloride	ug/L	50	54.8	110	63-134	
1,2-Dichlorobenzene-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2606860 2606861

Parameter	Units	40267414003 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	MSD Result							
1,1,1-Trichloroethane	ug/L	<0.30	50	50	58.6	61.0	117	122	70-134	4	20	

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

**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2606860		2606861		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40267414003 Result	MS Spike Conc.	MSD Spike Conc.									
1,1,2-Trichloroethane	ug/L	<0.34	50	50	51.5	55.2	103	110	70-130	7	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	58.1	60.4	116	121	70-130	4	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	51.2	53.2	102	106	71-130	4	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	54.9	55.9	110	112	70-137	2	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	54.7	57.1	109	114	70-130	4	20		
Tetrachloroethene	ug/L	<0.41	50	50	52.3	55.1	105	110	70-130	5	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	49.1	49.5	98	99	70-130	1	20		
Trichloroethene	ug/L	1.5	50	50	56.8	58.3	111	114	70-130	3	20		
Vinyl chloride	ug/L	<0.17	50	50	53.7	54.7	107	109	60-137	2	20		
1,2-Dichlorobenzene-d4 (S)	%						101	100	70-130				
4-Bromofluorobenzene (S)	%						103	103	70-130				
Toluene-d8 (S)	%						101	100	70-130				

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**REPORT OF LABORATORY ANALYSIS**

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**QUALITY CONTROL DATA**

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

QC Batch:	453914	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40267414010, 40267414011, 40267414012, 40267414013, 40267414014, 40267414015, 40267414016, 40267414017, 40267414018

METHOD BLANK: 2607285 Matrix: Water  
 Associated Lab Samples: 40267414010, 40267414011, 40267414012, 40267414013, 40267414014, 40267414015, 40267414016, 40267414017, 40267414018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	09/05/23 12:07	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	09/05/23 12:07	
1,1-Dichloroethane	ug/L	<0.30	1.0	09/05/23 12:07	
1,1-Dichloroethene	ug/L	<0.58	1.0	09/05/23 12:07	
1,2-Dichloroethane	ug/L	<0.29	1.0	09/05/23 12:07	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	09/05/23 12:07	
Tetrachloroethene	ug/L	<0.41	1.0	09/05/23 12:07	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	09/05/23 12:07	
Trichloroethene	ug/L	<0.32	1.0	09/05/23 12:07	
Vinyl chloride	ug/L	<0.17	1.0	09/05/23 12:07	
1,2-Dichlorobenzene-d4 (S)	%	100	70-130	09/05/23 12:07	
4-Bromofluorobenzene (S)	%	92	70-130	09/05/23 12:07	
Toluene-d8 (S)	%	96	70-130	09/05/23 12:07	

LABORATORY CONTROL SAMPLE: 2607286

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.5	101	70-132	
1,1,2-Trichloroethane	ug/L	50	47.6	95	70-130	
1,1-Dichloroethane	ug/L	50	51.5	103	70-130	
1,1-Dichloroethene	ug/L	50	49.3	99	73-140	
1,2-Dichloroethane	ug/L	50	48.3	97	70-130	
cis-1,2-Dichloroethene	ug/L	50	50.9	102	70-130	
Tetrachloroethene	ug/L	50	51.6	103	70-130	
trans-1,2-Dichloroethene	ug/L	50	54.3	109	70-131	
Trichloroethene	ug/L	50	51.9	104	70-130	
Vinyl chloride	ug/L	50	48.6	97	51-145	
1,2-Dichlorobenzene-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			95	70-130	
Toluene-d8 (S)	%			97	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2607287 2607288

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40267421007	Spike Conc.	Spike Conc.	MS Result						
1,1,1-Trichloroethane	ug/L	3.2	50	50	58.0	54.2	110	102	70-132	7	20

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

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**QUALITY CONTROL DATA**

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2607287		2607288		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40267421007 Result	MS Spike Conc.	MSD Spike Conc.									
1,1,2-Trichloroethane	ug/L	<0.34	50	50	49.5	49.8	99	100	70-130	1	20		
1,1-Dichloroethane	ug/L	1.8	50	50	55.5	52.4	107	101	70-131	6	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	51.8	48.3	104	97	69-146	7	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	50.7	47.0	101	94	70-130	8	20		
cis-1,2-Dichloroethene	ug/L	1.5	50	50	54.8	52.8	107	103	70-130	4	20		
Tetrachloroethene	ug/L	1.1	50	50	54.7	54.4	107	107	70-131	1	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	59.6	54.6	119	109	70-135	9	20		
Trichloroethene	ug/L	2.6	50	50	57.5	53.8	110	102	70-130	7	20		
Vinyl chloride	ug/L	<0.17	50	50	51.7	48.3	103	97	45-147	7	20		
1,2-Dichlorobenzene-d4 (S)	%						98	98	70-130				
4-Bromofluorobenzene (S)	%						93	93	70-130				
Toluene-d8 (S)	%						97	96	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.

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## QUALIFIERS

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

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### 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.

