



March 12, 2025

ELECTRONIC MAIL

Re: Firewater Loop Release Response
SERTS ID 20240926WC17; BRRTS ID: 0217590808
3M Menomonie

Dear Mr. Zeichert:

3M Company (3M) hereby submits this letter as a narrative summary for the September 26, 2024 firewater loop release that occurred at the 3M Menomonie facility. Per the direction of the previously assigned Wisconsin Department of Natural Resources (WDNR) regional spills coordinator, Mr. Jayson Schrank, this response is being submitted to you along with the analytical data report of the sampling taken on September 26th.

Release summary-

The site's Plant Engineering team reported unexpected pressure drops in the firewater system. A facility employee investigating a potential leak observed wet ground adjacent to one of the site's fire hydrants at the southern end of the facility. The technician immediately closed valves on both sides of the observed flow location. This stopped the flow, and the system pressure returned to normal. The release was determined to be fire suppression water with low/residual concentrations of per- and poly-fluoroalkyl substances (PFAS) materials due to an historic aqueous film forming foam (AFFF) system release into the facility's main fire water loop. Due to the nature of the leak, an exact volume of water released to the environment could not be determined. The incident was reported to WDNR at 12:05 PM on 9/26/2024.

Response actions-

3M contracted an excavation company to excavate visually wetted soils and the top layer of soil where there was obvious overground flow. During the soil removal, the cause of the release was revealed to be a pinhole gap on one of the butt welds of the hydrant connection and the hydrant was repaired. The extent of wetted soils was estimated to be approximately 5,400 square feet near the fire hydrant. Soil was excavated to approximately 20 feet below grade and in an approximately 10-foot radius around the point of origin. In total, 283 tons of material was removed and disposed of at an appropriately licensed facility. Additionally, a contractor was hired to remove water from the fire loop via a vac-truck as well as cleaning a nearby concrete culvert that the water had flowed through.

Prior to excavation, water samples were collected from standing water noted around the fire hydrant and the nearby culvert which had captured the discharge. Water samples were submitted to Pace Analytical Services (Pace) for laboratory analysis of PFAS via EPA

Modified Method 537. Following excavation, confirmatory soil samples were collected from the base of the excavation and submitted to Pace for laboratory analysis of PFAS by EPA Modified Method 537 to determine whether soil impacts remain. The laboratory analytical report is attached. Results indicate that PFAS was present in the water samples and trace PFAS concentrations were present in soils.

Transition to active spill to remediation project-

The release occurred at the location of a historical fire training area which utilized AFFF containing fire extinguishers. Soil samples and groundwater samples collected as part of the ongoing Remedial Investigation have confirmed that the historical use of AFFF is a source of PFAS impacts in groundwater and soil in this area. As such, it is difficult to discern localized environmental impacts due to the September 2024 fire loop release versus those due to historical AFFF usage.

The site is currently engaged in a Remedial Investigation under the WDNR Remediation & Redevelopment program. The BRRTS ID assigned to the project is # 0217590808. Per discussions with the WDNR, it is recommended that potential environmental impacts due to the September 2024 release of fire suppression water be investigated as part of the ongoing remedial investigation. The spill incident is recommended to be closed, and follow-up environmental investigations and/or remediation will be transferred to the Remediation project.

Thank you for the opportunity to provide this response to WDNR, and 3M looks forward to working with WDNR on this project. 3M will reach out to set up a meeting with the WDNR to discuss this letter and 3M's questions in the coming days. In the meantime, if you have any questions or comments on this response, please do not hesitate to contact me via phone at (715) 578-2318 or by email at bdluedtke@mmm.com.

Sincerely,

Brad Luedtke
Environmental Engineer
3M Menomonie

CC: Britta Chambers
LiJane Brunner
Janice Neitzel



November 27, 2024

Amanda Albrecht
3M Environmental
3M Center, 260-05-N-17
Saint Paul, MN 551441000

RE: Project: E24-0544 3M Menomonie Soil&GW-Revised Report
Pace Project No.: 10710098

Dear Amanda Albrecht:

Enclosed are the analytical results for sample(s) received by the laboratory on October 02, 2024. 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 - Minneapolis

This report was revised on November 27, 2024, to add a qualifier regarding EIS/surrogate recovery on sample 10710098001.

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

Sincerely,

Carolynne Trout

Carolynne Trout
carolynne.trout@pacelabs.com
1(612)607-6351
Project Manager

Enclosures

cc: 3M Environmental Laboratory, 3M Environmental



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414

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

DoD Certification via A2LA #: 2926.01

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

ISO/IEC 17025 Certification via A2LA #: 2926.01

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

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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10710098001	Ditch Water Sample 1	Water	09/26/24 10:14	10/02/24 08:50
10710098002	Ditch Water Sample 2	Water	09/26/24 10:19	10/02/24 08:50
10710098003	Soil Adjacent to Hydrant	Solid	09/26/24 10:25	10/02/24 08:50
10710098004	East ditch Soil	Solid	09/26/24 10:31	10/02/24 08:50
10710098005	West ditch Soil	Solid	09/26/24 10:36	10/02/24 08:50

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10710098001	Ditch Water Sample 1	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10710098002	Ditch Water Sample 2	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10710098003	Soil Adjacent to Hydrant	ASTM D2974	NJ1	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10710098004	East ditch Soil	ASTM D2974	NJ1	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10710098005	West ditch Soil	ASTM D2974	NJ1	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
10710098001	Ditch Water Sample 1					
ENV-SOP-MIN4-0178	PFBS	0.00055J	ug/L	0.0019	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFHxA	0.0071	ug/L	0.0021	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFBA	0.0011J	ug/L	0.0021	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFHpS	0.0010J	ug/L	0.0020	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFOSA	0.0015J	ug/L	0.0021	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFPeA	0.00090J	ug/L	0.0021	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFPeS	0.00061J	ug/L	0.0020	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFHpA	0.00048J	ug/L	0.0021	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFHxS	0.0086	ug/L	0.0019	10/16/24 12:08	
ENV-SOP-MIN4-0178	PFOS	0.24	ug/L	0.019	10/16/24 12:22	
ENV-SOP-MIN4-0178	PFOA	0.0019J	ug/L	0.0021	10/16/24 12:08	
10710098002	Ditch Water Sample 2					
ENV-SOP-MIN4-0178	PFBS	0.00067J	ug/L	0.0035	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFHxA	0.0084	ug/L	0.0039	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFBA	0.00068J	ug/L	0.0039	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFNS	0.0025J	ug/L	0.0038	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFOSA	0.0026J	ug/L	0.0039	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFPeA	0.0011J	ug/L	0.0039	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFPeS	0.00072J	ug/L	0.0037	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFHpA	0.00049J	ug/L	0.0039	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFHxS	0.010	ug/L	0.0036	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFOS	0.29	ug/L	0.0036	10/15/24 19:24	
ENV-SOP-MIN4-0178	PFOA	0.0022J	ug/L	0.0039	10/15/24 19:24	
10710098003	Soil Adjacent to Hydrant					
ASTM D2974	Percent Moisture	11.8	%	0.10	10/09/24 13:58	N2
ENV-SOP-MIN4-0178	PFDA	0.041J	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFHxA	0.099J	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFDS	0.82	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFDoS	0.86	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFNS	0.51	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFOSA	0.20	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFPeA	0.021J	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFPeS	0.020J	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFDoA	0.35	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFHxS	0.32	ug/kg	0.10	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFOS	7.3	ug/kg	0.10	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFOA	0.063J	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFTTrDA	0.028J	ug/kg	0.11	10/16/24 01:10	
ENV-SOP-MIN4-0178	PFUnA	0.12	ug/kg	0.11	10/16/24 01:10	
10710098004	East ditch Soil					
ASTM D2974	Percent Moisture	25.5	%	0.10	10/09/24 13:59	N2
ENV-SOP-MIN4-0178	PFHxA	0.042J	ug/kg	0.13	10/11/24 21:32	
ENV-SOP-MIN4-0178	PFDS	0.45	ug/kg	0.12	10/11/24 21:32	
ENV-SOP-MIN4-0178	PFDoS	0.56	ug/kg	0.12	10/11/24 21:32	
ENV-SOP-MIN4-0178	PFNS	0.18	ug/kg	0.12	10/11/24 21:32	
ENV-SOP-MIN4-0178	PFOSA	0.10J	ug/kg	0.13	10/11/24 21:32	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
10710098004	East ditch Soil					
ENV-SOP-MIN4-0178	PFD _o A	0.15	ug/kg	0.13	10/11/24 21:32	
ENV-SOP-MIN4-0178	PFH _x S	0.33	ug/kg	0.12	10/11/24 21:32	
ENV-SOP-MIN4-0178	PFOS	3.8	ug/kg	0.12	10/11/24 21:32	
ENV-SOP-MIN4-0178	PFOA	0.027J	ug/kg	0.13	10/11/24 21:32	
10710098005	West ditch Soil					
ASTM D2974	Percent Moisture	18.4	%	0.10	10/09/24 14:02	N2
ENV-SOP-MIN4-0178	PFBS	0.56	ug/kg	0.10	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFDA	0.13	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFH _x A	2.7	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFBA	0.59	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFDS	3.0	ug/kg	0.11	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFD _o S	3.5	ug/kg	0.11	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFHpS	2.0	ug/kg	0.11	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFNS	0.92	ug/kg	0.11	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFOSA	1.5	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFPeA	0.65	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFPeS	2.0	ug/kg	0.11	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFD _o A	0.61	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFHpA	0.52	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFH _x S	53.4	ug/kg	1.1	10/16/24 00:27	
ENV-SOP-MIN4-0178	PFNA	0.17	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFOS	26.2	ug/kg	1.1	10/16/24 00:27	
ENV-SOP-MIN4-0178	PFOA	1.1	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFTeDA	0.027J	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFT _r DA	0.060J	ug/kg	0.12	10/11/24 21:39	
ENV-SOP-MIN4-0178	PFUnA	0.22	ug/kg	0.12	10/11/24 21:39	

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PROJECT NARRATIVE

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Date: November 27, 2024

L4 PFAS

The quality system for Pace Analytical Services, LLC in Minneapolis, MN (Pace-MN) has been audited and was found to be in conformance with ISO/IEC 17025:2017 by an independent assessment (A2LA Certificate # 2926). The PFAS test results in non-drinking water for this project are not covered by this accreditation. Pace-MN maintains accreditation with the state of Wisconsin for their isotope dilution analysis as defined in ENV-SOP-MIN4-0178 under certificate number 999407970. All of the test results for this project are covered by the Wisconsin accreditation.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: November 27, 2024

General Information:

2 samples were analyzed for ENV-SOP-MIN4-0178 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 ENV-SOP-MIN4-0178 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.

