From: Reif, Maizie L - DNR
Sent: Thursday, October 16, 2025 9:49 AM
To: Bradley Luedtke
Cc: Pat Gareau; Janice Neitzel; Zeichert, Timothy A - DNR
Subject: RE: 3M Menomonie 6-14-25 Sampling Results and Follow Up

Good morning,

Thank you for the documentation of the immediate actions conducted on this spill incident (20250615WC17-1). As outlined previously, further investigation and remediation of this area will be overseen under the existing Environmental Repair Case BRRTS# 02-17-590808 with Project Manager Tim Zeichert.

Please reach out with any questions.

Thank you,

Maizie Reif
Phone:920-360-4291
Maizie.reif@wisconsin.gov

Our core values include professionalism, integrity, and customer service.
Please visit our survey to provide feedback on your experience interacting with any DNR employee.

From: Bradley Luedtke <bdluedtke@mmm.com>
Sent: Friday, August 8, 2025 9:22 AM
To: Reif, Maizie L - DNR <Maizie.Reif@wisconsin.gov>
Cc: Pat Gareau <US332421@mmm.com>; Janice Neitzel <jmneitzel@mmm.com>
Subject: 3M Menomonie 6-14-25 Sampling Results and Follow Up

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Maizie,

See attached for the response per your 6-18-2025 request regarding the 6-14-25 fire protection system release.

Please contact me or Pat Gareau with any questions.

Regards

Brad Luedtke | Environmental Engineer
USAC EHS
3M Menomonie | Menomonie, WI 54751 | United States
Office: +1 715 578 2318
bdluedtke@mmm.com

3M.com

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

July 11, 2025

Brad Luedtke
3M FMSCO Division
1425 Stokke Pkwy
Menomonie, WI 54751

RE: Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Dear Brad Luedtke:

Enclosed are the analytical results for sample(s) received by the laboratory on June 18, 2025. 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

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

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

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
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 via A2LA #: R-036
North Dakota Certification via 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

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SAMPLE SUMMARY

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10739125001	**Soil Sample 1**	Solid	06/15/25 11:02	06/18/25 08:50
10739125002	**Soil Sample 2**	Solid	06/15/25 11:10	06/18/25 08:50
10739125003	**Water Sample 1**	Water	06/15/25 11:20	06/18/25 08:50

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SAMPLE ANALYTE COUNT

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10739125001	**Soil Sample 1**	ASTM D2974	JDL	1
		EPA 1633	CS4	65
10739125002	**Soil Sample 2**	ASTM D2974	JDL	1
		EPA 1633	CS4	65
10739125003	**Water Sample 1**	EPA 1633	NBH	65

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
10739125001	**Soil Sample 1**					
ASTM D2974	Percent Moisture	7.7	%	0.10	06/23/25 13:05	N2
EPA 1633	PFBS	0.13J	ug/kg	0.20	07/03/25 22:21	
EPA 1633	PFHxA	0.23	ug/kg	0.20	07/03/25 22:21	
EPA 1633	PFOSA	0.056J	ug/kg	0.20	07/03/25 22:21	
EPA 1633	PFPeS	0.070J	ug/kg	0.20	07/03/25 22:21	
EPA 1633	PFHxS	0.31	ug/kg	0.20	07/03/25 22:21	
EPA 1633	PFOS	6.7	ug/kg	0.20	07/03/25 22:21	
10739125002	**Soil Sample 2**					
ASTM D2974	Percent Moisture	32.2	%	0.10	06/23/25 13:05	N2
EPA 1633	PFBS	0.14J	ug/kg	0.20	07/03/25 23:03	
EPA 1633	PFDA	0.065J	ug/kg	0.20	07/03/25 23:03	
EPA 1633	PFHxA	0.18J	ug/kg	0.20	07/03/25 23:03	
EPA 1633	PFPeS	0.058J	ug/kg	0.20	07/03/25 23:03	
EPA 1633	PFDoA	0.10J	ug/kg	0.20	07/03/25 23:03	
EPA 1633	PFHxS	0.15J	ug/kg	0.20	07/03/25 23:03	
EPA 1633	PFOS	0.72	ug/kg	0.20	07/03/25 23:03	
EPA 1633	PFUnA	0.079J	ug/kg	0.20	07/03/25 23:03	
10739125003	**Water Sample 1**					
EPA 1633	3:3 FTCA	8.2J	ng/L	15.0	07/07/25 16:43	
EPA 1633	6:2 FTS	4.9J	ng/L	12.0	07/07/25 16:43	
EPA 1633	PFBS	2400	ng/L	30.0	07/08/25 18:46	
EPA 1633	PFHxA	3180	ng/L	30.0	07/08/25 18:46	
EPA 1633	PFBA	723	ng/L	12.0	07/07/25 16:43	
EPA 1633	PFHpS	194	ng/L	3.0	07/07/25 16:43	
EPA 1633	PFMBA	2.9J	ng/L	6.0	07/07/25 16:43	
EPA 1633	PFMPA	2.7J	ng/L	6.0	07/07/25 16:43	
EPA 1633	PFNS	7.7	ng/L	3.0	07/07/25 16:43	
EPA 1633	PFOSA	33.2	ng/L	3.0	07/07/25 16:43	
EPA 1633	PFPeA	896	ng/L	6.0	07/07/25 16:43	
EPA 1633	PFPeS	1210	ng/L	30.0	07/08/25 18:46	
EPA 1633	PFHpA	226	ng/L	3.0	07/07/25 16:43	
EPA 1633	PFHxS	3080	ng/L	30.0	07/08/25 18:46	
EPA 1633	PFNA	2.1J	ng/L	3.0	07/07/25 16:43	
EPA 1633	PFOS	8500	ng/L	30.0	07/08/25 18:46	
EPA 1633	PFOA	432	ng/L	3.0	07/07/25 16:43	

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PROJECT NARRATIVE

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Date: July 11, 2025

For WIDNR, reporting of results by method EPA 1633 is equivalent to the reporting of results by method EPA 1633A for PAS-Minneapolis laboratory.

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PROJECT NARRATIVE

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Method: **EPA 1633**
Description: EPA 1633F Soil
Client: 3M Environmental
Date: July 11, 2025

General Information:
2 samples were analyzed for EPA 1633 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 1633 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:

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PROJECT NARRATIVE

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Method: **EPA 1633**
Description: EPA 1633F Water
Client: 3M Environmental
Date: July 11, 2025

General Information:
1 sample was analyzed for EPA 1633 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 1633 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: 1016670

S0: Surrogate recovery outside laboratory control limits.

- Water Sample 1 (Lab ID: 10739125003)
  - 13C8-PFOSA (S)
  - d3-NMeFOSA (S)
  - d5-NEtFOSA (S)
  - d7-NMeFOSE (S)
  - d9-NEtFOSE (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:

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PROJECT NARRATIVE

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Method: **EPA 1633**
Description: EPA 1633F Water
Client: 3M Environmental
Date: July 11, 2025

Analyte Comments:

QC Batch: 1016670

1M: 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 laboratory's SOP.

- Water Sample 1 (Lab ID: 10739125003)
  - 13C8-PFOSA (S)