DL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990-THERMO FISHER

Pace Project No.: 40267414

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40267414001	MW-7S-WG-20230828	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414002	MW-6S-WG-20230828	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414003	MW-20S-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414004	MW-01-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414005	MW-04-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414006	MW-03-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414007	MW-13S-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414008	MW-13D-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414009	MW-23S-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414010	MW-15I-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414011	MW-26S-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414012	MW-15D-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414013	MW-15I-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414014	DUP-01-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414015	DUP-02-WG-20230830	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414017	MW-09-WG-20230829	ASTM 6520 / EPA 8260 (SIM)	453785		
40267414001	MW-7S-WG-20230828	EPA 8260	453802		
40267414002	MW-6S-WG-20230828	EPA 8260	453802		
40267414003	MW-20S-WG-20230829	EPA 8260	453802		
40267414004	MW-01-WG-20230829	EPA 8260	453802		
40267414005	MW-04-WG-20230829	EPA 8260	453802		
40267414006	MW-03-WG-20230829	EPA 8260	453802		
40267414007	MW-13S-WG-20230829	EPA 8260	453802		
40267414008	MW-13D-WG-20230829	EPA 8260	453802		
40267414009	MW-23S-WG-20230830	EPA 8260	453802		
40267414010	MW-15I-WG-20230830	EPA 8260	453914		
40267414011	MW-26S-WG-20230830	EPA 8260	453914		
40267414012	MW-15D-WG-20230830	EPA 8260	453914		
40267414013	MW-15I-WG-20230830	EPA 8260	453914		
40267414014	DUP-01-WG-20230829	EPA 8260	453914		
40267414015	DUP-02-WG-20230830	EPA 8260	453914		
40267414016	TB-01-WG-20230830	EPA 8260	453914		
40267414017	MW-09-WG-20230829	EPA 8260	453914		
40267414018	FB-01-WG-20230830	EPA 8260	453914		

### REPORT OF LABORATORY ANALYSIS

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# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

40267414

ALL SHADED AREAS are for LAB USE ONLY

Company: **ERM** Billing Information:

Address: **Milwaukee**

Report To: **Andrew Roberts** Email To: **Andrew.Robert.com**

Copy To: **Leann.Graham@erm.com** Site Collection Info/Address:

Customer Project Name/Number: **038390-Thermo fisher WI** State: County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone: Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): **Leann Graham** Purchase Order #: Quote #: DW PWS ID #: DW Location Code:

Collected By (signature): **[Signature]** Turnaround Date Required: **Standard** Immediately Packed on Ice: [ ] Yes [ ] No

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold: Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

Container Preservative Type \*\* Lab Project Manager:

\*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses	Lab Profile/Line:	
	Lab Sample Receipt Checklist:	
8260 VOCs six species 1-4 Dioxane	Custody Seals Present/Intact	Y N NA
	Custody Signatures Present	Y N NA
	Collector Signatures Present	Y N NA
	Bottles Intact	Y N NA
	Correct Bottles	Y N NA
	Sufficient Volume	Y N NA
	Samples Received on Ice	Y N NA
	VOA - Headspace Acceptable	Y N NA
	USDA Regulated Soils	Y N NA
	Samples in Holding Time	Y N NA
	Residual Chlorine Present	Y N NA
	Cl Strips:	
	Sample pH Acceptable	Y N NA
	pH Strips:	
	Sulfide Present	Y N NA
Lead Acetate Strips:		
LAB USE ONLY:		
Lab Sample # / Comments:		

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-75-WG-20230828	GW		08/28	11:20				
MW-65-WG-20230828			08/28	10:25				
MW-205-WG-20230829			08/29	10:05				
MW-01-WG-20230829			08/29	10:20				
MW-74-WG-20230829			08/29	11:10				
MW-03-WG-20230829			08/29	11:55				
MW-135-WG-20230829			08/29	12:30				
MW-130-WG-20230829			08/29	15:20				
MW-235-WG-20230830			8/30	09:50				
MW-151-WG-20230830			8/30	10:25				

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: Wet Blue Dry None Packing Material Used: Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A Lab Tracking #: 2909017 Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info: Temp Blank Received: Y N NA Therm ID#: 121 Cooler 1 Temp Upon Receipt: 3.0 oC Cooler 1 Therm Corr. Factor: -0.5 oC Cooler 1 Corrected Temp: 2.5 oC Comments:

Relinquished by/Company: (Signature) **Adm ERM** Date/Time: 08/30/23 1524 Received by/Company: (Signature) **Rob Pace** Date/Time: 8-30-23 1524

MTJL LAB USE ONLY Table #: Acctnum: Template: Prelogin: PM: PB:

Trip Blank Received: Y N NA HCL MeOH TSP Other Non Conformance(s): Page 30 of 33 of: YES / NO



# CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

402607414

**ALL SHADED AREAS are for LAB USE ONLY**

Company: ERM  
 Address: Milwaukee  
 Report To: Andrew Roberts  
 Copy To: Leann Gravel @ERM.com  
 Email To: Andrew.Roberts@ERM.com  
 Site Collection Info/Address:

Container Preservative Type \*\*  
 Lab Project Manager:  
 \*\* Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Customer Project Name/Number: 0883950 - Thermo Fibrew  
 State: County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET  
 Phone: Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No  
 Email: [ ] Yes [ ] No  
 Collected By (print): Leann Gravel Purchase Order #: Quote #: DW PWS ID #: DW Location Code:  
 Collected By (signature): Leann Gravel Turnaround Date Required: Standard Immediately Packed on Ice: [ ] Yes [ ] No  
 Sample Disposal: Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day Field Filtered (if applicable): [ ] Yes [ ] No  
 [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold. (Expedite Charges Apply) Analysis:

Analyses		Lab Profile/Line:
8260 vocs site specific 1-4 Dioxane		Lab Sample Receipt Checklist:
		Custody Seals Present/Intact Y N NA
		Custody Signatures Present Y N NA
		Collector Signature Present Y N NA
		Bottles Intact Y N NA
		Correct Bottles Y N NA
		Sufficient Volume Y N NA
		Samples Received on Ice Y N NA
		VOA - Headspace Acceptable Y N NA
		USDA Regulated Soils Y N NA
Samples in Holding Time Y N NA		
Residual Chlorine Present Y N NA		
Cl Strips: _____		
Sample pH Acceptable Y N NA		
pH Strips: _____		
Sulfide Present Y N NA		
Lead Acetate Strips: _____		

\* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
MW-265-WG-20230830	GW		08/30	1120				
MW-150-WG-20230830			08/30	1205				
MW-151-WG-20230830			08/30	1340				
DUP-01-WG-20230829			08/29	---				
DUP-02-WG-20230830			08/30	---				
TB-01-WG-20230830			08/30	---				
MW-09-WG-20230829			08/29	1500				
FB-01-WG-20230830			8/30	1516				

LAB USE ONLY:  
 Lab Sample # / Comments:  
 011  
 012  
 013  
 014  
 015  
 016  
 017  
 018

Customer Remarks / Special Conditions / Possible Hazards: Type of Ice Used: Wet Blue Dry None  
 Packing Material Used: (1)  
 Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A  
 Lab Tracking #: 2909018  
 Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:  
 Temp Blank Received: Y N NA  
 Therm ID#: 121  
 Cooler 1 Temp Upon Receipt: 30 oC  
 Cooler 1 Therm Corr. Factor: 0.5 oC  
 Cooler 1 Corrected Temp: 2.5 oC  
 Comments:

Relinquished by/Company: (Signature) ERM Date/Time: 08/30/23 1524 Received by/Company: (Signature) Robert Pace Date/Time: 08/30/23 1524  
 Relinquished by/Company: (Signature) Date/Time: Received by/Company: (Signature) Date/Time:  
 Relinquished by/Company: (Signature) Date/Time: Received by/Company: (Signature) Date/Time:

MTJL LAB USE ONLY  
 Table #: (1)  
 Acctnum: (1)  
 Template:  
 Prelogin:  
 PM:  
 PB:  
 Trip Blank Received: Y N NA  
 HCL MeOH TSP Other  
 Non Conformance(s): Page 31 of 33  
 YES / NO of: \_\_\_\_\_

Client Name: EDM  
 All containers needing preservation have been checked and noted below.  
 Lab Lot# of pH paper:  Yes  No  
 Lab Sid #ID of preservation (if pH adjusted): N/A

Initial when completed:

Date/Time:

Sample Preservation Receipt Form  
 Project # 20267414

Pace Lab #	Glass						Plastic						Vials						Jars			General			pH				Volume (mL)										
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	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					
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
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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 Coliform, TOC, TOX, TOH, O&G, WI DRQ, Phenolics, Other: AIN 8 30 23  
 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	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
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	
						GN 2	



**Sample Condition Upon Receipt Form (SCUR)**

Client Name: EAM

Project #: **WO#: 40267414**  
  
 40267414

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

Tracking #: \_\_\_\_\_

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR - 121 Type of Ice: Wet Blue Dry None  Meltwater Only

Cooler Temperature Uncorr: 3.0 /Corr: 2.5

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: 8-30-23 /Initials: R.A  
 Labeled By Initials: SG

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- DI VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8. <u>'018' only received 3 vials R.A 8-30-23</u>
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Correct Type: <u>Pace Green Bay</u> , 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 checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>506</u>		

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

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

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



November 28, 2023

Andrew Roberts  
ERM, INC.  
1701 Golf Road  
Rolling Meadows, IL 60008

RE: Project: 0383990- THERMO FISHER  
Pace Project No.: 40271116

Dear Andrew Roberts:

Enclosed are the analytical results for sample(s) received by the laboratory on November 16, 2023. 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,

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

Enclosures

cc: Leann Grahler, ERM, INC.



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

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### **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

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## REPORT OF LABORATORY ANALYSIS

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### SAMPLE SUMMARY

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40271116001	MW-09-WG-20231114	Water	11/14/23 09:00	11/16/23 10:33
40271116002	MW-03-WG-20231114	Water	11/14/23 09:50	11/16/23 10:33
40271116003	MW-26S-WG-20231114	Water	11/14/23 10:30	11/16/23 10:33
40271116004	MW-13D-WG-20231114	Water	11/14/23 11:55	11/16/23 10:33
40271116005	MW-15S-WG-20231114	Water	11/14/23 12:10	11/16/23 10:33
40271116006	MW-6S-WG-20231114	Water	11/14/23 16:10	11/16/23 10:33
40271116007	MW-23S-WG-20231114	Water	11/14/23 15:40	11/16/23 10:33
40271116008	MW-20S-WG-20231115	Water	11/15/23 09:40	11/16/23 10:33
40271116009	MW-7S-WG-20231115	Water	11/15/23 09:10	11/16/23 10:33
40271116010	MW-15D-WG-20231115	Water	11/15/23 10:20	11/16/23 10:33
40271116011	MW-04-WG-20231115	Water	11/15/23 12:35	11/16/23 10:33
40271116012	MW-13S-WG-20231115	Water	11/15/23 11:50	11/16/23 10:33
40271116013	TB-01-WQ-20231115	Water	11/15/23 14:15	11/16/23 10:33
40271116014	DUP-01-WG-20231115	Water	11/15/23 00:00	11/16/23 10:33
40271116015	MW-15I-WG-20231115	Water	11/15/23 15:25	11/16/23 10:33
40271116016	DUP-02-WG-20231115	Water	11/15/23 00:00	11/16/23 10:33
40271116017	FB-01-WQ-20231115	Water	11/15/23 14:38	11/16/23 10:33