QC Batch: 972825

S0: Surrogate recovery outside laboratory control limits.

- Ditch Water Sample 1 (Lab ID: 10710098001)
 - 13C28:2FTS (S)
- LCS (Lab ID: 5083867)
 - 13C28:2FTS (S)
- LCSD (Lab ID: 5083868)
 - 13C28:2FTS (S)

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

- BLANK (Lab ID: 5083866)
 - 13C28:2FTS (S)

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.

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PROJECT NARRATIVE

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: November 27, 2024

Additional Comments:

Analyte Comments:

QC Batch: 972825

2M: All narrated results associated with this sample confirmed through secondary analysis. Extracted Internal Standards (EIS) with 0% recovery are confirmed based on their low detections meeting signal to noise criteria described in the laboratories SOP.

- Ditch Water Sample 1 (Lab ID: 10710098001)
- 13C4-PFBA (S)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: November 27, 2024

General Information:

3 samples were analyzed for ENV-SOP-MIN4-0178 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 ENV-SOP-MIN4-0178 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.

QC Batch: 972819

S0: Surrogate recovery outside laboratory control limits.

- East ditch Soil (Lab ID: 10710098004)
 - 13C28:2FTS (S)
 - d3-NMeFOSA (S)
 - d5-NEtFOSA (S)
- West ditch Soil (Lab ID: 10710098005)
 - 13C28:2FTS (S)

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:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: November 27, 2024

Analyte Comments:

QC Batch: 972819

1M: All narrated results associated with this sample confirmed through secondary analysis.

- East ditch Soil (Lab ID: 10710098004)
 - 13C2-PFDoA (S)
- West ditch Soil (Lab ID: 10710098005)
 - 13C2-PFDoA (S)

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: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: Ditch Water Sample 1 Lab ID: 10710098001 Collected: 09/26/24 10:14 Received: 10/02/24 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW									
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178									
Initial Volume/Weight: 237.443 mL Final Volume/Weight: 1 mL									
Pace Analytical Services - Minneapolis									
11CI-PF3OUdS	<0.00043	ug/L	0.0020	0.00043	1	10/11/24 14:00	10/16/24 12:08	763051-92-9	
4:2 FTS	<0.00038	ug/L	0.0020	0.00038	1	10/11/24 14:00	10/16/24 12:08	757124-72-4	
6:2 FTS	<0.00060	ug/L	0.0020	0.00060	1	10/11/24 14:00	10/16/24 12:08	27619-97-2	
8:2 FTS	<0.00083	ug/L	0.0020	0.00083	1	10/11/24 14:00	10/16/24 12:08	39108-34-4	
9CI-PF3ONS	<0.00037	ug/L	0.0020	0.00037	1	10/11/24 14:00	10/16/24 12:08	756426-58-1	
ADONA	<0.00034	ug/L	0.0020	0.00034	1	10/11/24 14:00	10/16/24 12:08	919005-14-4	
HFPO-DA	<0.00027	ug/L	0.0021	0.00027	1	10/11/24 14:00	10/16/24 12:08	13252-13-6	
NEtFOSAA	<0.00060	ug/L	0.0021	0.00060	1	10/11/24 14:00	10/16/24 12:08	2991-50-6	
NEtFOSA	<0.00048	ug/L	0.0021	0.00048	1	10/11/24 14:00	10/16/24 12:08	4151-50-2	
NEtFOSE	<0.00063	ug/L	0.0021	0.00063	1	10/11/24 14:00	10/16/24 12:08	1691-99-2	
NMeFOSAA	<0.00082	ug/L	0.0021	0.00082	1	10/11/24 14:00	10/16/24 12:08	2355-31-9	
NMeFOSA	<0.00066	ug/L	0.0021	0.00066	1	10/11/24 14:00	10/16/24 12:08	31506-32-8	
NMeFOSE	<0.00051	ug/L	0.0021	0.00051	1	10/11/24 14:00	10/16/24 12:08	24448-09-7	
PFBS	0.00055J	ug/L	0.0019	0.00021	1	10/11/24 14:00	10/16/24 12:08	375-73-5	
PFDA	<0.00026	ug/L	0.0021	0.00026	1	10/11/24 14:00	10/16/24 12:08	335-76-2	
PFHxA	0.0071	ug/L	0.0021	0.00040	1	10/11/24 14:00	10/16/24 12:08	307-24-4	
PFBA	0.0011J	ug/L	0.0021	0.00029	1	10/11/24 14:00	10/16/24 12:08	375-22-4	
PFDS	<0.00060	ug/L	0.0020	0.00060	1	10/11/24 14:00	10/16/24 12:08	335-77-3	
PFDoS	<0.00056	ug/L	0.0020	0.00056	1	10/11/24 14:00	10/16/24 12:08	79780-39-5	
PFHpS	0.0010J	ug/L	0.0020	0.00066	1	10/11/24 14:00	10/16/24 12:08	375-92-8	
PFNS	<0.00050	ug/L	0.0020	0.00050	1	10/11/24 14:00	10/16/24 12:08	68259-12-1	
PFOSA	0.0015J	ug/L	0.0021	0.00042	1	10/11/24 14:00	10/16/24 12:08	754-91-6	
PFPeA	0.00090J	ug/L	0.0021	0.00019	1	10/11/24 14:00	10/16/24 12:08	2706-90-3	
PFPeS	0.00061J	ug/L	0.0020	0.00027	1	10/11/24 14:00	10/16/24 12:08	2706-91-4	
PFDoA	<0.00045	ug/L	0.0021	0.00045	1	10/11/24 14:00	10/16/24 12:08	307-55-1	
PFHpA	0.00048J	ug/L	0.0021	0.00025	1	10/11/24 14:00	10/16/24 12:08	375-85-9	
PFHxS	0.0086	ug/L	0.0019	0.00025	1	10/11/24 14:00	10/16/24 12:08	355-46-4	
PFNA	<0.00022	ug/L	0.0021	0.00022	1	10/11/24 14:00	10/16/24 12:08	375-95-1	
PFOS	0.24	ug/L	0.019	0.0054	10	10/11/24 14:00	10/16/24 12:22	1763-23-1	
PFOA	0.0019J	ug/L	0.0021	0.00028	1	10/11/24 14:00	10/16/24 12:08	335-67-1	
PFTeDA	<0.00038	ug/L	0.0021	0.00038	1	10/11/24 14:00	10/16/24 12:08	376-06-7	
PFTTrDA	<0.00030	ug/L	0.0021	0.00030	1	10/11/24 14:00	10/16/24 12:08	72629-94-8	
PFUnA	<0.00067	ug/L	0.0021	0.00067	1	10/11/24 14:00	10/16/24 12:08	2058-94-8	
Surrogates									
13C4-PFBA (S)	92	%	25-150		1	10/11/24 14:00	10/16/24 12:08		2M
13C5-PFPeA (S)	90	%	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C3-PFBS (S)	105	%	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C24:2FTS (S)	94	%	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C3HFPO-DA (S)	90	%	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C4-PFHxA (S)	108	%	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C3-PFHxS (S)	110	%	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C26:2FTS (S)	94	%	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C8-PFOA (S)	112	%	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C8-PFOS (S)	105	%	25-150		1	10/11/24 14:00	10/16/24 12:08		

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: Ditch Water Sample 1 Lab ID: 10710098001 Collected: 09/26/24 10:14 Received: 10/02/24 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
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WI ID NPW

Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178

Initial Volume/Weight: 237.443 mL Final Volume/Weight: 1 mL

Pace Analytical Services - Minneapolis

Surrogates

13C9-PFNA (S)	108	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C6-PFDA (S)	126	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C28:2FTS (S)	248	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		S0
d3-MeFOSAA (S)	100	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C7-PFUdA (S)	113	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C8-PFOSA (S)	85	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		
d5-EtFOSAA (S)	103	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		
13C2-PFDoA (S)	101	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		
d3-NMeFOSA (S)	23	%.	10-150		1	10/11/24 14:00	10/16/24 12:08		
d7-NMeFOSE (S)	64	%.	10-150		1	10/11/24 14:00	10/16/24 12:08		
13C2-PFTA (S)	74	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		
d9-NEtFOSE (S)	55	%.	10-150		1	10/11/24 14:00	10/16/24 12:08		
d5-NEtFOSA (S)	21	%.	10-150		1	10/11/24 14:00	10/16/24 12:08		
13C5-PFHxA (S)	112	%.	25-150		1	10/11/24 14:00	10/16/24 12:08		