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Sample: Soil Sample 1 **Lab ID: 10739125001** Collected: 06/15/25 11:02 Received: 06/18/25 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	**7.7**	%	0.10	0.10	1		06/23/25 13:05		N2
EPA 1633F Soil	Analytical Method: EPA 1633 Preparation Method: EPA 1633 Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	**<0.15**	ug/kg	0.78	0.15	1	07/03/25 09:42	07/03/25 22:21	763051-92-9	
3:3 FTCA	**<0.26**	ug/kg	0.98	0.26	1	07/03/25 09:42	07/03/25 22:21	356-02-5	
4:2 FTS	**<0.14**	ug/kg	0.78	0.14	1	07/03/25 09:42	07/03/25 22:21	757124-72-4	
5:3 FTCA	**<1.2**	ug/kg	4.9	1.2	1	07/03/25 09:42	07/03/25 22:21	914637-49-3	
6:2 FTS	**<0.20**	ug/kg	0.78	0.20	1	07/03/25 09:42	07/03/25 22:21	27619-97-2	
7:3 FTCA	**<1.1**	ug/kg	4.9	1.1	1	07/03/25 09:42	07/03/25 22:21	812-70-4	
8:2 FTS	**<0.20**	ug/kg	0.78	0.20	1	07/03/25 09:42	07/03/25 22:21	39108-34-4	
9Cl-PF3ONS	**<0.18**	ug/kg	0.78	0.18	1	07/03/25 09:42	07/03/25 22:21	756426-58-1	
ADONA	**<0.18**	ug/kg	0.78	0.18	1	07/03/25 09:42	07/03/25 22:21	919005-14-4	
HFPO-DA	**<0.19**	ug/kg	0.78	0.19	1	07/03/25 09:42	07/03/25 22:21	13252-13-6	
NEtFOSAA	**<0.072**	ug/kg	0.20	0.072	1	07/03/25 09:42	07/03/25 22:21	2991-50-6	
NEtFOSA	**<0.051**	ug/kg	0.20	0.051	1	07/03/25 09:42	07/03/25 22:21	4151-50-2	
NEtFOSE	**<0.38**	ug/kg	2.0	0.38	1	07/03/25 09:42	07/03/25 22:21	1691-99-2	
NFDHA	**<0.13**	ug/kg	0.39	0.13	1	07/03/25 09:42	07/03/25 22:21	151772-58-6	
NMeFOSAA	**<0.053**	ug/kg	0.20	0.053	1	07/03/25 09:42	07/03/25 22:21	2355-31-9	
NMeFOSA	**<0.059**	ug/kg	0.20	0.059	1	07/03/25 09:42	07/03/25 22:21	31506-32-8	
NMeFOSE	**<0.45**	ug/kg	2.0	0.45	1	07/03/25 09:42	07/03/25 22:21	24448-09-7	
PFBS	**0.13J**	ug/kg	0.20	0.037	1	07/03/25 09:42	07/03/25 22:21	375-73-5	
PFDA	**<0.046**	ug/kg	0.20	0.046	1	07/03/25 09:42	07/03/25 22:21	335-76-2	
PFHxA	**0.23**	ug/kg	0.20	0.044	1	07/03/25 09:42	07/03/25 22:21	307-24-4	
PFBA	**<0.21**	ug/kg	0.78	0.21	1	07/03/25 09:42	07/03/25 22:21	375-22-4	
PFDS	**<0.057**	ug/kg	0.20	0.057	1	07/03/25 09:42	07/03/25 22:21	335-77-3	
PFDoS	**<0.042**	ug/kg	0.20	0.042	1	07/03/25 09:42	07/03/25 22:21	79780-39-5	
PFEESA	**<0.081**	ug/kg	0.39	0.081	1	07/03/25 09:42	07/03/25 22:21	113507-82-7	
PFHpS	**<0.058**	ug/kg	0.20	0.058	1	07/03/25 09:42	07/03/25 22:21	375-92-8	
PFMBA	**<0.094**	ug/kg	0.39	0.094	1	07/03/25 09:42	07/03/25 22:21	863090-89-5	
PFMPA	**<0.11**	ug/kg	0.39	0.11	1	07/03/25 09:42	07/03/25 22:21	377-73-1	
PFNS	**<0.052**	ug/kg	0.20	0.052	1	07/03/25 09:42	07/03/25 22:21	68259-12-1	
PFOSA	**0.056J**	ug/kg	0.20	0.043	1	07/03/25 09:42	07/03/25 22:21	754-91-6	
PFPeA	**<0.084**	ug/kg	0.39	0.084	1	07/03/25 09:42	07/03/25 22:21	2706-90-3	
PFPeS	**0.070J**	ug/kg	0.20	0.047	1	07/03/25 09:42	07/03/25 22:21	2706-91-4	
PFDoA	**<0.044**	ug/kg	0.20	0.044	1	07/03/25 09:42	07/03/25 22:21	307-55-1	
PFHpA	**<0.076**	ug/kg	0.20	0.076	1	07/03/25 09:42	07/03/25 22:21	375-85-9	
PFHxS	**0.31**	ug/kg	0.20	0.048	1	07/03/25 09:42	07/03/25 22:21	355-46-4	
PFNA	**<0.055**	ug/kg	0.20	0.055	1	07/03/25 09:42	07/03/25 22:21	375-95-1	
PFOS	**6.7**	ug/kg	0.20	0.039	1	07/03/25 09:42	07/03/25 22:21	1763-23-1	
PFOA	**<0.049**	ug/kg	0.20	0.049	1	07/03/25 09:42	07/03/25 22:21	335-67-1	
PFTeDA	**<0.049**	ug/kg	0.20	0.049	1	07/03/25 09:42	07/03/25 22:21	376-06-7	
PFTrDA	**<0.041**	ug/kg	0.20	0.041	1	07/03/25 09:42	07/03/25 22:21	72629-94-8	
PFUnA	**<0.047**	ug/kg	0.20	0.047	1	07/03/25 09:42	07/03/25 22:21	2058-94-8	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Sample: Soil Sample 1 **Lab ID: 10739125001** Collected: 06/15/25 11:02 Received: 06/18/25 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
EPA 1633F Soil	Analytical Method: EPA 1633 Preparation Method: EPA 1633 Pace Analytical Services - Minneapolis								
Surrogates									
13C2-PFDoA (S)	74	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C3HFPO-DA (S)	79	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C3-PFBS (S)	74	%.	40-135		1	07/03/25 09:42	07/03/25 22:21		
13C3-PFHxS (S)	77	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C4-PFBA (S)	56	%.	8-130		1	07/03/25 09:42	07/03/25 22:21		
13C4-PFHpA (S)	79	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C5-PFHxA (S)	77	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C5-PFPeA (S)	77	%.	35-130		1	07/03/25 09:42	07/03/25 22:21		
13C6-PFDA (S)	78	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C8-PFOA (S)	77	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C8-PFOS (S)	73	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C8-PFOSA (S)	83	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C9-PFNA (S)	73	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
d3-MeFOSAA (S)	75	%.	40-135		1	07/03/25 09:42	07/03/25 22:21		
d3-NMeFOSA (S)	75	%.	10-130		1	07/03/25 09:42	07/03/25 22:21		
d5-EtFOSAA (S)	74	%.	40-150		1	07/03/25 09:42	07/03/25 22:21		
d5-NEtFOSA (S)	77	%.	10-130		1	07/03/25 09:42	07/03/25 22:21		
d7-NMeFOSE (S)	87	%.	20-130		1	07/03/25 09:42	07/03/25 22:21		
d9-NEtFOSE (S)	92	%.	15-130		1	07/03/25 09:42	07/03/25 22:21		
13C2-PFTA (S)	60	%.	20-130		1	07/03/25 09:42	07/03/25 22:21		
13C7-PFUdA (S)	76	%.	40-130		1	07/03/25 09:42	07/03/25 22:21		
13C24:2FTS (S)	86	%.	40-135		1	07/03/25 09:42	07/03/25 22:21		
13C26:2FTS (S)	88	%.	40-215		1	07/03/25 09:42	07/03/25 22:21		
13C28:2FTS (S)	81	%.	40-275		1	07/03/25 09:42	07/03/25 22:21		
13C3-PFPrA (S)	22	%.	8-130		1	07/03/25 09:42	07/03/25 22:21		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Sample: Soil Sample 2 **Lab ID: 10739125002** Collected: 06/15/25 11:10 Received: 06/18/25 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	**32.2**	%	0.10	0.10	1		06/23/25 13:05		N2
EPA 1633F Soil	Analytical Method: EPA 1633 Preparation Method: EPA 1633 Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	**<0.15**	ug/kg	0.81	0.15	1	07/03/25 09:42	07/03/25 23:03	763051-92-9	
3:3 FTCA	**<0.27**	ug/kg	1.0	0.27	1	07/03/25 09:42	07/03/25 23:03	356-02-5	
4:2 FTS	**<0.14**	ug/kg	0.81	0.14	1	07/03/25 09:42	07/03/25 23:03	757124-72-4	
5:3 FTCA	**<1.2**	ug/kg	5.0	1.2	1	07/03/25 09:42	07/03/25 23:03	914637-49-3	
6:2 FTS	**<0.20**	ug/kg	0.81	0.20	1	07/03/25 09:42	07/03/25 23:03	27619-97-2	
7:3 FTCA	**<1.1**	ug/kg	5.0	1.1	1	07/03/25 09:42	07/03/25 23:03	812-70-4	
8:2 FTS	**<0.20**	ug/kg	0.81	0.20	1	07/03/25 09:42	07/03/25 23:03	39108-34-4	
9Cl-PF3ONS	**<0.19**	ug/kg	0.81	0.19	1	07/03/25 09:42	07/03/25 23:03	756426-58-1	
ADONA	**<0.19**	ug/kg	0.81	0.19	1	07/03/25 09:42	07/03/25 23:03	919005-14-4	
HFPO-DA	**<0.19**	ug/kg	0.81	0.19	1	07/03/25 09:42	07/03/25 23:03	13252-13-6	
NEtFOSAA	**<0.074**	ug/kg	0.20	0.074	1	07/03/25 09:42	07/03/25 23:03	2991-50-6	
NEtFOSA	**<0.052**	ug/kg	0.20	0.052	1	07/03/25 09:42	07/03/25 23:03	4151-50-2	
NEtFOSE	**<0.39**	ug/kg	2.0	0.39	1	07/03/25 09:42	07/03/25 23:03	1691-99-2	
NFDHA	**<0.13**	ug/kg	0.40	0.13	1	07/03/25 09:42	07/03/25 23:03	151772-58-6	
NMeFOSAA	**<0.054**	ug/kg	0.20	0.054	1	07/03/25 09:42	07/03/25 23:03	2355-31-9	
NMeFOSA	**<0.061**	ug/kg	0.20	0.061	1	07/03/25 09:42	07/03/25 23:03	31506-32-8	
NMeFOSE	**<0.46**	ug/kg	2.0	0.46	1	07/03/25 09:42	07/03/25 23:03	24448-09-7	
PFBS	**0.14J**	ug/kg	0.20	0.038	1	07/03/25 09:42	07/03/25 23:03	375-73-5	
PFDA	**0.065J**	ug/kg	0.20	0.047	1	07/03/25 09:42	07/03/25 23:03	335-76-2	
PFHxA	**0.18J**	ug/kg	0.20	0.045	1	07/03/25 09:42	07/03/25 23:03	307-24-4	
PFBA	**<0.21**	ug/kg	0.81	0.21	1	07/03/25 09:42	07/03/25 23:03	375-22-4	
PFDS	**<0.058**	ug/kg	0.20	0.058	1	07/03/25 09:42	07/03/25 23:03	335-77-3	
PFDoS	**<0.043**	ug/kg	0.20	0.043	1	07/03/25 09:42	07/03/25 23:03	79780-39-5	
PFEESA	**<0.083**	ug/kg	0.40	0.083	1	07/03/25 09:42	07/03/25 23:03	113507-82-7	
PFHpS	**<0.060**	ug/kg	0.20	0.060	1	07/03/25 09:42	07/03/25 23:03	375-92-8	
PFMBA	**<0.097**	ug/kg	0.40	0.097	1	07/03/25 09:42	07/03/25 23:03	863090-89-5	
PFMPA	**<0.12**	ug/kg	0.40	0.12	1	07/03/25 09:42	07/03/25 23:03	377-73-1	
PFNS	**<0.053**	ug/kg	0.20	0.053	1	07/03/25 09:42	07/03/25 23:03	68259-12-1	
PFOSA	**<0.044**	ug/kg	0.20	0.044	1	07/03/25 09:42	07/03/25 23:03	754-91-6	
PFPeA	**<0.087**	ug/kg	0.40	0.087	1	07/03/25 09:42	07/03/25 23:03	2706-90-3	
PFPeS	**0.058J**	ug/kg	0.20	0.048	1	07/03/25 09:42	07/03/25 23:03	2706-91-4	
PFDoA	**0.10J**	ug/kg	0.20	0.045	1	07/03/25 09:42	07/03/25 23:03	307-55-1	
PFHpA	**<0.079**	ug/kg	0.20	0.079	1	07/03/25 09:42	07/03/25 23:03	375-85-9	
PFHxS	**0.15J**	ug/kg	0.20	0.050	1	07/03/25 09:42	07/03/25 23:03	355-46-4	
PFNA	**<0.057**	ug/kg	0.20	0.057	1	07/03/25 09:42	07/03/25 23:03	375-95-1	
PFOS	**0.72**	ug/kg	0.20	0.040	1	07/03/25 09:42	07/03/25 23:03	1763-23-1	
PFOA	**<0.051**	ug/kg	0.20	0.051	1	07/03/25 09:42	07/03/25 23:03	335-67-1	
PFTeDA	**<0.050**	ug/kg	0.20	0.050	1	07/03/25 09:42	07/03/25 23:03	376-06-7	
PFTrDA	**<0.042**	ug/kg	0.20	0.042	1	07/03/25 09:42	07/03/25 23:03	72629-94-8	
PFUnA	**0.079J**	ug/kg	0.20	0.048	1	07/03/25 09:42	07/03/25 23:03	2058-94-8	