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### SAMPLE ANALYTE COUNT

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40271116001	MW-09-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116002	MW-03-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116003	MW-26S-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116004	MW-13D-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116005	MW-15S-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116006	MW-6S-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116007	MW-23S-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116008	MW-20S-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116009	MW-7S-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116010	MW-15D-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116011	MW-04-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116012	MW-13S-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116013	TB-01-WQ-20231115	EPA 8260	EIB	13	PASI-G
40271116014	DUP-01-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116015	MW-15I-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116016	DUP-02-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	EMG	2	PASI-G
		EPA 8260	EIB	13	PASI-G
40271116017	FB-01-WQ-20231115	EPA 8260	EIB	13	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-09-WG-20231114 Lab ID: 40271116001 Collected: 11/14/23 09:00 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		11/17/23 09:47	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		1		11/17/23 09:47		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 12:03	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 12:03	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 12:03	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 12:03	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 12:03	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 12:03	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/20/23 12:03	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 12:03	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 12:03	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 12:03	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	70-130		1		11/20/23 12:03	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		11/20/23 12:03	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		11/20/23 12:03	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-03-WG-20231114 Lab ID: 40271116002 Collected: 11/14/23 09:50 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		11/17/23 14:33	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		1		11/17/23 14:33		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 12:23	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 12:23	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 12:23	75-35-4	
cis-1,2-Dichloroethene	2.6	ug/L	1.0	0.47	1		11/20/23 12:23	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 12:23	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 12:23	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 12:23	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 12:23	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/20/23 12:23	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 12:23	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		1		11/20/23 12:23	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/20/23 12:23	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		11/20/23 12:23	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-26S-WG-20231114 Lab ID: 40271116003 Collected: 11/14/23 10:30 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		11/17/23 14:52	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	102	%	70-130		1		11/17/23 14:52		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 12:42	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 12:42	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 12:42	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 12:42	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 12:42	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 12:42	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 12:42	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 12:42	79-00-5	
Trichloroethene	0.40J	ug/L	1.0	0.32	1		11/20/23 12:42	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 12:42	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	70-130		1		11/20/23 12:42	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		11/20/23 12:42	2199-69-1	
Toluene-d8 (S)	89	%	70-130		1		11/20/23 12:42	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-13D-WG-20231114 Lab ID: 40271116004 Collected: 11/14/23 11:55 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	0.34	ug/L	0.20	0.057	1		11/17/23 10:44	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		1		11/17/23 10:44		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 13:02	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 13:02	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 13:02	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 13:02	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 13:02	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 13:02	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 13:02	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 13:02	79-00-5	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/20/23 13:02	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 13:02	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		1		11/20/23 13:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/20/23 13:02	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		11/20/23 13:02	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-15S-WG-20231114 Lab ID: 40271116005 Collected: 11/14/23 12:10 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		11/17/23 11:03	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	104	%	70-130		1		11/17/23 11:03		
<b>8260 MSV</b>	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 13:21	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 13:21	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 13:21	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 13:21	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 13:21	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 13:21	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 13:21	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 13:21	79-00-5	
Trichloroethene	1.5	ug/L	1.0	0.32	1		11/20/23 13:21	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 13:21	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	70-130		1		11/20/23 13:21	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		11/20/23 13:21	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		11/20/23 13:21	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-6S-WG-20231114 Lab ID: 40271116006 Collected: 11/14/23 16:10 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		11/17/23 11:22	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		1		11/17/23 11:22		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 13:40	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 13:40	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 13:40	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 13:40	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 13:40	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 13:40	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 13:40	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 13:40	79-00-5	
Trichloroethene	32.2	ug/L	1.0	0.32	1		11/20/23 13:40	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 13:40	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		1		11/20/23 13:40	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/20/23 13:40	2199-69-1	
Toluene-d8 (S)	95	%	70-130		1		11/20/23 13:40	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-23S-WG-20231114 Lab ID: 40271116007 Collected: 11/14/23 15:40 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		11/17/23 11:42	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	102	%	70-130		1		11/17/23 11:42		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/23 09:04	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/21/23 09:04	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/21/23 09:04	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/21/23 09:04	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/21/23 09:04	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/21/23 09:04	127-18-4	
Trichloroethene	0.64J	ug/L	1.0	0.32	1		11/21/23 09:04	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/21/23 09:04	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/21/23 09:04	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/21/23 09:04	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	99	%	70-130		1		11/21/23 09:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		11/21/23 09:04	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		11/21/23 09:04	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-20S-WG-20231115 Lab ID: 40271116008 Collected: 11/15/23 09:40 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		11/17/23 12:01	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		1		11/17/23 12:01		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 14:19	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 14:19	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 14:19	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 14:19	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 14:19	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 14:19	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 14:19	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 14:19	79-00-5	
Trichloroethene	9.6	ug/L	1.0	0.32	1		11/20/23 14:19	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 14:19	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	70-130		1		11/20/23 14:19	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		11/20/23 14:19	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		11/20/23 14:19	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-7S-WG-20231115 Lab ID: 40271116009 Collected: 11/15/23 09:10 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.057	ug/L	0.20	0.057	1		11/17/23 12:20	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	101	%	70-130		1		11/17/23 12:20		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 14:39	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 14:39	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 14:39	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 14:39	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 14:39	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 14:39	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 14:39	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 14:39	79-00-5	
Trichloroethene	16.1	ug/L	1.0	0.32	1		11/20/23 14:39	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 14:39	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	70-130		1		11/20/23 14:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		11/20/23 14:39	2199-69-1	
Toluene-d8 (S)	95	%	70-130		1		11/20/23 14:39	2037-26-5	