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: Ditch Water Sample 2 Lab ID: 10710098002 Collected: 09/26/24 10:19 Received: 10/02/24 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW									
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178									
Initial Volume/Weight: 127.967 mL Final Volume/Weight: 1 mL									
Pace Analytical Services - Minneapolis									
11Cl-PF3OUdS	<0.00079	ug/L	0.0037	0.00079	1	10/11/24 14:00	10/15/24 19:24	763051-92-9	
4:2 FTS	<0.00071	ug/L	0.0037	0.00071	1	10/11/24 14:00	10/15/24 19:24	757124-72-4	
6:2 FTS	<0.0011	ug/L	0.0037	0.0011	1	10/11/24 14:00	10/15/24 19:24	27619-97-2	
8:2 FTS	<0.0015	ug/L	0.0038	0.0015	1	10/11/24 14:00	10/15/24 19:24	39108-34-4	
9Cl-PF3ONS	<0.00069	ug/L	0.0036	0.00069	1	10/11/24 14:00	10/15/24 19:24	756426-58-1	
ADONA	<0.00063	ug/L	0.0037	0.00063	1	10/11/24 14:00	10/15/24 19:24	919005-14-4	
HFPO-DA	<0.00049	ug/L	0.0039	0.00049	1	10/11/24 14:00	10/15/24 19:24	13252-13-6	
NEtFOSAA	<0.0011	ug/L	0.0039	0.0011	1	10/11/24 14:00	10/15/24 19:24	2991-50-6	
NEtFOSA	<0.00089	ug/L	0.0039	0.00089	1	10/11/24 14:00	10/15/24 19:24	4151-50-2	
NEtFOSE	<0.0012	ug/L	0.0039	0.0012	1	10/11/24 14:00	10/15/24 19:24	1691-99-2	
NMeFOSAA	<0.0015	ug/L	0.0039	0.0015	1	10/11/24 14:00	10/15/24 19:24	2355-31-9	
NMeFOSA	<0.0012	ug/L	0.0039	0.0012	1	10/11/24 14:00	10/15/24 19:24	31506-32-8	
NMeFOSE	<0.00094	ug/L	0.0039	0.00094	1	10/11/24 14:00	10/15/24 19:24	24448-09-7	
PFBS	0.00067J	ug/L	0.0035	0.00040	1	10/11/24 14:00	10/15/24 19:24	375-73-5	
PFDA	<0.00049	ug/L	0.0039	0.00049	1	10/11/24 14:00	10/15/24 19:24	335-76-2	
PFHxA	0.0084	ug/L	0.0039	0.00074	1	10/11/24 14:00	10/15/24 19:24	307-24-4	
PFBA	0.00068J	ug/L	0.0039	0.00055	1	10/11/24 14:00	10/15/24 19:24	375-22-4	
PFDS	<0.0011	ug/L	0.0038	0.0011	1	10/11/24 14:00	10/15/24 19:24	335-77-3	
PFDoS	<0.0010	ug/L	0.0038	0.0010	1	10/11/24 14:00	10/15/24 19:24	79780-39-5	
PFHpS	<0.0012	ug/L	0.0037	0.0012	1	10/11/24 14:00	10/15/24 19:24	375-92-8	
PFNS	0.0025J	ug/L	0.0038	0.00093	1	10/11/24 14:00	10/15/24 19:24	68259-12-1	
PFOSA	0.0026J	ug/L	0.0039	0.00078	1	10/11/24 14:00	10/15/24 19:24	754-91-6	
PFPeA	0.0011J	ug/L	0.0039	0.00036	1	10/11/24 14:00	10/15/24 19:24	2706-90-3	
PFPeS	0.00072J	ug/L	0.0037	0.00050	1	10/11/24 14:00	10/15/24 19:24	2706-91-4	
PFDoA	<0.00084	ug/L	0.0039	0.00084	1	10/11/24 14:00	10/15/24 19:24	307-55-1	
PFHpA	0.00049J	ug/L	0.0039	0.00046	1	10/11/24 14:00	10/15/24 19:24	375-85-9	
PFHxS	0.010	ug/L	0.0036	0.00046	1	10/11/24 14:00	10/15/24 19:24	355-46-4	
PFNA	<0.00041	ug/L	0.0039	0.00041	1	10/11/24 14:00	10/15/24 19:24	375-95-1	
PFOS	0.29	ug/L	0.0036	0.0010	1	10/11/24 14:00	10/15/24 19:24	1763-23-1	
PFOA	0.0022J	ug/L	0.0039	0.00052	1	10/11/24 14:00	10/15/24 19:24	335-67-1	
PFTeDA	<0.00071	ug/L	0.0039	0.00071	1	10/11/24 14:00	10/15/24 19:24	376-06-7	
PFTTrDA	<0.00055	ug/L	0.0039	0.00055	1	10/11/24 14:00	10/15/24 19:24	72629-94-8	
PFUnA	<0.0012	ug/L	0.0039	0.0012	1	10/11/24 14:00	10/15/24 19:24	2058-94-8	
Surrogates									
13C4-PFBA (S)	103	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C5-PFPeA (S)	105	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C3-PFBS (S)	117	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C24:2FTS (S)	75	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C3HFPO-DA (S)	101	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C4-PFHpA (S)	117	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C3-PFHxS (S)	120	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C26:2FTS (S)	79	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C8-PFOA (S)	120	%	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C8-PFOS (S)	112	%	25-150		1	10/11/24 14:00	10/15/24 19:24		

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: Ditch Water Sample 2 Lab ID: 10710098002 Collected: 09/26/24 10:19 Received: 10/02/24 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
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WI ID NPW

Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178

Initial Volume/Weight: 127.967 mL Final Volume/Weight: 1 mL

Pace Analytical Services - Minneapolis

Surrogates

13C9-PFNA (S)	114	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C6-PFDA (S)	133	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C28:2FTS (S)	106	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
d3-MeFOSAA (S)	88	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C7-PFUDA (S)	113	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C8-PFOSA (S)	96	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
d5-EtFOSAA (S)	100	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
13C2-PFDoA (S)	106	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
d3-NMeFOSA (S)	35	%.	10-150		1	10/11/24 14:00	10/15/24 19:24		
d7-NMeFOSE (S)	81	%.	10-150		1	10/11/24 14:00	10/15/24 19:24		
13C2-PFTA (S)	106	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		
d9-NEtFOSE (S)	71	%.	10-150		1	10/11/24 14:00	10/15/24 19:24		
d5-NEtFOSA (S)	32	%.	10-150		1	10/11/24 14:00	10/15/24 19:24		
13C5-PFHxA (S)	120	%.	25-150		1	10/11/24 14:00	10/15/24 19:24		

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: Soil Adjacent to Hydrant Lab ID: 10710098003 Collected: 09/26/24 10:25 Received: 10/02/24 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	11.8	%	0.10	0.10	1		10/09/24 13:58		N2
WI ID SL									
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178									
Initial Volume/Weight: 5.037 g Final Volume/Weight: 1 mL									
Pace Analytical Services - Minneapolis									
11Cl-PF3OUdS	<0.019	ug/kg	0.11	0.019	1	10/10/24 13:08	10/16/24 01:10	763051-92-9	
4:2 FTS	<0.014	ug/kg	0.11	0.014	1	10/10/24 13:08	10/16/24 01:10	757124-72-4	
6:2 FTS	<0.023	ug/kg	0.11	0.023	1	10/10/24 13:08	10/16/24 01:10	27619-97-2	
8:2 FTS	<0.045	ug/kg	0.11	0.045	1	10/10/24 13:08	10/16/24 01:10	39108-34-4	
9Cl-PF3ONS	<0.020	ug/kg	0.10	0.020	1	10/10/24 13:08	10/16/24 01:10	756426-58-1	
ADONA	<0.012	ug/kg	0.11	0.012	1	10/10/24 13:08	10/16/24 01:10	919005-14-4	
HFPO-DA	<0.020	ug/kg	0.11	0.020	1	10/10/24 13:08	10/16/24 01:10	13252-13-6	
NEtFOSAA	<0.019	ug/kg	0.11	0.019	1	10/10/24 13:08	10/16/24 01:10	2991-50-6	
NEtFOSA	<0.026	ug/kg	0.11	0.026	1	10/10/24 13:08	10/16/24 01:10	4151-50-2	
NEtFOSE	<0.023	ug/kg	0.11	0.023	1	10/10/24 13:08	10/16/24 01:10	1691-99-2	
NMeFOSAA	<0.048	ug/kg	0.11	0.048	1	10/10/24 13:08	10/16/24 01:10	2355-31-9	
NMeFOSA	<0.041	ug/kg	0.11	0.041	1	10/10/24 13:08	10/16/24 01:10	31506-32-8	
NMeFOSE	<0.022	ug/kg	0.11	0.022	1	10/10/24 13:08	10/16/24 01:10	24448-09-7	
PFBS	<0.015	ug/kg	0.10	0.015	1	10/10/24 13:08	10/16/24 01:10	375-73-5	
PFDA	0.041J	ug/kg	0.11	0.019	1	10/10/24 13:08	10/16/24 01:10	335-76-2	
PFHxA	0.099J	ug/kg	0.11	0.016	1	10/10/24 13:08	10/16/24 01:10	307-24-4	
PFBA	<0.034	ug/kg	0.11	0.034	1	10/10/24 13:08	10/16/24 01:10	375-22-4	
PFDS	0.82	ug/kg	0.11	0.033	1	10/10/24 13:08	10/16/24 01:10	335-77-3	
PFDoS	0.86	ug/kg	0.11	0.027	1	10/10/24 13:08	10/16/24 01:10	79780-39-5	
PFHpS	<0.027	ug/kg	0.11	0.027	1	10/10/24 13:08	10/16/24 01:10	375-92-8	
PFNS	0.51	ug/kg	0.11	0.031	1	10/10/24 13:08	10/16/24 01:10	68259-12-1	
PFOSA	0.20	ug/kg	0.11	0.017	1	10/10/24 13:08	10/16/24 01:10	754-91-6	
PFPeA	0.021J	ug/kg	0.11	0.020	1	10/10/24 13:08	10/16/24 01:10	2706-90-3	
PFPeS	0.020J	ug/kg	0.11	0.013	1	10/10/24 13:08	10/16/24 01:10	2706-91-4	
PFDaA	0.35	ug/kg	0.11	0.026	1	10/10/24 13:08	10/16/24 01:10	307-55-1	
PFHpA	<0.011	ug/kg	0.11	0.011	1	10/10/24 13:08	10/16/24 01:10	375-85-9	
PFHxS	0.32	ug/kg	0.10	0.012	1	10/10/24 13:08	10/16/24 01:10	355-46-4	
PFNA	<0.020	ug/kg	0.11	0.020	1	10/10/24 13:08	10/16/24 01:10	375-95-1	
PFOS	7.3	ug/kg	0.10	0.049	1	10/10/24 13:08	10/16/24 01:10	1763-23-1	
PFOA	0.063J	ug/kg	0.11	0.014	1	10/10/24 13:08	10/16/24 01:10	335-67-1	
PFTeDA	<0.018	ug/kg	0.11	0.018	1	10/10/24 13:08	10/16/24 01:10	376-06-7	
PFTrDA	0.028J	ug/kg	0.11	0.024	1	10/10/24 13:08	10/16/24 01:10	72629-94-8	
PFUnA	0.12	ug/kg	0.11	0.038	1	10/10/24 13:08	10/16/24 01:10	2058-94-8	
Surrogates									
13C2-PFDaA (S)	98	%	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C2-PFTA (S)	101	%	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C24:2FTS (S)	71	%	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C26:2FTS (S)	80	%	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C28:2FTS (S)	136	%	25-150		1	10/10/24 13:08	10/16/24 01:10		