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Sample: Soil Sample 2 **Lab ID: 10739125002** Collected: 06/15/25 11:10 Received: 06/18/25 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
EPA 1633F Soil	Analytical Method: EPA 1633 Preparation Method: EPA 1633 Pace Analytical Services - Minneapolis								
Surrogates									
13C2-PFDoA (S)	66	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C3HFPO-DA (S)	67	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C3-PFBS (S)	66	%.	40-135		1	07/03/25 09:42	07/03/25 23:03		
13C3-PFHxS (S)	69	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C4-PFBA (S)	63	%.	8-130		1	07/03/25 09:42	07/03/25 23:03		
13C4-PFHpA (S)	70	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C5-PFHxA (S)	70	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C5-PFPeA (S)	69	%.	35-130		1	07/03/25 09:42	07/03/25 23:03		
13C6-PFDA (S)	65	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C8-PFOA (S)	66	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C8-PFOS (S)	68	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C8-PFOSA (S)	70	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C9-PFNA (S)	67	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
d3-MeFOSAA (S)	67	%.	40-135		1	07/03/25 09:42	07/03/25 23:03		
d3-NMeFOSA (S)	62	%.	10-130		1	07/03/25 09:42	07/03/25 23:03		
d5-EtFOSAA (S)	67	%.	40-150		1	07/03/25 09:42	07/03/25 23:03		
d5-NEtFOSA (S)	57	%.	10-130		1	07/03/25 09:42	07/03/25 23:03		
d7-NMeFOSE (S)	68	%.	20-130		1	07/03/25 09:42	07/03/25 23:03		
d9-NEtFOSE (S)	70	%.	15-130		1	07/03/25 09:42	07/03/25 23:03		
13C2-PFTA (S)	61	%.	20-130		1	07/03/25 09:42	07/03/25 23:03		
13C7-PFUdA (S)	68	%.	40-130		1	07/03/25 09:42	07/03/25 23:03		
13C24:2FTS (S)	86	%.	40-135		1	07/03/25 09:42	07/03/25 23:03		
13C26:2FTS (S)	92	%.	40-215		1	07/03/25 09:42	07/03/25 23:03		
13C28:2FTS (S)	92	%.	40-275		1	07/03/25 09:42	07/03/25 23:03		
13C3-PFPrA (S)	25	%.	8-130		1	07/03/25 09:42	07/03/25 23:03		

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(612)607-1700

ANALYTICAL RESULTS

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Sample: Water Sample 1 **Lab ID: 10739125003** Collected: 06/15/25 11:20 Received: 06/18/25 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 1633F Water	Analytical Method: EPA 1633 Preparation Method: EPA 1633 Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	**<3.6**	ng/L	12.0	3.6	1	07/06/25 09:24	07/07/25 16:43	763051-92-9	
3:3 FTCA	**8.2J**	ng/L	15.0	4.1	1	07/06/25 09:24	07/07/25 16:43	356-02-5	
4:2 FTS	**<3.0**	ng/L	12.0	3.0	1	07/06/25 09:24	07/07/25 16:43	757124-72-4	
5:3 FTCA	**<18.0**	ng/L	75.0	18.0	1	07/06/25 09:24	07/07/25 16:43	914637-49-3	
6:2 FTS	**4.9J**	ng/L	12.0	3.5	1	07/06/25 09:24	07/07/25 16:43	27619-97-2	
7:3 FTCA	**<21.4**	ng/L	75.0	21.4	1	07/06/25 09:24	07/07/25 16:43	812-70-4	
8:2 FTS	**<3.1**	ng/L	12.0	3.1	1	07/06/25 09:24	07/07/25 16:43	39108-34-4	
9Cl-PF3ONS	**<3.2**	ng/L	12.0	3.2	1	07/06/25 09:24	07/07/25 16:43	756426-58-1	
ADONA	**<3.5**	ng/L	12.0	3.5	1	07/06/25 09:24	07/07/25 16:43	919005-14-4	
HFPO-DA	**<3.4**	ng/L	12.0	3.4	1	07/06/25 09:24	07/07/25 16:43	13252-13-6	
NEtFOSAA	**<1.2**	ng/L	3.0	1.2	1	07/06/25 09:24	07/07/25 16:43	2991-50-6	
NEtFOSA	**<0.95**	ng/L	3.0	0.95	1	07/06/25 09:24	07/07/25 16:43	4151-50-2	
NEtFOSE	**<7.7**	ng/L	30.0	7.7	1	07/06/25 09:24	07/07/25 16:43	1691-99-2	
NFDHA	**<2.5**	ng/L	6.0	2.5	1	07/06/25 09:24	07/07/25 16:43	151772-58-6	
NMeFOSAA	**<0.94**	ng/L	3.0	0.94	1	07/06/25 09:24	07/07/25 16:43	2355-31-9	
NMeFOSA	**<0.92**	ng/L	3.0	0.92	1	07/06/25 09:24	07/07/25 16:43	31506-32-8	
NMeFOSE	**<7.7**	ng/L	30.0	7.7	1	07/06/25 09:24	07/07/25 16:43	24448-09-7	
PFBS	**2400**	ng/L	30.0	7.9	10	07/06/25 09:24	07/08/25 18:46	375-73-5	
PFDA	**<0.93**	ng/L	3.0	0.93	1	07/06/25 09:24	07/07/25 16:43	335-76-2	
PFHxA	**3180**	ng/L	30.0	7.2	10	07/06/25 09:24	07/08/25 18:46	307-24-4	
PFBA	**723**	ng/L	12.0	2.9	1	07/06/25 09:24	07/07/25 16:43	375-22-4	
PFDS	**<1.3**	ng/L	3.0	1.3	1	07/06/25 09:24	07/07/25 16:43	335-77-3	
PFDoS	**<0.65**	ng/L	3.0	0.65	1	07/06/25 09:24	07/07/25 16:43	79780-39-5	
PFEESA	**<1.3**	ng/L	6.0	1.3	1	07/06/25 09:24	07/07/25 16:43	113507-82-7	
PFHpS	**194**	ng/L	3.0	0.87	1	07/06/25 09:24	07/07/25 16:43	375-92-8	
PFMBA	**2.9J**	ng/L	6.0	1.5	1	07/06/25 09:24	07/07/25 16:43	863090-89-5	
PFMPA	**2.7J**	ng/L	6.0	1.2	1	07/06/25 09:24	07/07/25 16:43	377-73-1	
PFNS	**7.7**	ng/L	3.0	0.89	1	07/06/25 09:24	07/07/25 16:43	68259-12-1	
PFOSA	**33.2**	ng/L	3.0	0.92	1	07/06/25 09:24	07/07/25 16:43	754-91-6	
PFPeA	**896**	ng/L	6.0	1.8	1	07/06/25 09:24	07/07/25 16:43	2706-90-3	
PFPeS	**1210**	ng/L	30.0	7.1	10	07/06/25 09:24	07/08/25 18:46	2706-91-4	
PFDoA	**<0.92**	ng/L	3.0	0.92	1	07/06/25 09:24	07/07/25 16:43	307-55-1	
PFHpA	**226**	ng/L	3.0	1.2	1	07/06/25 09:24	07/07/25 16:43	375-85-9	
PFHxS	**3080**	ng/L	30.0	7.7	10	07/06/25 09:24	07/08/25 18:46	355-46-4	
PFNA	**2.1J**	ng/L	3.0	0.98	1	07/06/25 09:24	07/07/25 16:43	375-95-1	
PFOS	**8500**	ng/L	30.0	7.4	10	07/06/25 09:24	07/08/25 18:46	1763-23-1	
PFOA	**432**	ng/L	3.0	0.91	1	07/06/25 09:24	07/07/25 16:43	335-67-1	
PFTeDA	**<0.78**	ng/L	3.0	0.78	1	07/06/25 09:24	07/07/25 16:43	376-06-7	
PFTrDA	**<0.85**	ng/L	3.0	0.85	1	07/06/25 09:24	07/07/25 16:43	72629-94-8	
PFUnA	**<0.67**	ng/L	3.0	0.67	1	07/06/25 09:24	07/07/25 16:43	2058-94-8	
Surrogates									
13C2-PFDoA (S)	98	%.	10-130		1	07/06/25 09:24	07/07/25 16:43		
13C3HFPO-DA (S)	127	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
13C3-PFBS (S)	95	%.	40-135		10	07/06/25 09:24	07/08/25 18:46		
13C3-PFBS (S)	96	%.	40-135		1	07/06/25 09:24	07/07/25 16:43		

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(612)607-1700

ANALYTICAL RESULTS

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Sample: Water Sample 1 **Lab ID: 10739125003** Collected: 06/15/25 11:20 Received: 06/18/25 08:50 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 1633F Water	Analytical Method: EPA 1633 Preparation Method: EPA 1633 Pace Analytical Services - Minneapolis								
Surrogates									
13C3-PFHxS (S)	84	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
13C3-PFHxS (S)	87	%.	40-130		10	07/06/25 09:24	07/08/25 18:46		
13C4-PFBA (S)	94	%.	5-130		1	07/06/25 09:24	07/07/25 16:43		
13C4-PFHpA (S)	116	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
13C5-PFHxA (S)	91	%.	40-130		10	07/06/25 09:24	07/08/25 18:46		
13C5-PFHxA (S)	86	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
13C5-PFPeA (S)	88	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
13C6-PFDA (S)	85	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
13C8-PFOA (S)	85	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
13C8-PFOS (S)	92	%.	40-130		10	07/06/25 09:24	07/08/25 18:46		
13C8-PFOS (S)	89	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
13C8-PFOSA (S)	171	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		1M,S0
13C9-PFNA (S)	87	%.	40-130		1	07/06/25 09:24	07/07/25 16:43		
d3-MeFOSAA (S)	118	%.	40-170		1	07/06/25 09:24	07/07/25 16:43		
d3-NMeFOSA (S)	143	%.	10-130		1	07/06/25 09:24	07/07/25 16:43		S0
d5-EtFOSAA (S)	119	%.	25-135		1	07/06/25 09:24	07/07/25 16:43		
d5-NEtFOSA (S)	141	%.	10-130		1	07/06/25 09:24	07/07/25 16:43		S0
d7-NMeFOSE (S)	150	%.	10-130		1	07/06/25 09:24	07/07/25 16:43		S0
d9-NEtFOSE (S)	148	%.	10-130		1	07/06/25 09:24	07/07/25 16:43		S0
13C2-PFTA (S)	91	%.	10-130		1	07/06/25 09:24	07/07/25 16:43		
13C7-PFUdA (S)	105	%.	30-130		1	07/06/25 09:24	07/07/25 16:43		
13C24:2FTS (S)	95	%.	40-200		1	07/06/25 09:24	07/07/25 16:43		
13C26:2FTS (S)	124	%.	40-200		1	07/06/25 09:24	07/07/25 16:43		
13C28:2FTS (S)	136	%.	40-300		1	07/06/25 09:24	07/07/25 16:43		
13C3-PFPrA (S)	23	%.	5-130		1	07/06/25 09:24	07/07/25 16:43		

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1700 Elm Street
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QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

QC Batch: 1014374
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight / %M by ASTM D2974
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10739125001, 10739125002

SAMPLE DUPLICATE: 5288791

Parameter	Units	10738827062 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	18.8	18.0	5	30	N2

SAMPLE DUPLICATE: 5289263

Parameter	Units	10738827044 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	28.0	27.0	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: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

QC Batch: 1016196
QC Batch Method: EPA 1633
Analysis Method: EPA 1633
Analysis Description: EPA 1633F Soil
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10739125001, 10739125002

METHOD BLANK: 5297736 Matrix: Solid
Associated Lab Samples: 10739125001, 10739125002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
11Cl-PF3OUdS	ug/kg	<0.15	0.80	07/03/25 16:42	
3:3 FTCA	ug/kg	<0.27	1.0	07/03/25 16:42	
4:2 FTS	ug/kg	<0.14	0.80	07/03/25 16:42	
5:3 FTCA	ug/kg	<1.2	5.0	07/03/25 16:42	
6:2 FTS	ug/kg	<0.20	0.80	07/03/25 16:42	
7:3 FTCA	ug/kg	<1.1	5.0	07/03/25 16:42	
8:2 FTS	ug/kg	<0.20	0.80	07/03/25 16:42	
9Cl-PF3ONS	ug/kg	<0.19	0.80	07/03/25 16:42	
ADONA	ug/kg	<0.18	0.80	07/03/25 16:42	
HFPO-DA	ug/kg	<0.19	0.80	07/03/25 16:42	
NEtFOSA	ug/kg	<0.052	0.20	07/03/25 16:42	
NEtFOSAA	ug/kg	<0.074	0.20	07/03/25 16:42	
NEtFOSE	ug/kg	<0.39	2.0	07/03/25 16:42	
NFDHA	ug/kg	<0.13	0.40	07/03/25 16:42	
NMeFOSA	ug/kg	<0.060	0.20	07/03/25 16:42	
NMeFOSAA	ug/kg	<0.054	0.20	07/03/25 16:42	
NMeFOSE	ug/kg	<0.46	2.0	07/03/25 16:42	
PFBA	ug/kg	<0.21	0.80	07/03/25 16:42	
PFBS	ug/kg	<0.038	0.20	07/03/25 16:42	
PFDA	ug/kg	<0.047	0.20	07/03/25 16:42	
PFDoA	ug/kg	<0.045	0.20	07/03/25 16:42	
PFDoS	ug/kg	<0.042	0.20	07/03/25 16:42	
PFDS	ug/kg	<0.058	0.20	07/03/25 16:42	
PFEESA	ug/kg	<0.083	0.40	07/03/25 16:42	
PFHpA	ug/kg	<0.078	0.20	07/03/25 16:42	
PFHpS	ug/kg	<0.060	0.20	07/03/25 16:42	
PFHxA	ug/kg	<0.045	0.20	07/03/25 16:42	
PFHxS	ug/kg	<0.049	0.20	07/03/25 16:42	
PFMBA	ug/kg	<0.096	0.40	07/03/25 16:42	
PFMPA	ug/kg	<0.12	0.40	07/03/25 16:42	
PFNA	ug/kg	<0.056	0.20	07/03/25 16:42	
PFNS	ug/kg	<0.053	0.20	07/03/25 16:42	
PFOA	ug/kg	<0.050	0.20	07/03/25 16:42	
PFOS	ug/kg	<0.040	0.20	07/03/25 16:42	
PFOSA	ug/kg	<0.044	0.20	07/03/25 16:42	
PFPeA	ug/kg	<0.086	0.40	07/03/25 16:42	
PFPeS	ug/kg	<0.048	0.20	07/03/25 16:42	
PFTeDA	ug/kg	<0.050	0.20	07/03/25 16:42	
PFTrDA	ug/kg	<0.042	0.20	07/03/25 16:42	
PFUnA	ug/kg	<0.048	0.20	07/03/25 16:42	

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1700 Elm Street
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(612)607-1700

QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

METHOD BLANK: 5297736 Matrix: Solid
Associated Lab Samples: 10739125001, 10739125002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
13C2-PFDoA (S)	%.	61	40-130	07/03/25 16:42	
13C2-PFTA (S)	%.	50	20-130	07/03/25 16:42	
13C24:2FTS (S)	%.	70	40-135	07/03/25 16:42	
13C26:2FTS (S)	%.	69	40-215	07/03/25 16:42	
13C28:2FTS (S)	%.	69	40-275	07/03/25 16:42	
13C3-PFBS (S)	%.	61	40-135	07/03/25 16:42	
13C3-PFHxS (S)	%.	64	40-130	07/03/25 16:42	
13C3-PFPrA (S)	%.	16	8-130	07/03/25 16:42	
13C3HFPO-DA (S)	%.	61	40-130	07/03/25 16:42	
13C4-PFBA (S)	%.	44	8-130	07/03/25 16:42	
13C4-PFHpA (S)	%.	65	40-130	07/03/25 16:42	
13C5-PFHxA (S)	%.	60	40-130	07/03/25 16:42	
13C5-PFPeA (S)	%.	61	35-130	07/03/25 16:42	
13C6-PFDA (S)	%.	67	40-130	07/03/25 16:42	
13C7-PFUdA (S)	%.	62	40-130	07/03/25 16:42	
13C8-PFOA (S)	%.	65	40-130	07/03/25 16:42	
13C8-PFOS (S)	%.	67	40-130	07/03/25 16:42	
13C8-PFOSA (S)	%.	68	40-130	07/03/25 16:42	
13C9-PFNA (S)	%.	63	40-130	07/03/25 16:42	
d3-MeFOSAA (S)	%.	64	40-135	07/03/25 16:42	
d3-NMeFOSA (S)	%.	60	10-130	07/03/25 16:42	
d5-EtFOSAA (S)	%.	63	40-150	07/03/25 16:42	
d5-NEtFOSA (S)	%.	62	10-130	07/03/25 16:42	
d7-NMeFOSE (S)	%.	76	20-130	07/03/25 16:42	
d9-NEtFOSE (S)	%.	73	15-130	07/03/25 16:42	

LABORATORY CONTROL SAMPLE: 5297737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
11Cl-PF3OUdS	ug/kg	7.5	7.7	103	45-160	
3:3 FTCA	ug/kg	9.9	8.3	83	45-130	
4:2 FTS	ug/kg	7.5	7.7	103	60-150	
5:3 FTCA	ug/kg	49.6	48.4	98	60-130	
6:2 FTS	ug/kg	7.7	8.2	107	55-200	
7:3 FTCA	ug/kg	49.6	50.7	102	60-150	
8:2 FTS	ug/kg	7.7	7.7	100	70-150	
9Cl-PF3ONS	ug/kg	7.5	7.7	102	70-150	
ADONA	ug/kg	7.5	7.2	95	70-160	
HFPO-DA	ug/kg	8	7.8	98	70-145	
NEtFOSA	ug/kg	1.9	1.9	98	70-140	
NEtFOSAA	ug/kg	1.9	1.8	92	65-165	
NEtFOSE	ug/kg	19.2	18.4	96	70-135	
NFDHA	ug/kg	4	4.1	101	60-155	
NMeFOSA	ug/kg	1.9	1.9	99	70-155	

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QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

LABORATORY CONTROL SAMPLE: 5297737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
NMeFOSAA	ug/kg	1.9	2.0	103	65-155	
NMeFOSE	ug/kg	19.2	18.6	97	70-140	
PFBA	ug/kg	8	7.7	96	70-140	
PFBS	ug/kg	1.8	1.7	97	65-145	
PFDA	ug/kg	1.9	1.8	92	70-155	
PFDoA	ug/kg	1.9	1.8	91	70-150	
PFDoS	ug/kg	1.9	1.8	92	25-160	
PFDS	ug/kg	1.9	1.8	94	40-155	
PFEESA	ug/kg	3.5	3.4	98	70-140	
PFHpA	ug/kg	1.9	1.9	98	65-145	
PFHpS	ug/kg	1.9	1.9	98	65-155	
PFHxA	ug/kg	1.9	1.9	100	65-140	
PFHxS	ug/kg	1.8	1.7	96	60-150	
PFMBA	ug/kg	4	3.8	94	60-150	
PFMPA	ug/kg	4	4.5	113	30-140	
PFNA	ug/kg	1.9	1.8	96	70-155	
PFNS	ug/kg	1.9	1.8	91	55-140	
PFOA	ug/kg	1.9	1.9	98	70-150	
PFOS	ug/kg	1.9	1.6	86	65-160	
PFOSA	ug/kg	1.9	1.8	93	70-140	
PFPeA	ug/kg	4	3.7	94	60-150	
PFPeS	ug/kg	1.9	1.8	93	55-160	
PFTeDA	ug/kg	1.9	2.0	104	65-150	
PFTrDA	ug/kg	1.9	1.9	97	65-150	
PFUnA	ug/kg	1.9	1.9	97	70-155	
13C2-PFDoA (S)	%.			65	40-130	
13C2-PFTA (S)	%.			56	20-130	
13C24:2FTS (S)	%.			69	40-135	
13C26:2FTS (S)	%.			67	40-215	
13C28:2FTS (S)	%.			69	40-275	
13C3-PFBS (S)	%.			64	40-135	
13C3-PFHxS (S)	%.			66	40-130	
13C3-PFPrA (S)	%.			16	8-130	
13C3HFPO-DA (S)	%.			65	40-130	
13C4-PFBA (S)	%.			46	8-130	
13C4-PFHpA (S)	%.			69	40-130	
13C5-PFHxA (S)	%.			66	40-130	
13C5-PFPeA (S)	%.			65	35-130	
13C6-PFDA (S)	%.			72	40-130	
13C7-PFUdA (S)	%.			67	40-130	
13C8-PFOA (S)	%.			63	40-130	
13C8-PFOS (S)	%.			66	40-130	
13C8-PFOSA (S)	%.			71	40-130	
13C9-PFNA (S)	%.			65	40-130	
d3-MeFOSAA (S)	%.			64	40-135	
d3-NMeFOSA (S)	%.			63	10-130	
d5-EtFOSAA (S)	%.			66	40-150	

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QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

LABORATORY CONTROL SAMPLE: 5297737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
d5-NEtFOSA (S)	%.			61	10-130	
d7-NMeFOSE (S)	%.			74	20-130	
d9-NEtFOSE (S)	%.			72	15-130	

LABORATORY CONTROL SAMPLE: 5297738

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
11Cl-PF3OUdS	ug/kg	1.5	1.3	88	45-160	
3:3 FTCA	ug/kg	2	1.5	77	45-130	
4:2 FTS	ug/kg	1.5	1.3	89	60-150	
5:3 FTCA	ug/kg	9.9	8.8	88	60-130	
6:2 FTS	ug/kg	1.5	1.5	97	55-200	
7:3 FTCA	ug/kg	9.9	8.7	88	60-150	
8:2 FTS	ug/kg	1.5	1.4	92	70-150	
9Cl-PF3ONS	ug/kg	1.5	1.4	92	70-150	
ADONA	ug/kg	1.5	1.3	88	70-160	
HFPO-DA	ug/kg	1.6	1.3	84	70-145	
NEtFOSA	ug/kg	0.38	0.36	94	70-140	
NEtFOSAA	ug/kg	0.38	0.36	93	65-165	
NEtFOSE	ug/kg	3.8	3.4	89	70-135	
NFDHA	ug/kg	0.8	0.69	86	60-155	
NMeFOSA	ug/kg	0.38	0.37	96	70-155	
NMeFOSAA	ug/kg	0.38	0.36	94	65-155	
NMeFOSE	ug/kg	3.8	3.4	89	70-140	
PFBA	ug/kg	1.6	1.4	87	70-140	
PFBS	ug/kg	0.35	0.30	84	65-145	
PFDA	ug/kg	0.38	0.34	89	70-155	
PFDoA	ug/kg	0.38	0.36	93	70-150	
PFDoS	ug/kg	0.38	0.31	82	25-160	
PFDS	ug/kg	0.38	0.30	77	40-155	
PFEESA	ug/kg	0.7	0.63	89	70-140	
PFHpA	ug/kg	0.38	0.33	87	65-145	
PFHpS	ug/kg	0.38	0.33	86	65-155	
PFHxA	ug/kg	0.38	0.35	91	65-140	
PFHxS	ug/kg	0.35	0.30	86	60-150	
PFMBA	ug/kg	0.8	0.66	83	60-150	
PFMPA	ug/kg	0.8	0.87	108	30-140	
PFNA	ug/kg	0.38	0.33	87	70-155	
PFNS	ug/kg	0.38	0.32	84	55-140	
PFOA	ug/kg	0.38	0.33	86	70-150	
PFOS	ug/kg	0.38	0.33	87	65-160	
PFOSA	ug/kg	0.38	0.34	88	70-140	
PFPeA	ug/kg	0.8	0.69	86	60-150	
PFPeS	ug/kg	0.38	0.31	79	55-160	
PFTeDA	ug/kg	0.38	0.36	92	65-150	

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QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

LABORATORY CONTROL SAMPLE: 5297738

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PFTrDA	ug/kg	0.38	0.35	91	65-150	
PFUnA	ug/kg	0.38	0.34	88	70-155	
13C2-PFDoA (S)	%.			66	40-130	
13C2-PFTA (S)	%.			57	20-130	
13C24:2FTS (S)	%.			79	40-135	
13C26:2FTS (S)	%.			76	40-215	
13C28:2FTS (S)	%.			77	40-275	
13C3-PFBS (S)	%.			68	40-135	
13C3-PFHxS (S)	%.			72	40-130	
13C3-PFPrA (S)	%.			18	8-130	
13C3HFPO-DA (S)	%.			72	40-130	
13C4-PFBA (S)	%.			52	8-130	
13C4-PFHpA (S)	%.			76	40-130	
13C5-PFHxA (S)	%.			72	40-130	
13C5-PFPeA (S)	%.			71	35-130	
13C6-PFDA (S)	%.			73	40-130	
13C7-PFUdA (S)	%.			72	40-130	
13C8-PFOA (S)	%.			73	40-130	
13C8-PFOS (S)	%.			76	40-130	
13C8-PFOSA (S)	%.			76	40-130	
13C9-PFNA (S)	%.			71	40-130	
d3-MeFOSAA (S)	%.			71	40-135	
d3-NMeFOSA (S)	%.			68	10-130	
d5-EtFOSAA (S)	%.			73	40-150	
d5-NEtFOSA (S)	%.			67	10-130	
d7-NMeFOSE (S)	%.			82	20-130	
d9-NEtFOSE (S)	%.			80	15-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5297739 5297740

Parameter	Units	10739126014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
11Cl-PF3OUdS	ug/kg	ND	7.6	7.5	6.9	7.4	92	99	45-160	6	30	
3:3 FTCA	ug/kg	ND	9.9	9.8	6.4	6.2	65	63	45-130	4	30	
4:2 FTS	ug/kg	ND	7.6	7.5	7.0	7.1	93	95	60-150	1	30	
5:3 FTCA	ug/kg	ND	49.8	49.1	39.7	38.8	80	79	60-130	2	30	
6:2 FTS	ug/kg	ND	7.7	7.6	7.5	7.5	96	98	55-200	1	30	
7:3 FTCA	ug/kg	ND	49.8	49.1	45.0	44.0	90	90	60-150	2	30	
8:2 FTS	ug/kg	ND	7.7	7.6	7.1	7.2	92	95	70-150	2	30	
9Cl-PF3ONS	ug/kg	ND	7.6	7.5	7.0	7.4	93	100	70-150	6	30	
ADONA	ug/kg	ND	7.6	7.5	7.1	7.0	94	95	70-160	0	30	
HFPO-DA	ug/kg	ND	8.1	8	7.4	7.6	92	95	70-145	2	30	
NEtFOSA	ug/kg	ND	2	2	1.8	1.7	92	92	70-140	2	30	
NEtFOSAA	ug/kg	ND	2	2	1.9	1.8	96	94	65-165	3	30	
NEtFOSE	ug/kg	ND	19.3	19	18.3	17.4	95	92	70-135	5	30	

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QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5297739 5297740

Parameter	Units	10739126014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
NFDHA	ug/kg	ND	4	3.9	3.6	3.3	90	82	60-155	11	30	
NMeFOSA	ug/kg	ND	2	2	1.8	1.8	94	96	70-155	1	30	
NMeFOSAA	ug/kg	ND	2	2	1.7	1.9	87	98	65-155	11	30	
NMeFOSE	ug/kg	ND	19.3	19	17.5	17.4	91	91	70-140	1	30	
PFBA	ug/kg	ND	8.1	8	7.1	7.2	88	90	70-140	1	30	
PFBS	ug/kg	ND	1.7	1.7	1.5	1.6	88	94	65-145	6	30	
PFDA	ug/kg	ND	2	2	1.8	1.8	94	93	70-155	2	30	
PFDoA	ug/kg	ND	2	2	1.8	1.8	91	94	70-150	1	30	
PFDoS	ug/kg	ND	2	2	1.6	1.7	82	88	25-160	6	30	
PFDS	ug/kg	ND	2	2	1.6	1.7	84	91	40-155	6	30	
PFEESA	ug/kg	ND	3.5	3.4	3.4	3.3	97	96	70-140	3	30	
PFHpA	ug/kg	ND	2	2	1.8	1.8	93	94	65-145	1	30	
PFHpS	ug/kg	ND	2	2	1.6	1.8	83	96	65-155	14	30	
PFHxA	ug/kg	ND	2	2	1.8	1.8	94	94	65-140	2	30	
PFHxS	ug/kg	ND	1.7	1.7	1.6	1.6	90	91	60-150	1	30	
PFMBA	ug/kg	ND	4	3.9	3.7	3.6	92	92	60-150	2	30	
PFMPA	ug/kg	ND	4	3.9	3.9	3.9	97	100	30-140	1	30	
PFNA	ug/kg	ND	2	2	1.8	1.8	93	92	70-155	3	30	
PFNS	ug/kg	ND	2	2	1.6	1.8	85	95	55-140	9	30	
PFOA	ug/kg	ND	2	2	1.7	1.8	89	95	70-150	5	30	
PFOS	ug/kg	ND	2	2	1.5	1.6	78	84	65-160	6	30	
PFOSA	ug/kg	ND	2	2	1.8	1.8	91	94	70-140	1	30	
PFPeA	ug/kg	ND	4	3.9	3.6	3.6	90	92	60-150	0	30	
PFPeS	ug/kg	ND	2	2	1.6	1.6	82	84	55-160	1	30	
PFTeDA	ug/kg	ND	2	2	1.9	1.9	100	101	65-150	1	30	
PFTrDA	ug/kg	ND	2	2	1.7	1.7	87	90	65-150	2	30	
PFUnA	ug/kg	ND	2	2	1.8	1.8	95	92	70-155	5	30	
13C2-PFDoA (S)	%.						72	75	40-130			
13C2-PFTA (S)	%.						60	66	20-130			
13C24:2FTS (S)	%.						76	78	40-135			
13C26:2FTS (S)	%.						71	76	40-215			
13C28:2FTS (S)	%.						71	82	40-275			
13C3-PFBS (S)	%.						68	70	40-135			
13C3-PFHxS (S)	%.						69	77	40-130			
13C3-PFPrA (S)	%.						26	24	8-130			
13C3HFPO-DA (S)	%.						68	70	40-130			
13C4-PFBA (S)	%.						67	63	8-130			
13C4-PFHpA (S)	%.						68	77	40-130			
13C5-PFHxA (S)	%.						68	75	40-130			
13C5-PFPeA (S)	%.						71	73	35-130			
13C6-PFDA (S)	%.						73	82	40-130			
13C7-PFUdA (S)	%.						73	81	40-130			
13C8-PFOA (S)	%.						70	80	40-130			
13C8-PFOS (S)	%.						76	77	40-130			
13C8-PFOSA (S)	%.						80	84	40-130			
13C9-PFNA (S)	%.						68	78	40-130			

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QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5297739 5297740

Parameter	Units	10739126014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
d3-MeFOSAA (S)	%.						69	75	40-135			
d3-NMeFOSA (S)	%.						76	79	10-130			
d5-EtFOSAA (S)	%.						66	74	40-150			
d5-NEtFOSA (S)	%.						73	79	10-130			
d7-NMeFOSE (S)	%.						82	90	20-130			
d9-NEtFOSE (S)	%.						78	86	15-130			

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

QC Batch: 1016670
QC Batch Method: EPA 1633
Analysis Method: EPA 1633
Analysis Description: EPA 1633F Water
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10739125003

METHOD BLANK: 5299960 Matrix: Water
Associated Lab Samples: 10739125003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
11Cl-PF3OUdS	ng/L	<1.9	6.4	07/07/25 12:44	
3:3 FTCA	ng/L	<2.2	8.0	07/07/25 12:44	
4:2 FTS	ng/L	<1.6	6.4	07/07/25 12:44	
5:3 FTCA	ng/L	<9.6	40.0	07/07/25 12:44	
6:2 FTS	ng/L	<1.8	6.4	07/07/25 12:44	
7:3 FTCA	ng/L	<11.4	40.0	07/07/25 12:44	
8:2 FTS	ng/L	<1.7	6.4	07/07/25 12:44	
9Cl-PF3ONS	ng/L	<1.7	6.4	07/07/25 12:44	
ADONA	ng/L	<1.9	6.4	07/07/25 12:44	
HFPO-DA	ng/L	<1.8	6.4	07/07/25 12:44	
NEtFOSA	ng/L	<0.51	1.6	07/07/25 12:44	
NEtFOSAA	ng/L	<0.66	1.6	07/07/25 12:44	
NEtFOSE	ng/L	<4.1	16.0	07/07/25 12:44	
NFDHA	ng/L	<1.3	3.2	07/07/25 12:44	
NMeFOSA	ng/L	<0.49	1.6	07/07/25 12:44	
NMeFOSAA	ng/L	<0.50	1.6	07/07/25 12:44	
NMeFOSE	ng/L	<4.1	16.0	07/07/25 12:44	
PFBA	ng/L	<1.6	6.4	07/07/25 12:44	
PFBS	ng/L	<0.42	1.6	07/07/25 12:44	
PFDA	ng/L	<0.50	1.6	07/07/25 12:44	
PFDoA	ng/L	<0.49	1.6	07/07/25 12:44	
PFDoS	ng/L	<0.34	1.6	07/07/25 12:44	
PFDS	ng/L	<0.69	1.6	07/07/25 12:44	
PFEESA	ng/L	<0.69	3.2	07/07/25 12:44	
PFHpA	ng/L	<0.62	1.6	07/07/25 12:44	
PFHpS	ng/L	<0.47	1.6	07/07/25 12:44	
PFHxA	ng/L	<0.38	1.6	07/07/25 12:44	
PFHxS	ng/L	<0.41	1.6	07/07/25 12:44	
PFMBA	ng/L	<0.78	3.2	07/07/25 12:44	
PFMPA	ng/L	<0.62	3.2	07/07/25 12:44	
PFNA	ng/L	<0.52	1.6	07/07/25 12:44	
PFNS	ng/L	<0.47	1.6	07/07/25 12:44	
PFOA	ng/L	<0.49	1.6	07/07/25 12:44	
PFOS	ng/L	<0.39	1.6	07/07/25 12:44	
PFOSA	ng/L	<0.49	1.6	07/07/25 12:44	
PFPeA	ng/L	<0.95	3.2	07/07/25 12:44	
PFPeS	ng/L	<0.38	1.6	07/07/25 12:44	
PFTeDA	ng/L	<0.41	1.6	07/07/25 12:44	
PFTrDA	ng/L	<0.45	1.6	07/07/25 12:44	
PFUnA	ng/L	<0.36	1.6	07/07/25 12:44	

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(612)607-1700

QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

METHOD BLANK: 5299960 Matrix: Water
Associated Lab Samples: 10739125003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
13C2-PFDoA (S)	%.	86	10-130	07/07/25 12:44	
13C2-PFTA (S)	%.	83	10-130	07/07/25 12:44	
13C24:2FTS (S)	%.	88	40-200	07/07/25 12:44	
13C26:2FTS (S)	%.	80	40-200	07/07/25 12:44	
13C28:2FTS (S)	%.	87	40-300	07/07/25 12:44	
13C3-PFBS (S)	%.	92	40-135	07/07/25 12:44	
13C3-PFHxS (S)	%.	87	40-130	07/07/25 12:44	
13C3-PFPrA (S)	%.	72	5-130	07/07/25 12:44	
13C3HFPO-DA (S)	%.	98	40-130	07/07/25 12:44	
13C4-PFBA (S)	%.	93	5-130	07/07/25 12:44	
13C4-PFHpA (S)	%.	95	40-130	07/07/25 12:44	
13C5-PFHxA (S)	%.	92	40-130	07/07/25 12:44	
13C5-PFPeA (S)	%.	96	40-130	07/07/25 12:44	
13C6-PFDA (S)	%.	89	40-130	07/07/25 12:44	
13C7-PFUdA (S)	%.	91	30-130	07/07/25 12:44	
13C8-PFOA (S)	%.	87	40-130	07/07/25 12:44	
13C8-PFOS (S)	%.	89	40-130	07/07/25 12:44	
13C8-PFOSA (S)	%.	75	40-130	07/07/25 12:44	
13C9-PFNA (S)	%.	88	40-130	07/07/25 12:44	
d3-MeFOSAA (S)	%.	84	40-170	07/07/25 12:44	
d3-NMeFOSA (S)	%.	73	10-130	07/07/25 12:44	
d5-EtFOSAA (S)	%.	80	25-135	07/07/25 12:44	
d5-NEtFOSA (S)	%.	74	10-130	07/07/25 12:44	
d7-NMeFOSE (S)	%.	77	10-130	07/07/25 12:44	
d9-NEtFOSE (S)	%.	80	10-130	07/07/25 12:44	

LABORATORY CONTROL SAMPLE: 5299961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
11Cl-PF3OUdS	ng/L	75.2	77.3	103	55-160	
3:3 FTCA	ng/L	99.2	83.1	84	65-130	
4:2 FTS	ng/L	75.2	70.5	94	70-145	
5:3 FTCA	ng/L	496	434	87	70-135	
6:2 FTS	ng/L	76.8	73.1	95	65-155	
7:3 FTCA	ng/L	496	424	85	50-145	
8:2 FTS	ng/L	76.8	77.9	101	60-150	
9Cl-PF3ONS	ng/L	75.2	68.6	91	70-155	
ADONA	ng/L	75.2	74.0	98	65-145	
HFPO-DA	ng/L	80	73.8	92	70-140	
NEtFOSA	ng/L	19.2	17.6	92	65-145	
NEtFOSAA	ng/L	19.2	19.6	102	70-145	
NEtFOSE	ng/L	192	182	95	70-135	
NFDHA	ng/L	40	39.0	97	50-150	
NMeFOSA	ng/L	19.2	18.6	97	60-150	

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(612)607-1700

QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

LABORATORY CONTROL SAMPLE: 5299961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
NMeFOSAA	ng/L	19.2	18.7	97	50-140	
NMeFOSE	ng/L	192	179	93	70-145	
PFBA	ng/L	80	74.5	93	70-140	
PFBS	ng/L	17.6	15.9	90	60-145	
PFDA	ng/L	19.2	18.2	95	70-140	
PFDoA	ng/L	19.2	19.0	99	70-140	
PFDoS	ng/L	19.2	20.0	104	50-145	
PFDS	ng/L	19.2	17.8	93	60-145	
PFEESA	ng/L	35.2	34.8	99	70-140	
PFHpA	ng/L	19.2	18.3	95	70-150	
PFHpS	ng/L	19.2	16.3	85	70-150	
PFHxA	ng/L	19.2	18.5	96	70-145	
PFHxS	ng/L	17.6	16.9	96	65-145	
PFMBA	ng/L	40	36.0	90	60-150	
PFMPA	ng/L	40	35.9	90	55-140	
PFNA	ng/L	19.2	18.1	94	70-150	
PFNS	ng/L	19.2	17.8	93	65-145	
PFOA	ng/L	19.2	18.1	94	70-150	
PFOS	ng/L	19.2	15.8	83	55-150	
PFOSA	ng/L	19.2	18.9	98	70-145	
PFPeA	ng/L	40	35.7	89	65-135	
PFPeS	ng/L	19.2	18.6	97	65-140	
PFTeDA	ng/L	19.2	18.4	96	60-140	
PFTrDA	ng/L	19.2	20.3	106	65-140	
PFUnA	ng/L	19.2	18.4	96	70-145	
13C2-PFDoA (S)	%.			50	10-130	
13C2-PFTA (S)	%.			56	10-130	
13C24:2FTS (S)	%.			49	40-200	
13C26:2FTS (S)	%.			43	40-200	
13C28:2FTS (S)	%.			43	40-300	
13C3-PFBS (S)	%.			51	40-135	
13C3-PFHxS (S)	%.			46	40-130	
13C3-PFPrA (S)	%.			40	5-130	
13C3HFPO-DA (S)	%.			51	40-130	
13C4-PFBA (S)	%.			52	5-130	
13C4-PFHpA (S)	%.			49	40-130	
13C5-PFHxA (S)	%.			50	40-130	
13C5-PFPeA (S)	%.			52	40-130	
13C6-PFDA (S)	%.			48	40-130	
13C7-PFUdA (S)	%.			51	30-130	
13C8-PFOA (S)	%.			48	40-130	
13C8-PFOS (S)	%.			50	40-130	
13C8-PFOSA (S)	%.			40	40-130	
13C9-PFNA (S)	%.			49	40-130	
d3-MeFOSAA (S)	%.			43	40-170	
d3-NMeFOSA (S)	%.			35	10-130	
d5-EtFOSAA (S)	%.			41	25-135	

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QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

LABORATORY CONTROL SAMPLE: 5299961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
d5-NEtFOSA (S)	%.			38	10-130	
d7-NMeFOSE (S)	%.			42	10-130	
d9-NEtFOSE (S)	%.			45	10-130	

LABORATORY CONTROL SAMPLE: 5299962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
11Cl-PF3OUdS	ng/L	12	11.3	94	55-160	
3:3 FTCA	ng/L	15.9	13.5	85	65-130	
4:2 FTS	ng/L	12	11.0	91	70-145	
5:3 FTCA	ng/L	79.4	67.2	85	70-135	
6:2 FTS	ng/L	12.3	12.1	98	65-155	
7:3 FTCA	ng/L	79.4	65.2	82	50-145	
8:2 FTS	ng/L	12.3	11.2	92	60-150	
9Cl-PF3ONS	ng/L	12	11.1	92	70-155	
ADONA	ng/L	12	11.5	96	65-145	
HFPO-DA	ng/L	12.8	11.4	89	70-140	
NEtFOSA	ng/L	3.1	2.8	91	65-145	
NEtFOSAA	ng/L	3.1	2.8	92	70-145	
NEtFOSE	ng/L	30.7	28.8	94	70-135	
NFDHA	ng/L	6.4	6.6	103	50-150	
NMeFOSA	ng/L	3.1	2.9	95	60-150	
NMeFOSAA	ng/L	3.1	2.9	93	50-140	
NMeFOSE	ng/L	30.7	28.2	92	70-145	
PFBA	ng/L	12.8	11.7	91	70-140	
PFBS	ng/L	2.8	2.6	92	60-145	
PFDA	ng/L	3.1	2.9	96	70-140	
PFDoA	ng/L	3.1	2.9	94	70-140	
PFDoS	ng/L	3.1	3.1	100	50-145	
PFDS	ng/L	3.1	2.6	86	60-145	
PFEESA	ng/L	5.6	5.5	98	70-140	
PFHpA	ng/L	3.1	2.8	91	70-150	
PFHpS	ng/L	3.1	2.7	89	70-150	
PFHxA	ng/L	3.1	2.9	94	70-145	
PFHxS	ng/L	2.8	2.6	93	65-145	
PFMBA	ng/L	6.4	5.7	89	60-150	
PFMPA	ng/L	6.4	6.0	95	55-140	
PFNA	ng/L	3.1	3.0	96	70-150	
PFNS	ng/L	3.1	2.6	85	65-145	
PFOA	ng/L	3.1	3.0	97	70-150	
PFOS	ng/L	3.1	2.6	83	55-150	
PFOSA	ng/L	3.1	3.1	101	70-145	
PFPeA	ng/L	6.4	5.8	90	65-135	
PFPeS	ng/L	3.1	2.8	90	65-140	
PFTeDA	ng/L	3.1	3.0	97	60-140	

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QUALITY CONTROL DATA

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

LABORATORY CONTROL SAMPLE: 5299962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PFTrDA	ng/L	3.1	3.0	99	65-140	
PFUnA	ng/L	3.1	2.8	92	70-145	
13C2-PFDoA (S)	%.			57	10-130	
13C2-PFTA (S)	%.			57	10-130	
13C24:2FTS (S)	%.			62	40-200	
13C26:2FTS (S)	%.			52	40-200	
13C28:2FTS (S)	%.			55	40-300	
13C3-PFBS (S)	%.			62	40-135	
13C3-PFHxS (S)	%.			59	40-130	
13C3-PFPrA (S)	%.			49	5-130	
13C3HFPO-DA (S)	%.			65	40-130	
13C4-PFBA (S)	%.			64	5-130	
13C4-PFHpA (S)	%.			61	40-130	
13C5-PFHxA (S)	%.			61	40-130	
13C5-PFPeA (S)	%.			63	40-130	
13C6-PFDA (S)	%.			58	40-130	
13C7-PFUdA (S)	%.			60	30-130	
13C8-PFOA (S)	%.			55	40-130	
13C8-PFOS (S)	%.			59	40-130	
13C8-PFOSA (S)	%.			48	40-130	
13C9-PFNA (S)	%.			56	40-130	
d3-MeFOSAA (S)	%.			53	40-170	
d3-NMeFOSA (S)	%.			48	10-130	
d5-EtFOSAA (S)	%.			50	25-135	
d5-NEtFOSA (S)	%.			50	10-130	
d7-NMeFOSE (S)	%.			52	10-130	
d9-NEtFOSE (S)	%.			54	10-130	

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QUALIFIERS

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

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

1M	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 laboratory's 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.

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bldg 12 Fire Loop Release
Pace Project No.: 10739125

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10739125001	**Soil Sample 1**	ASTM D2974	1014374		
10739125002	**Soil Sample 2**	ASTM D2974	1014374		
10739125001	**Soil Sample 1**	EPA 1633	1016196	EPA 1633	1017046
10739125002	**Soil Sample 2**	EPA 1633	1016196	EPA 1633	1017046
10739125003	**Water Sample 1**	EPA 1633	1016670	EPA 1633	1017217

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Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

WO#: 10739125

10739125

Company Name: SM	Contact/Report To: Brad Lvedtke
Street Address: 1425 Stokke Parkway Menomonie, WI 54751	Phone #: 715-578-2318
	E-Mail: bdlvedtke@mmm.com
	Cc E-Mail:
Customer Project #: Pace profile # 20131	Invoice to:
Project Name:	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [X] CT [ ] ET	County / State origin of sample(s):

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day Other

Date Results Requested:

DW PWSID # or WW Permit # as applicable:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

EPA1633

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** 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

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Residual Chlorine Result	Residual Chlorine Units	Sample Comment
Soil Sample 1	SS	Grab			6-15-25	11:02	1			001
Soil Sample 2	SS	Grab			6-15-25	11:10	1			002
Water Sample 1	WW	Grab			6-15-25	11:20	1			003

Additional Instructions from Pace®:

Collected By: Brad Lvedtke
Printed Name
Signature Brad Lvedtke

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C):	Corrected Temp. (°C):	[✓] On Ice
1	T6	True	1.8	1.8	✓

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
SM / Brad Lvedtke	6-15-25 08:36	[signature]	6/18/25 $50	
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: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORQ-0019_v02_110123 ©

ENV-FRM-MIN4-0150 v19_Sample Condition Upon Receipt

Person Examining & Date: DGS 6/18/25 **PROJECT #:** **WO#: 10739125**

PM: CT1 **Due Date: 07/17/25**

CLIENT: 3M ENV

Client Name: 3M

Custody Seal Present: ☑ YES ☐ NO **Seals Intact:** ☑ YES ☐ NO

Tracking Number: 6092 7241 0960 ☐ **See Exceptions form ENV-FRM-MIN4-0142.**

Courier: ☐ Client ☐ Commercial ☑ FedEx ☐ Pace Courier/Field ☐ SpeeDee ☐ UPS ☐ USPS

Packing Material: ☐ Bubble Bags ☐ Bubble Wrap ☑ None ☐ Other: _____ **Biological Tissue Frozen:** ☐ YES ☐NO

Thermometer: ☐ T1 (0461) ☐ T2 (0431) ☐ T3 (0459) ☐ T4 (0402) ☐ T5 (0187) ☑ T6 (0396) ☐ T7 (0377) ☐ T8 (0775) ☐ T9 (0428) ☐ 01339252 (0710)

Type of Ice: ☐ Blue ☐ Dry ☑ Wet ☐Melted ☐ None

Temp Blank: ☑ YES ☐NO

NOTE: *Temp should be ≤ 6°C, but above freezing.*

Read Temp w/Temp Blank: 1.8 °C

Correction Factor: True

Corrected Temp w/Temp Blank: 1.8 °C

Did Samples Originate in West Virginia: ☐ YES ☑ NO **(list temps on exception)**

Were All Container Temps Taken: ☐ YES ☐ NO ☑ N/A

Average Corrected Temp (No Temp Blank Only): _____

☐ **See Exceptions form ENV-FRM-MIN4-0142.** ☐ 1 Container

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

Did Samples originate from one of the following states (check maps): ☐ YES ☑ NO

Circle State: AL, AR, AZ, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, VA

Are samples 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? **(i.e., Analysis/ID/Date/Time)**	☑	☐		1.
Chain of Custody Relinquished?	☑	☐		2.
Sampler Name and/or Signature on COC?	☑	☐	☐	3.
Samples Arrived within Hold Time? If Fecal: ☐ <8 hrs ☐ >8 hr but <24 hr ☐ >24 hr	☑	☐		4.
Short Hold Time Analysis (<72 hr)?	☐	☑		5. ☐ BOD / cBOD ☐Fecal coliform ☐ Hex Chrom ☐ HPC ☐ Nitrate ☐ Nitrite ☐ Ortho Phos ☐ Total coliform/*E. coli* ☐ Turbidity ☐ Other: _____
Rush Turn Around Time Requested?	☐	☑		6. ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 5 Day Due Date: _____
Sufficient Sample Volume? **(If NO, list approximate volume in section 7.)**	☑	☐		7.
Correct Containers Used? – Pace Containers Used?	☑ ☑	☐ ☐	☐	8.
Containers Intact?	☑	☐		9.
Field Filtered Volume Received for Dissolved Tests?	☐	☐	☑	10. Is sediment visible in the dissolved container: ☐ YES ☐ NO
ID/Date/Time Match? **(If NO, fill out section 11.)** Matrix: ☐ Oil ☑ Soil ☑ Water ☐ Other	☑	☐	☐	11. ☐ **See Exceptions form ENV-FRM-MIN4-0142**
All containers needing acid/base preservation have been checked?	☐	☐	☑	12.

Sample #:

☐ HNO3 _____ ☐ H2SO4 _____ ☐ NaOH _____ ☐ Zinc Acetate _____

pH Paper Lot #:

☐ Residual Chlorine _____ ☐ 0-6 Roll _____ ☐ 0-6 Strip _____ ☐ 0-14 Strip _____

Positive for Residual Chlorine (NaOH containers only): ☐ **YES** ☐ **NO**

Preserved containers in compliance with EPA recommendations? (HNO3, H2SO4, < 2 pH, NaOH > 9 Sulfide, NaOH > 10 Cyanide)	☐	☐	☑	☐ **See Exceptions form ENV-FRM-MIN4-0142**
EXCECTIONS (water only): VOA, Coliform, TOC/DOC, Oil & Grease, Phenols, DRO/8015, Dioxins, and PFAS	☐	☐	☑	
Extra labels present on soil VOA or WIDRO containers? **(soil only)**	☐	☐	☑	13.
Headspace in Methyl Mercury Container?	☐	☐	☑	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: **Labeled By:** DGS **Line:** 4

Person Contacted & Date/Time: _____ **PM Review & Date:** 6/18/25

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.*

3M Menomonie
1425 Stokke Pkwy
Menomonie, WI 54751

August 8, 2025

Via email

Wisconsin Department of Natural Resources

Subject:
June 14, 2025, Fire water sampling Results Follow Up

Dear Maizie Reif:

Per your request as part of the correspondence from the follow up from the June 14th fire water release 3M collected two soil samples at surface level and one water sample, which was standing water at surface level, from the area immediately adjacent to the origin of the spill. The fire main repairs were completed on June 27th. The full report is attached for your reference.

If you have any questions or comments, please contact me at (715) 578-2318.

Sincerely,

Brad Luedtke
Environmental Engineer
3M Menomonie

cc: Pat Gareau
Janice Neitzel

From: Adesanwo, Adebowale C - DNR
Sent: Thursday, June 19, 2025 10:36 AM
To: Janice Neitzel; Bradley Luedtke
Cc: Bittencourt, Geisa B - DNR; Reif, Maizie L - DNR; Paul Sterk; David Schofield
Subject: 3M Notice of Noncompliance - June 2025 PFAS firefighting wastewater Spill/discharge to POTW
Attachments: NON 3M Spill - June 2025.pdf

Good afternoon,

I have attached a Notice of Noncompliance Letter for the reported discharge of PFAS-contaminated firefighting wastewater. Please read the document in its entirety and respond by **July 19, 2025**.

Sincerely,

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Adebowale “Wa le” Adesanwo
Wastewater Engineer Senior – Water Quality/Environmental Management
Wisconsin Department of Natural Resources
1300 West Clairemont Avenue Eau Claire, WI 54701
Phone: 715-492-4047
Cell Phone: 715-492-4047
adebowale.adesanwo@wisconsin.gov

dnr.wi.gov
Our core values include professionalism, integrity, and customer service.
Please visit our survey to provide feedback on your experience interacting with any DNR employee.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
Eau Claire Service Center
1300 W. Clairemont Avenue
Eau Claire, WI 54701

Tony Evers, Governor
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 19, 2025

Ms. Janice Neitzel
Plant Manager
3M Company Menomonie
1425 Stokke Pkwy
Menomonie, WI 54751

Subject: **NOTICE OF NONCOMPLIANCE**
Noncompliance with: Wis Adm. Code Section NR 211.10 (1)
POTW Interference Prohibition (December 2024)

Dear Ms. Janice Neitzel,

Section 283.21 of the Wisconsin Statutes and chapter NR 211, Wisconsin Administrative Code, regulate the wastewater discharge of pollutants to Publicly Owned Treatment Works (POTWs) from an industrial user of the POTW. These regulations, specifically NR 211.10(1), prohibit industrial discharges that interfere with or cause pass-through at the POTW. The City of Menomonie POTW (Menomonie WWTF) is the facility in question.

The purpose of this letter is to issue a Notice of Noncompliance (NON) for failure to comply with the prohibition against pass-through and interference, and to require 3M to submit a written, scheduled plan by **July 19, 2025.**

While the Wisconsin DNR (the department) acknowledges that 3M reported the incident to the Spill Hotline, the department still requires a corrective action plan to be submitted to the DNR and the Menomonie WWTF with more details.

Summary of Noncompliance:

According to an email received June 18, 2025, from the department's Spill Program, it was reported that 3M had a spill/discharge of 240 gallons of PFAS-related wastewater sent to the Menomonie WWTF, which is a violation of NR 211.10(1).

Required item:

- Submit a detailed scheduled plan to the department, as indicated above, that will address the violation of NR 211.10 (1) and the following:
    - A PFAS sampling analysis of the source of the spill/discharge.
    - Creation or Modification of the Spill Response Plan, specifically addressing how pollutants (such as PFAS) that cause pass-through and/or interference, as per NR 211.10(1), will be handled and disposed of per regulatory requirements.
    - An educational and training schedule for all personnel who will participate in implementing the Spill response plan, and disposal, specifically focused on PFAS regulatory handling.

Please provide a written response to the department by July 19, 2025, addressing the required action items above. Please be advised that if violations persist or corrective actions are not taken, the department may pursue further enforcement action. Those actions may ultimately result in a referral to the Department of Justice with potential penalties per s. 283.89, Wis. Stats.

If you have any questions or comments, please get in touch with me at 715-492-4047 or via email at adebowale.adesanwo@wisconsin.gov. I appreciate your cooperation in protecting our natural resources.

Sincerely,

Adebowale Adesanwo
Wastewater Engineer
CC (email): Paul Sterk, OIC, Menomonie WWTF
David Schofield, Director of Public Works, Menomonie WWTF
Bradley Luedtke, Environmental Engineer, 3M company Menomonie.

From: Reif, Maizie L - DNR
Sent: Wednesday, June 18, 2025 9:22 AM
To: Pat Gareau
Cc: Janice Neitzel; Bradley Luedtke; Craig Mara; Britta Chambers
Subject: RE: 3M Menomonie - 6/14/2025 Fire Protection System Release Information

Thank you, Pat.

Please submit the sample results to me when they come in along with the sample details on where they were collected, what depth, etc. Also let me know when the repairs have been completed.

You can email those to me. But if you need to use the Submittal Portal, the case number for this incident is 20250615WC17-1.

Let me know if you have any questions!

Maizie Reif
Phone:920-360-4291
Maizie.reif@wisconsin.gov

Our core values include professionalism, integrity, and customer service.
Please visit our survey to provide feedback on your experience interacting with any DNR employee.

From: Pat Gareau <US332421@mmm.com>
Sent: Tuesday, June 17, 2025 7:39 AM
To: Reif, Maizie L - DNR <Maizie.Reif@wisconsin.gov>
Cc: Janice Neitzel <jmneitzel@mmm.com>; Bradley Luedtke <bdluedtke@mmm.com>; Craig Mara <cmmara@mmm.com>; Britta Chambers <bchambers2@mmm.com>
Subject: 3M Menomonie - 6/14/2025 Fire Protection System Release Information

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning, Maizie
Attached is the summary information you requested on the 3M Menomonie fire system release from 6/14/2025. Please let me know if you have any further questions. Thank you.

Pat Gareau | EHS Manager
Enterprise Supply Chain
1425 Stokke Parkway | Menomonie, WI 54751 | United States
Office: +1 715 578 2370 | Mobile: +1 715 309 0592
3M.com

6/17/2025

Maizie Reif
State of Wisconsin
Department of Natural Resources
2984 Shawano Avenue
Green Bay, WI 54313-6727

Re: 3M Menomonie Facility

Good morning, Maizie:

As requested during our discussion this morning, below is a description of the fire water system release from 6/14/2025 at the 3M Menomonie facility and the immediate actions taken:

Details of incident:

- On or about 11:30pm on 6/14 an underground water leak was discovered outside of 3M Menomonie - Building 12.
- Upon investigation, it was determined that the leak was from the facility fire protection system loop located underground on the north side of the property.
    - PFAS constituents have been detected in the fire water system loop likely due to the previous use of PFAS containing AFFF.
- The Menomonie Plant Engineering team worked to review the system design to identify the appropriate valve(s) that would be used to isolate the specific affected area.
- The flow rate of leak was reduced over the next few hours so that it was fully isolated by approximately 9:30 am on 6/15.
- It has been initially determined that approximately 3000 gallons of fire system water had been released. By design, this water was directed to and collected in the on-site storm water basin #1 located on the northern portion of the 3M Menomonie site (which is identified on the attached facility layouts).

3M Menomonie actions:

- The fire protection system has been isolated to prevent further release of water.
- Outside contractors have been contacted to schedule and begin the work of investigating and identifying the source of and working to repair the leak.
- Soil and water samples were taken from affected areas of the release for analysis of potential PFAS constituents.
- An assessment will be conducted to determine if remediation procedures need to be implemented for any affected soil and associated materials.

Please see the attached photos with descriptions to understand the layout of the facility and locations of the release and affected areas.

Please let me know if you have any questions. I'd be happy to set up a time to discuss the above information.

Best regards,

Pat Gareau
EHS Manager
1425 Stokke Parkway
Menomonie, Wi 54751

3M Menomonie On-Site Stormwater Retention Basin #1