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## ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-15D-WG-20231115 Lab ID: 40271116010 Collected: 11/15/23 10:20 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	4.4	ug/L	0.20	0.057	1		11/17/23 12:39	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	101	%	70-130		1		11/17/23 12:39		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 14:58	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 14:58	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 14:58	75-35-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 14:58	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 14:58	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 14:58	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 14:58	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 14:58	79-00-5	
Trichloroethene	1.6	ug/L	1.0	0.32	1		11/20/23 14:58	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 14:58	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	70-130		1		11/20/23 14:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/20/23 14:58	2199-69-1	
Toluene-d8 (S)	91	%	70-130		1		11/20/23 14:58	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-04-WG-20231115 Lab ID: 40271116011 Collected: 11/15/23 12:35 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.28	ug/L	1.0	0.28	5		11/17/23 10:06	123-91-1	D3
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		5		11/17/23 10:06		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 16:34	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 16:34	107-06-2	
1,1-Dichloroethene	1.4	ug/L	1.0	0.58	1		11/20/23 16:34	75-35-4	
cis-1,2-Dichloroethene	48.5	ug/L	1.0	0.47	1		11/20/23 16:34	156-59-2	
trans-1,2-Dichloroethene	32.9	ug/L	1.0	0.53	1		11/20/23 16:34	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 16:34	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 16:34	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 16:34	79-00-5	
Trichloroethene	285	ug/L	1.0	0.32	1		11/20/23 16:34	79-01-6	
Vinyl chloride	0.31J	ug/L	1.0	0.17	1		11/20/23 16:34	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	70-130		1		11/20/23 16:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		11/20/23 16:34	2199-69-1	
Toluene-d8 (S)	95	%	70-130		1		11/20/23 16:34	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-13S-WG-20231115 Lab ID: 40271116012 Collected: 11/15/23 11:50 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	31.8	ug/L	0.20	0.057	1		11/17/23 13:36	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	99	%	70-130		1		11/17/23 13:36		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	1.8	ug/L	1.0	0.30	1		11/20/23 16:54	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 16:54	107-06-2	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 16:54	75-35-4	
cis-1,2-Dichloroethene	1.1	ug/L	1.0	0.47	1		11/20/23 16:54	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 16:54	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 16:54	127-18-4	
1,1,1-Trichloroethane	4.1	ug/L	1.0	0.30	1		11/20/23 16:54	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 16:54	79-00-5	
Trichloroethene	240	ug/L	1.0	0.32	1		11/20/23 16:54	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 16:54	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	70-130		1		11/20/23 16:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/20/23 16:54	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		11/20/23 16:54	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: **TB-01-WQ-20231115** Lab ID: **40271116013** Collected: 11/15/23 14:15 Received: 11/16/23 10:33 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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 11:25	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 11:25	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 11:25	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 11:25	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 11:25	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 11:25	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/20/23 11:25	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 11:25	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 11:25	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 11:25	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		11/20/23 11:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		11/20/23 11:25	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		11/20/23 11:25	2037-26-5	

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**ANALYTICAL RESULTS**

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

**Sample: DUP-01-WG-20231115**      **Lab ID: 40271116014**      Collected: 11/15/23 00:00      Received: 11/16/23 10:33      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<0.28	ug/L	1.0	0.28	5		11/20/23 08:36	123-91-1	D3
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		5		11/20/23 08:36		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 15:17	75-34-3	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 15:17	107-06-2	
1,1-Dichloroethene	1.4	ug/L	1.0	0.58	1		11/20/23 15:17	75-35-4	
cis-1,2-Dichloroethene	47.0	ug/L	1.0	0.47	1		11/20/23 15:17	156-59-2	
trans-1,2-Dichloroethene	33.2	ug/L	1.0	0.53	1		11/20/23 15:17	156-60-5	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 15:17	127-18-4	
1,1,1-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 15:17	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 15:17	79-00-5	
Trichloroethene	289	ug/L	1.0	0.32	1		11/20/23 15:17	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 15:17	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		11/20/23 15:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/20/23 15:17	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		11/20/23 15:17	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: MW-15I-WG-20231115 Lab ID: 40271116015 Collected: 11/15/23 15:25 Received: 11/16/23 10:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	34.2	ug/L	2.0	0.57	10		11/17/23 10:25	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	103	%	70-130		10		11/17/23 10:25		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<3.0	ug/L	10.0	3.0	10		11/20/23 17:32	75-34-3	
1,2-Dichloroethane	<2.9	ug/L	10.0	2.9	10		11/20/23 17:32	107-06-2	
1,1-Dichloroethene	<5.8	ug/L	10.0	5.8	10		11/20/23 17:32	75-35-4	
cis-1,2-Dichloroethene	11.7	ug/L	10.0	4.7	10		11/20/23 17:32	156-59-2	
trans-1,2-Dichloroethene	<5.3	ug/L	10.0	5.3	10		11/20/23 17:32	156-60-5	
Tetrachloroethene	<4.1	ug/L	10.0	4.1	10		11/20/23 17:32	127-18-4	
1,1,1-Trichloroethane	<3.0	ug/L	10.0	3.0	10		11/20/23 17:32	71-55-6	
1,1,2-Trichloroethane	<3.4	ug/L	10.0	3.4	10		11/20/23 17:32	79-00-5	
Trichloroethene	833	ug/L	10.0	3.2	10		11/20/23 17:32	79-01-6	
Vinyl chloride	<1.7	ug/L	10.0	1.7	10		11/20/23 17:32	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	70-130		10		11/20/23 17:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		10		11/20/23 17:32	2199-69-1	
Toluene-d8 (S)	92	%	70-130		10		11/20/23 17:32	2037-26-5	