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: Soil Adjacent to Hydrant Lab ID: 10710098003 Collected: 09/26/24 10:25 Received: 10/02/24 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL									
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178									
Initial Volume/Weight: 5.037 g Final Volume/Weight: 1 mL									
Pace Analytical Services - Minneapolis									
Surrogates									
13C3-PFBS (S)	105	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C3-PFHxS (S)	101	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C3HFPO-DA (S)	86	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C4-PFBA (S)	96	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C4-PFHpA (S)	99	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C5-PFHxA (S)	100	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C5-PFPeA (S)	96	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C6-PFDA (S)	110	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C7-PFUdA (S)	104	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C8-PFOA (S)	100	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C8-PFOS (S)	102	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C8-PFOSA (S)	94	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
13C9-PFNA (S)	97	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
d3-MeFOSAA (S)	91	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
d3-NMeFOSA (S)	81	%.	10-150		1	10/10/24 13:08	10/16/24 01:10		
d5-EtFOSAA (S)	102	%.	25-150		1	10/10/24 13:08	10/16/24 01:10		
d5-NEtFOSA (S)	79	%.	10-150		1	10/10/24 13:08	10/16/24 01:10		
d7-NMeFOSE (S)	80	%.	10-150		1	10/10/24 13:08	10/16/24 01:10		
d9-NEtFOSE (S)	75	%.	10-150		1	10/10/24 13:08	10/16/24 01:10		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: East ditch Soil Lab ID: 10710098004 Collected: 09/26/24 10:31 Received: 10/02/24 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	25.5	%	0.10	0.10	1		10/09/24 13:59		N2
WI ID SL									
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178									
Initial Volume/Weight: 5.223 g Final Volume/Weight: 1 mL									
Pace Analytical Services - Minneapolis									
11Cl-PF3OUdS	<0.022	ug/kg	0.12	0.022	1	10/10/24 13:08	10/11/24 21:32	763051-92-9	
4:2 FTS	<0.016	ug/kg	0.12	0.016	1	10/10/24 13:08	10/11/24 21:32	757124-72-4	
6:2 FTS	<0.026	ug/kg	0.12	0.026	1	10/10/24 13:08	10/11/24 21:32	27619-97-2	
8:2 FTS	<0.052	ug/kg	0.12	0.052	1	10/10/24 13:08	10/11/24 21:32	39108-34-4	
9Cl-PF3ONS	<0.023	ug/kg	0.12	0.023	1	10/10/24 13:08	10/11/24 21:32	756426-58-1	
ADONA	<0.014	ug/kg	0.12	0.014	1	10/10/24 13:08	10/11/24 21:32	919005-14-4	
HFPO-DA	<0.022	ug/kg	0.13	0.022	1	10/10/24 13:08	10/11/24 21:32	13252-13-6	
NEtFOSAA	<0.022	ug/kg	0.13	0.022	1	10/10/24 13:08	10/11/24 21:32	2991-50-6	
NEtFOSA	<0.029	ug/kg	0.13	0.029	1	10/10/24 13:08	10/11/24 21:32	4151-50-2	
NEtFOSE	<0.027	ug/kg	0.13	0.027	1	10/10/24 13:08	10/11/24 21:32	1691-99-2	
NMeFOSAA	<0.054	ug/kg	0.13	0.054	1	10/10/24 13:08	10/11/24 21:32	2355-31-9	
NMeFOSA	<0.046	ug/kg	0.13	0.046	1	10/10/24 13:08	10/11/24 21:32	31506-32-8	
NMeFOSE	<0.025	ug/kg	0.13	0.025	1	10/10/24 13:08	10/11/24 21:32	24448-09-7	
PFBS	<0.017	ug/kg	0.11	0.017	1	10/10/24 13:08	10/11/24 21:32	375-73-5	
PFDA	<0.022	ug/kg	0.13	0.022	1	10/10/24 13:08	10/11/24 21:32	335-76-2	
PFHxA	0.042J	ug/kg	0.13	0.018	1	10/10/24 13:08	10/11/24 21:32	307-24-4	
PFBA	<0.039	ug/kg	0.13	0.039	1	10/10/24 13:08	10/11/24 21:32	375-22-4	
PFDS	0.45	ug/kg	0.12	0.037	1	10/10/24 13:08	10/11/24 21:32	335-77-3	
PFDoS	0.56	ug/kg	0.12	0.031	1	10/10/24 13:08	10/11/24 21:32	79780-39-5	
PFHpS	<0.031	ug/kg	0.12	0.031	1	10/10/24 13:08	10/11/24 21:32	375-92-8	
PFNS	0.18	ug/kg	0.12	0.035	1	10/10/24 13:08	10/11/24 21:32	68259-12-1	
PFOSA	0.10J	ug/kg	0.13	0.019	1	10/10/24 13:08	10/11/24 21:32	754-91-6	
PFPeA	<0.023	ug/kg	0.13	0.023	1	10/10/24 13:08	10/11/24 21:32	2706-90-3	
PFPeS	<0.015	ug/kg	0.12	0.015	1	10/10/24 13:08	10/11/24 21:32	2706-91-4	
PFDoA	0.15	ug/kg	0.13	0.030	1	10/10/24 13:08	10/11/24 21:32	307-55-1	
PFHpA	<0.013	ug/kg	0.13	0.013	1	10/10/24 13:08	10/11/24 21:32	375-85-9	
PFHxS	0.33	ug/kg	0.12	0.014	1	10/10/24 13:08	10/11/24 21:32	355-46-4	
PFNA	<0.023	ug/kg	0.13	0.023	1	10/10/24 13:08	10/11/24 21:32	375-95-1	
PFOS	3.8	ug/kg	0.12	0.056	1	10/10/24 13:08	10/11/24 21:32	1763-23-1	
PFOA	0.027J	ug/kg	0.13	0.016	1	10/10/24 13:08	10/11/24 21:32	335-67-1	
PFTeDA	<0.020	ug/kg	0.13	0.020	1	10/10/24 13:08	10/11/24 21:32	376-06-7	
PFTTrDA	<0.027	ug/kg	0.13	0.027	1	10/10/24 13:08	10/11/24 21:32	72629-94-8	
PFUnA	<0.043	ug/kg	0.13	0.043	1	10/10/24 13:08	10/11/24 21:32	2058-94-8	
Surrogates									
13C2-PFDoA (S)	114	%	25-150		1	10/10/24 13:08	10/11/24 21:32		1M
13C2-PFTA (S)	113	%	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C24:2FTS (S)	90	%	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C26:2FTS (S)	112	%	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C28:2FTS (S)	210	%	25-150		1	10/10/24 13:08	10/11/24 21:32		S0

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: East ditch Soil Lab ID: 10710098004 Collected: 09/26/24 10:31 Received: 10/02/24 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL									
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178									
Initial Volume/Weight: 5.223 g Final Volume/Weight: 1 mL									
Pace Analytical Services - Minneapolis									
Surrogates									
13C3-PFBS (S)	111	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C3-PFHxS (S)	111	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C3HFPO-DA (S)	97	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C4-PFBA (S)	93	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C4-PFHpA (S)	107	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C5-PFHxA (S)	109	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C5-PFPeA (S)	92	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C6-PFDA (S)	126	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C7-PFUDa (S)	118	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C8-PFOA (S)	108	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C8-PFOS (S)	108	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C8-PFOSA (S)	49	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
13C9-PFNA (S)	108	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
d3-MeFOSAA (S)	129	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
d3-NMeFOSA (S)	8	%.	10-150		1	10/10/24 13:08	10/11/24 21:32		S0
d5-EtFOSAA (S)	128	%.	25-150		1	10/10/24 13:08	10/11/24 21:32		
d5-NEtFOSA (S)	6	%.	10-150		1	10/10/24 13:08	10/11/24 21:32		S0
d7-NMeFOSE (S)	20	%.	10-150		1	10/10/24 13:08	10/11/24 21:32		
d9-NEtFOSE (S)	16	%.	10-150		1	10/10/24 13:08	10/11/24 21:32		

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: West ditch Soil Lab ID: 10710098005 Collected: 09/26/24 10:36 Received: 10/02/24 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974									
Analytical Method: ASTM D2974									
Pace Analytical Services - Minneapolis									
Percent Moisture	18.4	%	0.10	0.10	1		10/09/24 14:02		N2
WI ID SL									
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178									
Initial Volume/Weight: 5.194 g Final Volume/Weight: 1 mL									
Pace Analytical Services - Minneapolis									
11Cl-PF3OUdS	<0.020	ug/kg	0.11	0.020	1	10/10/24 13:08	10/11/24 21:39	763051-92-9	
4:2 FTS	<0.015	ug/kg	0.11	0.015	1	10/10/24 13:08	10/11/24 21:39	757124-72-4	
6:2 FTS	<0.024	ug/kg	0.11	0.024	1	10/10/24 13:08	10/11/24 21:39	27619-97-2	
8:2 FTS	<0.048	ug/kg	0.11	0.048	1	10/10/24 13:08	10/11/24 21:39	39108-34-4	
9Cl-PF3ONS	<0.021	ug/kg	0.11	0.021	1	10/10/24 13:08	10/11/24 21:39	756426-58-1	
ADONA	<0.013	ug/kg	0.11	0.013	1	10/10/24 13:08	10/11/24 21:39	919005-14-4	
HFPO-DA	<0.021	ug/kg	0.12	0.021	1	10/10/24 13:08	10/11/24 21:39	13252-13-6	
NEtFOSAA	<0.020	ug/kg	0.12	0.020	1	10/10/24 13:08	10/11/24 21:39	2991-50-6	
NEtFOSA	<0.027	ug/kg	0.12	0.027	1	10/10/24 13:08	10/11/24 21:39	4151-50-2	
NEtFOSE	<0.024	ug/kg	0.12	0.024	1	10/10/24 13:08	10/11/24 21:39	1691-99-2	
NMeFOSAA	<0.050	ug/kg	0.12	0.050	1	10/10/24 13:08	10/11/24 21:39	2355-31-9	
NMeFOSA	<0.042	ug/kg	0.12	0.042	1	10/10/24 13:08	10/11/24 21:39	31506-32-8	
NMeFOSE	<0.023	ug/kg	0.12	0.023	1	10/10/24 13:08	10/11/24 21:39	24448-09-7	
PFBS	0.56	ug/kg	0.10	0.015	1	10/10/24 13:08	10/11/24 21:39	375-73-5	
PFDA	0.13	ug/kg	0.12	0.020	1	10/10/24 13:08	10/11/24 21:39	335-76-2	
PFHxA	2.7	ug/kg	0.12	0.017	1	10/10/24 13:08	10/11/24 21:39	307-24-4	
PFBA	0.59	ug/kg	0.12	0.036	1	10/10/24 13:08	10/11/24 21:39	375-22-4	
PFDS	3.0	ug/kg	0.11	0.034	1	10/10/24 13:08	10/11/24 21:39	335-77-3	
PFDoS	3.5	ug/kg	0.11	0.028	1	10/10/24 13:08	10/11/24 21:39	79780-39-5	
PFHpS	2.0	ug/kg	0.11	0.028	1	10/10/24 13:08	10/11/24 21:39	375-92-8	
PFNS	0.92	ug/kg	0.11	0.033	1	10/10/24 13:08	10/11/24 21:39	68259-12-1	
PFOSA	1.5	ug/kg	0.12	0.018	1	10/10/24 13:08	10/11/24 21:39	754-91-6	
PFPeA	0.65	ug/kg	0.12	0.021	1	10/10/24 13:08	10/11/24 21:39	2706-90-3	
PFPeS	2.0	ug/kg	0.11	0.013	1	10/10/24 13:08	10/11/24 21:39	2706-91-4	
PFDaA	0.61	ug/kg	0.12	0.028	1	10/10/24 13:08	10/11/24 21:39	307-55-1	
PFHpA	0.52	ug/kg	0.12	0.012	1	10/10/24 13:08	10/11/24 21:39	375-85-9	
PFHxS	53.4	ug/kg	1.1	0.13	10	10/10/24 13:08	10/16/24 00:27	355-46-4	
PFNA	0.17	ug/kg	0.12	0.021	1	10/10/24 13:08	10/11/24 21:39	375-95-1	
PFOS	26.2	ug/kg	1.1	0.51	10	10/10/24 13:08	10/16/24 00:27	1763-23-1	
PFOA	1.1	ug/kg	0.12	0.014	1	10/10/24 13:08	10/11/24 21:39	335-67-1	
PFTeDA	0.027J	ug/kg	0.12	0.018	1	10/10/24 13:08	10/11/24 21:39	376-06-7	
PFTTrDA	0.060J	ug/kg	0.12	0.025	1	10/10/24 13:08	10/11/24 21:39	72629-94-8	
PFUnA	0.22	ug/kg	0.12	0.040	1	10/10/24 13:08	10/11/24 21:39	2058-94-8	
Surrogates									
13C2-PFDaA (S)	101	%	25-150		1	10/10/24 13:08	10/11/24 21:39		1M
13C2-PFTA (S)	98	%	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C24:2FTS (S)	94	%	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C26:2FTS (S)	130	%	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C28:2FTS (S)	193	%	25-150		1	10/10/24 13:08	10/11/24 21:39		S0

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Sample: West ditch Soil Lab ID: 10710098005 Collected: 09/26/24 10:36 Received: 10/02/24 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL									
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178									
Initial Volume/Weight: 5.194 g Final Volume/Weight: 1 mL									
Pace Analytical Services - Minneapolis									
Surrogates									
13C3-PFBS (S)	98	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C3-PFHxS (S)	94	%.	25-150		10	10/10/24 13:08	10/16/24 00:27		
13C3HFPO-DA (S)	84	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C4-PFBA (S)	81	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C4-PFHpA (S)	94	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C5-PFHxA (S)	98	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C5-PFPeA (S)	77	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C6-PFDA (S)	108	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C7-PFUDa (S)	109	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C8-PFOA (S)	98	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C8-PFOS (S)	95	%.	25-150		10	10/10/24 13:08	10/16/24 00:27		
13C8-PFOSA (S)	81	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
13C9-PFNA (S)	92	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
d3-MeFOSAA (S)	124	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
d3-NMeFOSA (S)	33	%.	10-150		1	10/10/24 13:08	10/11/24 21:39		
d5-EtFOSAA (S)	125	%.	25-150		1	10/10/24 13:08	10/11/24 21:39		
d5-NEtFOSA (S)	29	%.	10-150		1	10/10/24 13:08	10/11/24 21:39		
d7-NMeFOSE (S)	61	%.	10-150		1	10/10/24 13:08	10/11/24 21:39		
d9-NEtFOSE (S)	44	%.	10-150		1	10/10/24 13:08	10/11/24 21:39		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

QC Batch:	972581	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight / %M by ASTM D2974
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10710098003, 10710098004, 10710098005

SAMPLE DUPLICATE: 5082540

Parameter	Units	10710868001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	26.4	25.7	3	30	N2

SAMPLE DUPLICATE: 5082541

Parameter	Units	10710868011 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	21.8	21.0	4	30	N2

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: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

QC Batch: 972825

Analysis Method: ENV-SOP-MIN4-0178

QC Batch Method: ENV-SOP-MIN4-0178

Analysis Description: WI ID NPW

Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10710098001, 10710098002

METHOD BLANK: 5083866

Matrix: Water

Associated Lab Samples: 10710098001, 10710098002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
11CI-PF3OUdS	ug/L	<0.00041	0.0019	10/15/24 17:14	
4:2 FTS	ug/L	<0.00037	0.0019	10/15/24 17:14	
6:2 FTS	ug/L	0.00064J	0.0019	10/15/24 17:14	
8:2 FTS	ug/L	<0.00080	0.0020	10/15/24 17:14	
9CI-PF3ONS	ug/L	<0.00036	0.0019	10/15/24 17:14	
ADONA	ug/L	<0.00032	0.0019	10/15/24 17:14	
HFPO-DA	ug/L	<0.00025	0.0020	10/15/24 17:14	
NEtFOSA	ug/L	<0.00046	0.0020	10/15/24 17:14	
NEtFOSAA	ug/L	<0.00057	0.0020	10/15/24 17:14	
NEtFOSE	ug/L	<0.00061	0.0020	10/15/24 17:14	
NMeFOSA	ug/L	<0.00063	0.0020	10/15/24 17:14	
NMeFOSAA	ug/L	<0.00079	0.0020	10/15/24 17:14	
NMeFOSE	ug/L	<0.00049	0.0020	10/15/24 17:14	
PFBA	ug/L	<0.00028	0.0020	10/15/24 17:14	
PFBS	ug/L	<0.00021	0.0018	10/15/24 17:14	
PFDA	ug/L	<0.00025	0.0020	10/15/24 17:14	
PFDaA	ug/L	<0.00044	0.0020	10/15/24 17:14	
PFDoS	ug/L	<0.00054	0.0020	10/15/24 17:14	
PFDS	ug/L	<0.00057	0.0020	10/15/24 17:14	
PFHpA	ug/L	<0.00024	0.0020	10/15/24 17:14	
PFHpS	ug/L	<0.00064	0.0019	10/15/24 17:14	
PFHxA	ug/L	<0.00038	0.0020	10/15/24 17:14	
PFHxS	ug/L	<0.00024	0.0018	10/15/24 17:14	
PFNA	ug/L	<0.00021	0.0020	10/15/24 17:14	
PFNS	ug/L	<0.00048	0.0019	10/15/24 17:14	
PFOA	ug/L	<0.00027	0.0020	10/15/24 17:14	
PFOS	ug/L	<0.00052	0.0019	10/15/24 17:14	
PFOSA	ug/L	<0.00040	0.0020	10/15/24 17:14	
PFPeA	ug/L	<0.00018	0.0020	10/15/24 17:14	
PFPeS	ug/L	<0.00026	0.0019	10/15/24 17:14	
PFTeDA	ug/L	<0.00036	0.0020	10/15/24 17:14	
PFTTrDA	ug/L	<0.00029	0.0020	10/15/24 17:14	
PfUnA	ug/L	<0.00065	0.0020	10/15/24 17:14	
13C2-PFDaA (S)	%.	120	25-150	10/15/24 17:14	
13C2-PFTA (S)	%.	113	25-150	10/15/24 17:14	
13C24:2FTS (S)	%.	126	25-150	10/15/24 17:14	
13C26:2FTS (S)	%.	126	25-150	10/15/24 17:14	
13C28:2FTS (S)	%.	272	25-150	10/15/24 17:14	S3
13C2PFHxDA (S)	%.	88	25-150	10/15/24 17:14	
13C3-PFBS (S)	%.	129	25-150	10/15/24 17:14	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