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**ANALYTICAL RESULTS**

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

**Sample: DUP-02-WG-20231115**      **Lab ID: 40271116016**      Collected: 11/15/23 00:00      Received: 11/16/23 10:33      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260D (SIM) SPME 1,4-Dioxane</b>									
Analytical Method: ASTM 6520 / EPA 8260 (SIM)									
Pace Analytical Services - Green Bay									
1,4-Dioxane (p-Dioxane)	<b>33.2</b>	ug/L	1.0	0.28	5		11/20/23 08:55	123-91-1	
<b>Surrogates</b>									
1,3-Dioxane (S)	100	%	70-130		5		11/20/23 08:55		
<b>8260 MSV</b>									
Analytical Method: EPA 8260									
Pace Analytical Services - Green Bay									
1,1-Dichloroethane	<b>0.94J</b>	ug/L	1.0	0.30	1		11/20/23 17:13	75-34-3	
1,2-Dichloroethane	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		11/20/23 17:13	107-06-2	
1,1-Dichloroethene	<b>1.1</b>	ug/L	1.0	0.58	1		11/20/23 17:13	75-35-4	
cis-1,2-Dichloroethene	<b>12.1</b>	ug/L	1.0	0.47	1		11/20/23 17:13	156-59-2	
trans-1,2-Dichloroethene	<b>1.7</b>	ug/L	1.0	0.53	1		11/20/23 17:13	156-60-5	
Tetrachloroethene	<b>0.41J</b>	ug/L	1.0	0.41	1		11/20/23 17:13	127-18-4	
1,1,1-Trichloroethane	<b>3.1</b>	ug/L	1.0	0.30	1		11/20/23 17:13	71-55-6	
1,1,2-Trichloroethane	<b>&lt;0.34</b>	ug/L	1.0	0.34	1		11/20/23 17:13	79-00-5	
Trichloroethene	<b>659</b>	ug/L	20.0	6.4	20		11/21/23 09:23	79-01-6	
Vinyl chloride	<b>&lt;0.17</b>	ug/L	1.0	0.17	1		11/20/23 17:13	75-01-4	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	70-130		1		11/20/23 17:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		11/20/23 17:13	2199-69-1	
Toluene-d8 (S)	94	%	70-130		1		11/20/23 17:13	2037-26-5	

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### ANALYTICAL RESULTS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Sample: **FB-01-WQ-20231115** Lab ID: **40271116017** Collected: 11/15/23 14:38 Received: 11/16/23 10:33 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-Trichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 11:44	71-55-6	
1,1,2-Trichloroethane	<0.34	ug/L	1.0	0.34	1		11/20/23 11:44	79-00-5	
1,1-Dichloroethane	<0.30	ug/L	1.0	0.30	1		11/20/23 11:44	75-34-3	
1,1-Dichloroethene	<0.58	ug/L	1.0	0.58	1		11/20/23 11:44	75-35-4	
1,2-Dichloroethane	<0.29	ug/L	1.0	0.29	1		11/20/23 11:44	107-06-2	
Tetrachloroethene	<0.41	ug/L	1.0	0.41	1		11/20/23 11:44	127-18-4	
Trichloroethene	<0.32	ug/L	1.0	0.32	1		11/20/23 11:44	79-01-6	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		11/20/23 11:44	75-01-4	
cis-1,2-Dichloroethene	<0.47	ug/L	1.0	0.47	1		11/20/23 11:44	156-59-2	
trans-1,2-Dichloroethene	<0.53	ug/L	1.0	0.53	1		11/20/23 11:44	156-60-5	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	70-130		1		11/20/23 11:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		11/20/23 11:44	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		11/20/23 11:44	2037-26-5	

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**QUALITY CONTROL DATA**

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

QC Batch: 460691 Analysis Method: ASTM 6520 / EPA 8260 (SIM)  
 QC Batch Method: ASTM 6520 / EPA 8260 (SIM) Analysis Description: 8260D (SIM) SPME 1,4-Dioxane  
 Laboratory: Pace Analytical Services - Green Bay  
 Associated Lab Samples: 40271116001, 40271116002, 40271116003, 40271116004, 40271116005, 40271116006, 40271116007,  
 40271116008, 40271116009, 40271116010, 40271116011, 40271116012, 40271116014, 40271116015,  
 40271116016

METHOD BLANK: 2645269 Matrix: Water  
 Associated Lab Samples: 40271116001, 40271116002, 40271116003, 40271116004, 40271116005, 40271116006, 40271116007,  
 40271116008, 40271116009, 40271116010, 40271116011, 40271116012, 40271116014, 40271116015,  
 40271116016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	11/17/23 08:31	
1,3-Dioxane (S)	%	101	70-130	11/17/23 08:31	