METHOD BLANK: 5083866

Matrix: Water

Associated Lab Samples: 10710098001, 10710098002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
13C3-PFHxS (S)	%.	123	25-150	10/15/24 17:14	
13C3HFPO-DA (S)	%.	107	25-150	10/15/24 17:14	
13C4-PFBA (S)	%.	123	25-150	10/15/24 17:14	
13C4-PFHpA (S)	%.	122	25-150	10/15/24 17:14	
13C5-PFHxA (S)	%.	121	25-150	10/15/24 17:14	
13C5-PFPeA (S)	%.	125	25-150	10/15/24 17:14	
13C6-PFDA (S)	%.	135	25-150	10/15/24 17:14	
13C7-PFUdA (S)	%.	123	25-150	10/15/24 17:14	
13C8-PFOA (S)	%.	124	25-150	10/15/24 17:14	
13C8-PFOS (S)	%.	121	25-150	10/15/24 17:14	
13C8-PFOSA (S)	%.	116	25-150	10/15/24 17:14	
13C9-PFNA (S)	%.	120	25-150	10/15/24 17:14	
d3-MeFOSAA (S)	%.	110	25-150	10/15/24 17:14	
d3-NMeFOSA (S)	%.	91	20-150	10/15/24 17:14	
d5-EtFOSAA (S)	%.	112	25-150	10/15/24 17:14	
d5-NEtFOSA (S)	%.	94	20-150	10/15/24 17:14	
d7-NMeFOSE (S)	%.	104	20-150	10/15/24 17:14	
d9-NEtFOSE (S)	%.	102	20-150	10/15/24 17:14	

LABORATORY CONTROL SAMPLE & LCSD: 5083867

5083868

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
11Cl-PF3OUdS	ug/L	0.0038	0.0031	0.0032	81	85	50-150	3	30	
4:2 FTS	ug/L	0.0038	0.0035	0.0033	92	88	50-150	7	30	
6:2 FTS	ug/L	0.0039	0.0034	0.0035	89	94	50-150	3	30	
8:2 FTS	ug/L	0.0039	0.0034	0.0033	88	88	50-150	2	30	
9Cl-PF3ONS	ug/L	0.0038	0.0033	0.0033	87	90	50-150	1	30	
ADONA	ug/L	0.0038	0.0034	0.0032	88	85	50-150	6	30	
HFPO-DA	ug/L	0.0041	0.0036	0.0033	89	83	50-150	9	30	
NEtFOSA	ug/L	0.0041	0.0036	0.0035	90	88	50-150	4	30	
NEtFOSAA	ug/L	0.0041	0.0035	0.0036	86	91	50-150	3	30	
NEtFOSE	ug/L	0.0041	0.0035	0.0038	85	95	50-150	9	30	
NMeFOSA	ug/L	0.0041	0.0035	0.0036	85	91	50-150	4	30	
NMeFOSAA	ug/L	0.0041	0.0042	0.0036	103	91	50-150	15	30	
NMeFOSE	ug/L	0.0041	0.0036	0.0036	90	90	50-150	2	30	
PFBA	ug/L	0.0041	0.0037	0.0035	91	89	50-150	5	30	
PFBS	ug/L	0.0036	0.0034	0.0031	94	89	50-150	8	30	
PFDA	ug/L	0.0041	0.0037	0.0035	90	88	50-150	5	30	
PFDoA	ug/L	0.0041	0.0037	0.0037	90	93	50-150	1	30	
PFDoS	ug/L	0.0039	0.0028	0.0028	71	74	50-150	1	30	
PFDS	ug/L	0.0039	0.0031	0.0033	78	86	50-150	8	30	
PFHpA	ug/L	0.0041	0.0036	0.0035	88	87	50-150	3	30	
PFHpS	ug/L	0.0039	0.0038	0.0036	97	96	50-150	3	30	
PFHxA	ug/L	0.0041	0.0037	0.0035	92	89	50-150	6	30	

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QUALITY CONTROL DATA

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

LABORATORY CONTROL SAMPLE & LCSD: 5083867			5083868							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PFHxS	ug/L	0.0037	0.0033	0.0033	90	91	50-150	2	30	
PFNA	ug/L	0.0041	0.0037	0.0036	91	92	50-150	1	30	
PFNS	ug/L	0.0039	0.0035	0.0034	90	91	50-150	2	30	
PFOA	ug/L	0.0041	0.0037	0.0035	91	88	50-150	6	30	
PFOS	ug/L	0.0038	0.0034	0.0035	90	94	50-150	2	30	
PFOSA	ug/L	0.0041	0.0039	0.0034	96	85	50-150	14	30	
PFPeA	ug/L	0.0041	0.0036	0.0035	89	88	50-150	4	30	
PFPeS	ug/L	0.0038	0.0034	0.0033	88	89	50-150	2	30	
PFTeDA	ug/L	0.0041	0.0035	0.0035	87	89	50-150	0	30	
PFTrDA	ug/L	0.0041	0.0035	0.0033	87	84	50-150	6	30	
PFUnA	ug/L	0.0041	0.0038	0.0033	93	84	50-150	13	30	
13C2-PFDoA (S)	%				113	123	25-150			
13C2-PFTA (S)	%				114	107	25-150			
13C24:2FTS (S)	%				117	130	25-150			
13C26:2FTS (S)	%				132	129	25-150			
13C28:2FTS (S)	%				200	235	25-150			S0
13C2PFHxDA (S)	%				76	71	25-150			
13C3-PFBS (S)	%				124	132	25-150			
13C3-PFHxS (S)	%				123	124	25-150			
13C3HFPO-DA (S)	%				105	118	25-150			
13C4-PFBA (S)	%				117	122	25-150			
13C4-PFHpA (S)	%				118	125	25-150			
13C5-PFHxA (S)	%				117	124	25-150			
13C5-PFPeA (S)	%				121	124	25-150			
13C6-PFDA (S)	%				129	140	25-150			
13C7-PFUDa (S)	%				119	129	25-150			
13C8-PFOA (S)	%				121	129	25-150			
13C8-PFOS (S)	%				120	121	25-150			
13C8-PFOSA (S)	%				111	118	25-150			
13C9-PFNA (S)	%				122	128	25-150			
d3-MeFOSAA (S)	%				109	116	25-150			
d3-NMeFOSA (S)	%				65	76	20-150			
d5-EtFOSAA (S)	%				121	120	25-150			
d5-NEtFOSA (S)	%				66	73	20-150			
d7-NMeFOSE (S)	%				91	102	20-150			
d9-NEtFOSE (S)	%				93	101	20-150			

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QUALITY CONTROL DATA

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

QC Batch:	972819	Analysis Method:	ENV-SOP-MIN4-0178
QC Batch Method:	ENV-SOP-MIN4-0178	Analysis Description:	WI ID SL
		Laboratory:	Pace Analytical Services - Minneapolis