LABORATORY CONTROL SAMPLE: 2645270

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	24.4	98	70-130	
1,3-Dioxane (S)	%			103	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2645288 2645289

Parameter	Units	40271116001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	25	25	25.0	24.4	100	98	70-130	3	20	
1,3-Dioxane (S)	%						102	101	70-130			

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### QUALITY CONTROL DATA

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

QC Batch:	460696	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40271116001, 40271116002, 40271116003, 40271116004, 40271116005, 40271116006, 40271116007, 40271116008, 40271116009, 40271116010, 40271116011, 40271116012, 40271116013, 40271116014, 40271116015, 40271116016, 40271116017

METHOD BLANK: 2645284 Matrix: Water

Associated Lab Samples: 40271116001, 40271116002, 40271116003, 40271116004, 40271116005, 40271116006, 40271116007, 40271116008, 40271116009, 40271116010, 40271116011, 40271116012, 40271116013, 40271116014, 40271116015, 40271116016, 40271116017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	11/20/23 09:29	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	11/20/23 09:29	
1,1-Dichloroethane	ug/L	<0.30	1.0	11/20/23 09:29	
1,1-Dichloroethene	ug/L	<0.58	1.0	11/20/23 09:29	
1,2-Dichloroethane	ug/L	<0.29	1.0	11/20/23 09:29	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	11/20/23 09:29	
Tetrachloroethene	ug/L	<0.41	1.0	11/20/23 09:29	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	11/20/23 09:29	
Trichloroethene	ug/L	<0.32	1.0	11/20/23 09:29	
Vinyl chloride	ug/L	<0.17	1.0	11/20/23 09:29	
1,2-Dichlorobenzene-d4 (S)	%	101	70-130	11/20/23 09:29	
4-Bromofluorobenzene (S)	%	96	70-130	11/20/23 09:29	
Toluene-d8 (S)	%	96	70-130	11/20/23 09:29	

LABORATORY CONTROL SAMPLE: 2645285

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	62.3	125	70-132	
1,1,2-Trichloroethane	ug/L	50	48.8	98	70-130	
1,1-Dichloroethane	ug/L	50	58.1	116	70-130	
1,1-Dichloroethene	ug/L	50	56.8	114	73-140	
1,2-Dichloroethane	ug/L	50	56.7	113	70-130	
cis-1,2-Dichloroethene	ug/L	50	54.6	109	70-130	
Tetrachloroethene	ug/L	50	53.8	108	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.8	108	70-131	
Trichloroethene	ug/L	50	52.4	105	70-130	
Vinyl chloride	ug/L	50	55.5	111	51-145	
1,2-Dichlorobenzene-d4 (S)	%			94	70-130	
4-Bromofluorobenzene (S)	%			93	70-130	
Toluene-d8 (S)	%			98	70-130	

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**QUALITY CONTROL DATA**

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

Parameter	Units	2646416		2646417		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40271116001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result								
1,1,1-Trichloroethane	ug/L	<0.30	50	50	60.2	64.2	120	128	70-132	6	20		
1,1,2-Trichloroethane	ug/L	<0.34	50	50	49.1	51.1	98	102	70-130	4	20		
1,1-Dichloroethane	ug/L	<0.30	50	50	57.9	60.9	116	122	70-131	5	20		
1,1-Dichloroethene	ug/L	<0.58	50	50	57.6	59.2	115	118	69-146	3	20		
1,2-Dichloroethane	ug/L	<0.29	50	50	59.1	59.5	118	119	70-130	1	20		
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	55.9	56.7	112	113	70-130	1	20		
Tetrachloroethene	ug/L	<0.41	50	50	52.3	57.5	105	115	70-131	10	20		
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	55.1	56.7	110	113	70-135	3	20		
Trichloroethene	ug/L	<0.32	50	50	50.9	54.9	102	110	70-130	7	20		
Vinyl chloride	ug/L	<0.17	50	50	56.3	57.6	113	115	45-147	2	20		
1,2-Dichlorobenzene-d4 (S)	%						98	97	70-130				
4-Bromofluorobenzene (S)	%						95	95	70-130				
Toluene-d8 (S)	%						96	99	70-130				

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## QUALIFIERS

Project: 0383990- THERMO FISHER

Pace Project No.: 40271116

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### 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 - The reported result is an estimated value.

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.

DL - Adjusted Method Detection Limit.

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 - Analyte was not detected and is reported as less than the LOD or as defined by the customer.

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

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

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

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

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 0383990- THERMO FISHER  
 Pace Project No.: 40271116

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40271116001	MW-09-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116002	MW-03-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116003	MW-26S-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116004	MW-13D-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116005	MW-15S-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116006	MW-6S-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116007	MW-23S-WG-20231114	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116008	MW-20S-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116009	MW-7S-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116010	MW-15D-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116011	MW-04-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116012	MW-13S-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116014	DUP-01-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116015	MW-15I-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116016	DUP-02-WG-20231115	ASTM 6520 / EPA 8260 (SIM)	460691		
40271116001	MW-09-WG-20231114	EPA 8260	460696		
40271116002	MW-03-WG-20231114	EPA 8260	460696		
40271116003	MW-26S-WG-20231114	EPA 8260	460696		
40271116004	MW-13D-WG-20231114	EPA 8260	460696		
40271116005	MW-15S-WG-20231114	EPA 8260	460696		
40271116006	MW-6S-WG-20231114	EPA 8260	460696		
40271116007	MW-23S-WG-20231114	EPA 8260	460696		
40271116008	MW-20S-WG-20231115	EPA 8260	460696		
40271116009	MW-7S-WG-20231115	EPA 8260	460696		
40271116010	MW-15D-WG-20231115	EPA 8260	460696		
40271116011	MW-04-WG-20231115	EPA 8260	460696		
40271116012	MW-13S-WG-20231115	EPA 8260	460696		
40271116013	TB-01-WQ-20231115	EPA 8260	460696		
40271116014	DUP-01-WG-20231115	EPA 8260	460696		
40271116015	MW-15I-WG-20231115	EPA 8260	460696		
40271116016	DUP-02-WG-20231115	EPA 8260	460696		
40271116017	FB-01-WQ-20231115	EPA 8260	460696		

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Company Name: <b>ERM, INC.</b>	Contact/Report To: <b>John Roberts - Andrew Roberts</b>
Street Address: <b>7311 W. Greenfield Ave., Milwaukee, WI 53214</b>	Phone #: <b>414-977-4710</b>
Customer Project #:	E-Mail: <b>John.roberts@erm.com andrew.roberts@erm.com</b>
Project Name: <b>TWO RIVERS</b>	Cc E-Mail:
Site Collection Info/Facility ID (as applicable):	Invoice To: <b>WI Rhonda Sharp</b>
	Invoice E-Mail: <b>ermnaaccountspayable@erm.com</b>
	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected. [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET	County / State origin of sample(s): <b>Wisconsin</b>

Specify Container Size **	**Container Size. (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) Other
Identify Container Preservative Type***	*** Preservative Types. (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other
Analysis Requested	

Data Deliverables:	Regulatory Program (DW, RCRA, etc.) as applicable:
[ ] Level II [ ] Level III [ ] Level IV	Rush (Pre-approval required): [ ] 2 Day [ ] 3 day [ ] 5 day [ ] Other <b>Standard</b>
[ ] EQUIS	Date Results Requested:
[ ] Other _____	DW PWSID # or WW Permit # as applicable:
	Field Filtered (if applicable). [ ] Yes [x] No
	Analysis:

\* Matrix Codes (Insert in Matrix box below) Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Other (OT), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res. CL2	Number & Type of Containers		8260D (SIM) 1, 4-Dioxane	PFAS (WDNR 33 Targets)	VOC (select list)							Sample Comment	Preservation non-conformance identified for sample.		
			Date	Time	Date	Time		Plastic	Glass													
MW-09-W6-20231114	GW	G	11/14/2023	0900						X	X									001		
MW-03-W6-20231114	GW	G	11/14/2023	0950						X	X										002	
MW-265-W6-20231114	GW	G	11/14/2023	1030						X	X										003	
MW-13D-W6-20231114	GW	G	11/14/2023	1155						X	X										004	
MW-155-W6-20231114	GW	G	11/14/2023	1210						X	X										005	
MW-65-W6-20231114	GW	G	11/14/2023	1610						X	X										006	
MW-235-W6-20231114	GW	G	11/14/2023	1540						X	X										007	
MW-205-W6-20231115	GW	G	11/15/2023	0940						X	X										008	
MW-75-W6-20231115	GW	G	11/15/2023	0910						X	X										009	
MW-15D-W6-20231115	GW	G	11/15/2023	1020						X	X										010	

Customer Remarks / Special Conditions / Possible Hazards:	Collected By: Printed Name: Signature: _____	Additional Instructions from Pace*: # Coolers: 1 Thermometer ID: 121 Correction Factor (°C): -0.5 Obs. Temp (°C): 1.5 Corrected Temp. (°C): 1.0
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Relinquished by/Company (Signature): <b>Aditi Mahantesh / ERM</b>	Date/Time: <b>11/16/2023 1033</b>	Received by/Company (Signature): <b>Rodney Pace</b>	Date/Time: <b>11-16-23 1033</b>	Tracking Number:
Relinquished by/Company (Signature):	Date/Time:	Received by/Company (Signature):	Date/Time:	Delivered by [ ] In-Person [ ] Courier
Relinquished by/Company (Signature):	Date/Time:	Received by/Company (Signature):	Date/Time:	[ ] FedEx [ ] UPS [ ] Other
Relinquished by/Company (Signature):	Date/Time:	Received by/Company (Signature):	Date/Time:	Page: <b>1</b> of <b>3</b>





**Sample Condition Upon Receipt Form (SCUR)**

Project #: \_\_\_\_\_

Client Name: ERM

WO#: **40271116**



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

Tracking #: \_\_\_\_\_

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

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

Packing Material:  Bubble Wrap  Bubble Bags  None  Other

Thermometer Used SR-139 Type of Ice:  Wet  Blue  Dry  None  Meltwater Only

Cooler Temperature Uncorr. 1.0 / Corr. 1.0

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: 11/16/23 Initials: SG  
 Labeled By Initials: R.A

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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- DI VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Correct Type: <u>Pace Green Bay, Pace IR, Non-Pace</u>		
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		<u>005 ID "MW-15-W6-20231114" 11/16/23 SG</u> <u>05 ID "MW-15-W6-20231115" For 2 Wats</u>
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>508</u>		

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

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