Associated Lab Samples: 10710098003, 10710098004, 10710098005

METHOD BLANK: 5083844 Matrix: Solid

Associated Lab Samples: 10710098003, 10710098004, 10710098005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
11CI-PF3OUdS	ug/kg	<0.017	0.094	10/11/24 18:53	
4:2 FTS	ug/kg	<0.012	0.094	10/11/24 18:53	
6:2 FTS	ug/kg	<0.020	0.095	10/11/24 18:53	
8:2 FTS	ug/kg	<0.040	0.097	10/11/24 18:53	
9CI-PF3ONS	ug/kg	<0.018	0.093	10/11/24 18:53	
ADONA	ug/kg	<0.011	0.095	10/11/24 18:53	
HFPO-DA	ug/kg	<0.018	0.10	10/11/24 18:53	
NEtFOSA	ug/kg	<0.023	0.10	10/11/24 18:53	
NEtFOSAA	ug/kg	<0.017	0.10	10/11/24 18:53	
NEtFOSE	ug/kg	<0.021	0.10	10/11/24 18:53	
NMeFOSA	ug/kg	<0.036	0.10	10/11/24 18:53	
NMeFOSAA	ug/kg	<0.042	0.10	10/11/24 18:53	
NMeFOSE	ug/kg	<0.020	0.10	10/11/24 18:53	
PFBA	ug/kg	<0.030	0.10	10/11/24 18:53	
PFBS	ug/kg	<0.013	0.089	10/11/24 18:53	
PFDA	ug/kg	<0.017	0.10	10/11/24 18:53	
PFDoA	ug/kg	<0.024	0.10	10/11/24 18:53	
PFDoS	ug/kg	<0.024	0.097	10/11/24 18:53	
PFDS	ug/kg	<0.029	0.097	10/11/24 18:53	
PFHpA	ug/kg	<0.010	0.10	10/11/24 18:53	
PFHpS	ug/kg	<0.024	0.095	10/11/24 18:53	
PFHxA	ug/kg	<0.014	0.10	10/11/24 18:53	
PFHxS	ug/kg	<0.011	0.091	10/11/24 18:53	
PFNA	ug/kg	<0.018	0.10	10/11/24 18:53	
PFNS	ug/kg	<0.028	0.096	10/11/24 18:53	
PFOA	ug/kg	<0.012	0.10	10/11/24 18:53	
PFOS	ug/kg	<0.043	0.093	10/11/24 18:53	
PFOSA	ug/kg	<0.015	0.10	10/11/24 18:53	
PFPeA	ug/kg	<0.018	0.10	10/11/24 18:53	
PFPeS	ug/kg	<0.011	0.094	10/11/24 18:53	
PFTeDA	ug/kg	<0.016	0.10	10/11/24 18:53	
PFTTrDA	ug/kg	<0.021	0.10	10/11/24 18:53	
PFUnA	ug/kg	<0.034	0.10	10/11/24 18:53	
13C2-PFDoA (S)	%.	107	25-150	10/11/24 18:53	
13C2-PFTA (S)	%.	100	25-150	10/11/24 18:53	
13C24:2FTS (S)	%.	93	25-150	10/11/24 18:53	
13C26:2FTS (S)	%.	109	25-150	10/11/24 18:53	
13C28:2FTS (S)	%.	130	25-150	10/11/24 18:53	
13C2PFHxDA (S)	%.	95	25-150	10/11/24 18:53	
13C3-PFBS (S)	%.	107	25-150	10/11/24 18:53	

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QUALITY CONTROL DATA

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

METHOD BLANK: 5083844

Matrix: Solid

Associated Lab Samples: 10710098003, 10710098004, 10710098005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
13C3-PFHxS (S)	%	103	25-150	10/11/24 18:53	
13C3HFPO-DA (S)	%	95	25-150	10/11/24 18:53	
13C4-PFBA (S)	%	92	25-150	10/11/24 18:53	
13C4-PFHpA (S)	%	101	25-150	10/11/24 18:53	
13C5-PFHxA (S)	%	101	25-150	10/11/24 18:53	
13C5-PFPeA (S)	%	94	25-150	10/11/24 18:53	
13C6-PFDA (S)	%	111	25-150	10/11/24 18:53	
13C7-PFUdA (S)	%	106	25-150	10/11/24 18:53	
13C8-PFOA (S)	%	100	25-150	10/11/24 18:53	
13C8-PFOS (S)	%	107	25-150	10/11/24 18:53	
13C8-PFOSA (S)	%	94	25-150	10/11/24 18:53	
13C9-PFNA (S)	%	103	25-150	10/11/24 18:53	
d3-MeFOSAA (S)	%	101	25-150	10/11/24 18:53	
d3-NMeFOSA (S)	%	45	20-150	10/11/24 18:53	
d5-EtFOSAA (S)	%	105	25-150	10/11/24 18:53	
d5-NEtFOSA (S)	%	47	20-150	10/11/24 18:53	
d7-NMeFOSE (S)	%	58	20-150	10/11/24 18:53	
d9-NEtFOSE (S)	%	58	20-150	10/11/24 18:53	

LABORATORY CONTROL SAMPLE & LCSD: 5083845

5083846

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
11CI-PF3OUdS	ug/kg	0.19	0.16	0.15	84	81	50-150	4	30	
4:2 FTS	ug/kg	0.19	0.17	0.16	89	84	50-150	6	30	
6:2 FTS	ug/kg	0.19	0.16	0.17	85	87	50-150	3	30	
8:2 FTS	ug/kg	0.19	0.16	0.15	85	77	50-150	11	30	
9CI-PF3ONS	ug/kg	0.19	0.15	0.17	82	88	50-150	7	30	
ADONA	ug/kg	0.19	0.16	0.16	87	87	50-150	0	30	
HFPO-DA	ug/kg	0.2	0.17	0.16	86	81	50-150	6	30	
NEtFOSA	ug/kg	0.2	0.19	0.18	95	89	50-150	6	30	
NEtFOSAA	ug/kg	0.2	0.18	0.20	91	99	50-150	9	30	
NEtFOSE	ug/kg	0.2	0.19	0.18	93	89	50-150	4	30	
NMeFOSA	ug/kg	0.2	0.16	0.17	78	84	50-150	7	30	
NMeFOSAA	ug/kg	0.2	0.17	0.16	86	79	50-150	8	30	
NMeFOSE	ug/kg	0.2	0.21	0.17	104	86	50-150	18	30	
PFBA	ug/kg	0.2	0.19	0.18	93	90	50-150	3	30	
PFBS	ug/kg	0.18	0.16	0.15	90	87	50-150	4	30	
PFDA	ug/kg	0.2	0.16	0.17	81	85	50-150	4	30	
PFDoA	ug/kg	0.2	0.18	0.18	89	91	50-150	1	30	
PFDoS	ug/kg	0.19	0.15	0.17	79	86	50-150	9	30	
PFDS	ug/kg	0.19	0.17	0.17	87	88	50-150	0	30	
PFHpA	ug/kg	0.2	0.17	0.17	87	86	50-150	1	30	
PFHpS	ug/kg	0.19	0.19	0.15	98	81	50-150	19	30	
PFHxA	ug/kg	0.2	0.18	0.17	91	87	50-150	5	30	

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QUALITY CONTROL DATA

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

LABORATORY CONTROL SAMPLE & LCSD: 5083845			5083846							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PFHxS	ug/kg	0.18	0.16	0.17	89	92	50-150	4	30	
PFNA	ug/kg	0.2	0.18	0.16	92	82	50-150	12	30	
PFNS	ug/kg	0.19	0.17	0.19	86	99	50-150	14	30	
PFOA	ug/kg	0.2	0.19	0.19	95	95	50-150	0	30	
PFOS	ug/kg	0.19	0.16	0.16	87	87	50-150	0	30	
PFOSA	ug/kg	0.2	0.19	0.19	94	97	50-150	3	30	
PFPeA	ug/kg	0.2	0.18	0.17	89	87	50-150	3	30	
PFPeS	ug/kg	0.19	0.17	0.16	88	88	50-150	0	30	
PFTeDA	ug/kg	0.2	0.19	0.17	94	86	50-150	9	30	
PFTrDA	ug/kg	0.2	0.18	0.18	88	90	50-150	2	30	
PFUnA	ug/kg	0.2	0.18	0.17	91	83	50-150	9	30	
13C2-PFDoA (S)	%				99	99	25-150			
13C2-PFTA (S)	%				94	98	25-150			
13C24:2FTS (S)	%				85	94	25-150			
13C26:2FTS (S)	%				104	99	25-150			
13C28:2FTS (S)	%				120	133	25-150			
13C2PFHxDA (S)	%				93	94	25-150			
13C3-PFBS (S)	%				102	105	25-150			
13C3-PFHxS (S)	%				99	100	25-150			
13C3HFPO-DA (S)	%				87	94	25-150			
13C4-PFBA (S)	%				87	91	25-150			
13C4-PFHpA (S)	%				94	98	25-150			
13C5-PFHxA (S)	%				95	98	25-150			
13C5-PFPeA (S)	%				89	93	25-150			
13C6-PFDA (S)	%				109	110	25-150			
13C7-PFUDa (S)	%				99	101	25-150			
13C8-PFOA (S)	%				95	98	25-150			
13C8-PFOS (S)	%				105	103	25-150			
13C8-PFOSA (S)	%				73	89	25-150			
13C9-PFNA (S)	%				94	101	25-150			
d3-MeFOSAA (S)	%				96	104	25-150			
d3-NMeFOSA (S)	%				64	93	20-150			
d5-EtFOSAA (S)	%				99	102	25-150			
d5-NEtFOSA (S)	%				63	93	20-150			
d7-NMeFOSE (S)	%				63	85	20-150			
d9-NEtFOSE (S)	%				67	84	20-150			

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QUALIFIERS

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

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.

WORKORDER QUALIFIERS

WO: 10710098

- [1] L4 PFAS
- [2] The quality system for Pace Analytical Services, LLC in Minneapolis, MN (Pace-MN) has been audited and was found to be in conformance with ISO/IEC 17025:2017 by an independent assessment (A2LA Certificate # 2926). The PFAS test results in non-drinking water for this project are not covered by this accreditation. Pace-MN maintains accreditation with the state of Wisconsin for their isotope dilution analysis as defined in ENV-SOP-MIN4-0178 under certificate number 999407970. All of the test results for this project are covered by the Wisconsin accreditation.

ANALYTE QUALIFIERS

- 1M All narrated results associated with this sample confirmed through secondary analysis.
- 2M All narrated results associated with this sample confirmed through secondary analysis. Extracted Internal Standards (EIS) with 0% recovery are confirmed based on their low detections meeting signal to noise criteria described in the laboratories SOP.
- N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
- S0 Surrogate recovery outside laboratory control limits.
- S3 Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: E24-0544 3M Menomonie Soil&GW-Revised Report

Pace Project No.: 10710098

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10710098003	Soil Adjacent to Hydrant	ASTM D2974	972581		
10710098004	East ditch Soil	ASTM D2974	972581		
10710098005	West ditch Soil	ASTM D2974	972581		
10710098001	Ditch Water Sample 1	ENV-SOP-MIN4-0178	972825	ENV-SOP-MIN4-0178	974062
10710098002	Ditch Water Sample 2	ENV-SOP-MIN4-0178	972825	ENV-SOP-MIN4-0178	974062
10710098003	Soil Adjacent to Hydrant	ENV-SOP-MIN4-0178	972819	ENV-SOP-MIN4-0178	973495
10710098004	East ditch Soil	ENV-SOP-MIN4-0178	972819	ENV-SOP-MIN4-0178	973495
10710098005	West ditch Soil	ENV-SOP-MIN4-0178	972819	ENV-SOP-MIN4-0178	973495

REPORT OF LABORATORY ANALYSIS

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3M Global EHS Laboratory

Chain of Custody / Request for Analytical

Project: E24-0544

Sample Shipping Address

Pace Analytical Services, LLC - Minneapolis

1700 Elm St SE
Minneapolis, MN 55414
Attn: Martha Hansen

Project Description: 3M Menomonic Soil & GW Release

Project Requester

Chambers, Britta (MAPLEWOOD-3MUS-MN 3M CENTER)
Department: 530711 Site Source: 01J9C020
Project Created: 10/1/2024

3M Project Lead

Amanda Albrecht
Email Address: aalbrecht2@mmm.com
Phone Number: 651-736-9414

Number of Containers

Item	3M Sample Number	Sample Description	Date/Time Sampled	Matrix	Type of Sample	Sample Comment	Record each container type/ preservative collected
1	E24-0544-001	Ditch Water Sample 1	9-26-24 10:14	WT	☒ Grab ☐ Comp		001
2	E24-0544-002	Ditch Water Sample 2	9-26-24 10:19	WT	☒ Grab ☐ Comp		002
3	E24-0544-003	Soil Adjacent to Hydrant	9-26-24 10:25	SOIL	☒ Grab ☐ Comp		003
4	E24-0544-004	East ditch Soil	9-26-24 10:31	SOIL	☒ Grab ☐ Comp		004
5	E24-0544-005	West ditch Soil	9-26-24 10:36	SOIL	☒ Grab ☐ Comp		005

WO#: 10710098



10710098

Collected by (print): L. Jane Ballard				Collector's signature:				Comments			
Item	Relinquished by:	Date	Time	Shipped Via	Received by:	Date	Time				
15	3M	11-24	13:15	FedEx		11/24	9:50				

Contact EHS Lab project lead or refer to GPO for project details,
including requested tests and target analytes, if not specified.

ENV-FRM-MIN4-0150 v17_Sample Condition Upon Receipt

CLIENT NAME: 3M Global EHS Laboratory PROJECT #:

WO#: **10710098**

COURIER: ☐ Client ☐ Commercial ☒ FedEx ☐ Pace
☐ Speedee ☐ UPS ☐ USPS

PM: CT1 Due Date: 10/30/24

CLIENT: 3M ENV

TRACKING NUMBER: ☐ See Exceptions form ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present: ☒ YES ☐ NO Seals Intact: ☒ YES ☐ NO Biological Tissue Frozen: ☐ YES ☐ NO ☒ N/A

Packing Material: ☐ Bubble Bags ☒ Bubble Wrap ☐ None ☐ Other Temp Blank: ☐ YES ☒ NO Type of Ice: ☐ Blue ☐ Dry ☒ Wet

Thermometer: ☐ T1 (0461) ☐ T2 (0436) ☐ T3 (0459) ☐ T4 (0402) ☐ T5 (0178) ☐ T6 (0235)
☐ T7 (0042) ☐ T8 (0775) ☒ T9 (0727) ☐ 01339252 (1710)

☐ Melted ☐ None

Did Samples Originate in West Virginia: ☐ YES ☒ NO

Were All Container Temps taken: ☐ YES ☐ NO ☒ N/A

Correction Factor: -0.2 Cooler Temp Read w/Temp Blank: _____ °C

Average Corrected Temp (no Temp Blank Only): 1.3 °C

Cooler Temp Corrected w/Temp Blank: _____ °C

NOTE: Temp should be above freezing to 6°C.

☒ See Exceptions Form ENV-FRM-MIN4-0142 ☐ 1 Container

USDA Regulated Soil: ☐ N/A - Water Sample/Other (describe): _____

Initials & Date of Person Examining Contents: SMW 10/21/24

Did Samples originate from one of the following states (check maps) - AL, AR, AZ, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA: ☐ YES ☒ NO

Did samples originate from a foreign source (international, including Hawaii and Puerto Rico): ☐ YES ☒ NO

NOTE: If YES to either question, fill out a Regulated Soil Checklist (ENV-FRM-MIN4-0154) and include with SCUR/COC paperwork.

LOCATION (check one): ☐ DULUTH ☒ MINNEAPOLIS ☐ VIRGINIA	YES	NO	N/A	COMMENT(S)												
Chain of Custody Present and Filled Out?	☒	☐		1.												
Chain of Custody Relinquished?	☒	☐		2.												
Sampler Name and/or Signature on COC?	☒	☐	☐	3.												
Samples Arrived within Hold Time?	☒	☐		4. If Fecal: ☐ <8 hrs ☐ >8 hr, <24 hr ☐ No												
Short Hold Time Analysis (<72 hr)?	☐	☒		5. ☐ BOD / cBOD ☐ Fecal coliform ☐ Hex Chrom ☐ HPC ☐ Nitrate ☐ Nitrite ☐ Ortho Phos ☐ Total coliform/E. coli ☐ Other: _____												
Rush Turn Around Time Requested?	☐	☒		6.												
Sufficient Sample Volume?	☒	☐		7.												
Correct Containers Used?	☒	☐	☐	8.												
- Pace Containers Used?	☐	☒														
Containers Intact?	☒	☐		9.												
Field Filtered Volume Received for Dissolved Tests?	☐	☐	☒	10. Is sediment visible in the dissolved container: ☐ YES ☐ NO												
Is sufficient information available to reconcile the samples to the COC? NOTE: If ID/Date/Time don't match fill out section 11. Matrix: ☐ Oil ☒ Soil ☒ Water ☐ Other	☒	☐	☒	11. If NO, write ID/Date/Time of container below: <u>Sample 18</u> <u>SMW 10/21/24</u> <u>does not match the COC except time and date</u> ☐ See Exceptions form ENV-FRM-MIN4-0142												
All containers needing acid/base preservation have been checked? All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , < 2 pH, NaOH > 9 Sulfide, NaOH > 10 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil & Grease, DRO/8015 (water) and Dioxins/PFAS	☐	☐	☒	12. Sample #: ☐ HNO ₃ ☐ H ₂ SO ₄ ☐ NaOH ☐ Zinc Acetate Positive for Residual Chlorine: ☐ YES ☐ NO												
NOTE: If adding preservation to the container, verify with the PM first. Clients may require adding preservative to the field and equipment blanks when this occurs.				<table border="1"> <thead> <tr> <th colspan="4">pH Paper Lot #</th> </tr> <tr> <th>Residual Chlorine</th> <th>0-6 Roll</th> <th>0-6 Strip</th> <th>0-14 Strip</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> ☐ See Exceptions form ENV-FRM-MIN4-0142	pH Paper Lot #				Residual Chlorine	0-6 Roll	0-6 Strip	0-14 Strip				
pH Paper Lot #																
Residual Chlorine	0-6 Roll	0-6 Strip	0-14 Strip													
Headspace in Methyl Mercury Container?	☐	☐	☒	13.												
Extra labels present on soil VOA or WIDRO containers?	☐	☐	☒	14.												
Headspace in VOA Vials (greater than 6mm)?	☐	☐	☒	☐ See Exceptions form ENV-FRM-MIN4-0140												
Trip Blanks Present?	☐	☒	☐	15.												
Trip Blank Custody Seals Present?	☐	☐	☒	Pace Trip Blank Lot # (if purchased): _____												

CLIENT NOTIFICATION / RESOLUTION

FIELD DATA REQUIRED: ☐ YES ☐ NO

Person Contacted: _____ Date & Time: _____

Comments / Resolution: _____

Project Manager Review: Carolynne Trout

Date: 10/3/24

NOTE: When there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEQ Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled By: SMW Line: 2

Workorder #: _____

No Temp Blank		
Read Temp	Corrected Temp	Average temp
0.9	0.7	1.3
0.7	0.5	
0.9	0.7	
3.4	3.2	

PM Notified of Out of Temp Cooler? ☐ YES ☐ NO If yes, indicate who was contacted, date and time. If no, indicate reason why. _____
Multiple Cooler Project? ☐ YES ☐ NO

If anything is OVER 6.0°C, you **MUST** document containers in this section **HERE**



Tracking Number	Temperature



Out of Temp Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples										
Sample ID	Type Of Preserve	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance After Addition?		Initials
								YES	NO	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	

Comments:

Workorder #: _____

No Temp Blank		
Read Temp	Corrected Temp	Average temp

PM Notified of Out of Temp Cooler? ☐ YES ☐ NO If yes, indicate who was contacted, date and time. If no, indicate reason why. _____
Multiple Cooler Project? ☐ YES ☐ NO

If anything is OVER 6.0°C, you **MUST** document containers in this section HERE



Tracking Number	Temperature



Out of Temp Sample ID	^{Date} Container Type	^{Time} # of Containers
South Stormwater Spill	9/26/24	10:14
South Stormwater Ditch Dip		10:19
Hydramat 6 leaks Soil		1025
Soil South Ditch Start		1031 AM
Soil South Stormwater End	✓	1036 AM

pH Adjustment Log for Preserved Samples

Sample ID	Type Of Preserve	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance After Addition?		Initials
								YES	NO	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	
								☐	☐	

Comments:
