

June 13, 2023

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

RE: Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

Dear Amanda Albrecht:

Enclosed are the analytical results for sample(s) received by the laboratory on May 05, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Minneapolis

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

Sincerely,



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

Enclosures

cc: 3M Environmental Laboratory, 3M Environmental



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064

Arizona Certification #: AZ0014

Arkansas DW Certification #: MN00064

Arkansas WW Certification #: 88-0680

California Certification #: 2929

Colorado Certification #: MN00064

Connecticut Certification #: PH-0256

EPA Region 8 Tribal Water Systems+Wyoming DW

Certification #: via MN 027-053-137

Florida Certification #: E87605

Georgia Certification #: 959

GMP+ Certification #: GMP050884

Hawaii Certification #: MN00064

Idaho Certification #: MN00064

Illinois Certification #: 200011

Indiana Certification #: C-MN-01

Iowa Certification #: 368

Kansas Certification #: E-10167

Kentucky DW Certification #: 90062

Kentucky WW Certification #: 90062

Louisiana DEQ Certification #: AI-03086

Louisiana DW Certification #: MN00064

Maine Certification #: MN00064

Maryland Certification #: 322

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Approval: via MN 027-053-137

Minnesota Petrofund Registration #: 1240

Mississippi Certification #: MN00064

Missouri Certification #: 10100

Montana Certification #: CERT0092

Nebraska Certification #: NE-OS-18-06

Nevada Certification #: MN00064

New Hampshire Certification #: 2081

New Jersey Certification #: MN002

New York Certification #: 11647

North Carolina DW Certification #: 27700

North Carolina WW Certification #: 530

North Dakota Certification (A2LA) #: R-036

North Dakota Certification (MN) #: R-036

Ohio DW Certification #: 41244

Ohio VAP Certification (1700) #: CL101

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

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

SAMPLE SUMMARY

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10652169001	MEWI-S-HA30-5-6 FT-0-230505	Solid	05/05/23 08:40	05/05/23 15:18
10652169002	MEWI-S-HA30-9-10 FT-0-230505	Solid	05/05/23 08:55	05/05/23 15:18
10652169003	MEWI-S-HA30-9-10 FT-DB-230505	Solid	05/05/23 09:00	05/05/23 15:18
10652169004	MEWI-S-HA31-3.5-4.5 FT-0-23050	Solid	05/05/23 09:10	05/05/23 15:18
10652169005	MEWI-S-HA31-8.5-9.5 FT-0-23050	Solid	05/05/23 09:25	05/05/23 15:18
10652169006	MEWI-S-HA31-8.5-9.5 FT-DB-2305	Solid	05/05/23 09:30	05/05/23 15:18
10652169007	MEWI-S-HA32-4-5 FT-0-230505	Solid	05/05/23 10:25	05/05/23 15:18
10652169008	MEWI-S-HA32-8.5-9.5 FT-0-23050	Solid	05/05/23 10:45	05/05/23 15:18
10652169009	MEWI-S-HA33-4-5 FT-0-230505	Solid	05/05/23 11:10	05/05/23 15:18
10652169010	MEWI-S-HA33-8.5-9.5 FT-0-23050	Solid	05/05/23 11:25	05/05/23 15:18
10652169011	MEWI-S-SB28-24-25 FT-0-230504	Solid	05/04/23 15:45	05/05/23 15:18
10652169012	MEWI-S-SB28-29-30 FT-0-230504	Solid	05/04/23 16:00	05/05/23 15:18
10652169013	MEWI-S-SB29-24-25 FT-0-230504	Solid	05/04/23 15:30	05/05/23 15:18
10652169014	MEWI-S-SB29-29-30 FT-0-230504	Solid	05/04/23 15:35	05/05/23 15:18
10652169015	MEWI-S-SB30-4.5-5.5 FT-0-23050	Solid	05/03/23 15:15	05/05/23 15:18
10652169016	MEWI-S-SB31-9-10 FT-0-230502	Solid	05/02/23 08:00	05/05/23 15:18
10652169017	MEWI-S-SB30-12.5-13.5 FT-0-230	Solid	05/03/23 15:30	05/05/23 15:18
10652169018	MEWI-S-SB30-19-20 FT-0-230503	Solid	05/03/23 15:45	05/05/23 15:18
10652169019	MEWI-S-SB31-1-2 FT-0-230502	Solid	05/02/23 07:55	05/05/23 15:18
10652169020	MEWI-S-SB31-9-10 FT-DB-230502	Solid	05/02/23 08:05	05/05/23 15:18
10652169021	MEWI-S-SB32-1-2 FT-0-230503	Solid	05/03/23 15:25	05/05/23 15:18
10652169022	MEWI-S-SB32-9-10 FT-0-230503	Solid	05/03/23 15:30	05/05/23 15:18
10652169023	MEWI-S-MW2-4.5-5.5 FT-0-230504	Solid	05/04/23 08:40	05/05/23 15:18
10652169024	MEWI-S-MW2-11.5-12.5 FT-0-2305	Solid	05/04/23 08:50	05/05/23 15:18
10652169025	MEWI-S-MW2-59-60 FT-0-230504	Solid	05/04/23 13:15	05/05/23 15:18
10652169026	MEWI-S-MW3-4.5-5.5 FT-0-230503	Solid	05/03/23 08:15	05/05/23 15:18
10652169027	MEWI-S-MW3-12.5-13.5 FT-0-2305	Solid	05/03/23 08:35	05/05/23 15:18
10652169028	MEWI-S-MW4-63-64 FT-0-230501	Solid	05/01/23 16:35	05/05/23 15:18
10652169029	MEWI-S-MW5-64-65 FT-0-230501	Solid	05/01/23 10:10	05/05/23 15:18
10652169030	MEWI-S-MW6-2-3 FT-0-230503	Solid	05/03/23 08:15	05/05/23 15:18
10652169031	MEWI-S-MW6-58-59 FT-0-230503	Solid	05/03/23 09:25	05/05/23 15:18
10652169032	MEWI-S-MW7-2-3 FT-0-230502	Solid	05/02/23 09:15	05/05/23 15:18
10652169033	MEWI-S-MW7-58-59 FT-0-230502	Solid	05/02/23 11:40	05/05/23 15:18
10652169034	MEWI-W-FB1-FB-230501	Water	05/01/23 16:05	05/05/23 15:18
10652169035	MEWI-W-FB2-FB-230502	Water	05/02/23 16:10	05/05/23 15:18
10652169036	MEWI-W-FB3-FB-230504	Water	05/04/23 10:00	05/05/23 15:18
10652169037	MEWI-W-FB4-FB-230505	Water	05/05/23 11:40	05/05/23 15:18

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10652169038	MEWI-W-EB1-EB-230502	Water	05/02/23 16:15	05/05/23 15:18
10652169039	MEWI-W-EB2-EB-230503	Water	05/03/23 17:40	05/05/23 15:18
10652169040	MEWI-W-EB3-EB-230504	Water	05/04/23 13:30	05/05/23 15:18
10652169041	MEWI-W-EB4-EB-230505	Water	05/05/23 11:35	05/05/23 15:18
10652169042	MEWI-S-MW3-59-60 FT-0-230503	Solid	05/03/23 11:05	05/05/23 15:18

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10652169001	MEWI-S-HA30-5-6 FT-0-230505	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169002	MEWI-S-HA30-9-10 FT-0-230505	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169003	MEWI-S-HA30-9-10 FT-DB-230505	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169004	MEWI-S-HA31-3.5-4.5 FT-0-23050	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169005	MEWI-S-HA31-8.5-9.5 FT-0-23050	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169006	MEWI-S-HA31-8.5-9.5 FT-DB-2305	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169007	MEWI-S-HA32-4-5 FT-0-230505	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169008	MEWI-S-HA32-8.5-9.5 FT-0-23050	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169009	MEWI-S-HA33-4-5 FT-0-230505	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169010	MEWI-S-HA33-8.5-9.5 FT-0-23050	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169011	MEWI-S-SB28-24-25 FT-0-230504	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169012	MEWI-S-SB28-29-30 FT-0-230504	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169013	MEWI-S-SB29-24-25 FT-0-230504	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169014	MEWI-S-SB29-29-30 FT-0-230504	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169015	MEWI-S-SB30-4.5-5.5 FT-0-23050	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169016	MEWI-S-SB31-9-10 FT-0-230502	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169017	MEWI-S-SB30-12.5-13.5 FT-0-230	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4	57	PASI-M
10652169018	MEWI-S-SB30-19-20 FT-0-230503	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4	57	PASI-M
10652169019	MEWI-S-SB31-1-2 FT-0-230502	ASTM D2974	JDL	1	PASI-M

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169020	MEWI-S-SB31-9-10 FT-DB-230502	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169021	MEWI-S-SB32-1-2 FT-0-230503	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169022	MEWI-S-SB32-9-10 FT-0-230503	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169023	MEWI-S-MW2-4.5-5.5 FT-0-230504	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169024	MEWI-S-MW2-11.5-12.5 FT-0-2305	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M
10652169025	MEWI-S-MW2-59-60 FT-0-230504	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169026	MEWI-S-MW3-4.5-5.5 FT-0-230503	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4	57	PASI-M
10652169027	MEWI-S-MW3-12.5-13.5 FT-0-2305	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4	57	PASI-M
10652169028	MEWI-S-MW4-63-64 FT-0-230501	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169029	MEWI-S-MW5-64-65 FT-0-230501	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169030	MEWI-S-MW6-2-3 FT-0-230503	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169031	MEWI-S-MW6-58-59 FT-0-230503	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169032	MEWI-S-MW7-2-3 FT-0-230502	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169033	MEWI-S-MW7-58-59 FT-0-230502	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169034	MEWI-W-FB1-FB-230501	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169035	MEWI-W-FB2-FB-230502	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169036	MEWI-W-FB3-FB-230504	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169037	MEWI-W-FB4-FB-230505	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169038	MEWI-W-EB1-EB-230502	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169039	MEWI-W-EB2-EB-230503	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169040	MEWI-W-EB3-EB-230504	ENV-SOP-MIN4-0178	NBH	57	PASI-M
10652169041	MEWI-W-EB4-EB-230505	ENV-SOP-MIN4-0178	NBH	57	PASI-M

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10652169042	MEWI-S-MW3-59-60 FT-0-230503	ASTM D2974	JDL	1	PASI-M
		ENV-SOP-MIN4-0178	MM4, NBH	57	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
10652169001	MEWI-S-HA30-5-6 FT-0-230505					
ASTM D2974	Percent Moisture	7.7	%	0.10	05/25/23 14:00	N2
ENV-SOP-MIN4-0178	Perfluorodecanoic acid	0.12	ug/kg	0.11	06/06/23 17:42	N2
ENV-SOP-MIN4-0178	PFDS	0.39	ug/kg	0.10	06/06/23 17:42	N2
ENV-SOP-MIN4-0178	PFDoS	0.25	ug/kg	0.10	06/06/23 17:42	N2
ENV-SOP-MIN4-0178	PFHpS	1.6	ug/kg	0.10	06/06/23 17:42	N2
ENV-SOP-MIN4-0178	PFNS	8.5	ug/kg	1.0	05/22/23 18:19	N2
ENV-SOP-MIN4-0178	PFOSA	1.5	ug/kg	0.11	06/06/23 17:42	N2
ENV-SOP-MIN4-0178	PFPeS	0.33	ug/kg	0.10	06/06/23 17:42	N2
ENV-SOP-MIN4-0178	Perfluoroheptanoic acid	0.12	ug/kg	0.11	06/06/23 17:42	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	12.3	ug/kg	0.98	05/22/23 18:19	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	725	ug/kg	10.1	05/31/23 12:52	N2
ENV-SOP-MIN4-0178	Perfluorooctanoic acid	0.41	ug/kg	0.11	06/06/23 17:42	N2
10652169002	MEWI-S-HA30-9-10 FT-0-230505					
ASTM D2974	Percent Moisture	6.8	%	0.10	05/25/23 14:00	N2
ENV-SOP-MIN4-0178	PFNS	3.3	ug/kg	1.0	05/22/23 18:27	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	3.7	ug/kg	0.96	05/22/23 18:27	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	640	ug/kg	9.8	05/31/23 12:59	N2
10652169003	MEWI-S-HA30-9-10 FT-DB-230505					
ASTM D2974	Percent Moisture	6.8	%	0.10	05/25/23 14:01	N2
ENV-SOP-MIN4-0178	PFNS	4.4	ug/kg	1.0	05/22/23 18:34	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	4.7	ug/kg	0.94	05/22/23 18:34	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	755	ug/kg	9.6	05/31/23 13:07	N2
10652169004	MEWI-S-HA31-3.5-4.5 FT-0-23050					
ASTM D2974	Percent Moisture	10.0	%	0.10	05/25/23 14:01	N2
ENV-SOP-MIN4-0178	PFDS	3.6	ug/kg	1.1	05/22/23 18:41	N2
ENV-SOP-MIN4-0178	PFNS	6.3	ug/kg	1.1	05/22/23 18:41	N2
ENV-SOP-MIN4-0178	PFOSA	3.7	ug/kg	1.1	05/22/23 18:41	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	240	ug/kg	5.1	05/31/23 13:14	N2
10652169005	MEWI-S-HA31-8.5-9.5 FT-0-23050					
ASTM D2974	Percent Moisture	7.1	%	0.10	05/25/23 14:01	N2
ENV-SOP-MIN4-0178	PFNS	2.0	ug/kg	1.0	05/22/23 18:48	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	2.6	ug/kg	0.96	05/22/23 18:48	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	646	ug/kg	9.8	05/31/23 13:21	N2
10652169006	MEWI-S-HA31-8.5-9.5 FT-DB-2305					
ASTM D2974	Percent Moisture	6.9	%	0.10	05/25/23 14:01	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	1.9	ug/kg	0.94	05/22/23 18:55	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	357	ug/kg	4.8	05/31/23 13:28	N2
10652169007	MEWI-S-HA32-4-5 FT-0-230505					
ASTM D2974	Percent Moisture	7.7	%	0.10	05/25/23 14:01	N2
ENV-SOP-MIN4-0178	PFDS	2.4	ug/kg	1.0	05/22/23 19:03	N2
ENV-SOP-MIN4-0178	PFNS	4.1	ug/kg	1.0	05/22/23 19:03	N2
ENV-SOP-MIN4-0178	PFOSA	3.8	ug/kg	1.1	05/22/23 19:03	N2

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
10652169007	MEWI-S-HA32-4-5 FT-0-230505					
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	4.0	ug/kg	0.97	05/22/23 19:03	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	413	ug/kg	4.9	05/31/23 13:36	N2
10652169008	MEWI-S-HA32-8.5-9.5 FT-0-23050					
ASTM D2974	Percent Moisture	9.4	%	0.10	05/25/23 14:02	N2
ENV-SOP-MIN4-0178	PFNS	14.4	ug/kg	1.1	05/22/23 19:10	N2
ENV-SOP-MIN4-0178	PFOSA	1.1	ug/kg	1.1	05/22/23 19:10	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	1.2	ug/kg	1.0	05/22/23 19:10	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	975	ug/kg	10.2	05/31/23 13:43	N2
10652169009	MEWI-S-HA33-4-5 FT-0-230505					
ASTM D2974	Percent Moisture	5.9	%	0.10	05/25/23 14:02	N2
ENV-SOP-MIN4-0178	PFDS	3.8	ug/kg	1.0	05/22/23 19:17	N2
ENV-SOP-MIN4-0178	PFHpS	1.7	ug/kg	0.98	05/22/23 19:17	N2
ENV-SOP-MIN4-0178	PFNS	9.6	ug/kg	0.99	05/22/23 19:17	N2
ENV-SOP-MIN4-0178	PFOSA	3.1	ug/kg	1.0	05/22/23 19:17	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	5.0	ug/kg	0.94	05/22/23 19:17	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	929	ug/kg	19.1	05/31/23 13:50	N2
10652169010	MEWI-S-HA33-8.5-9.5 FT-0-23050					
ASTM D2974	Percent Moisture	9.4	%	0.10	05/25/23 14:02	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	3.9	ug/kg	0.99	05/22/23 19:32	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	463	ug/kg	10.1	05/31/23 13:57	N2
10652169011	MEWI-S-SB28-24-25 FT-0-230504					
ASTM D2974	Percent Moisture	4.8	%	0.10	05/25/23 14:02	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	0.11	ug/kg	0.094	06/06/23 16:51	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	1.0	ug/kg	0.096	06/06/23 16:51	N2
10652169012	MEWI-S-SB28-29-30 FT-0-230504					
ASTM D2974	Percent Moisture	3.7	%	0.10	05/25/23 14:03	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	0.12	ug/kg	0.092	06/06/23 16:58	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	0.36	ug/kg	0.094	06/06/23 16:58	N2
10652169013	MEWI-S-SB29-24-25 FT-0-230504					
ASTM D2974	Percent Moisture	1.9	%	0.10	05/25/23 14:03	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	1.0	ug/kg	0.090	06/06/23 17:06	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	0.57	ug/kg	0.091	06/06/23 17:06	N2
ENV-SOP-MIN4-0178	Perfluorooctanoic acid	0.11	ug/kg	0.098	06/06/23 17:06	N2
10652169014	MEWI-S-SB29-29-30 FT-0-230504					
ASTM D2974	Percent Moisture	2.5	%	0.10	05/25/23 14:03	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	1.4	ug/kg	0.090	06/06/23 17:13	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	0.12	ug/kg	0.092	06/06/23 17:13	N2
10652169015	MEWI-S-SB30-4.5-5.5 FT-0-23050					
ASTM D2974	Percent Moisture	18.9	%	0.10	05/25/23 14:03	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	329	ug/kg	4.5	05/31/23 15:02	N2
10652169016	MEWI-S-SB31-9-10 FT-0-230502					
ASTM D2974	Percent Moisture	8.1	%	0.10	05/25/23 14:04	N2

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
10652169017	MEWI-S-SB30-12.5-13.5 FT-0-230					
ASTM D2974	Percent Moisture	6.5	%	0.10	05/25/23 14:04	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	2.0	ug/kg	0.95	05/22/23 20:22	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	65.3	ug/kg	0.97	05/22/23 20:22	N2
ENV-SOP-MIN4-0178	Perfluorooctanoic acid	2.2	ug/kg	1.0	05/22/23 20:22	N2
10652169018	MEWI-S-SB30-19-20 FT-0-230503					
ASTM D2974	Percent Moisture	3.4	%	0.10	05/25/23 14:04	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	12.9	ug/kg	0.94	05/22/23 20:29	N2
10652169019	MEWI-S-SB31-1-2 FT-0-230502					
ASTM D2974	Percent Moisture	3.4	%	0.10	05/25/23 14:04	N2
10652169020	MEWI-S-SB31-9-10 FT-DB-230502					
ASTM D2974	Percent Moisture	8.8	%	0.10	05/25/23 14:04	N2
10652169021	MEWI-S-SB32-1-2 FT-0-230503					
ASTM D2974	Percent Moisture	3.9	%	0.10	05/25/23 15:39	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	0.61	ug/kg	0.094	06/06/23 12:54	N2
ENV-SOP-MIN4-0178	Perfluorooctanoic acid	0.19	ug/kg	0.10	06/06/23 12:54	N2
10652169022	MEWI-S-SB32-9-10 FT-0-230503					
ASTM D2974	Percent Moisture	6.6	%	0.10	05/25/23 15:40	N2
10652169023	MEWI-S-MW2-4.5-5.5 FT-0-230504					
ASTM D2974	Percent Moisture	5.5	%	0.10	05/25/23 15:40	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	2.5	ug/kg	0.096	06/06/23 14:12	N2
10652169024	MEWI-S-MW2-11.5-12.5 FT-0-2305					
ASTM D2974	Percent Moisture	11.6	%	0.10	05/25/23 15:40	N2
ENV-SOP-MIN4-0178	PFHpS	0.54	ug/kg	0.11	06/06/23 14:19	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	0.21	ug/kg	0.10	06/06/23 14:19	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	104	ug/kg	1.0	05/25/23 15:05	N2
10652169025	MEWI-S-MW2-59-60 FT-0-230504					
ASTM D2974	Percent Moisture	7.5	%	0.10	05/25/23 15:40	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	4.7	ug/kg	0.097	06/06/23 14:26	N2
10652169026	MEWI-S-MW3-4.5-5.5 FT-0-230503					
ASTM D2974	Percent Moisture	6.9	%	0.10	05/25/23 15:40	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	11.3	ug/kg	0.98	05/25/23 15:26	N2
10652169027	MEWI-S-MW3-12.5-13.5 FT-0-2305					
ASTM D2974	Percent Moisture	9.2	%	0.10	05/25/23 15:41	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	17.3	ug/kg	1.0	05/25/23 15:33	N2
10652169028	MEWI-S-MW4-63-64 FT-0-230501					
ASTM D2974	Percent Moisture	21.4	%	0.10	05/25/23 15:41	N2

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
10652169029	MEWI-S-MW5-64-65 FT-0-230501					
ASTM D2974	Percent Moisture	7.3	%	0.10	05/25/23 15:41	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	0.24	ug/kg	0.10	06/06/23 15:16	N2
10652169030	MEWI-S-MW6-2-3 FT-0-230503					
ASTM D2974	Percent Moisture	8.2	%	0.10	05/25/23 15:41	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	0.17	ug/kg	0.098	06/06/23 15:23	N2
10652169031	MEWI-S-MW6-58-59 FT-0-230503					
ASTM D2974	Percent Moisture	3.7	%	0.10	05/25/23 15:42	N2
10652169032	MEWI-S-MW7-2-3 FT-0-230502					
ASTM D2974	Percent Moisture	7.5	%	0.10	05/25/23 15:42	N2
ENV-SOP-MIN4-0178	PFBA	0.15	ug/kg	0.11	06/06/23 16:16	N2
10652169033	MEWI-S-MW7-58-59 FT-0-230502					
ASTM D2974	Percent Moisture	3.9	%	0.10	05/25/23 15:42	N2
10652169041	MEWI-W-EB4-EB-230505					
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	0.0056	ug/L	0.0019	05/19/23 15:31	N2
10652169042	MEWI-S-MW3-59-60 FT-0-230503					
ASTM D2974	Percent Moisture	3.0	%	0.10	05/25/23 15:42	N2
ENV-SOP-MIN4-0178	PFHpS	0.19	ug/kg	0.095	06/06/23 16:44	N2
ENV-SOP-MIN4-0178	PFPeS	0.10	ug/kg	0.094	06/06/23 16:44	N2
ENV-SOP-MIN4-0178	Perfluorohexanesulfonic acid	12.8	ug/kg	0.91	05/25/23 16:24	N2
ENV-SOP-MIN4-0178	Perfluorooctanesulfonic acid	4.3	ug/kg	0.093	06/06/23 16:44	N2
ENV-SOP-MIN4-0178	Perfluorooctanoic acid	0.53	ug/kg	0.10	06/06/23 16:44	N2

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

General Information:

8 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: 880080

S0: Surrogate recovery outside laboratory control limits.

- MEWI-W-EB1-EB-230502 (Lab ID: 10652169038)
 - d3-NMeFOSA (S)
 - d5-NEtFOSA (S)
- MEWI-W-EB2-EB-230503 (Lab ID: 10652169039)
 - d3-NMeFOSA (S)
 - d5-NEtFOSA (S)
- MEWI-W-EB3-EB-230504 (Lab ID: 10652169040)
 - d3-NMeFOSA (S)
 - d5-NEtFOSA (S)
- MEWI-W-EB4-EB-230505 (Lab ID: 10652169041)
 - 13C28:2FTS (S)
- MS (Lab ID: 4644211)
 - d3-NMeFOSA (S)
 - d5-NEtFOSA (S)

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

- MEWI-W-EB1-EB-230502 (Lab ID: 10652169038)
 - 13C28:2FTS (S)
- MEWI-W-EB2-EB-230503 (Lab ID: 10652169039)
 - 13C26:2FTS (S)

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

QC Batch: 880080

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

- 13C28:2FTS (S)
- MEWI-W-EB3-EB-230504 (Lab ID: 10652169040)
 - 13C28:2FTS (S)
- MEWI-W-FB1-FB-230501 (Lab ID: 10652169034)
 - 13C28:2FTS (S)
- MEWI-W-FB2-FB-230502 (Lab ID: 10652169035)
 - 13C28:2FTS (S)
- MEWI-W-FB3-FB-230504 (Lab ID: 10652169036)
 - 13C28:2FTS (S)
- MEWI-W-FB4-FB-230505 (Lab ID: 10652169037)
 - 13C28:2FTS (S)

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- DUP (Lab ID: 4644212)
 - d3-NMeFOSA (S)
 - d5-NEtFOSA (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.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 880080

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.

- BLANK (Lab ID: 4638791)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- BLANK (Lab ID: 4638791)
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- DUP (Lab ID: 4644212)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- DUP (Lab ID: 4644212)
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- LCS (Lab ID: 4638792)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- LCS (Lab ID: 4638792)
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- LCSD (Lab ID: 4644210)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- LCSD (Lab ID: 4644210)
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-W-EB1-EB-230502 (Lab ID: 10652169038)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-W-EB2-EB-230503 (Lab ID: 10652169039)
 - 11Cl-PF3OUdS
 - 4:2 FTS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

• MEWI-W-EB2-EB-230503 (Lab ID: 10652169039)

- 6:2 FTS
- 8:2 FTS
- 9CI-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid
- Perfluorodecanoic acid
- PFDS
- Perfluorododecanoic acid
- PFDoS
- Perfluoroheptanoic acid
- PFHpS
- Perfluorohexanoic acid
- Perfluorohexanesulfonic acid
- Perfluorononanoic acid
- PFNS
- Perfluorooctanoic acid
- Perfluorooctanesulfonic acid
- PFOSA
- PFPeA
- PFPeS
- Perfluorotetradecanoic acid
- Perfluorotridecanoic acid
- Perfluoroundecanoic acid

• MEWI-W-EB3-EB-230504 (Lab ID: 10652169040)

- 11CI-PF3OUdS
- 4:2 FTS
- 6:2 FTS
- 8:2 FTS
- 9CI-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- MEWI-W-EB3-EB-230504 (Lab ID: 10652169040)

- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid
- Perfluorodecanoic acid
- PFDS
- Perfluorododecanoic acid
- PFDoS
- Perfluoroheptanoic acid
- PFHpS
- Perfluorohexanoic acid
- Perfluorohexanesulfonic acid
- Perfluorononanoic acid
- PFNS
- Perfluorooctanoic acid
- Perfluorooctanesulfonic acid
- PFOSA
- PFPeA
- PFPeS
- Perfluorotetradecanoic acid
- Perfluorotridecanoic acid
- Perfluoroundecanoic acid

- MEWI-W-EB4-EB-230505 (Lab ID: 10652169041)

- 11Cl-PF3OUdS
- 4:2 FTS
- 6:2 FTS
- 8:2 FTS
- 9Cl-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid
- Perfluorodecanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- MEWI-W-EB4-EB-230505 (Lab ID: 10652169041)
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-W-FB1-FB-230501 (Lab ID: 10652169034)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- MEWI-W-FB1-FB-230501 (Lab ID: 10652169034)
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-W-FB2-FB-230502 (Lab ID: 10652169035)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- MEWI-W-FB2-FB-230502 (Lab ID: 10652169035)
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-W-FB3-FB-230504 (Lab ID: 10652169036)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-W-FB4-FB-230505 (Lab ID: 10652169037)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- MEWI-W-FB4-FB-230505 (Lab ID: 10652169037)

- 8:2 FTS
- 9Cl-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid
- Perfluorodecanoic acid
- PFDS
- Perfluorododecanoic acid
- PFDoS
- Perfluoroheptanoic acid
- PFHpS
- Perfluorohexanoic acid
- Perfluorohexanesulfonic acid
- Perfluorononanoic acid
- PFNS
- Perfluorooctanoic acid
- Perfluorooctanesulfonic acid
- PFOSA
- PFPeA
- PFPeS
- Perfluorotetradecanoic acid
- Perfluorotridecanoic acid
- Perfluoroundecanoic acid

- MS (Lab ID: 4644211)

- 11Cl-PF3OUdS
- 4:2 FTS
- 6:2 FTS
- 8:2 FTS
- 9Cl-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA
- NEtFOSE

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID NPW

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 880080

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.

- MS (Lab ID: 4644211)
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

General Information:

34 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: 881401

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- MEWI-S-HA30-9-10 FT-0-230505 (Lab ID: 10652169002)
 - 13C2-PFDoA (S)
 - 13C2-PFTA (S)
 - 13C6-PFDA (S)
 - 13C7-PFUdA (S)
 - 13C8-PFOA (S)
 - 13C9-PFNA (S)
 - d3-MeFOSAA (S)
 - d5-EtFOSAA (S)
- MEWI-S-HA30-9-10 FT-DB-230505 (Lab ID: 10652169003)
 - 13C2-PFDoA (S)
 - 13C2-PFTA (S)
 - 13C6-PFDA (S)
 - 13C7-PFUdA (S)
 - 13C9-PFNA (S)
- MEWI-S-HA31-3.5-4.5 FT-0-23050 (Lab ID: 10652169004)
 - 13C6-PFDA (S)
 - 13C7-PFUdA (S)
 - 13C9-PFNA (S)
- MEWI-S-HA31-8.5-9.5 FT-0-23050 (Lab ID: 10652169005)

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

QC Batch: 881401

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- 13C2-PFDoA (S)
- 13C2-PFTA (S)
- 13C28:2FTS (S)
- 13C6-PFDA (S)
- 13C7-PFUdA (S)
- 13C8-PFOA (S)
- 13C9-PFNA (S)
- d3-MeFOSAA (S)
- MEWI-S-HA31-8.5-9.5 FT-DB-2305 (Lab ID: 10652169006)
 - 13C2-PFTA (S)
 - 13C6-PFDA (S)
 - 13C7-PFUdA (S)
 - 13C9-PFNA (S)
- MEWI-S-HA33-8.5-9.5 FT-0-23050 (Lab ID: 10652169010)
 - 13C28:2FTS (S)
- MEWI-S-SB30-12.5-13.5 FT-0-230 (Lab ID: 10652169017)
 - 13C8-PFOS (S)
 - 13C9-PFNA (S)
- MEWI-S-SB30-19-20 FT-0-230503 (Lab ID: 10652169018)
 - 13C9-PFNA (S)

QC Batch: 881983

S0: Surrogate recovery outside laboratory control limits.

- MEWI-S-MW4-63-64 FT-0-230501 (Lab ID: 10652169028)
 - d5-NEtFOSA (S)

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- MEWI-S-MW3-12.5-13.5 FT-0-2305 (Lab ID: 10652169027)
 - 13C24:2FTS (S)
 - 13C26:2FTS (S)
- MEWI-S-MW3-4.5-5.5 FT-0-230503 (Lab ID: 10652169026)
 - 13C24:2FTS (S)
 - 13C26:2FTS (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

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- BLANK (Lab ID: 4644807)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- LCS (Lab ID: 4644808)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- LCS (Lab ID: 4644808)
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA30-5-6 FT-0-230505 (Lab ID: 10652169001)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-HA30-5-6 FT-0-230505 (Lab ID: 10652169001)
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA30-9-10 FT-0-230505 (Lab ID: 10652169002)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-HA30-9-10 FT-0-230505 (Lab ID: 10652169002)
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA30-9-10 FT-DB-230505 (Lab ID: 10652169003)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-HA30-9-10 FT-DB-230505 (Lab ID: 10652169003)
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA31-3.5-4.5 FT-0-23050 (Lab ID: 10652169004)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA31-8.5-9.5 FT-0-23050 (Lab ID: 10652169005)
 - 11CI-PF3OUdS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-HA31-8.5-9.5 FT-0-23050 (Lab ID: 10652169005)
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA31-8.5-9.5 FT-DB-2305 (Lab ID: 10652169006)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-HA31-8.5-9.5 FT-DB-2305 (Lab ID: 10652169006)

- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid
- Perfluorodecanoic acid
- PFDS
- Perfluorododecanoic acid
- PFDoS
- Perfluoroheptanoic acid
- PFHpS
- Perfluorohexanoic acid
- Perfluorohexanesulfonic acid
- Perfluorononanoic acid
- PFNS
- Perfluorooctanoic acid
- Perfluorooctanesulfonic acid
- PFOSA
- PFPeA
- PFPeS
- Perfluorotetradecanoic acid
- Perfluorotridecanoic acid
- Perfluoroundecanoic acid

- MEWI-S-HA32-4-5 FT-0-230505 (Lab ID: 10652169007)

- 11Cl-PF3OUdS
- 4:2 FTS
- 6:2 FTS
- 8:2 FTS
- 9Cl-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-HA32-4-5 FT-0-230505 (Lab ID: 10652169007)
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA32-8.5-9.5 FT-0-23050 (Lab ID: 10652169008)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-HA32-8.5-9.5 FT-0-23050 (Lab ID: 10652169008)
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA33-4-5 FT-0-230505 (Lab ID: 10652169009)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-HA33-4-5 FT-0-230505 (Lab ID: 10652169009)
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-HA33-8.5-9.5 FT-0-23050 (Lab ID: 10652169010)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB28-24-25 FT-0-230504 (Lab ID: 10652169011)
 - 11Cl-PF3OUdS
 - 4:2 FTS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-SB28-24-25 FT-0-230504 (Lab ID: 10652169011)
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB28-29-30 FT-0-230504 (Lab ID: 10652169012)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-SB28-29-30 FT-0-230504 (Lab ID: 10652169012)
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB29-24-25 FT-0-230504 (Lab ID: 10652169013)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-SB29-24-25 FT-0-230504 (Lab ID: 10652169013)
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB29-29-30 FT-0-230504 (Lab ID: 10652169014)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-SB29-29-30 FT-0-230504 (Lab ID: 10652169014)
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB30-12.5-13.5 FT-0-230 (Lab ID: 10652169017)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-SB30-12.5-13.5 FT-0-230 (Lab ID: 10652169017)
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB30-19-20 FT-0-230503 (Lab ID: 10652169018)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB30-4.5-5.5 FT-0-23050 (Lab ID: 10652169015)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-SB30-4.5-5.5 FT-0-23050 (Lab ID: 10652169015)
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB31-1-2 FT-0-230502 (Lab ID: 10652169019)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-SB31-1-2 FT-0-230502 (Lab ID: 10652169019)
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB31-9-10 FT-0-230502 (Lab ID: 10652169016)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MEWI-S-SB31-9-10 FT-0-230502 (Lab ID: 10652169016)

- Perfluorododecanoic acid
- PFDoS
- Perfluoroheptanoic acid
- PFHpS
- Perfluorohexanoic acid
- Perfluorohexanesulfonic acid
- Perfluorononanoic acid
- PFNS
- Perfluorooctanoic acid
- Perfluorooctanesulfonic acid
- PFOSA
- PFPeA
- PFPeS
- Perfluorotetradecanoic acid
- Perfluorotridecanoic acid
- Perfluoroundecanoic acid

- MS (Lab ID: 4645248)

- 11Cl-PF3OUdS
- 4:2 FTS
- 6:2 FTS
- 8:2 FTS
- 9Cl-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid
- Perfluorodecanoic acid
- PFDS
- Perfluorododecanoic acid
- PFDoS
- Perfluoroheptanoic acid
- PFHpS
- Perfluorohexanoic acid
- Perfluorohexanesulfonic acid
- Perfluorononanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MS (Lab ID: 4645248)
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MSD (Lab ID: 4645249)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881401

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.

- MSD (Lab ID: 4645249)
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid

QC Batch: 881983

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.

- BLANK (Lab ID: 4647589)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- LCS (Lab ID: 4647590)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW2-11.5-12.5 FT-0-2305 (Lab ID: 10652169024)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW2-11.5-12.5 FT-0-2305 (Lab ID: 10652169024)

- NEtFOSA
- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid
- Perfluorodecanoic acid
- PFDS
- Perfluorododecanoic acid
- PFDoS
- Perfluoroheptanoic acid
- PFHpS
- Perfluorohexanoic acid
- Perfluorohexanesulfonic acid
- Perfluorononanoic acid
- PFNS
- Perfluorooctanoic acid
- Perfluorooctanesulfonic acid
- PFOSA
- PFPeA
- PFPeS
- Perfluorotetradecanoic acid
- Perfluorotridecanoic acid
- Perfluoroundecanoic acid

- MEWI-S-MW2-4.5-5.5 FT-0-230504 (Lab ID: 10652169023)

- 11Cl-PF3OUdS
- 4:2 FTS
- 6:2 FTS
- 8:2 FTS
- 9Cl-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW2-4.5-5.5 FT-0-230504 (Lab ID: 10652169023)
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW2-59-60 FT-0-230504 (Lab ID: 10652169025)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW2-59-60 FT-0-230504 (Lab ID: 10652169025)
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW3-12.5-13.5 FT-0-2305 (Lab ID: 10652169027)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW3-12.5-13.5 FT-0-2305 (Lab ID: 10652169027)
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW3-4.5-5.5 FT-0-230503 (Lab ID: 10652169026)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW3-59-60 FT-0-230503 (Lab ID: 10652169042)
 - 11CI-PF3OUdS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW3-59-60 FT-0-230503 (Lab ID: 10652169042)
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW4-63-64 FT-0-230501 (Lab ID: 10652169028)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW4-63-64 FT-0-230501 (Lab ID: 10652169028)
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW5-64-65 FT-0-230501 (Lab ID: 10652169029)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW5-64-65 FT-0-230501 (Lab ID: 10652169029)
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW6-2-3 FT-0-230503 (Lab ID: 10652169030)
 - 11CI-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9CI-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW6-2-3 FT-0-230503 (Lab ID: 10652169030)
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW6-58-59 FT-0-230503 (Lab ID: 10652169031)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW6-58-59 FT-0-230503 (Lab ID: 10652169031)
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW7-2-3 FT-0-230502 (Lab ID: 10652169032)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-MW7-58-59 FT-0-230502 (Lab ID: 10652169033)
 - 11Cl-PF3OUdS
 - 4:2 FTS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-MW7-58-59 FT-0-230502 (Lab ID: 10652169033)
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB31-9-10 FT-DB-230502 (Lab ID: 10652169020)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-SB31-9-10 FT-DB-230502 (Lab ID: 10652169020)
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB32-1-2 FT-0-230503 (Lab ID: 10652169021)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-SB32-1-2 FT-0-230503 (Lab ID: 10652169021)
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MEWI-S-SB32-9-10 FT-0-230503 (Lab ID: 10652169022)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MEWI-S-SB32-9-10 FT-0-230503 (Lab ID: 10652169022)

- Perfluorononanoic acid
- PFNS
- Perfluorooctanoic acid
- Perfluorooctanesulfonic acid
- PFOSA
- PFPeA
- PFPeS
- Perfluorotetradecanoic acid
- Perfluorotridecanoic acid
- Perfluoroundecanoic acid

- MS (Lab ID: 4647698)

- 11Cl-PF3OUdS
- 4:2 FTS
- 6:2 FTS
- 8:2 FTS
- 9Cl-PF3ONS
- ADONA
- HFPO-DA
- NEtFOSA
- NEtFOSAA
- NEtFOSE
- NMeFOSA
- NMeFOSAA
- NMeFOSE
- PFBA
- Perfluorobutanesulfonic acid
- Perfluorodecanoic acid
- PFDS
- Perfluorododecanoic acid
- PFDoS
- Perfluoroheptanoic acid
- PFHpS
- Perfluorohexanoic acid
- Perfluorohexanesulfonic acid
- Perfluorononanoic acid
- PFNS
- Perfluorooctanoic acid
- Perfluorooctanesulfonic acid
- PFOSA
- PFPeA
- PFPeS

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Method: ENV-SOP-MIN4-0178

Description: WI ID SL

Client: 3M Environmental

Date: June 13, 2023

Analyte Comments:

QC Batch: 881983

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.

- MS (Lab ID: 4647698)
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid
- MSD (Lab ID: 4647699)
 - 11Cl-PF3OUdS
 - 4:2 FTS
 - 6:2 FTS
 - 8:2 FTS
 - 9Cl-PF3ONS
 - ADONA
 - HFPO-DA
 - NEtFOSA
 - NEtFOSAA
 - NEtFOSE
 - NMeFOSA
 - NMeFOSAA
 - NMeFOSE
 - PFBA
 - Perfluorobutanesulfonic acid
 - Perfluorodecanoic acid
 - PFDS
 - Perfluorododecanoic acid
 - PFDoS
 - Perfluoroheptanoic acid
 - PFHpS
 - Perfluorohexanoic acid
 - Perfluorohexanesulfonic acid
 - Perfluorononanoic acid
 - PFNS
 - Perfluorooctanoic acid
 - Perfluorooctanesulfonic acid
 - PFOSA
 - PFPeA
 - PFPeS
 - Perfluorotetradecanoic acid
 - Perfluorotridecanoic acid
 - Perfluoroundecanoic acid

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

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA30-5-6 FT-0-230505 **Lab ID:** 10652169001 Collected: 05/05/23 08:40 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	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	1		05/25/23 14:00		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	756426-58-1	N2
ADONA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 17:42	375-73-5	N2
Perfluorodecanoic acid	0.12	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	307-24-4	N2
PFBA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	375-22-4	N2
PFDS	0.39	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	335-77-3	N2
PFDoS	0.25	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	79780-39-5	N2
PFHpS	1.6	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	375-92-8	N2
PFNS	8.5	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:19	68259-12-1	N2
PFOSA	1.5	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	754-91-6	N2
PFPeA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	2706-90-3	N2
PFPeS	0.33	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:42	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	307-55-1	N2
Perfluoroheptanoic acid	0.12	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	375-85-9	N2
Perfluorohexanesulfonic acid	12.3	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:19	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	375-95-1	N2
Perfluorooctanesulfonic acid	725	ug/kg	10.1	100	05/17/23 10:14	05/31/23 12:52	1763-23-1	N2
Perfluorooctanoic acid	0.41	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:42	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	91	%	25-150	1	05/17/23 10:14	06/06/23 17:42		
13C2-PFTA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:42		
13C24:2FTS (S)	81	%	25-150	1	05/17/23 10:14	06/06/23 17:42		
13C26:2FTS (S)	94	%	25-150	1	05/17/23 10:14	06/06/23 17:42		
13C28:2FTS (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:42		
13C3-PFBS (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 17:42	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA30-5-6 FT-0-230505 **Lab ID:** 10652169001 Collected: 05/05/23 08:40 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	87	%	25-150	1	05/17/23 10:14	06/06/23 17:42	355-46-4	
13C3HFPO-DA (S)	98	%	25-150	1	05/17/23 10:14	06/06/23 17:42		
13C4-PFBA (S)	89	%	25-150	1	05/17/23 10:14	06/06/23 17:42	375-22-4	
13C4-PFHpA (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:42	375-85-9	
13C5-PFHxA (S)	93	%	25-150	1	05/17/23 10:14	06/06/23 17:42	307-24-4	
13C5-PFPeA (S)	91	%	25-150	1	05/17/23 10:14	06/06/23 17:42	2706-90-3	
13C6-PFDA (S)	89	%	25-150	1	05/17/23 10:14	06/06/23 17:42	335-76-2	
13C7-PFUdA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:42	2058-94-8	
13C8-PFOA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:42	335-67-1	
13C8-PFOS (S)	28	%	25-150	1	05/17/23 10:14	06/06/23 17:42	1763-23-1	
13C8-PFOSA (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 17:42	754-91-6	
13C9-PFNA (S)	27	%	25-150	1	05/17/23 10:14	06/06/23 17:42	375-95-1	
d3-MeFOSAA (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:42	2355-31-9	
d3-NMeFOSA (S)	78	%	10-150	1	05/17/23 10:14	06/06/23 17:42	31506-32-8	
d5-EtFOSAA (S)	98	%	25-150	1	05/17/23 10:14	06/06/23 17:42	2991-50-6	
d5-NEtFOSA (S)	76	%	10-150	1	05/17/23 10:14	06/06/23 17:42	4151-50-2	
d7-NMeFOSE (S)	87	%	10-150	1	05/17/23 10:14	06/06/23 17:42	24448-09-7	
d9-NEtFOSE (S)	80	%	10-150	1	05/17/23 10:14	06/06/23 17:42	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA30-9-10 FT-0-230505 **Lab ID:** 10652169002 Collected: 05/05/23 08:55 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	6.8	%	0.10	1		05/25/23 14:00		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:27	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:27	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:27	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:27	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:27	756426-58-1	N2
ADONA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:27	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.94	10	05/17/23 10:14	05/22/23 18:27	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	307-24-4	N2
PFBA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	375-22-4	N2
PFDS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:27	335-77-3	N2
PFDoS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:27	79780-39-5	N2
PFHpS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:27	375-92-8	N2
PFNS	3.3	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:27	68259-12-1	N2
PFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	754-91-6	N2
PFPeA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	2706-90-3	N2
PFPeS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:27	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	375-85-9	N2
Perfluorohexanesulfonic acid	3.7	ug/kg	0.96	10	05/17/23 10:14	05/22/23 18:27	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	375-95-1	N2
Perfluorooctanesulfonic acid	640	ug/kg	9.8	100	05/17/23 10:14	05/31/23 12:59	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:27	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	182	%	25-150	10	05/17/23 10:14	05/22/23 18:27		S4
13C2-PFTA (S)	174	%	25-150	10	05/17/23 10:14	05/22/23 18:27		S4
13C24:2FTS (S)	121	%	25-150	10	05/17/23 10:14	05/22/23 18:27		
13C26:2FTS (S)	115	%	25-150	10	05/17/23 10:14	05/22/23 18:27		
13C28:2FTS (S)	130	%	25-150	10	05/17/23 10:14	05/22/23 18:27		
13C3-PFBS (S)	119	%	25-150	10	05/17/23 10:14	05/22/23 18:27	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA30-9-10 FT-0-230505 **Lab ID:** 10652169002 Collected: 05/05/23 08:55 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	128	%	25-150	10	05/17/23 10:14	05/22/23 18:27	355-46-4	
13C3HFPO-DA (S)	134	%	25-150	10	05/17/23 10:14	05/22/23 18:27		
13C4-PFBA (S)	125	%	25-150	10	05/17/23 10:14	05/22/23 18:27	375-22-4	
13C4-PFHpA (S)	144	%	25-150	10	05/17/23 10:14	05/22/23 18:27	375-85-9	
13C5-PFHxA (S)	138	%	25-150	10	05/17/23 10:14	05/22/23 18:27	307-24-4	
13C5-PFPeA (S)	131	%	25-150	10	05/17/23 10:14	05/22/23 18:27	2706-90-3	
13C6-PFDA (S)	194	%	25-150	10	05/17/23 10:14	05/22/23 18:27	335-76-2	S4
13C7-PFUdA (S)	200	%	25-150	10	05/17/23 10:14	05/22/23 18:27	2058-94-8	S4
13C8-PFOA (S)	172	%	25-150	10	05/17/23 10:14	05/22/23 18:27	335-67-1	S4
13C8-PFOS (S)	126	%	25-150	10	05/17/23 10:14	05/22/23 18:27	1763-23-1	
13C8-PFOSA (S)	131	%	25-150	10	05/17/23 10:14	05/22/23 18:27	754-91-6	
13C9-PFNA (S)	171	%	25-150	10	05/17/23 10:14	05/22/23 18:27	375-95-1	S4
d3-MeFOSAA (S)	169	%	25-150	10	05/17/23 10:14	05/22/23 18:27	2355-31-9	S4
d3-NMeFOSA (S)	123	%	10-150	10	05/17/23 10:14	05/22/23 18:27	31506-32-8	
d5-EtFOSAA (S)	164	%	25-150	10	05/17/23 10:14	05/22/23 18:27	2991-50-6	S4
d5-NEtFOSA (S)	132	%	10-150	10	05/17/23 10:14	05/22/23 18:27	4151-50-2	
d7-NMeFOSE (S)	109	%	10-150	10	05/17/23 10:14	05/22/23 18:27	24448-09-7	
d9-NEtFOSE (S)	109	%	10-150	10	05/17/23 10:14	05/22/23 18:27	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA30-9-10 FT-DB-230505 **Lab ID:** 10652169003 Collected: 05/05/23 09:00 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	6.8	%	0.10	1		05/25/23 14:01		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:34	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:34	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:34	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.96	10	05/17/23 10:14	05/22/23 18:34	756426-58-1	N2
ADONA	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:34	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.92	10	05/17/23 10:14	05/22/23 18:34	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	307-24-4	N2
PFBA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	375-22-4	N2
PFDS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	335-77-3	N2
PFDoS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	79780-39-5	N2
PFHpS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:34	375-92-8	N2
PFNS	4.4	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	68259-12-1	N2
PFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	754-91-6	N2
PFPeA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	2706-90-3	N2
PFPeS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:34	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	375-85-9	N2
Perfluorohexanesulfonic acid	4.7	ug/kg	0.94	10	05/17/23 10:14	05/22/23 18:34	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	375-95-1	N2
Perfluorooctanesulfonic acid	755	ug/kg	9.6	100	05/17/23 10:14	05/31/23 13:07	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:34	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	152	%	25-150	10	05/17/23 10:14	05/22/23 18:34		S4
13C2-PFTA (S)	155	%	25-150	10	05/17/23 10:14	05/22/23 18:34		S4
13C24:2FTS (S)	81	%	25-150	10	05/17/23 10:14	05/22/23 18:34		
13C26:2FTS (S)	99	%	25-150	10	05/17/23 10:14	05/22/23 18:34		
13C28:2FTS (S)	129	%	25-150	10	05/17/23 10:14	05/22/23 18:34		
13C3-PFBS (S)	106	%	25-150	10	05/17/23 10:14	05/22/23 18:34	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA30-9-10 FT-DB-230505 **Lab ID:** 10652169003 **Collected:** 05/05/23 09:00 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	108	%	25-150	10	05/17/23 10:14	05/22/23 18:34	355-46-4	
13C3HFPO-DA (S)	118	%	25-150	10	05/17/23 10:14	05/22/23 18:34		
13C4-PFBA (S)	103	%	25-150	10	05/17/23 10:14	05/22/23 18:34	375-22-4	
13C4-PFHpA (S)	129	%	25-150	10	05/17/23 10:14	05/22/23 18:34	375-85-9	
13C5-PFHxA (S)	119	%	25-150	10	05/17/23 10:14	05/22/23 18:34	307-24-4	
13C5-PFPeA (S)	113	%	25-150	10	05/17/23 10:14	05/22/23 18:34	2706-90-3	
13C6-PFDA (S)	172	%	25-150	10	05/17/23 10:14	05/22/23 18:34	335-76-2	S4
13C7-PFUdA (S)	175	%	25-150	10	05/17/23 10:14	05/22/23 18:34	2058-94-8	S4
13C8-PFOA (S)	142	%	25-150	10	05/17/23 10:14	05/22/23 18:34	335-67-1	
13C8-PFOS (S)	107	%	25-150	10	05/17/23 10:14	05/22/23 18:34	1763-23-1	
13C8-PFOSA (S)	120	%	25-150	10	05/17/23 10:14	05/22/23 18:34	754-91-6	
13C9-PFNA (S)	155	%	25-150	10	05/17/23 10:14	05/22/23 18:34	375-95-1	S4
d3-MeFOSAA (S)	140	%	25-150	10	05/17/23 10:14	05/22/23 18:34	2355-31-9	
d3-NMeFOSA (S)	82	%	10-150	10	05/17/23 10:14	05/22/23 18:34	31506-32-8	
d5-EtFOSAA (S)	136	%	25-150	10	05/17/23 10:14	05/22/23 18:34	2991-50-6	
d5-NEtFOSA (S)	86	%	10-150	10	05/17/23 10:14	05/22/23 18:34	4151-50-2	
d7-NMeFOSE (S)	104	%	10-150	10	05/17/23 10:14	05/22/23 18:34	24448-09-7	
d9-NEtFOSE (S)	86	%	10-150	10	05/17/23 10:14	05/22/23 18:34	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA31-3.5-4.5 FT-0-23050 **Lab ID:** 10652169004 Collected: 05/05/23 09:10 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	10.0	%	0.10	1		05/25/23 14:01		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:41	763051-92-9	N2
4:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:41	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:41	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:41	756426-58-1	N2
ADONA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:41	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:41	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	307-24-4	N2
PFBA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	375-22-4	N2
PFDS	3.6	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	335-77-3	N2
PFDoS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	79780-39-5	N2
PFHpS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:41	375-92-8	N2
PFNS	6.3	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	68259-12-1	N2
PFOSA	3.7	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	754-91-6	N2
PFPeA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	2706-90-3	N2
PFPeS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:41	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:41	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	375-95-1	N2
Perfluorooctanesulfonic acid	240	ug/kg	5.1	50	05/17/23 10:14	05/31/23 13:14	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:41	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	149	%	25-150	10	05/17/23 10:14	05/22/23 18:41		
13C2-PFTA (S)	143	%	25-150	10	05/17/23 10:14	05/22/23 18:41		
13C24:2FTS (S)	82	%	25-150	10	05/17/23 10:14	05/22/23 18:41		
13C26:2FTS (S)	116	%	25-150	10	05/17/23 10:14	05/22/23 18:41		
13C28:2FTS (S)	102	%	25-150	10	05/17/23 10:14	05/22/23 18:41		
13C3-PFBS (S)	105	%	25-150	10	05/17/23 10:14	05/22/23 18:41	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA31-3.5-4.5 FT-0-23050 **Lab ID:** 10652169004 Collected: 05/05/23 09:10 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	115	%	25-150	10	05/17/23 10:14	05/22/23 18:41	355-46-4	
13C3HFPO-DA (S)	116	%	25-150	10	05/17/23 10:14	05/22/23 18:41		
13C4-PFBA (S)	109	%	25-150	10	05/17/23 10:14	05/22/23 18:41	375-22-4	
13C4-PFHpA (S)	126	%	25-150	10	05/17/23 10:14	05/22/23 18:41	375-85-9	
13C5-PFHxA (S)	121	%	25-150	10	05/17/23 10:14	05/22/23 18:41	307-24-4	
13C5-PFPeA (S)	115	%	25-150	10	05/17/23 10:14	05/22/23 18:41	2706-90-3	
13C6-PFDA (S)	167	%	25-150	10	05/17/23 10:14	05/22/23 18:41	335-76-2	S4
13C7-PFUdA (S)	171	%	25-150	10	05/17/23 10:14	05/22/23 18:41	2058-94-8	S4
13C8-PFOA (S)	145	%	25-150	10	05/17/23 10:14	05/22/23 18:41	335-67-1	
13C8-PFOS (S)	119	%	25-150	10	05/17/23 10:14	05/22/23 18:41	1763-23-1	
13C8-PFOSA (S)	110	%	25-150	10	05/17/23 10:14	05/22/23 18:41	754-91-6	
13C9-PFNA (S)	157	%	25-150	10	05/17/23 10:14	05/22/23 18:41	375-95-1	S4
d3-MeFOSAA (S)	138	%	25-150	10	05/17/23 10:14	05/22/23 18:41	2355-31-9	
d3-NMeFOSA (S)	106	%	10-150	10	05/17/23 10:14	05/22/23 18:41	31506-32-8	
d5-EtFOSAA (S)	137	%	25-150	10	05/17/23 10:14	05/22/23 18:41	2991-50-6	
d5-NEtFOSA (S)	92	%	10-150	10	05/17/23 10:14	05/22/23 18:41	4151-50-2	
d7-NMeFOSE (S)	104	%	10-150	10	05/17/23 10:14	05/22/23 18:41	24448-09-7	
d9-NEtFOSE (S)	94	%	10-150	10	05/17/23 10:14	05/22/23 18:41	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA31-8.5-9.5 FT-0-23050 **Lab ID:** 10652169005 Collected: 05/05/23 09:25 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	7.1	%	0.10	1		05/25/23 14:01		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:48	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:48	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:48	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:48	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:48	756426-58-1	N2
ADONA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:48	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.94	10	05/17/23 10:14	05/22/23 18:48	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	307-24-4	N2
PFBA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	375-22-4	N2
PFDS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:48	335-77-3	N2
PFDoS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:48	79780-39-5	N2
PFHpS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:48	375-92-8	N2
PFNS	2.0	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:48	68259-12-1	N2
PFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	754-91-6	N2
PFPeA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	2706-90-3	N2
PFPeS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:48	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	375-85-9	N2
Perfluorohexanesulfonic acid	2.6	ug/kg	0.96	10	05/17/23 10:14	05/22/23 18:48	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	375-95-1	N2
Perfluorooctanesulfonic acid	646	ug/kg	9.8	100	05/17/23 10:14	05/31/23 13:21	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 18:48	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	169	%	25-150	10	05/17/23 10:14	05/22/23 18:48		S4
13C2-PFTA (S)	161	%	25-150	10	05/17/23 10:14	05/22/23 18:48		S4
13C24:2FTS (S)	104	%	25-150	10	05/17/23 10:14	05/22/23 18:48		
13C26:2FTS (S)	112	%	25-150	10	05/17/23 10:14	05/22/23 18:48		
13C28:2FTS (S)	170	%	25-150	10	05/17/23 10:14	05/22/23 18:48		S4
13C3-PFBS (S)	111	%	25-150	10	05/17/23 10:14	05/22/23 18:48	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA31-8.5-9.5 FT-0-23050 **Lab ID:** 10652169005 **Collected:** 05/05/23 09:25 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	116	%	25-150	10	05/17/23 10:14	05/22/23 18:48	355-46-4	
13C3HFPO-DA (S)	127	%	25-150	10	05/17/23 10:14	05/22/23 18:48		
13C4-PFBA (S)	112	%	25-150	10	05/17/23 10:14	05/22/23 18:48	375-22-4	
13C4-PFHpA (S)	136	%	25-150	10	05/17/23 10:14	05/22/23 18:48	375-85-9	
13C5-PFHxA (S)	127	%	25-150	10	05/17/23 10:14	05/22/23 18:48	307-24-4	
13C5-PFPeA (S)	119	%	25-150	10	05/17/23 10:14	05/22/23 18:48	2706-90-3	
13C6-PFDA (S)	180	%	25-150	10	05/17/23 10:14	05/22/23 18:48	335-76-2	S4
13C7-PFUdA (S)	192	%	25-150	10	05/17/23 10:14	05/22/23 18:48	2058-94-8	S4
13C8-PFOA (S)	153	%	25-150	10	05/17/23 10:14	05/22/23 18:48	335-67-1	S4
13C8-PFOS (S)	127	%	25-150	10	05/17/23 10:14	05/22/23 18:48	1763-23-1	
13C8-PFOSA (S)	120	%	25-150	10	05/17/23 10:14	05/22/23 18:48	754-91-6	
13C9-PFNA (S)	167	%	25-150	10	05/17/23 10:14	05/22/23 18:48	375-95-1	S4
d3-MeFOSAA (S)	160	%	25-150	10	05/17/23 10:14	05/22/23 18:48	2355-31-9	S4
d3-NMeFOSA (S)	110	%	10-150	10	05/17/23 10:14	05/22/23 18:48	31506-32-8	
d5-EtFOSAA (S)	132	%	25-150	10	05/17/23 10:14	05/22/23 18:48	2991-50-6	
d5-NEtFOSA (S)	126	%	10-150	10	05/17/23 10:14	05/22/23 18:48	4151-50-2	
d7-NMeFOSE (S)	100	%	10-150	10	05/17/23 10:14	05/22/23 18:48	24448-09-7	
d9-NEtFOSE (S)	96	%	10-150	10	05/17/23 10:14	05/22/23 18:48	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA31-8.5-9.5 FT-DB-2305 **Lab ID:** 10652169006 Collected: 05/05/23 09:30 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	6.9	%	0.10	1		05/25/23 14:01		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 18:55	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 18:55	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:55	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.96	10	05/17/23 10:14	05/22/23 18:55	756426-58-1	N2
ADONA	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:55	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.92	10	05/17/23 10:14	05/22/23 18:55	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	307-24-4	N2
PFBA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	375-22-4	N2
PFDS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	335-77-3	N2
PFDoS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	79780-39-5	N2
PFHpS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 18:55	375-92-8	N2
PFNS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 18:55	68259-12-1	N2
PFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	754-91-6	N2
PFPeA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	2706-90-3	N2
PFPeS	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 18:55	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	375-85-9	N2
Perfluorohexanesulfonic acid	1.9	ug/kg	0.94	10	05/17/23 10:14	05/22/23 18:55	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	375-95-1	N2
Perfluorooctanesulfonic acid	357	ug/kg	4.8	50	05/17/23 10:14	05/31/23 13:28	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 18:55	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	149	%	25-150	10	05/17/23 10:14	05/22/23 18:55		
13C2-PFTA (S)	153	%	25-150	10	05/17/23 10:14	05/22/23 18:55		S4
13C24:2FTS (S)	92	%	25-150	10	05/17/23 10:14	05/22/23 18:55		
13C26:2FTS (S)	94	%	25-150	10	05/17/23 10:14	05/22/23 18:55		
13C28:2FTS (S)	116	%	25-150	10	05/17/23 10:14	05/22/23 18:55		
13C3-PFBS (S)	112	%	25-150	10	05/17/23 10:14	05/22/23 18:55	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA31-8.5-9.5 FT-DB-2305 **Lab ID:** 10652169006 Collected: 05/05/23 09:30 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	112	%	25-150	10	05/17/23 10:14	05/22/23 18:55	355-46-4	
13C3HFPO-DA (S)	121	%	25-150	10	05/17/23 10:14	05/22/23 18:55		
13C4-PFBA (S)	112	%	25-150	10	05/17/23 10:14	05/22/23 18:55	375-22-4	
13C4-PFHpA (S)	127	%	25-150	10	05/17/23 10:14	05/22/23 18:55	375-85-9	
13C5-PFHxA (S)	123	%	25-150	10	05/17/23 10:14	05/22/23 18:55	307-24-4	
13C5-PFPeA (S)	115	%	25-150	10	05/17/23 10:14	05/22/23 18:55	2706-90-3	
13C6-PFDA (S)	168	%	25-150	10	05/17/23 10:14	05/22/23 18:55	335-76-2	S4
13C7-PFUdA (S)	173	%	25-150	10	05/17/23 10:14	05/22/23 18:55	2058-94-8	S4
13C8-PFOA (S)	146	%	25-150	10	05/17/23 10:14	05/22/23 18:55	335-67-1	
13C8-PFOS (S)	136	%	25-150	10	05/17/23 10:14	05/22/23 18:55	1763-23-1	
13C8-PFOSA (S)	110	%	25-150	10	05/17/23 10:14	05/22/23 18:55	754-91-6	
13C9-PFNA (S)	173	%	25-150	10	05/17/23 10:14	05/22/23 18:55	375-95-1	S4
d3-MeFOSAA (S)	134	%	25-150	10	05/17/23 10:14	05/22/23 18:55	2355-31-9	
d3-NMeFOSA (S)	44	%	10-150	10	05/17/23 10:14	05/22/23 18:55	31506-32-8	
d5-EtFOSAA (S)	140	%	25-150	10	05/17/23 10:14	05/22/23 18:55	2991-50-6	
d5-NEtFOSA (S)	35	%	10-150	10	05/17/23 10:14	05/22/23 18:55	4151-50-2	
d7-NMeFOSE (S)	80	%	10-150	10	05/17/23 10:14	05/22/23 18:55	24448-09-7	
d9-NEtFOSE (S)	75	%	10-150	10	05/17/23 10:14	05/22/23 18:55	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA32-4-5 FT-0-230505 Lab ID: 10652169007 Collected: 05/05/23 10:25 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	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	1		05/25/23 14:01		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	763051-92-9	N2
4:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 19:03	756426-58-1	N2
ADONA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.95	10	05/17/23 10:14	05/22/23 19:03	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	307-24-4	N2
PFBA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	375-22-4	N2
PFDS	2.4	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	335-77-3	N2
PFDoS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	79780-39-5	N2
PFHpS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	375-92-8	N2
PFNS	4.1	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	68259-12-1	N2
PFOSA	3.8	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	754-91-6	N2
PFPeA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	2706-90-3	N2
PFPeS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:03	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	375-85-9	N2
Perfluorohexanesulfonic acid	4.0	ug/kg	0.97	10	05/17/23 10:14	05/22/23 19:03	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	375-95-1	N2
Perfluorooctanesulfonic acid	413	ug/kg	4.9	50	05/17/23 10:14	05/31/23 13:36	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:03	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	105	%	25-150	10	05/17/23 10:14	05/22/23 19:03		
13C2-PFTA (S)	97	%	25-150	10	05/17/23 10:14	05/22/23 19:03		
13C24:2FTS (S)	88	%	25-150	10	05/17/23 10:14	05/22/23 19:03		
13C26:2FTS (S)	82	%	25-150	10	05/17/23 10:14	05/22/23 19:03		
13C28:2FTS (S)	84	%	25-150	10	05/17/23 10:14	05/22/23 19:03		
13C3-PFBS (S)	92	%	25-150	10	05/17/23 10:14	05/22/23 19:03	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA32-4-5 FT-0-230505 **Lab ID:** 10652169007 Collected: 05/05/23 10:25 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	103	%	25-150	10	05/17/23 10:14	05/22/23 19:03	355-46-4	
13C3HFPO-DA (S)	95	%	25-150	10	05/17/23 10:14	05/22/23 19:03		
13C4-PFBA (S)	88	%	25-150	10	05/17/23 10:14	05/22/23 19:03	375-22-4	
13C4-PFHpA (S)	100	%	25-150	10	05/17/23 10:14	05/22/23 19:03	375-85-9	
13C5-PFHxA (S)	99	%	25-150	10	05/17/23 10:14	05/22/23 19:03	307-24-4	
13C5-PFPeA (S)	94	%	25-150	10	05/17/23 10:14	05/22/23 19:03	2706-90-3	
13C6-PFDA (S)	119	%	25-150	10	05/17/23 10:14	05/22/23 19:03	335-76-2	
13C7-PFUdA (S)	110	%	25-150	10	05/17/23 10:14	05/22/23 19:03	2058-94-8	
13C8-PFOA (S)	114	%	25-150	10	05/17/23 10:14	05/22/23 19:03	335-67-1	
13C8-PFOS (S)	113	%	25-150	10	05/17/23 10:14	05/22/23 19:03	1763-23-1	
13C8-PFOSA (S)	103	%	25-150	10	05/17/23 10:14	05/22/23 19:03	754-91-6	
13C9-PFNA (S)	121	%	25-150	10	05/17/23 10:14	05/22/23 19:03	375-95-1	
d3-MeFOSAA (S)	98	%	25-150	10	05/17/23 10:14	05/22/23 19:03	2355-31-9	
d3-NMeFOSA (S)	101	%	10-150	10	05/17/23 10:14	05/22/23 19:03	31506-32-8	
d5-EtFOSAA (S)	97	%	25-150	10	05/17/23 10:14	05/22/23 19:03	2991-50-6	
d5-NEtFOSA (S)	93	%	10-150	10	05/17/23 10:14	05/22/23 19:03	4151-50-2	
d7-NMeFOSE (S)	100	%	10-150	10	05/17/23 10:14	05/22/23 19:03	24448-09-7	
d9-NEtFOSE (S)	79	%	10-150	10	05/17/23 10:14	05/22/23 19:03	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA32-8.5-9.5 FT-0-23050 **Lab ID:** 10652169008 **Collected:** 05/05/23 10:45 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	9.4	%	0.10	1		05/25/23 14:02		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:10	763051-92-9	N2
4:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:10	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:10	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:10	756426-58-1	N2
ADONA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:10	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 19:10	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	307-24-4	N2
PFBA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	375-22-4	N2
PFDS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	335-77-3	N2
PFDoS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	79780-39-5	N2
PFHpS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:10	375-92-8	N2
PFNS	14.4	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	68259-12-1	N2
PFOSA	1.1	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	754-91-6	N2
PFPeA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	2706-90-3	N2
PFPeS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:10	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	375-85-9	N2
Perfluorohexanesulfonic acid	1.2	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:10	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	375-95-1	N2
Perfluorooctanesulfonic acid	975	ug/kg	10.2	100	05/17/23 10:14	05/31/23 13:43	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:10	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	116	%	25-150	10	05/17/23 10:14	05/22/23 19:10		
13C2-PFTA (S)	108	%	25-150	10	05/17/23 10:14	05/22/23 19:10		
13C24:2FTS (S)	70	%	25-150	10	05/17/23 10:14	05/22/23 19:10		
13C26:2FTS (S)	105	%	25-150	10	05/17/23 10:14	05/22/23 19:10		
13C28:2FTS (S)	146	%	25-150	10	05/17/23 10:14	05/22/23 19:10		
13C3-PFBS (S)	94	%	25-150	10	05/17/23 10:14	05/22/23 19:10	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA32-8.5-9.5 FT-0-23050 **Lab ID:** 10652169008 Collected: 05/05/23 10:45 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	104	%	25-150	10	05/17/23 10:14	05/22/23 19:10	355-46-4	
13C3HFPO-DA (S)	104	%	25-150	10	05/17/23 10:14	05/22/23 19:10		
13C4-PFBA (S)	89	%	25-150	10	05/17/23 10:14	05/22/23 19:10	375-22-4	
13C4-PFHpA (S)	103	%	25-150	10	05/17/23 10:14	05/22/23 19:10	375-85-9	
13C5-PFHxA (S)	102	%	25-150	10	05/17/23 10:14	05/22/23 19:10	307-24-4	
13C5-PFPeA (S)	97	%	25-150	10	05/17/23 10:14	05/22/23 19:10	2706-90-3	
13C6-PFDA (S)	128	%	25-150	10	05/17/23 10:14	05/22/23 19:10	335-76-2	
13C7-PFUdA (S)	117	%	25-150	10	05/17/23 10:14	05/22/23 19:10	2058-94-8	
13C8-PFOA (S)	113	%	25-150	10	05/17/23 10:14	05/22/23 19:10	335-67-1	
13C8-PFOS (S)	105	%	25-150	10	05/17/23 10:14	05/22/23 19:10	1763-23-1	
13C8-PFOSA (S)	95	%	25-150	10	05/17/23 10:14	05/22/23 19:10	754-91-6	
13C9-PFNA (S)	115	%	25-150	10	05/17/23 10:14	05/22/23 19:10	375-95-1	
d3-MeFOSAA (S)	118	%	25-150	10	05/17/23 10:14	05/22/23 19:10	2355-31-9	
d3-NMeFOSA (S)	85	%	10-150	10	05/17/23 10:14	05/22/23 19:10	31506-32-8	
d5-EtFOSAA (S)	106	%	25-150	10	05/17/23 10:14	05/22/23 19:10	2991-50-6	
d5-NEtFOSA (S)	75	%	10-150	10	05/17/23 10:14	05/22/23 19:10	4151-50-2	
d7-NMeFOSE (S)	94	%	10-150	10	05/17/23 10:14	05/22/23 19:10	24448-09-7	
d9-NEtFOSE (S)	106	%	10-150	10	05/17/23 10:14	05/22/23 19:10	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA33-4-5 FT-0-230505 **Lab ID:** 10652169009 Collected: 05/05/23 11:10 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	5.9	%	0.10	1		05/25/23 14:02		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 19:17	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 19:17	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 19:17	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.96	10	05/17/23 10:14	05/22/23 19:17	756426-58-1	N2
ADONA	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 19:17	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.92	10	05/17/23 10:14	05/22/23 19:17	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	307-24-4	N2
PFBA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	375-22-4	N2
PFDS	3.8	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	335-77-3	N2
PFDoS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	79780-39-5	N2
PFHpS	1.7	ug/kg	0.98	10	05/17/23 10:14	05/22/23 19:17	375-92-8	N2
PFNS	9.6	ug/kg	0.99	10	05/17/23 10:14	05/22/23 19:17	68259-12-1	N2
PFOSA	3.1	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	754-91-6	N2
PFPeA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	2706-90-3	N2
PFPeS	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 19:17	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	375-85-9	N2
Perfluorohexanesulfonic acid	5.0	ug/kg	0.94	10	05/17/23 10:14	05/22/23 19:17	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	375-95-1	N2
Perfluorooctanesulfonic acid	929	ug/kg	19.1	200	05/17/23 10:14	05/31/23 13:50	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:17	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	114	%	25-150	10	05/17/23 10:14	05/22/23 19:17		
13C2-PFTA (S)	108	%	25-150	10	05/17/23 10:14	05/22/23 19:17		
13C24:2FTS (S)	75	%	25-150	10	05/17/23 10:14	05/22/23 19:17		
13C26:2FTS (S)	63	%	25-150	10	05/17/23 10:14	05/22/23 19:17		
13C28:2FTS (S)	112	%	25-150	10	05/17/23 10:14	05/22/23 19:17		
13C3-PFBS (S)	92	%	25-150	10	05/17/23 10:14	05/22/23 19:17	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA33-4-5 FT-0-230505 **Lab ID:** 10652169009 Collected: 05/05/23 11:10 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	100	%	25-150	10	05/17/23 10:14	05/22/23 19:17	355-46-4	
13C3HFPO-DA (S)	99	%	25-150	10	05/17/23 10:14	05/22/23 19:17		
13C4-PFBA (S)	87	%	25-150	10	05/17/23 10:14	05/22/23 19:17	375-22-4	
13C4-PFHpA (S)	103	%	25-150	10	05/17/23 10:14	05/22/23 19:17	375-85-9	
13C5-PFHxA (S)	98	%	25-150	10	05/17/23 10:14	05/22/23 19:17	307-24-4	
13C5-PFPeA (S)	93	%	25-150	10	05/17/23 10:14	05/22/23 19:17	2706-90-3	
13C6-PFDA (S)	118	%	25-150	10	05/17/23 10:14	05/22/23 19:17	335-76-2	
13C7-PFUdA (S)	126	%	25-150	10	05/17/23 10:14	05/22/23 19:17	2058-94-8	
13C8-PFOA (S)	108	%	25-150	10	05/17/23 10:14	05/22/23 19:17	335-67-1	
13C8-PFOS (S)	107	%	25-150	10	05/17/23 10:14	05/22/23 19:17	1763-23-1	
13C8-PFOSA (S)	99	%	25-150	10	05/17/23 10:14	05/22/23 19:17	754-91-6	
13C9-PFNA (S)	108	%	25-150	10	05/17/23 10:14	05/22/23 19:17	375-95-1	
d3-MeFOSAA (S)	110	%	25-150	10	05/17/23 10:14	05/22/23 19:17	2355-31-9	
d3-NMeFOSA (S)	97	%	10-150	10	05/17/23 10:14	05/22/23 19:17	31506-32-8	
d5-EtFOSAA (S)	108	%	25-150	10	05/17/23 10:14	05/22/23 19:17	2991-50-6	
d5-NEtFOSA (S)	86	%	10-150	10	05/17/23 10:14	05/22/23 19:17	4151-50-2	
d7-NMeFOSE (S)	87	%	10-150	10	05/17/23 10:14	05/22/23 19:17	24448-09-7	
d9-NEtFOSE (S)	94	%	10-150	10	05/17/23 10:14	05/22/23 19:17	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA33-8.5-9.5 FT-0-23050 Lab ID: 10652169010 Collected: 05/05/23 11:25 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	9.4	%	0.10	1		05/25/23 14:02		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:32	763051-92-9	N2
4:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:32	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:32	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:32	756426-58-1	N2
ADONA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:32	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 19:32	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	307-24-4	N2
PFBA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	375-22-4	N2
PFDS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	335-77-3	N2
PFDoS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	79780-39-5	N2
PFHpS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:32	375-92-8	N2
PFNS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:32	68259-12-1	N2
PFOSA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	754-91-6	N2
PFPeA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	2706-90-3	N2
PFPeS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 19:32	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	375-85-9	N2
Perfluorohexanesulfonic acid	3.9	ug/kg	0.99	10	05/17/23 10:14	05/22/23 19:32	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	375-95-1	N2
Perfluorooctanesulfonic acid	463	ug/kg	10.1	100	05/17/23 10:14	05/31/23 13:57	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 19:32	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	128	%	25-150	10	05/17/23 10:14	05/22/23 19:32		
13C2-PFTA (S)	130	%	25-150	10	05/17/23 10:14	05/22/23 19:32		
13C24:2FTS (S)	84	%	25-150	10	05/17/23 10:14	05/22/23 19:32		
13C26:2FTS (S)	101	%	25-150	10	05/17/23 10:14	05/22/23 19:32		
13C28:2FTS (S)	156	%	25-150	10	05/17/23 10:14	05/22/23 19:32		S4
13C3-PFBS (S)	109	%	25-150	10	05/17/23 10:14	05/22/23 19:32	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-HA33-8.5-9.5 FT-0-23050 **Lab ID:** 10652169010 Collected: 05/05/23 11:25 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	118	%	25-150	10	05/17/23 10:14	05/22/23 19:32	355-46-4	
13C3HFPO-DA (S)	113	%	25-150	10	05/17/23 10:14	05/22/23 19:32		
13C4-PFBA (S)	104	%	25-150	10	05/17/23 10:14	05/22/23 19:32	375-22-4	
13C4-PFHpA (S)	119	%	25-150	10	05/17/23 10:14	05/22/23 19:32	375-85-9	
13C5-PFHxA (S)	112	%	25-150	10	05/17/23 10:14	05/22/23 19:32	307-24-4	
13C5-PFPeA (S)	108	%	25-150	10	05/17/23 10:14	05/22/23 19:32	2706-90-3	
13C6-PFDA (S)	135	%	25-150	10	05/17/23 10:14	05/22/23 19:32	335-76-2	
13C7-PFUdA (S)	137	%	25-150	10	05/17/23 10:14	05/22/23 19:32	2058-94-8	
13C8-PFOA (S)	125	%	25-150	10	05/17/23 10:14	05/22/23 19:32	335-67-1	
13C8-PFOS (S)	119	%	25-150	10	05/17/23 10:14	05/22/23 19:32	1763-23-1	
13C8-PFOSA (S)	120	%	25-150	10	05/17/23 10:14	05/22/23 19:32	754-91-6	
13C9-PFNA (S)	140	%	25-150	10	05/17/23 10:14	05/22/23 19:32	375-95-1	
d3-MeFOSAA (S)	127	%	25-150	10	05/17/23 10:14	05/22/23 19:32	2355-31-9	
d3-NMeFOSA (S)	74	%	10-150	10	05/17/23 10:14	05/22/23 19:32	31506-32-8	
d5-EtFOSAA (S)	126	%	25-150	10	05/17/23 10:14	05/22/23 19:32	2991-50-6	
d5-NEtFOSA (S)	65	%	10-150	10	05/17/23 10:14	05/22/23 19:32	4151-50-2	
d7-NMeFOSE (S)	114	%	10-150	10	05/17/23 10:14	05/22/23 19:32	24448-09-7	
d9-NEtFOSE (S)	109	%	10-150	10	05/17/23 10:14	05/22/23 19:32	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB28-24-25 FT-0-230504 **Lab ID:** 10652169011 **Collected:** 05/04/23 15:45 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	4.8	%	0.10	1		05/25/23 14:02		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.097	1	05/17/23 10:14	06/06/23 16:51	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.097	1	05/17/23 10:14	06/06/23 16:51	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 16:51	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 16:51	756426-58-1	N2
ADONA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 16:51	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.092	1	05/17/23 10:14	06/06/23 16:51	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	79780-39-5	N2
PFHpS	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 16:51	375-92-8	N2
PFNS	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 16:51	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	2706-90-3	N2
PFPeS	ND	ug/kg	0.097	1	05/17/23 10:14	06/06/23 16:51	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	375-85-9	N2
Perfluorohexanesulfonic acid	0.11	ug/kg	0.094	1	05/17/23 10:14	06/06/23 16:51	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	375-95-1	N2
Perfluorooctanesulfonic acid	1.0	ug/kg	0.096	1	05/17/23 10:14	06/06/23 16:51	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:51	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	82	%	25-150	1	05/17/23 10:14	06/06/23 16:51		
13C2-PFTA (S)	81	%	25-150	1	05/17/23 10:14	06/06/23 16:51		
13C24:2FTS (S)	81	%	25-150	1	05/17/23 10:14	06/06/23 16:51		
13C26:2FTS (S)	96	%	25-150	1	05/17/23 10:14	06/06/23 16:51		
13C28:2FTS (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 16:51		
13C3-PFBS (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 16:51	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB28-24-25 FT-0-230504 **Lab ID:** 10652169011 Collected: 05/04/23 15:45 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 16:51	355-46-4	
13C3HFPO-DA (S)	89	%	25-150	1	05/17/23 10:14	06/06/23 16:51		
13C4-PFBA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 16:51	375-22-4	
13C4-PFHpA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 16:51	375-85-9	
13C5-PFHxA (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 16:51	307-24-4	
13C5-PFPeA (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 16:51	2706-90-3	
13C6-PFDA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 16:51	335-76-2	
13C7-PFUdA (S)	82	%	25-150	1	05/17/23 10:14	06/06/23 16:51	2058-94-8	
13C8-PFOA (S)	79	%	25-150	1	05/17/23 10:14	06/06/23 16:51	335-67-1	
13C8-PFOS (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 16:51	1763-23-1	
13C8-PFOSA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 16:51	754-91-6	
13C9-PFNA (S)	87	%	25-150	1	05/17/23 10:14	06/06/23 16:51	375-95-1	
d3-MeFOSAA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 16:51	2355-31-9	
d3-NMeFOSA (S)	75	%	10-150	1	05/17/23 10:14	06/06/23 16:51	31506-32-8	
d5-EtFOSAA (S)	94	%	25-150	1	05/17/23 10:14	06/06/23 16:51	2991-50-6	
d5-NEtFOSA (S)	76	%	10-150	1	05/17/23 10:14	06/06/23 16:51	4151-50-2	
d7-NMeFOSE (S)	80	%	10-150	1	05/17/23 10:14	06/06/23 16:51	24448-09-7	
d9-NEtFOSE (S)	77	%	10-150	1	05/17/23 10:14	06/06/23 16:51	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB28-29-30 FT-0-230504 **Lab ID:** 10652169012 Collected: 05/04/23 16:00 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	3.7	%	0.10	1		05/25/23 14:03		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 16:58	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 16:58	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 16:58	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 16:58	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 16:58	756426-58-1	N2
ADONA	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 16:58	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.090	1	05/17/23 10:14	06/06/23 16:58	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	375-22-4	N2
PFDS	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 16:58	335-77-3	N2
PFDoS	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 16:58	79780-39-5	N2
PFHpS	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 16:58	375-92-8	N2
PFNS	ND	ug/kg	0.097	1	05/17/23 10:14	06/06/23 16:58	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	2706-90-3	N2
PFPeS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 16:58	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	375-85-9	N2
Perfluorohexanesulfonic acid	0.12	ug/kg	0.092	1	05/17/23 10:14	06/06/23 16:58	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	375-95-1	N2
Perfluorooctanesulfonic acid	0.36	ug/kg	0.094	1	05/17/23 10:14	06/06/23 16:58	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 16:58	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 16:58		
13C2-PFTA (S)	81	%	25-150	1	05/17/23 10:14	06/06/23 16:58		
13C24:2FTS (S)	78	%	25-150	1	05/17/23 10:14	06/06/23 16:58		
13C26:2FTS (S)	96	%	25-150	1	05/17/23 10:14	06/06/23 16:58		
13C28:2FTS (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 16:58		
13C3-PFBS (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 16:58	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB28-29-30 FT-0-230504 **Lab ID:** 10652169012 Collected: 05/04/23 16:00 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	87	%	25-150	1	05/17/23 10:14	06/06/23 16:58	355-46-4	
13C3HFPO-DA (S)	95	%	25-150	1	05/17/23 10:14	06/06/23 16:58		
13C4-PFBA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 16:58	375-22-4	
13C4-PFHpA (S)	81	%	25-150	1	05/17/23 10:14	06/06/23 16:58	375-85-9	
13C5-PFHxA (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 16:58	307-24-4	
13C5-PFPeA (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 16:58	2706-90-3	
13C6-PFDA (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 16:58	335-76-2	
13C7-PFUdA (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 16:58	2058-94-8	
13C8-PFOA (S)	79	%	25-150	1	05/17/23 10:14	06/06/23 16:58	335-67-1	
13C8-PFOS (S)	94	%	25-150	1	05/17/23 10:14	06/06/23 16:58	1763-23-1	
13C8-PFOSA (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 16:58	754-91-6	
13C9-PFNA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 16:58	375-95-1	
d3-MeFOSAA (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 16:58	2355-31-9	
d3-NMeFOSA (S)	76	%	10-150	1	05/17/23 10:14	06/06/23 16:58	31506-32-8	
d5-EtFOSAA (S)	98	%	25-150	1	05/17/23 10:14	06/06/23 16:58	2991-50-6	
d5-NEtFOSA (S)	79	%	10-150	1	05/17/23 10:14	06/06/23 16:58	4151-50-2	
d7-NMeFOSE (S)	80	%	10-150	1	05/17/23 10:14	06/06/23 16:58	24448-09-7	
d9-NEtFOSE (S)	77	%	10-150	1	05/17/23 10:14	06/06/23 16:58	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB29-24-25 FT-0-230504 **Lab ID:** 10652169013 Collected: 05/04/23 15:30 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	1.9	%	0.10	1		05/25/23 14:03		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.092	1	05/17/23 10:14	06/06/23 17:06	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.092	1	05/17/23 10:14	06/06/23 17:06	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.093	1	05/17/23 10:14	06/06/23 17:06	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 17:06	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.091	1	05/17/23 10:14	06/06/23 17:06	756426-58-1	N2
ADONA	ND	ug/kg	0.093	1	05/17/23 10:14	06/06/23 17:06	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.088	1	05/17/23 10:14	06/06/23 17:06	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	307-24-4	N2
PFBA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	375-22-4	N2
PFDS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 17:06	335-77-3	N2
PFDoS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 17:06	79780-39-5	N2
PFHpS	ND	ug/kg	0.093	1	05/17/23 10:14	06/06/23 17:06	375-92-8	N2
PFNS	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 17:06	68259-12-1	N2
PFOSA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	754-91-6	N2
PFPeA	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	2706-90-3	N2
PFPeS	ND	ug/kg	0.092	1	05/17/23 10:14	06/06/23 17:06	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	375-85-9	N2
Perfluorohexanesulfonic acid	1.0	ug/kg	0.090	1	05/17/23 10:14	06/06/23 17:06	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	375-95-1	N2
Perfluorooctanesulfonic acid	0.57	ug/kg	0.091	1	05/17/23 10:14	06/06/23 17:06	1763-23-1	N2
Perfluorooctanoic acid	0.11	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:06	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 17:06		
13C2-PFTA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:06		
13C24:2FTS (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 17:06		
13C26:2FTS (S)	102	%	25-150	1	05/17/23 10:14	06/06/23 17:06		
13C28:2FTS (S)	98	%	25-150	1	05/17/23 10:14	06/06/23 17:06		
13C3-PFBS (S)	95	%	25-150	1	05/17/23 10:14	06/06/23 17:06	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB29-24-25 FT-0-230504 **Lab ID:** 10652169013 Collected: 05/04/23 15:30 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	94	%	25-150	1	05/17/23 10:14	06/06/23 17:06	355-46-4	
13C3HFPO-DA (S)	101	%	25-150	1	05/17/23 10:14	06/06/23 17:06		
13C4-PFBA (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 17:06	375-22-4	
13C4-PFHpA (S)	89	%	25-150	1	05/17/23 10:14	06/06/23 17:06	375-85-9	
13C5-PFHxA (S)	95	%	25-150	1	05/17/23 10:14	06/06/23 17:06	307-24-4	
13C5-PFPeA (S)	94	%	25-150	1	05/17/23 10:14	06/06/23 17:06	2706-90-3	
13C6-PFDA (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 17:06	335-76-2	
13C7-PFUDa (S)	87	%	25-150	1	05/17/23 10:14	06/06/23 17:06	2058-94-8	
13C8-PFOA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:06	335-67-1	
13C8-PFOS (S)	97	%	25-150	1	05/17/23 10:14	06/06/23 17:06	1763-23-1	
13C8-PFOSA (S)	94	%	25-150	1	05/17/23 10:14	06/06/23 17:06	754-91-6	
13C9-PFNA (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 17:06	375-95-1	
d3-MeFOSAA (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 17:06	2355-31-9	
d3-NMeFOSA (S)	86	%	10-150	1	05/17/23 10:14	06/06/23 17:06	31506-32-8	
d5-EtFOSAA (S)	101	%	25-150	1	05/17/23 10:14	06/06/23 17:06	2991-50-6	
d5-NEtFOSA (S)	87	%	10-150	1	05/17/23 10:14	06/06/23 17:06	4151-50-2	
d7-NMeFOSE (S)	87	%	10-150	1	05/17/23 10:14	06/06/23 17:06	24448-09-7	
d9-NEtFOSE (S)	82	%	10-150	1	05/17/23 10:14	06/06/23 17:06	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB29-29-30 FT-0-230504 **Lab ID:** 10652169014 Collected: 05/04/23 15:35 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	2.5	%	0.10	1		05/25/23 14:03		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.093	1	05/17/23 10:14	06/06/23 17:13	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.093	1	05/17/23 10:14	06/06/23 17:13	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 17:13	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 17:13	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.092	1	05/17/23 10:14	06/06/23 17:13	756426-58-1	N2
ADONA	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 17:13	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.088	1	05/17/23 10:14	06/06/23 17:13	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	307-24-4	N2
PFBA	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	375-22-4	N2
PFDS	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 17:13	335-77-3	N2
PFDoS	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 17:13	79780-39-5	N2
PFHpS	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 17:13	375-92-8	N2
PFNS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 17:13	68259-12-1	N2
PFOSA	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	754-91-6	N2
PFPeA	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	2706-90-3	N2
PFPeS	ND	ug/kg	0.093	1	05/17/23 10:14	06/06/23 17:13	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	375-85-9	N2
Perfluorohexanesulfonic acid	1.4	ug/kg	0.090	1	05/17/23 10:14	06/06/23 17:13	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	375-95-1	N2
Perfluorooctanesulfonic acid	0.12	ug/kg	0.092	1	05/17/23 10:14	06/06/23 17:13	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:13	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:13		
13C2-PFTA (S)	79	%	25-150	1	05/17/23 10:14	06/06/23 17:13		
13C24:2FTS (S)	77	%	25-150	1	05/17/23 10:14	06/06/23 17:13		
13C26:2FTS (S)	93	%	25-150	1	05/17/23 10:14	06/06/23 17:13		
13C28:2FTS (S)	89	%	25-150	1	05/17/23 10:14	06/06/23 17:13		
13C3-PFBS (S)	89	%	25-150	1	05/17/23 10:14	06/06/23 17:13	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB29-29-30 FT-0-230504 **Lab ID:** 10652169014 Collected: 05/04/23 15:35 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:13	355-46-4	
13C3HFPO-DA (S)	95	%	25-150	1	05/17/23 10:14	06/06/23 17:13		
13C4-PFBA (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:13	375-22-4	
13C4-PFHpA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 17:13	375-85-9	
13C5-PFHxA (S)	89	%	25-150	1	05/17/23 10:14	06/06/23 17:13	307-24-4	
13C5-PFPeA (S)	88	%	25-150	1	05/17/23 10:14	06/06/23 17:13	2706-90-3	
13C6-PFDA (S)	89	%	25-150	1	05/17/23 10:14	06/06/23 17:13	335-76-2	
13C7-PFUdA (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 17:13	2058-94-8	
13C8-PFOA (S)	80	%	25-150	1	05/17/23 10:14	06/06/23 17:13	335-67-1	
13C8-PFOS (S)	94	%	25-150	1	05/17/23 10:14	06/06/23 17:13	1763-23-1	
13C8-PFOSA (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:13	754-91-6	
13C9-PFNA (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 17:13	375-95-1	
d3-MeFOSAA (S)	80	%	25-150	1	05/17/23 10:14	06/06/23 17:13	2355-31-9	
d3-NMeFOSA (S)	79	%	10-150	1	05/17/23 10:14	06/06/23 17:13	31506-32-8	
d5-EtFOSAA (S)	95	%	25-150	1	05/17/23 10:14	06/06/23 17:13	2991-50-6	
d5-NEtFOSA (S)	79	%	10-150	1	05/17/23 10:14	06/06/23 17:13	4151-50-2	
d7-NMeFOSE (S)	79	%	10-150	1	05/17/23 10:14	06/06/23 17:13	24448-09-7	
d9-NEtFOSE (S)	77	%	10-150	1	05/17/23 10:14	06/06/23 17:13	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB30-4.5-5.5 FT-0-23050 **Lab ID:** 10652169015 Collected: 05/03/23 15:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	18.9	%	0.10	1		05/25/23 14:03		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	763051-92-9	N2
4:2 FTS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	756426-58-1	N2
ADONA	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	307-24-4	N2
PFBA	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	375-22-4	N2
PFDS	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	335-77-3	N2
PFDoS	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	79780-39-5	N2
PFHpS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	375-92-8	N2
PFNS	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	68259-12-1	N2
PFOSA	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	754-91-6	N2
PFPeA	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	2706-90-3	N2
PFPeS	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	1.1	10	05/17/23 10:14	05/22/23 20:08	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	375-95-1	N2
Perfluorooctanesulfonic acid	329	ug/kg	4.5	40	05/17/23 10:14	05/31/23 15:02	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.2	10	05/17/23 10:14	05/22/23 20:08	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	98	%	25-150	10	05/17/23 10:14	05/22/23 20:08		
13C2-PFTA (S)	93	%	25-150	10	05/17/23 10:14	05/22/23 20:08		
13C24:2FTS (S)	73	%	25-150	10	05/17/23 10:14	05/22/23 20:08		
13C26:2FTS (S)	71	%	25-150	10	05/17/23 10:14	05/22/23 20:08		
13C28:2FTS (S)	102	%	25-150	10	05/17/23 10:14	05/22/23 20:08		
13C3-PFBS (S)	92	%	25-150	10	05/17/23 10:14	05/22/23 20:08	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB30-4.5-5.5 FT-0-23050 **Lab ID:** 10652169015 Collected: 05/03/23 15:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	91	%	25-150	10	05/17/23 10:14	05/22/23 20:08	355-46-4	
13C3HFPO-DA (S)	97	%	25-150	10	05/17/23 10:14	05/22/23 20:08		
13C4-PFBA (S)	83	%	25-150	10	05/17/23 10:14	05/22/23 20:08	375-22-4	
13C4-PFHpA (S)	97	%	25-150	10	05/17/23 10:14	05/22/23 20:08	375-85-9	
13C5-PFHxA (S)	90	%	25-150	10	05/17/23 10:14	05/22/23 20:08	307-24-4	
13C5-PFPeA (S)	88	%	25-150	10	05/17/23 10:14	05/22/23 20:08	2706-90-3	
13C6-PFDA (S)	103	%	25-150	10	05/17/23 10:14	05/22/23 20:08	335-76-2	
13C7-PFUdA (S)	109	%	25-150	10	05/17/23 10:14	05/22/23 20:08	2058-94-8	
13C8-PFOA (S)	100	%	25-150	10	05/17/23 10:14	05/22/23 20:08	335-67-1	
13C8-PFOS (S)	128	%	25-150	10	05/17/23 10:14	05/22/23 20:08	1763-23-1	
13C8-PFOSA (S)	97	%	25-150	10	05/17/23 10:14	05/22/23 20:08	754-91-6	
13C9-PFNA (S)	116	%	25-150	10	05/17/23 10:14	05/22/23 20:08	375-95-1	
d3-MeFOSAA (S)	86	%	25-150	10	05/17/23 10:14	05/22/23 20:08	2355-31-9	
d3-NMeFOSA (S)	69	%	10-150	10	05/17/23 10:14	05/22/23 20:08	31506-32-8	
d5-EtFOSAA (S)	82	%	25-150	10	05/17/23 10:14	05/22/23 20:08	2991-50-6	
d5-NEtFOSA (S)	52	%	10-150	10	05/17/23 10:14	05/22/23 20:08	4151-50-2	
d7-NMeFOSE (S)	61	%	10-150	10	05/17/23 10:14	05/22/23 20:08	24448-09-7	
d9-NEtFOSE (S)	46	%	10-150	10	05/17/23 10:14	05/22/23 20:08	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB31-9-10 FT-0-230502 **Lab ID:** 10652169016 Collected: 05/02/23 08:00 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	8.1	%	0.10	1		05/25/23 14:04		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:27	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:27	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:27	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:27	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:27	756426-58-1	N2
ADONA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:27	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 17:27	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	307-24-4	N2
PFBA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:27	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:27	79780-39-5	N2
PFHpS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:27	375-92-8	N2
PFNS	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:27	68259-12-1	N2
PFOSA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	754-91-6	N2
PFPeA	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	2706-90-3	N2
PFPeS	ND	ug/kg	0.099	1	05/17/23 10:14	06/06/23 17:27	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 17:27	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.098	1	05/17/23 10:14	06/06/23 17:27	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.11	1	05/17/23 10:14	06/06/23 17:27	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 17:27		
13C2-PFTA (S)	76	%	25-150	1	05/17/23 10:14	06/06/23 17:27		
13C24:2FTS (S)	74	%	25-150	1	05/17/23 10:14	06/06/23 17:27		
13C26:2FTS (S)	96	%	25-150	1	05/17/23 10:14	06/06/23 17:27		
13C28:2FTS (S)	87	%	25-150	1	05/17/23 10:14	06/06/23 17:27		
13C3-PFBS (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:27	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB31-9-10 FT-0-230502 **Lab ID:** 10652169016 Collected: 05/02/23 08:00 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:27	355-46-4	
13C3HFPO-DA (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 17:27		
13C4-PFBA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 17:27	375-22-4	
13C4-PFHpA (S)	80	%	25-150	1	05/17/23 10:14	06/06/23 17:27	375-85-9	
13C5-PFHxA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:27	307-24-4	
13C5-PFPeA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:27	2706-90-3	
13C6-PFDA (S)	81	%	25-150	1	05/17/23 10:14	06/06/23 17:27	335-76-2	
13C7-PFUDa (S)	75	%	25-150	1	05/17/23 10:14	06/06/23 17:27	2058-94-8	
13C8-PFOA (S)	79	%	25-150	1	05/17/23 10:14	06/06/23 17:27	335-67-1	
13C8-PFOS (S)	93	%	25-150	1	05/17/23 10:14	06/06/23 17:27	1763-23-1	
13C8-PFOSA (S)	82	%	25-150	1	05/17/23 10:14	06/06/23 17:27	754-91-6	
13C9-PFNA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 17:27	375-95-1	
d3-MeFOSAA (S)	79	%	25-150	1	05/17/23 10:14	06/06/23 17:27	2355-31-9	
d3-NMeFOSA (S)	71	%	10-150	1	05/17/23 10:14	06/06/23 17:27	31506-32-8	
d5-EtFOSAA (S)	93	%	25-150	1	05/17/23 10:14	06/06/23 17:27	2991-50-6	
d5-NEtFOSA (S)	75	%	10-150	1	05/17/23 10:14	06/06/23 17:27	4151-50-2	
d7-NMeFOSE (S)	80	%	10-150	1	05/17/23 10:14	06/06/23 17:27	24448-09-7	
d9-NEtFOSE (S)	76	%	10-150	1	05/17/23 10:14	06/06/23 17:27	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB30-12.5-13.5 FT-0-230 **Lab ID:** 10652169017 **Collected:** 05/03/23 15:30 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	6.5	%	0.10	1		05/25/23 14:04		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 20:22	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 20:22	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 20:22	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 20:22	756426-58-1	N2
ADONA	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 20:22	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.93	10	05/17/23 10:14	05/22/23 20:22	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	307-24-4	N2
PFBA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	375-22-4	N2
PFDS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	335-77-3	N2
PFDoS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	79780-39-5	N2
PFHpS	ND	ug/kg	0.99	10	05/17/23 10:14	05/22/23 20:22	375-92-8	N2
PFNS	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	68259-12-1	N2
PFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	754-91-6	N2
PFPeA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	2706-90-3	N2
PFPeS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 20:22	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	375-85-9	N2
Perfluorohexanesulfonic acid	2.0	ug/kg	0.95	10	05/17/23 10:14	05/22/23 20:22	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	375-95-1	N2
Perfluorooctanesulfonic acid	65.3	ug/kg	0.97	10	05/17/23 10:14	05/22/23 20:22	1763-23-1	N2
Perfluorooctanoic acid	2.2	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:22	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	124	%	25-150	10	05/17/23 10:14	05/22/23 20:22		
13C2-PFTA (S)	120	%	25-150	10	05/17/23 10:14	05/22/23 20:22		
13C24:2FTS (S)	81	%	25-150	10	05/17/23 10:14	05/22/23 20:22		
13C26:2FTS (S)	65	%	25-150	10	05/17/23 10:14	05/22/23 20:22		
13C28:2FTS (S)	112	%	25-150	10	05/17/23 10:14	05/22/23 20:22		
13C3-PFBS (S)	106	%	25-150	10	05/17/23 10:14	05/22/23 20:22	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB30-12.5-13.5 FT-0-230 **Lab ID:** 10652169017 Collected: 05/03/23 15:30 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	109	%	25-150	10	05/17/23 10:14	05/22/23 20:22	355-46-4	
13C3HFPO-DA (S)	109	%	25-150	10	05/17/23 10:14	05/22/23 20:22		
13C4-PFBA (S)	100	%	25-150	10	05/17/23 10:14	05/22/23 20:22	375-22-4	
13C4-PFHpA (S)	111	%	25-150	10	05/17/23 10:14	05/22/23 20:22	375-85-9	
13C5-PFHxA (S)	108	%	25-150	10	05/17/23 10:14	05/22/23 20:22	307-24-4	
13C5-PFPeA (S)	105	%	25-150	10	05/17/23 10:14	05/22/23 20:22	2706-90-3	
13C6-PFDA (S)	137	%	25-150	10	05/17/23 10:14	05/22/23 20:22	335-76-2	
13C7-PFUdA (S)	137	%	25-150	10	05/17/23 10:14	05/22/23 20:22	2058-94-8	
13C8-PFOA (S)	122	%	25-150	10	05/17/23 10:14	05/22/23 20:22	335-67-1	
13C8-PFOS (S)	155	%	25-150	10	05/17/23 10:14	05/22/23 20:22	1763-23-1	S4
13C8-PFOSA (S)	122	%	25-150	10	05/17/23 10:14	05/22/23 20:22	754-91-6	
13C9-PFNA (S)	161	%	25-150	10	05/17/23 10:14	05/22/23 20:22	375-95-1	S4
d3-MeFOSAA (S)	116	%	25-150	10	05/17/23 10:14	05/22/23 20:22	2355-31-9	
d3-NMeFOSA (S)	97	%	10-150	10	05/17/23 10:14	05/22/23 20:22	31506-32-8	
d5-EtFOSAA (S)	136	%	25-150	10	05/17/23 10:14	05/22/23 20:22	2991-50-6	
d5-NEtFOSA (S)	112	%	10-150	10	05/17/23 10:14	05/22/23 20:22	4151-50-2	
d7-NMeFOSE (S)	87	%	10-150	10	05/17/23 10:14	05/22/23 20:22	24448-09-7	
d9-NEtFOSE (S)	97	%	10-150	10	05/17/23 10:14	05/22/23 20:22	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB30-19-20 FT-0-230503 **Lab ID:** 10652169018 **Collected:** 05/03/23 15:45 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	3.4	%	0.10	1		05/25/23 14:04		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.95	10	05/17/23 10:14	05/22/23 20:29	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.95	10	05/17/23 10:14	05/22/23 20:29	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.96	10	05/17/23 10:14	05/22/23 20:29	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 20:29	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.94	10	05/17/23 10:14	05/22/23 20:29	756426-58-1	N2
ADONA	ND	ug/kg	0.96	10	05/17/23 10:14	05/22/23 20:29	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.90	10	05/17/23 10:14	05/22/23 20:29	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	307-24-4	N2
PFBA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	375-22-4	N2
PFDS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 20:29	335-77-3	N2
PFDoS	ND	ug/kg	0.98	10	05/17/23 10:14	05/22/23 20:29	79780-39-5	N2
PFHpS	ND	ug/kg	0.96	10	05/17/23 10:14	05/22/23 20:29	375-92-8	N2
PFNS	ND	ug/kg	0.97	10	05/17/23 10:14	05/22/23 20:29	68259-12-1	N2
PFOSA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	754-91-6	N2
PFPeA	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	2706-90-3	N2
PFPeS	ND	ug/kg	0.95	10	05/17/23 10:14	05/22/23 20:29	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.92	10	05/17/23 10:14	05/22/23 20:29	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	375-95-1	N2
Perfluorooctanesulfonic acid	12.9	ug/kg	0.94	10	05/17/23 10:14	05/22/23 20:29	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.0	10	05/17/23 10:14	05/22/23 20:29	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	129	%	25-150	10	05/17/23 10:14	05/22/23 20:29		
13C2-PFTA (S)	129	%	25-150	10	05/17/23 10:14	05/22/23 20:29		
13C24:2FTS (S)	104	%	25-150	10	05/17/23 10:14	05/22/23 20:29		
13C26:2FTS (S)	104	%	25-150	10	05/17/23 10:14	05/22/23 20:29		
13C28:2FTS (S)	116	%	25-150	10	05/17/23 10:14	05/22/23 20:29		
13C3-PFBS (S)	111	%	25-150	10	05/17/23 10:14	05/22/23 20:29	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB30-19-20 FT-0-230503 **Lab ID:** 10652169018 Collected: 05/03/23 15:45 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	122	%	25-150	10	05/17/23 10:14	05/22/23 20:29	355-46-4	
13C3HFPO-DA (S)	113	%	25-150	10	05/17/23 10:14	05/22/23 20:29		
13C4-PFBA (S)	102	%	25-150	10	05/17/23 10:14	05/22/23 20:29	375-22-4	
13C4-PFHpA (S)	120	%	25-150	10	05/17/23 10:14	05/22/23 20:29	375-85-9	
13C5-PFHxA (S)	115	%	25-150	10	05/17/23 10:14	05/22/23 20:29	307-24-4	
13C5-PFPeA (S)	109	%	25-150	10	05/17/23 10:14	05/22/23 20:29	2706-90-3	
13C6-PFDA (S)	135	%	25-150	10	05/17/23 10:14	05/22/23 20:29	335-76-2	
13C7-PFUDa (S)	129	%	25-150	10	05/17/23 10:14	05/22/23 20:29	2058-94-8	
13C8-PFOA (S)	126	%	25-150	10	05/17/23 10:14	05/22/23 20:29	335-67-1	
13C8-PFOS (S)	147	%	25-150	10	05/17/23 10:14	05/22/23 20:29	1763-23-1	
13C8-PFOSA (S)	126	%	25-150	10	05/17/23 10:14	05/22/23 20:29	754-91-6	
13C9-PFNA (S)	170	%	25-150	10	05/17/23 10:14	05/22/23 20:29	375-95-1	S4
d3-MeFOSAA (S)	127	%	25-150	10	05/17/23 10:14	05/22/23 20:29	2355-31-9	
d3-NMeFOSA (S)	116	%	10-150	10	05/17/23 10:14	05/22/23 20:29	31506-32-8	
d5-EtFOSAA (S)	123	%	25-150	10	05/17/23 10:14	05/22/23 20:29	2991-50-6	
d5-NEtFOSA (S)	80	%	10-150	10	05/17/23 10:14	05/22/23 20:29	4151-50-2	
d7-NMeFOSE (S)	92	%	10-150	10	05/17/23 10:14	05/22/23 20:29	24448-09-7	
d9-NEtFOSE (S)	97	%	10-150	10	05/17/23 10:14	05/22/23 20:29	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB31-1-2 FT-0-230502 **Lab ID:** 10652169019 Collected: 05/02/23 07:55 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	3.4	%	0.10	1		05/25/23 14:04		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 17:35	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 17:35	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 17:35	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.097	1	05/17/23 10:14	06/06/23 17:35	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	0.093	1	05/17/23 10:14	06/06/23 17:35	756426-58-1	N2
ADONA	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 17:35	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.089	1	05/17/23 10:14	06/06/23 17:35	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	375-22-4	N2
PFDS	ND	ug/kg	0.097	1	05/17/23 10:14	06/06/23 17:35	335-77-3	N2
PFDoS	ND	ug/kg	0.097	1	05/17/23 10:14	06/06/23 17:35	79780-39-5	N2
PFHpS	ND	ug/kg	0.095	1	05/17/23 10:14	06/06/23 17:35	375-92-8	N2
PFNS	ND	ug/kg	0.096	1	05/17/23 10:14	06/06/23 17:35	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	2706-90-3	N2
PFPeS	ND	ug/kg	0.094	1	05/17/23 10:14	06/06/23 17:35	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.091	1	05/17/23 10:14	06/06/23 17:35	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.093	1	05/17/23 10:14	06/06/23 17:35	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/17/23 10:14	06/06/23 17:35	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 17:35		
13C2-PFTA (S)	78	%	25-150	1	05/17/23 10:14	06/06/23 17:35		
13C24:2FTS (S)	73	%	25-150	1	05/17/23 10:14	06/06/23 17:35		
13C26:2FTS (S)	96	%	25-150	1	05/17/23 10:14	06/06/23 17:35		
13C28:2FTS (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:35		
13C3-PFBS (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 17:35	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB31-1-2 FT-0-230502 **Lab ID:** 10652169019 Collected: 05/02/23 07:55 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	84	%	25-150	1	05/17/23 10:14	06/06/23 17:35	355-46-4	
13C3HFPO-DA (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 17:35		
13C4-PFBA (S)	81	%	25-150	1	05/17/23 10:14	06/06/23 17:35	375-22-4	
13C4-PFHpA (S)	80	%	25-150	1	05/17/23 10:14	06/06/23 17:35	375-85-9	
13C5-PFHxA (S)	86	%	25-150	1	05/17/23 10:14	06/06/23 17:35	307-24-4	
13C5-PFPeA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:35	2706-90-3	
13C6-PFDA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 17:35	335-76-2	
13C7-PFUdA (S)	82	%	25-150	1	05/17/23 10:14	06/06/23 17:35	2058-94-8	
13C8-PFOA (S)	80	%	25-150	1	05/17/23 10:14	06/06/23 17:35	335-67-1	
13C8-PFOS (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:35	1763-23-1	
13C8-PFOSA (S)	85	%	25-150	1	05/17/23 10:14	06/06/23 17:35	754-91-6	
13C9-PFNA (S)	83	%	25-150	1	05/17/23 10:14	06/06/23 17:35	375-95-1	
d3-MeFOSAA (S)	82	%	25-150	1	05/17/23 10:14	06/06/23 17:35	2355-31-9	
d3-NMeFOSA (S)	77	%	10-150	1	05/17/23 10:14	06/06/23 17:35	31506-32-8	
d5-EtFOSAA (S)	90	%	25-150	1	05/17/23 10:14	06/06/23 17:35	2991-50-6	
d5-NEtFOSA (S)	76	%	10-150	1	05/17/23 10:14	06/06/23 17:35	4151-50-2	
d7-NMeFOSE (S)	83	%	10-150	1	05/17/23 10:14	06/06/23 17:35	24448-09-7	
d9-NEtFOSE (S)	72	%	10-150	1	05/17/23 10:14	06/06/23 17:35	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB31-9-10 FT-DB-230502 Lab ID: 10652169020 Collected: 05/02/23 08:05 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	8.8	%	0.10	1		05/25/23 14:04		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	756426-58-1	N2
ADONA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 12:47	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	307-24-4	N2
PFBA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	79780-39-5	N2
PFHpS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	375-92-8	N2
PFNS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	68259-12-1	N2
PFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	754-91-6	N2
PFPeA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	2706-90-3	N2
PFPeS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 12:47	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:47	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 12:47	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 12:47		
13C2-PFTA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 12:47		
13C24:2FTS (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 12:47		
13C26:2FTS (S)	117	%	25-150	1	05/18/23 15:05	06/06/23 12:47		
13C28:2FTS (S)	114	%	25-150	1	05/18/23 15:05	06/06/23 12:47		
13C3-PFBS (S)	107	%	25-150	1	05/18/23 15:05	06/06/23 12:47	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB31-9-10 FT-DB-230502 **Lab ID:** 10652169020 Collected: 05/02/23 08:05 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	104	%	25-150	1	05/18/23 15:05	06/06/23 12:47	355-46-4	
13C3HFPO-DA (S)	110	%	25-150	1	05/18/23 15:05	06/06/23 12:47		
13C4-PFBA (S)	105	%	25-150	1	05/18/23 15:05	06/06/23 12:47	375-22-4	
13C4-PFHpA (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 12:47	375-85-9	
13C5-PFHxA (S)	108	%	25-150	1	05/18/23 15:05	06/06/23 12:47	307-24-4	
13C5-PFPeA (S)	108	%	25-150	1	05/18/23 15:05	06/06/23 12:47	2706-90-3	
13C6-PFDA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 12:47	335-76-2	
13C7-PFUdA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 12:47	2058-94-8	
13C8-PFOA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 12:47	335-67-1	
13C8-PFOS (S)	110	%	25-150	1	05/18/23 15:05	06/06/23 12:47	1763-23-1	
13C8-PFOSA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 12:47	754-91-6	
13C9-PFNA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 12:47	375-95-1	
d3-MeFOSAA (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 12:47	2355-31-9	
d3-NMeFOSA (S)	82	%	10-150	1	05/18/23 15:05	06/06/23 12:47	31506-32-8	
d5-EtFOSAA (S)	111	%	25-150	1	05/18/23 15:05	06/06/23 12:47	2991-50-6	
d5-NEtFOSA (S)	78	%	10-150	1	05/18/23 15:05	06/06/23 12:47	4151-50-2	
d7-NMeFOSE (S)	97	%	10-150	1	05/18/23 15:05	06/06/23 12:47	24448-09-7	
d9-NEtFOSE (S)	88	%	10-150	1	05/18/23 15:05	06/06/23 12:47	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB32-1-2 FT-0-230503 **Lab ID:** 10652169021 Collected: 05/03/23 15:25 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	3.9	%	0.10	1		05/25/23 15:39		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 12:54	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 12:54	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 12:54	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 12:54	756426-58-1	N2
ADONA	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 12:54	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.092	1	05/18/23 15:05	06/06/23 12:54	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	79780-39-5	N2
PFHpS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 12:54	375-92-8	N2
PFNS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 12:54	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	2706-90-3	N2
PFPeS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 12:54	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	375-85-9	N2
Perfluorohexanesulfonic acid	0.61	ug/kg	0.094	1	05/18/23 15:05	06/06/23 12:54	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 12:54	1763-23-1	N2
Perfluorooctanoic acid	0.19	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 12:54	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 12:54		
13C2-PFTA (S)	93	%	25-150	1	05/18/23 15:05	06/06/23 12:54		
13C24:2FTS (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 12:54		
13C26:2FTS (S)	104	%	25-150	1	05/18/23 15:05	06/06/23 12:54		
13C28:2FTS (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 12:54		
13C3-PFBS (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 12:54	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB32-1-2 FT-0-230503 **Lab ID:** 10652169021 Collected: 05/03/23 15:25 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 12:54	355-46-4	
13C3HFPO-DA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 12:54		
13C4-PFBA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 12:54	375-22-4	
13C4-PFHpA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 12:54	375-85-9	
13C5-PFHxA (S)	99	%	25-150	1	05/18/23 15:05	06/06/23 12:54	307-24-4	
13C5-PFPeA (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 12:54	2706-90-3	
13C6-PFDA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 12:54	335-76-2	
13C7-PFUdA (S)	82	%	25-150	1	05/18/23 15:05	06/06/23 12:54	2058-94-8	
13C8-PFOA (S)	88	%	25-150	1	05/18/23 15:05	06/06/23 12:54	335-67-1	
13C8-PFOS (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 12:54	1763-23-1	
13C8-PFOSA (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 12:54	754-91-6	
13C9-PFNA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 12:54	375-95-1	
d3-MeFOSAA (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 12:54	2355-31-9	
d3-NMeFOSA (S)	89	%	10-150	1	05/18/23 15:05	06/06/23 12:54	31506-32-8	
d5-EtFOSAA (S)	111	%	25-150	1	05/18/23 15:05	06/06/23 12:54	2991-50-6	
d5-NEtFOSA (S)	91	%	10-150	1	05/18/23 15:05	06/06/23 12:54	4151-50-2	
d7-NMeFOSE (S)	90	%	10-150	1	05/18/23 15:05	06/06/23 12:54	24448-09-7	
d9-NEtFOSE (S)	84	%	10-150	1	05/18/23 15:05	06/06/23 12:54	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB32-9-10 FT-0-230503 **Lab ID:** 10652169022 Collected: 05/03/23 15:30 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	6.6	%	0.10	1		05/25/23 15:40		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 14:05	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 14:05	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:05	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:05	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 14:05	756426-58-1	N2
ADONA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:05	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.094	1	05/18/23 15:05	06/06/23 14:05	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	307-24-4	N2
PFBA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:05	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:05	79780-39-5	N2
PFHpS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:05	375-92-8	N2
PFNS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:05	68259-12-1	N2
PFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	754-91-6	N2
PFPeA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	2706-90-3	N2
PFPeS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 14:05	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 14:05	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 14:05	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:05	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	82	%	25-150	1	05/18/23 15:05	06/06/23 14:05		
13C2-PFTA (S)	83	%	25-150	1	05/18/23 15:05	06/06/23 14:05		
13C24:2FTS (S)	86	%	25-150	1	05/18/23 15:05	06/06/23 14:05		
13C26:2FTS (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 14:05		
13C28:2FTS (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 14:05		
13C3-PFBS (S)	89	%	25-150	1	05/18/23 15:05	06/06/23 14:05	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-SB32-9-10 FT-0-230503 **Lab ID:** 10652169022 Collected: 05/03/23 15:30 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	88	%	25-150	1	05/18/23 15:05	06/06/23 14:05	355-46-4	
13C3HFPO-DA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 14:05		
13C4-PFBA (S)	86	%	25-150	1	05/18/23 15:05	06/06/23 14:05	375-22-4	
13C4-PFHpA (S)	83	%	25-150	1	05/18/23 15:05	06/06/23 14:05	375-85-9	
13C5-PFHxA (S)	90	%	25-150	1	05/18/23 15:05	06/06/23 14:05	307-24-4	
13C5-PFPeA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 14:05	2706-90-3	
13C6-PFDA (S)	78	%	25-150	1	05/18/23 15:05	06/06/23 14:05	335-76-2	
13C7-PFUdA (S)	79	%	25-150	1	05/18/23 15:05	06/06/23 14:05	2058-94-8	
13C8-PFOA (S)	84	%	25-150	1	05/18/23 15:05	06/06/23 14:05	335-67-1	
13C8-PFOS (S)	93	%	25-150	1	05/18/23 15:05	06/06/23 14:05	1763-23-1	
13C8-PFOSA (S)	85	%	25-150	1	05/18/23 15:05	06/06/23 14:05	754-91-6	
13C9-PFNA (S)	86	%	25-150	1	05/18/23 15:05	06/06/23 14:05	375-95-1	
d3-MeFOSAA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 14:05	2355-31-9	
d3-NMeFOSA (S)	77	%	10-150	1	05/18/23 15:05	06/06/23 14:05	31506-32-8	
d5-EtFOSAA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 14:05	2991-50-6	
d5-NEtFOSA (S)	80	%	10-150	1	05/18/23 15:05	06/06/23 14:05	4151-50-2	
d7-NMeFOSE (S)	82	%	10-150	1	05/18/23 15:05	06/06/23 14:05	24448-09-7	
d9-NEtFOSE (S)	76	%	10-150	1	05/18/23 15:05	06/06/23 14:05	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW2-4.5-5.5 FT-0-230504 **Lab ID:** 10652169023 Collected: 05/04/23 08:40 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	5.5	%	0.10	1		05/25/23 15:40		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 14:12	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 14:12	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 14:12	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 14:12	756426-58-1	N2
ADONA	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 14:12	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.092	1	05/18/23 15:05	06/06/23 14:12	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	79780-39-5	N2
PFHpS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 14:12	375-92-8	N2
PFNS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 14:12	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	2706-90-3	N2
PFPeS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 14:12	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.094	1	05/18/23 15:05	06/06/23 14:12	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	375-95-1	N2
Perfluorooctanesulfonic acid	2.5	ug/kg	0.096	1	05/18/23 15:05	06/06/23 14:12	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:12	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 14:12		
13C2-PFTA (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 14:12		
13C24:2FTS (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 14:12		
13C26:2FTS (S)	110	%	25-150	1	05/18/23 15:05	06/06/23 14:12		
13C28:2FTS (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 14:12		
13C3-PFBS (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 14:12	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW2-4.5-5.5 FT-0-230504 **Lab ID:** 10652169023 Collected: 05/04/23 08:40 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 14:12	355-46-4	
13C3HFPO-DA (S)	114	%	25-150	1	05/18/23 15:05	06/06/23 14:12		
13C4-PFBA (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 14:12	375-22-4	
13C4-PFHpA (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 14:12	375-85-9	
13C5-PFHxA (S)	104	%	25-150	1	05/18/23 15:05	06/06/23 14:12	307-24-4	
13C5-PFPeA (S)	104	%	25-150	1	05/18/23 15:05	06/06/23 14:12	2706-90-3	
13C6-PFDA (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 14:12	335-76-2	
13C7-PFUdA (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 14:12	2058-94-8	
13C8-PFOA (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 14:12	335-67-1	
13C8-PFOS (S)	105	%	25-150	1	05/18/23 15:05	06/06/23 14:12	1763-23-1	
13C8-PFOSA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 14:12	754-91-6	
13C9-PFNA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 14:12	375-95-1	
d3-MeFOSAA (S)	109	%	25-150	1	05/18/23 15:05	06/06/23 14:12	2355-31-9	
d3-NMeFOSA (S)	82	%	10-150	1	05/18/23 15:05	06/06/23 14:12	31506-32-8	
d5-EtFOSAA (S)	114	%	25-150	1	05/18/23 15:05	06/06/23 14:12	2991-50-6	
d5-NEtFOSA (S)	85	%	10-150	1	05/18/23 15:05	06/06/23 14:12	4151-50-2	
d7-NMeFOSE (S)	94	%	10-150	1	05/18/23 15:05	06/06/23 14:12	24448-09-7	
d9-NEtFOSE (S)	93	%	10-150	1	05/18/23 15:05	06/06/23 14:12	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

Sample: MEWI-S-MW2-11.5-12.5 FT-0-2305 **Lab ID:** 10652169024 Collected: 05/04/23 08:50 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	11.6	%	0.10	1		05/25/23 15:40		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:19	756426-58-1	N2
ADONA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:19	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	307-24-4	N2
PFBA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	375-22-4	N2
PFDS	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	335-77-3	N2
PFDoS	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	79780-39-5	N2
PFHpS	0.54	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	375-92-8	N2
PFNS	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	68259-12-1	N2
PFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	754-91-6	N2
PFPeA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	2706-90-3	N2
PFPeS	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	375-85-9	N2
Perfluorohexanesulfonic acid	0.21	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:19	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	375-95-1	N2
Perfluorooctanesulfonic acid	104	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:05	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:19	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 14:19		
13C2-PFTA (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 14:19		
13C24:2FTS (S)	88	%	25-150	1	05/18/23 15:05	06/06/23 14:19		
13C26:2FTS (S)	106	%	25-150	1	05/18/23 15:05	06/06/23 14:19		
13C28:2FTS (S)	114	%	25-150	1	05/18/23 15:05	06/06/23 14:19		
13C3-PFBS (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 14:19	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW2-11.5-12.5 FT-0-2305 **Lab ID:** 10652169024 Collected: 05/04/23 08:50 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	96	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	355-46-4	
13C3HFPO-DA (S)	107	%.	25-150	1	05/18/23 15:05	06/06/23 14:19		
13C4-PFBA (S)	101	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	375-22-4	
13C4-PFHpA (S)	95	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	375-85-9	
13C5-PFHxA (S)	101	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	307-24-4	
13C5-PFPeA (S)	103	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	2706-90-3	
13C6-PFDA (S)	97	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	335-76-2	
13C7-PFUdA (S)	97	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	2058-94-8	
13C8-PFOA (S)	91	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	335-67-1	
13C8-PFOS (S)	100	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	1763-23-1	
13C8-PFOSA (S)	89	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	754-91-6	
13C9-PFNA (S)	90	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	375-95-1	
d3-MeFOSAA (S)	93	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	2355-31-9	
d3-NMeFOSA (S)	32	%.	10-150	1	05/18/23 15:05	06/06/23 14:19	31506-32-8	
d5-EtFOSAA (S)	107	%.	25-150	1	05/18/23 15:05	06/06/23 14:19	2991-50-6	
d5-NEtFOSA (S)	29	%.	10-150	1	05/18/23 15:05	06/06/23 14:19	4151-50-2	
d7-NMeFOSE (S)	79	%.	10-150	1	05/18/23 15:05	06/06/23 14:19	24448-09-7	
d9-NEtFOSE (S)	69	%.	10-150	1	05/18/23 15:05	06/06/23 14:19	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW2-59-60 FT-0-230504 **Lab ID:** 10652169025 **Collected:** 05/04/23 13:15 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	7.5	%	0.10	1		05/25/23 15:40		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 14:26	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 14:26	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 14:26	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 14:26	756426-58-1	N2
ADONA	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 14:26	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.093	1	05/18/23 15:05	06/06/23 14:26	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	79780-39-5	N2
PFHpS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 14:26	375-92-8	N2
PFNS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	2706-90-3	N2
PFPeS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 14:26	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 14:26	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	375-95-1	N2
Perfluorooctanesulfonic acid	4.7	ug/kg	0.097	1	05/18/23 15:05	06/06/23 14:26	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 14:26	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 14:26		
13C2-PFTA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 14:26		
13C24:2FTS (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 14:26		
13C26:2FTS (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 14:26		
13C28:2FTS (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 14:26		
13C3-PFBS (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 14:26	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW2-59-60 FT-0-230504 **Lab ID:** 10652169025 Collected: 05/04/23 13:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 14:26	355-46-4	
13C3HFPO-DA (S)	109	%	25-150	1	05/18/23 15:05	06/06/23 14:26		
13C4-PFBA (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 14:26	375-22-4	
13C4-PFHpA (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 14:26	375-85-9	
13C5-PFHxA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 14:26	307-24-4	
13C5-PFPeA (S)	104	%	25-150	1	05/18/23 15:05	06/06/23 14:26	2706-90-3	
13C6-PFDA (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 14:26	335-76-2	
13C7-PFUdA (S)	93	%	25-150	1	05/18/23 15:05	06/06/23 14:26	2058-94-8	
13C8-PFOA (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 14:26	335-67-1	
13C8-PFOS (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 14:26	1763-23-1	
13C8-PFOSA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 14:26	754-91-6	
13C9-PFNA (S)	93	%	25-150	1	05/18/23 15:05	06/06/23 14:26	375-95-1	
d3-MeFOSAA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 14:26	2355-31-9	
d3-NMeFOSA (S)	88	%	10-150	1	05/18/23 15:05	06/06/23 14:26	31506-32-8	
d5-EtFOSAA (S)	113	%	25-150	1	05/18/23 15:05	06/06/23 14:26	2991-50-6	
d5-NEtFOSA (S)	86	%	10-150	1	05/18/23 15:05	06/06/23 14:26	4151-50-2	
d7-NMeFOSE (S)	88	%	10-150	1	05/18/23 15:05	06/06/23 14:26	24448-09-7	
d9-NEtFOSE (S)	85	%	10-150	1	05/18/23 15:05	06/06/23 14:26	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW3-4.5-5.5 FT-0-230503 **Lab ID:** 10652169026 Collected: 05/03/23 08:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	6.9	%	0.10	1		05/25/23 15:40		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	0.99	10	05/18/23 15:05	05/25/23 15:26	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.99	10	05/18/23 15:05	05/25/23 15:26	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	0.98	10	05/18/23 15:05	05/25/23 15:26	756426-58-1	N2
ADONA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.93	10	05/18/23 15:05	05/25/23 15:26	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	307-24-4	N2
PFBA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	375-22-4	N2
PFDS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	335-77-3	N2
PFDoS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	79780-39-5	N2
PFHpS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	375-92-8	N2
PFNS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	68259-12-1	N2
PFOSA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	754-91-6	N2
PFPeA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	2706-90-3	N2
PFPeS	ND	ug/kg	0.99	10	05/18/23 15:05	05/25/23 15:26	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.95	10	05/18/23 15:05	05/25/23 15:26	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	375-95-1	N2
Perfluorooctanesulfonic acid	11.3	ug/kg	0.98	10	05/18/23 15:05	05/25/23 15:26	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:26	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	116	%	25-150	10	05/18/23 15:05	05/25/23 15:26		
13C2-PFTA (S)	116	%	25-150	10	05/18/23 15:05	05/25/23 15:26		
13C24:2FTS (S)	0	%	25-150	10	05/18/23 15:05	05/25/23 15:26		S4
13C26:2FTS (S)	0	%	25-150	10	05/18/23 15:05	05/25/23 15:26		S4
13C28:2FTS (S)	90	%	25-150	10	05/18/23 15:05	05/25/23 15:26		
13C3-PFBS (S)	106	%	25-150	10	05/18/23 15:05	05/25/23 15:26	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW3-4.5-5.5 FT-0-230503 **Lab ID:** 10652169026 Collected: 05/03/23 08:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	101	%	25-150	10	05/18/23 15:05	05/25/23 15:26	355-46-4	
13C3HFPO-DA (S)	99	%	25-150	10	05/18/23 15:05	05/25/23 15:26		
13C4-PFBA (S)	115	%	25-150	10	05/18/23 15:05	05/25/23 15:26	375-22-4	
13C4-PFHpA (S)	119	%	25-150	10	05/18/23 15:05	05/25/23 15:26	375-85-9	
13C5-PFHxA (S)	114	%	25-150	10	05/18/23 15:05	05/25/23 15:26	307-24-4	
13C5-PFPeA (S)	115	%	25-150	10	05/18/23 15:05	05/25/23 15:26	2706-90-3	
13C6-PFDA (S)	123	%	25-150	10	05/18/23 15:05	05/25/23 15:26	335-76-2	
13C7-PFUdA (S)	121	%	25-150	10	05/18/23 15:05	05/25/23 15:26	2058-94-8	
13C8-PFOA (S)	119	%	25-150	10	05/18/23 15:05	05/25/23 15:26	335-67-1	
13C8-PFOS (S)	98	%	25-150	10	05/18/23 15:05	05/25/23 15:26	1763-23-1	
13C8-PFOSA (S)	106	%	25-150	10	05/18/23 15:05	05/25/23 15:26	754-91-6	
13C9-PFNA (S)	109	%	25-150	10	05/18/23 15:05	05/25/23 15:26	375-95-1	
d3-MeFOSAA (S)	102	%	25-150	10	05/18/23 15:05	05/25/23 15:26	2355-31-9	
d3-NMeFOSA (S)	107	%	10-150	10	05/18/23 15:05	05/25/23 15:26	31506-32-8	
d5-EtFOSAA (S)	108	%	25-150	10	05/18/23 15:05	05/25/23 15:26	2991-50-6	
d5-NEtFOSA (S)	90	%	10-150	10	05/18/23 15:05	05/25/23 15:26	4151-50-2	
d7-NMeFOSE (S)	93	%	10-150	10	05/18/23 15:05	05/25/23 15:26	24448-09-7	
d9-NEtFOSE (S)	97	%	10-150	10	05/18/23 15:05	05/25/23 15:26	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW3-12.5-13.5 FT-0-2305 **Lab ID:** 10652169027 **Collected:** 05/03/23 08:35 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	9.2	%	0.10	1		05/25/23 15:41		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	763051-92-9	N2
4:2 FTS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	757124-72-4	N2
6:2 FTS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	27619-97-2	N2
8:2 FTS	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	756426-58-1	N2
ADONA	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	919005-14-4	N2
HFPO-DA	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	13252-13-6	N2
NEtFOSAA	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	2991-50-6	N2
NEtFOSA	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	4151-50-2	N2
NEtFOSE	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	1691-99-2	N2
NMeFOSAA	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	2355-31-9	N2
NMeFOSA	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	31506-32-8	N2
NMeFOSE	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.97	10	05/18/23 15:05	05/25/23 15:33	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	307-24-4	N2
PFBA	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	375-22-4	N2
PFDS	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	335-77-3	N2
PFDoS	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	79780-39-5	N2
PFHpS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	375-92-8	N2
PFNS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	68259-12-1	N2
PFOSA	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	754-91-6	N2
PFPeA	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	2706-90-3	N2
PFPeS	ND	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.99	10	05/18/23 15:05	05/25/23 15:33	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	375-95-1	N2
Perfluorooctanesulfonic acid	17.3	ug/kg	1.0	10	05/18/23 15:05	05/25/23 15:33	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	1.1	10	05/18/23 15:05	05/25/23 15:33	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	108	%	25-150	10	05/18/23 15:05	05/25/23 15:33		
13C2-PFTA (S)	106	%	25-150	10	05/18/23 15:05	05/25/23 15:33		
13C24:2FTS (S)	0	%	25-150	10	05/18/23 15:05	05/25/23 15:33		S4
13C26:2FTS (S)	0	%	25-150	10	05/18/23 15:05	05/25/23 15:33		S4
13C28:2FTS (S)	94	%	25-150	10	05/18/23 15:05	05/25/23 15:33		
13C3-PFBS (S)	97	%	25-150	10	05/18/23 15:05	05/25/23 15:33	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW3-12.5-13.5 FT-0-2305 **Lab ID:** 10652169027 Collected: 05/03/23 08:35 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	94	%	25-150	10	05/18/23 15:05	05/25/23 15:33	355-46-4	
13C3HFPO-DA (S)	92	%	25-150	10	05/18/23 15:05	05/25/23 15:33		
13C4-PFBA (S)	106	%	25-150	10	05/18/23 15:05	05/25/23 15:33	375-22-4	
13C4-PFHpA (S)	105	%	25-150	10	05/18/23 15:05	05/25/23 15:33	375-85-9	
13C5-PFHxA (S)	104	%	25-150	10	05/18/23 15:05	05/25/23 15:33	307-24-4	
13C5-PFPeA (S)	104	%	25-150	10	05/18/23 15:05	05/25/23 15:33	2706-90-3	
13C6-PFDA (S)	116	%	25-150	10	05/18/23 15:05	05/25/23 15:33	335-76-2	
13C7-PFUdA (S)	114	%	25-150	10	05/18/23 15:05	05/25/23 15:33	2058-94-8	
13C8-PFOA (S)	107	%	25-150	10	05/18/23 15:05	05/25/23 15:33	335-67-1	
13C8-PFOS (S)	79	%	25-150	10	05/18/23 15:05	05/25/23 15:33	1763-23-1	
13C8-PFOSA (S)	92	%	25-150	10	05/18/23 15:05	05/25/23 15:33	754-91-6	
13C9-PFNA (S)	95	%	25-150	10	05/18/23 15:05	05/25/23 15:33	375-95-1	
d3-MeFOSAA (S)	93	%	25-150	10	05/18/23 15:05	05/25/23 15:33	2355-31-9	
d3-NMeFOSA (S)	111	%	10-150	10	05/18/23 15:05	05/25/23 15:33	31506-32-8	
d5-EtFOSAA (S)	94	%	25-150	10	05/18/23 15:05	05/25/23 15:33	2991-50-6	
d5-NEtFOSA (S)	110	%	10-150	10	05/18/23 15:05	05/25/23 15:33	4151-50-2	
d7-NMeFOSE (S)	80	%	10-150	10	05/18/23 15:05	05/25/23 15:33	24448-09-7	
d9-NEtFOSE (S)	81	%	10-150	10	05/18/23 15:05	05/25/23 15:33	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW4-63-64 FT-0-230501 **Lab ID:** 10652169028 Collected: 05/01/23 16:35 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	21.4	%	0.10	1		05/25/23 15:41		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	756426-58-1	N2
ADONA	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:52	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	307-24-4	N2
PFBA	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	375-22-4	N2
PFDS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	335-77-3	N2
PFDoS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	79780-39-5	N2
PFHpS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	375-92-8	N2
PFNS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	68259-12-1	N2
PFOSA	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	754-91-6	N2
PFPeA	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	2706-90-3	N2
PFPeS	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 14:52	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.12	1	05/18/23 15:05	06/06/23 14:52	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.13	1	05/18/23 15:05	06/06/23 14:52	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 14:52		
13C2-PFTA (S)	67	%	25-150	1	05/18/23 15:05	06/06/23 14:52		
13C24:2FTS (S)	103	%	25-150	1	05/18/23 15:05	06/06/23 14:52		
13C26:2FTS (S)	126	%	25-150	1	05/18/23 15:05	06/06/23 14:52		
13C28:2FTS (S)	114	%	25-150	1	05/18/23 15:05	06/06/23 14:52		
13C3-PFBS (S)	109	%	25-150	1	05/18/23 15:05	06/06/23 14:52	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW4-63-64 FT-0-230501 **Lab ID:** 10652169028 Collected: 05/01/23 16:35 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	107	%	25-150	1	05/18/23 15:05	06/06/23 14:52	355-46-4	
13C3HFPO-DA (S)	115	%	25-150	1	05/18/23 15:05	06/06/23 14:52		
13C4-PFBA (S)	110	%	25-150	1	05/18/23 15:05	06/06/23 14:52	375-22-4	
13C4-PFHpA (S)	103	%	25-150	1	05/18/23 15:05	06/06/23 14:52	375-85-9	
13C5-PFHxA (S)	109	%	25-150	1	05/18/23 15:05	06/06/23 14:52	307-24-4	
13C5-PFPeA (S)	112	%	25-150	1	05/18/23 15:05	06/06/23 14:52	2706-90-3	
13C6-PFDA (S)	99	%	25-150	1	05/18/23 15:05	06/06/23 14:52	335-76-2	
13C7-PFUdA (S)	99	%	25-150	1	05/18/23 15:05	06/06/23 14:52	2058-94-8	
13C8-PFOA (S)	103	%	25-150	1	05/18/23 15:05	06/06/23 14:52	335-67-1	
13C8-PFOS (S)	115	%	25-150	1	05/18/23 15:05	06/06/23 14:52	1763-23-1	
13C8-PFOSA (S)	103	%	25-150	1	05/18/23 15:05	06/06/23 14:52	754-91-6	
13C9-PFNA (S)	105	%	25-150	1	05/18/23 15:05	06/06/23 14:52	375-95-1	
d3-MeFOSAA (S)	110	%	25-150	1	05/18/23 15:05	06/06/23 14:52	2355-31-9	
d3-NMeFOSA (S)	23	%	10-150	1	05/18/23 15:05	06/06/23 14:52	31506-32-8	
d5-EtFOSAA (S)	122	%	25-150	1	05/18/23 15:05	06/06/23 14:52	2991-50-6	
d5-NEtFOSA (S)	9	%	10-150	1	05/18/23 15:05	06/06/23 14:52	4151-50-2	S0
d7-NMeFOSE (S)	39	%	10-150	1	05/18/23 15:05	06/06/23 14:52	24448-09-7	
d9-NEtFOSE (S)	27	%	10-150	1	05/18/23 15:05	06/06/23 14:52	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW5-64-65 FT-0-230501 **Lab ID:** 10652169029 **Collected:** 05/01/23 10:10 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	7.3	%	0.10	1		05/25/23 15:41		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	756426-58-1	N2
ADONA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 15:16	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	307-24-4	N2
PFBA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	79780-39-5	N2
PFHpS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	375-92-8	N2
PFNS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	68259-12-1	N2
PFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	754-91-6	N2
PFPeA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	2706-90-3	N2
PFPeS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 15:16	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	375-95-1	N2
Perfluorooctanesulfonic acid	0.24	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:16	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:16	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 15:16		
13C2-PFTA (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 15:16		
13C24:2FTS (S)	86	%	25-150	1	05/18/23 15:05	06/06/23 15:16		
13C26:2FTS (S)	99	%	25-150	1	05/18/23 15:05	06/06/23 15:16		
13C28:2FTS (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 15:16		
13C3-PFBS (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 15:16	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW5-64-65 FT-0-230501 **Lab ID:** 10652169029 Collected: 05/01/23 10:10 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 15:16	355-46-4	
13C3HFPO-DA (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 15:16		
13C4-PFBA (S)	93	%	25-150	1	05/18/23 15:05	06/06/23 15:16	375-22-4	
13C4-PFHpA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 15:16	375-85-9	
13C5-PFHxA (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 15:16	307-24-4	
13C5-PFPeA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 15:16	2706-90-3	
13C6-PFDA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 15:16	335-76-2	
13C7-PFUdA (S)	93	%	25-150	1	05/18/23 15:05	06/06/23 15:16	2058-94-8	
13C8-PFOA (S)	90	%	25-150	1	05/18/23 15:05	06/06/23 15:16	335-67-1	
13C8-PFOS (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 15:16	1763-23-1	
13C8-PFOSA (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 15:16	754-91-6	
13C9-PFNA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 15:16	375-95-1	
d3-MeFOSAA (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 15:16	2355-31-9	
d3-NMeFOSA (S)	86	%	10-150	1	05/18/23 15:05	06/06/23 15:16	31506-32-8	
d5-EtFOSAA (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 15:16	2991-50-6	
d5-NEtFOSA (S)	90	%	10-150	1	05/18/23 15:05	06/06/23 15:16	4151-50-2	
d7-NMeFOSE (S)	90	%	10-150	1	05/18/23 15:05	06/06/23 15:16	24448-09-7	
d9-NEtFOSE (S)	85	%	10-150	1	05/18/23 15:05	06/06/23 15:16	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW6-2-3 FT-0-230503 **Lab ID:** 10652169030 Collected: 05/03/23 08:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	8.2	%	0.10	1		05/25/23 15:41		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 15:23	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 15:23	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:23	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:23	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 15:23	756426-58-1	N2
ADONA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:23	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.094	1	05/18/23 15:05	06/06/23 15:23	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	307-24-4	N2
PFBA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:23	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:23	79780-39-5	N2
PFHpS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:23	375-92-8	N2
PFNS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:23	68259-12-1	N2
PFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	754-91-6	N2
PFPeA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	2706-90-3	N2
PFPeS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 15:23	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 15:23	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	375-95-1	N2
Perfluorooctanesulfonic acid	0.17	ug/kg	0.098	1	05/18/23 15:05	06/06/23 15:23	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 15:23	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	90	%	25-150	1	05/18/23 15:05	06/06/23 15:23		
13C2-PFTA (S)	85	%	25-150	1	05/18/23 15:05	06/06/23 15:23		
13C24:2FTS (S)	81	%	25-150	1	05/18/23 15:05	06/06/23 15:23		
13C26:2FTS (S)	89	%	25-150	1	05/18/23 15:05	06/06/23 15:23		
13C28:2FTS (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 15:23		
13C3-PFBS (S)	89	%	25-150	1	05/18/23 15:05	06/06/23 15:23	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW6-2-3 FT-0-230503 **Lab ID:** 10652169030 Collected: 05/03/23 08:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	--------------	----	----------	----------	---------	------

WI ID SL Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178
Pace Analytical Services - Minneapolis

Surrogates

13C3-PFHxS (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 15:23	355-46-4	
13C3HFPO-DA (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 15:23		
13C4-PFBA (S)	88	%	25-150	1	05/18/23 15:05	06/06/23 15:23	375-22-4	
13C4-PFHpA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 15:23	375-85-9	
13C5-PFHxA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 15:23	307-24-4	
13C5-PFPeA (S)	90	%	25-150	1	05/18/23 15:05	06/06/23 15:23	2706-90-3	
13C6-PFDA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 15:23	335-76-2	
13C7-PFUdA (S)	84	%	25-150	1	05/18/23 15:05	06/06/23 15:23	2058-94-8	
13C8-PFOA (S)	83	%	25-150	1	05/18/23 15:05	06/06/23 15:23	335-67-1	
13C8-PFOS (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 15:23	1763-23-1	
13C8-PFOSA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 15:23	754-91-6	
13C9-PFNA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 15:23	375-95-1	
d3-MeFOSAA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 15:23	2355-31-9	
d3-NMeFOSA (S)	77	%	10-150	1	05/18/23 15:05	06/06/23 15:23	31506-32-8	
d5-EtFOSAA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 15:23	2991-50-6	
d5-NEtFOSA (S)	81	%	10-150	1	05/18/23 15:05	06/06/23 15:23	4151-50-2	
d7-NMeFOSE (S)	78	%	10-150	1	05/18/23 15:05	06/06/23 15:23	24448-09-7	
d9-NEtFOSE (S)	75	%	10-150	1	05/18/23 15:05	06/06/23 15:23	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW6-58-59 FT-0-230503 **Lab ID:** 10652169031 **Collected:** 05/03/23 09:25 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	3.7	%	0.10	1		05/25/23 15:42		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11Cl-PF3OUdS	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 15:48	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 15:48	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 15:48	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 15:48	39108-34-4	N2
9Cl-PF3ONS	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 15:48	756426-58-1	N2
ADONA	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 15:48	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.091	1	05/18/23 15:05	06/06/23 15:48	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	375-22-4	N2
PFDS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 15:48	335-77-3	N2
PFDoS	ND	ug/kg	0.099	1	05/18/23 15:05	06/06/23 15:48	79780-39-5	N2
PFHpS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 15:48	375-92-8	N2
PFNS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 15:48	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	2706-90-3	N2
PFPeS	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 15:48	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.093	1	05/18/23 15:05	06/06/23 15:48	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 15:48	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 15:48	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	104	%	25-150	1	05/18/23 15:05	06/06/23 15:48		
13C2-PFTA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 15:48		
13C24:2FTS (S)	85	%	25-150	1	05/18/23 15:05	06/06/23 15:48		
13C26:2FTS (S)	109	%	25-150	1	05/18/23 15:05	06/06/23 15:48		
13C28:2FTS (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 15:48		
13C3-PFBS (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 15:48	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW6-58-59 FT-0-230503 **Lab ID:** 10652169031 Collected: 05/03/23 09:25 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 15:48	355-46-4	
13C3HFPO-DA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 15:48		
13C4-PFBA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 15:48	375-22-4	
13C4-PFHpA (S)	90	%	25-150	1	05/18/23 15:05	06/06/23 15:48	375-85-9	
13C5-PFHxA (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 15:48	307-24-4	
13C5-PFPeA (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 15:48	2706-90-3	
13C6-PFDA (S)	100	%	25-150	1	05/18/23 15:05	06/06/23 15:48	335-76-2	
13C7-PFUdA (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 15:48	2058-94-8	
13C8-PFOA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 15:48	335-67-1	
13C8-PFOS (S)	98	%	25-150	1	05/18/23 15:05	06/06/23 15:48	1763-23-1	
13C8-PFOSA (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 15:48	754-91-6	
13C9-PFNA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 15:48	375-95-1	
d3-MeFOSAA (S)	90	%	25-150	1	05/18/23 15:05	06/06/23 15:48	2355-31-9	
d3-NMeFOSA (S)	85	%	10-150	1	05/18/23 15:05	06/06/23 15:48	31506-32-8	
d5-EtFOSAA (S)	103	%	25-150	1	05/18/23 15:05	06/06/23 15:48	2991-50-6	
d5-NEtFOSA (S)	86	%	10-150	1	05/18/23 15:05	06/06/23 15:48	4151-50-2	
d7-NMeFOSE (S)	88	%	10-150	1	05/18/23 15:05	06/06/23 15:48	24448-09-7	
d9-NEtFOSE (S)	82	%	10-150	1	05/18/23 15:05	06/06/23 15:48	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW7-2-3 FT-0-230502 Lab ID: 10652169032 Collected: 05/02/23 09:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	7.5	%	0.10	1		05/25/23 15:42		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	756426-58-1	N2
ADONA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 16:16	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	307-24-4	N2
PFBA	0.15	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	375-22-4	N2
PFDS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	335-77-3	N2
PFDoS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	79780-39-5	N2
PFHpS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	375-92-8	N2
PFNS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	68259-12-1	N2
PFOSA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	754-91-6	N2
PFPeA	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	2706-90-3	N2
PFPeS	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 16:16	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:16	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.11	1	05/18/23 15:05	06/06/23 16:16	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 16:16		
13C2-PFTA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 16:16		
13C24:2FTS (S)	85	%	25-150	1	05/18/23 15:05	06/06/23 16:16		
13C26:2FTS (S)	105	%	25-150	1	05/18/23 15:05	06/06/23 16:16		
13C28:2FTS (S)	106	%	25-150	1	05/18/23 15:05	06/06/23 16:16		
13C3-PFBS (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 16:16	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW7-2-3 FT-0-230502 **Lab ID:** 10652169032 Collected: 05/02/23 09:15 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	91	%	25-150	1	05/18/23 15:05	06/06/23 16:16	355-46-4	
13C3HFPO-DA (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 16:16		
13C4-PFBA (S)	88	%	25-150	1	05/18/23 15:05	06/06/23 16:16	375-22-4	
13C4-PFHpA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 16:16	375-85-9	
13C5-PFHxA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 16:16	307-24-4	
13C5-PFPeA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 16:16	2706-90-3	
13C6-PFDA (S)	82	%	25-150	1	05/18/23 15:05	06/06/23 16:16	335-76-2	
13C7-PFUdA (S)	88	%	25-150	1	05/18/23 15:05	06/06/23 16:16	2058-94-8	
13C8-PFOA (S)	83	%	25-150	1	05/18/23 15:05	06/06/23 16:16	335-67-1	
13C8-PFOS (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 16:16	1763-23-1	
13C8-PFOSA (S)	85	%	25-150	1	05/18/23 15:05	06/06/23 16:16	754-91-6	
13C9-PFNA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 16:16	375-95-1	
d3-MeFOSAA (S)	86	%	25-150	1	05/18/23 15:05	06/06/23 16:16	2355-31-9	
d3-NMeFOSA (S)	84	%	10-150	1	05/18/23 15:05	06/06/23 16:16	31506-32-8	
d5-EtFOSAA (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 16:16	2991-50-6	
d5-NEtFOSA (S)	85	%	10-150	1	05/18/23 15:05	06/06/23 16:16	4151-50-2	
d7-NMeFOSE (S)	83	%	10-150	1	05/18/23 15:05	06/06/23 16:16	24448-09-7	
d9-NEtFOSE (S)	80	%	10-150	1	05/18/23 15:05	06/06/23 16:16	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW7-58-59 FT-0-230502 **Lab ID:** 10652169033 **Collected:** 05/02/23 11:40 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974								
Pace Analytical Services - Minneapolis								
Percent Moisture	3.9	%	0.10	1		05/25/23 15:42		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 16:37	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 16:37	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 16:37	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 16:37	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.094	1	05/18/23 15:05	06/06/23 16:37	756426-58-1	N2
ADONA	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 16:37	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.090	1	05/18/23 15:05	06/06/23 16:37	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	375-22-4	N2
PFDS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 16:37	335-77-3	N2
PFDoS	ND	ug/kg	0.098	1	05/18/23 15:05	06/06/23 16:37	79780-39-5	N2
PFHpS	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 16:37	375-92-8	N2
PFNS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 16:37	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	2706-90-3	N2
PFPeS	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 16:37	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/kg	0.092	1	05/18/23 15:05	06/06/23 16:37	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/kg	0.094	1	05/18/23 15:05	06/06/23 16:37	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:37	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	95	%	25-150	1	05/18/23 15:05	06/06/23 16:37		
13C2-PFTA (S)	88	%	25-150	1	05/18/23 15:05	06/06/23 16:37		
13C24:2FTS (S)	93	%	25-150	1	05/18/23 15:05	06/06/23 16:37		
13C26:2FTS (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 16:37		
13C28:2FTS (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 16:37		
13C3-PFBS (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 16:37	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW7-58-59 FT-0-230502 **Lab ID:** 10652169033 **Collected:** 05/02/23 11:40 **Received:** 05/05/23 15:18 **Matrix:** Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	94	%	25-150	1	05/18/23 15:05	06/06/23 16:37	355-46-4	
13C3HFPO-DA (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 16:37		
13C4-PFBA (S)	92	%	25-150	1	05/18/23 15:05	06/06/23 16:37	375-22-4	
13C4-PFHpA (S)	89	%	25-150	1	05/18/23 15:05	06/06/23 16:37	375-85-9	
13C5-PFHxA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 16:37	307-24-4	
13C5-PFPeA (S)	97	%	25-150	1	05/18/23 15:05	06/06/23 16:37	2706-90-3	
13C6-PFDA (S)	83	%	25-150	1	05/18/23 15:05	06/06/23 16:37	335-76-2	
13C7-PFUdA (S)	87	%	25-150	1	05/18/23 15:05	06/06/23 16:37	2058-94-8	
13C8-PFOA (S)	85	%	25-150	1	05/18/23 15:05	06/06/23 16:37	335-67-1	
13C8-PFOS (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 16:37	1763-23-1	
13C8-PFOSA (S)	89	%	25-150	1	05/18/23 15:05	06/06/23 16:37	754-91-6	
13C9-PFNA (S)	88	%	25-150	1	05/18/23 15:05	06/06/23 16:37	375-95-1	
d3-MeFOSAA (S)	86	%	25-150	1	05/18/23 15:05	06/06/23 16:37	2355-31-9	
d3-NMeFOSA (S)	88	%	10-150	1	05/18/23 15:05	06/06/23 16:37	31506-32-8	
d5-EtFOSAA (S)	106	%	25-150	1	05/18/23 15:05	06/06/23 16:37	2991-50-6	
d5-NEtFOSA (S)	86	%	10-150	1	05/18/23 15:05	06/06/23 16:37	4151-50-2	
d7-NMeFOSE (S)	90	%	10-150	1	05/18/23 15:05	06/06/23 16:37	24448-09-7	
d9-NEtFOSE (S)	83	%	10-150	1	05/18/23 15:05	06/06/23 16:37	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-FB1-FB-230501	Lab ID: 10652169034	Collected: 05/01/23 16:05	Received: 05/05/23 15:18	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:33	763051-92-9	N2
4:2 FTS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:33	757124-72-4	N2
6:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	27619-97-2	N2
8:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	39108-34-4	N2
9CI-PF3ONS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:33	756426-58-1	N2
ADONA	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:33	919005-14-4	N2
HFPO-DA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	13252-13-6	N2
NEtFOSAA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	2991-50-6	N2
NEtFOSA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	4151-50-2	N2
NEtFOSE	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	1691-99-2	N2
NMeFOSAA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	2355-31-9	N2
NMeFOSA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	31506-32-8	N2
NMeFOSE	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/L	0.0017	1	05/16/23 13:50	05/19/23 14:33	375-73-5	N2
Perfluorodecanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	335-76-2	N2
Perfluorohexanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	307-24-4	N2
PFBA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	375-22-4	N2
PFDS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	335-77-3	N2
PFDoS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	79780-39-5	N2
PFHpS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	375-92-8	N2
PFNS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	68259-12-1	N2
PFOSA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	754-91-6	N2
PFPeA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	2706-90-3	N2
PFPeS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:33	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:33	355-46-4	N2
Perfluorononanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:33	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:33	2058-94-8	N2
Surrogates								
13C4-PFBA (S)	93	%	25-150	1	05/16/23 13:50	05/19/23 14:33	375-22-4	
13C5-PFPeA (S)	96	%	25-150	1	05/16/23 13:50	05/19/23 14:33	2706-90-3	
13C3-PFBS (S)	100	%	25-150	1	05/16/23 13:50	05/19/23 14:33	375-73-5	
13C24:2FTS (S)	100	%	25-150	1	05/16/23 13:50	05/19/23 14:33		
13C3HFPO-DA (S)	100	%	25-150	1	05/16/23 13:50	05/19/23 14:33		
13C4-PFHpA (S)	98	%	25-150	1	05/16/23 13:50	05/19/23 14:33	375-85-9	
13C3-PFHxS (S)	100	%	25-150	1	05/16/23 13:50	05/19/23 14:33	355-46-4	
13C26:2FTS (S)	102	%	25-150	1	05/16/23 13:50	05/19/23 14:33		
13C8-PFOA (S)	97	%	25-150	1	05/16/23 13:50	05/19/23 14:33	335-67-1	
13C8-PFOS (S)	91	%	25-150	1	05/16/23 13:50	05/19/23 14:33	1763-23-1	
13C9-PFNA (S)	93	%	25-150	1	05/16/23 13:50	05/19/23 14:33	375-95-1	
13C6-PFDA (S)	108	%	25-150	1	05/16/23 13:50	05/19/23 14:33	335-76-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-FB1-FB-230501 **Lab ID: 10652169034** Collected: 05/01/23 16:05 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C28:2FTS (S)	223	%.	25-150	1	05/16/23 13:50	05/19/23 14:33		S3
d3-MeFOSAA (S)	84	%.	25-150	1	05/16/23 13:50	05/19/23 14:33	2355-31-9	
13C7-PFUdA (S)	96	%.	25-150	1	05/16/23 13:50	05/19/23 14:33	2058-94-8	
13C8-PFOA (S)	81	%.	25-150	1	05/16/23 13:50	05/19/23 14:33	754-91-6	
d5-EtFOSAA (S)	84	%.	25-150	1	05/16/23 13:50	05/19/23 14:33	2991-50-6	
13C2-PFDoA (S)	90	%.	25-150	1	05/16/23 13:50	05/19/23 14:33		
d3-NMeFOA (S)	53	%.	10-150	1	05/16/23 13:50	05/19/23 14:33	31506-32-8	
d7-NMeFOSE (S)	76	%.	10-150	1	05/16/23 13:50	05/19/23 14:33	24448-09-7	
13C2-PFTA (S)	86	%.	25-150	1	05/16/23 13:50	05/19/23 14:33		
d9-NEtFOSE (S)	71	%.	10-150	1	05/16/23 13:50	05/19/23 14:33	1691-99-2	
d5-NEtFOA (S)	53	%.	10-150	1	05/16/23 13:50	05/19/23 14:33	4151-50-2	
13C5-PFHxA (S)	97	%.	25-150	1	05/16/23 13:50	05/19/23 14:33	307-24-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-FB2-FB-230502 **Lab ID: 10652169035** Collected: 05/02/23 16:10 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	--------------	----	----------	----------	---------	------

WI ID NPW

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

Pace Analytical Services - Minneapolis

11CI-PF3OUdS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	763051-92-9	N2
4:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	757124-72-4	N2
6:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	27619-97-2	N2
8:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	39108-34-4	N2
9CI-PF3ONS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:41	756426-58-1	N2
ADONA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	919005-14-4	N2
HFPO-DA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	13252-13-6	N2
NEtFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	2991-50-6	N2
NEtFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	4151-50-2	N2
NEtFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	1691-99-2	N2
NMeFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	2355-31-9	N2
NMeFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	31506-32-8	N2
NMeFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:41	375-73-5	N2
Perfluorodecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	335-76-2	N2
Perfluorohexanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	307-24-4	N2
PFBA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	375-22-4	N2
PFDS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	335-77-3	N2
PFDoS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	79780-39-5	N2
PFHpS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	375-92-8	N2
PFNS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	68259-12-1	N2
PFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	754-91-6	N2
PFPeA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	2706-90-3	N2
PFPeS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:41	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:41	355-46-4	N2
Perfluorononanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:41	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:41	2058-94-8	N2

Surrogates

13C4-PFBA (S)	91	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	375-22-4	
13C5-PFPeA (S)	98	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	2706-90-3	
13C3-PFBS (S)	101	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	375-73-5	
13C24:2FTS (S)	98	%.	25-150	1	05/16/23 13:50	05/19/23 14:41		
13C3HFPO-DA (S)	102	%.	25-150	1	05/16/23 13:50	05/19/23 14:41		
13C4-PFHpA (S)	100	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	375-85-9	
13C3-PFHxS (S)	101	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	355-46-4	
13C26:2FTS (S)	103	%.	25-150	1	05/16/23 13:50	05/19/23 14:41		
13C8-PFOA (S)	100	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	335-67-1	
13C8-PFOS (S)	85	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	1763-23-1	
13C9-PFNA (S)	94	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	375-95-1	
13C6-PFDA (S)	108	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	335-76-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-FB2-FB-230502 **Lab ID: 10652169035** Collected: 05/02/23 16:10 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C28:2FTS (S)	258	%.	25-150	1	05/16/23 13:50	05/19/23 14:41		S3
d3-MeFOSAA (S)	75	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	2355-31-9	
13C7-PFUdA (S)	86	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	2058-94-8	
13C8-PFOA (S)	80	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	754-91-6	
d5-EtFOSAA (S)	75	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	2991-50-6	
13C2-PFDoA (S)	88	%.	25-150	1	05/16/23 13:50	05/19/23 14:41		
d3-NMeFOA (S)	52	%.	10-150	1	05/16/23 13:50	05/19/23 14:41	31506-32-8	
d7-NMeFOSE (S)	70	%.	10-150	1	05/16/23 13:50	05/19/23 14:41	24448-09-7	
13C2-PFTA (S)	84	%.	25-150	1	05/16/23 13:50	05/19/23 14:41		
d9-NEtFOSE (S)	70	%.	10-150	1	05/16/23 13:50	05/19/23 14:41	1691-99-2	
d5-NEtFOA (S)	48	%.	10-150	1	05/16/23 13:50	05/19/23 14:41	4151-50-2	
13C5-PFHxA (S)	100	%.	25-150	1	05/16/23 13:50	05/19/23 14:41	307-24-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-FB3-FB-230504	Lab ID: 10652169036	Collected: 05/04/23 10:00	Received: 05/05/23 15:18	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	763051-92-9	N2
4:2 FTS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:48	757124-72-4	N2
6:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	27619-97-2	N2
8:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	39108-34-4	N2
9CI-PF3ONS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:48	756426-58-1	N2
ADONA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	919005-14-4	N2
HFPO-DA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	13252-13-6	N2
NEtFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	2991-50-6	N2
NEtFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	4151-50-2	N2
NEtFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	1691-99-2	N2
NMeFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	2355-31-9	N2
NMeFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	31506-32-8	N2
NMeFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/L	0.0017	1	05/16/23 13:50	05/19/23 14:48	375-73-5	N2
Perfluorodecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	335-76-2	N2
Perfluorohexanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	307-24-4	N2
PFBA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	375-22-4	N2
PFDS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	335-77-3	N2
PFDoS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	79780-39-5	N2
PFHpS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	375-92-8	N2
PFNS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	68259-12-1	N2
PFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	754-91-6	N2
PFPeA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	2706-90-3	N2
PFPeS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 14:48	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:48	355-46-4	N2
Perfluorononanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 14:48	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 14:48	2058-94-8	N2
Surrogates								
13C4-PFBA (S)	92	%	25-150	1	05/16/23 13:50	05/19/23 14:48	375-22-4	
13C5-PFPeA (S)	99	%	25-150	1	05/16/23 13:50	05/19/23 14:48	2706-90-3	
13C3-PFBS (S)	102	%	25-150	1	05/16/23 13:50	05/19/23 14:48	375-73-5	
13C24:2FTS (S)	102	%	25-150	1	05/16/23 13:50	05/19/23 14:48		
13C3HFPO-DA (S)	104	%	25-150	1	05/16/23 13:50	05/19/23 14:48		
13C4-PFHpA (S)	101	%	25-150	1	05/16/23 13:50	05/19/23 14:48	375-85-9	
13C3-PFHxS (S)	99	%	25-150	1	05/16/23 13:50	05/19/23 14:48	355-46-4	
13C26:2FTS (S)	103	%	25-150	1	05/16/23 13:50	05/19/23 14:48		
13C8-PFOA (S)	99	%	25-150	1	05/16/23 13:50	05/19/23 14:48	335-67-1	
13C8-PFOS (S)	92	%	25-150	1	05/16/23 13:50	05/19/23 14:48	1763-23-1	
13C9-PFNA (S)	96	%	25-150	1	05/16/23 13:50	05/19/23 14:48	375-95-1	
13C6-PFDA (S)	101	%	25-150	1	05/16/23 13:50	05/19/23 14:48	335-76-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-FB3-FB-230504 **Lab ID: 10652169036** Collected: 05/04/23 10:00 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C28:2FTS (S)	162	%.	25-150	1	05/16/23 13:50	05/19/23 14:48		S3
d3-MeFOSAA (S)	64	%.	25-150	1	05/16/23 13:50	05/19/23 14:48	2355-31-9	
13C7-PFUdA (S)	83	%.	25-150	1	05/16/23 13:50	05/19/23 14:48	2058-94-8	
13C8-PFOA (S)	74	%.	25-150	1	05/16/23 13:50	05/19/23 14:48	754-91-6	
d5-EtFOSAA (S)	64	%.	25-150	1	05/16/23 13:50	05/19/23 14:48	2991-50-6	
13C2-PFDoA (S)	76	%.	25-150	1	05/16/23 13:50	05/19/23 14:48		
d3-NMeFOA (S)	40	%.	10-150	1	05/16/23 13:50	05/19/23 14:48	31506-32-8	
d7-NMeFOSE (S)	61	%.	10-150	1	05/16/23 13:50	05/19/23 14:48	24448-09-7	
13C2-PFTA (S)	82	%.	25-150	1	05/16/23 13:50	05/19/23 14:48		
d9-NEtFOSE (S)	58	%.	10-150	1	05/16/23 13:50	05/19/23 14:48	1691-99-2	
d5-NEtFOA (S)	38	%.	10-150	1	05/16/23 13:50	05/19/23 14:48	4151-50-2	
13C5-PFHxA (S)	100	%.	25-150	1	05/16/23 13:50	05/19/23 14:48	307-24-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-FB4-FB-230505 Lab ID: 10652169037 Collected: 05/05/23 11:40 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	763051-92-9	N2
4:2 FTS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:02	757124-72-4	N2
6:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	27619-97-2	N2
8:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	39108-34-4	N2
9CI-PF3ONS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:02	756426-58-1	N2
ADONA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	919005-14-4	N2
HFPO-DA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	13252-13-6	N2
NEtFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	2991-50-6	N2
NEtFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	4151-50-2	N2
NEtFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	1691-99-2	N2
NMeFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	2355-31-9	N2
NMeFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	31506-32-8	N2
NMeFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/L	0.0017	1	05/16/23 13:50	05/19/23 15:02	375-73-5	N2
Perfluorodecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	335-76-2	N2
Perfluorohexanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	307-24-4	N2
PFBA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	375-22-4	N2
PFDS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	335-77-3	N2
PFDoS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	79780-39-5	N2
PFHpS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	375-92-8	N2
PFNS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	68259-12-1	N2
PFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	754-91-6	N2
PFPeA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	2706-90-3	N2
PFPeS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:02	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:02	355-46-4	N2
Perfluorononanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:02	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:02	2058-94-8	N2
Surrogates								
13C4-PFBA (S)	93	%	25-150	1	05/16/23 13:50	05/19/23 15:02	375-22-4	
13C5-PFPeA (S)	100	%	25-150	1	05/16/23 13:50	05/19/23 15:02	2706-90-3	
13C3-PFBS (S)	103	%	25-150	1	05/16/23 13:50	05/19/23 15:02	375-73-5	
13C24:2FTS (S)	100	%	25-150	1	05/16/23 13:50	05/19/23 15:02		
13C3HFPO-DA (S)	105	%	25-150	1	05/16/23 13:50	05/19/23 15:02		
13C4-PFHpA (S)	103	%	25-150	1	05/16/23 13:50	05/19/23 15:02	375-85-9	
13C3-PFHxS (S)	103	%	25-150	1	05/16/23 13:50	05/19/23 15:02	355-46-4	
13C26:2FTS (S)	101	%	25-150	1	05/16/23 13:50	05/19/23 15:02		
13C8-PFOA (S)	101	%	25-150	1	05/16/23 13:50	05/19/23 15:02	335-67-1	
13C8-PFOS (S)	92	%	25-150	1	05/16/23 13:50	05/19/23 15:02	1763-23-1	
13C9-PFNA (S)	98	%	25-150	1	05/16/23 13:50	05/19/23 15:02	375-95-1	
13C6-PFDA (S)	113	%	25-150	1	05/16/23 13:50	05/19/23 15:02	335-76-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-FB4-FB-230505 **Lab ID: 10652169037** Collected: 05/05/23 11:40 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C28:2FTS (S)	185	%.	25-150	1	05/16/23 13:50	05/19/23 15:02		S3
d3-MeFOSAA (S)	78	%.	25-150	1	05/16/23 13:50	05/19/23 15:02	2355-31-9	
13C7-PFUdA (S)	92	%.	25-150	1	05/16/23 13:50	05/19/23 15:02	2058-94-8	
13C8-PFOA (S)	85	%.	25-150	1	05/16/23 13:50	05/19/23 15:02	754-91-6	
d5-EtFOSAA (S)	81	%.	25-150	1	05/16/23 13:50	05/19/23 15:02	2991-50-6	
13C2-PFDoA (S)	88	%.	25-150	1	05/16/23 13:50	05/19/23 15:02		
d3-NMeFOA (S)	49	%.	10-150	1	05/16/23 13:50	05/19/23 15:02	31506-32-8	
d7-NMeFOSE (S)	78	%.	10-150	1	05/16/23 13:50	05/19/23 15:02	24448-09-7	
13C2-PFTA (S)	91	%.	25-150	1	05/16/23 13:50	05/19/23 15:02		
d9-NEtFOSE (S)	74	%.	10-150	1	05/16/23 13:50	05/19/23 15:02	1691-99-2	
d5-NEtFOA (S)	52	%.	10-150	1	05/16/23 13:50	05/19/23 15:02	4151-50-2	
13C5-PFHxA (S)	101	%.	25-150	1	05/16/23 13:50	05/19/23 15:02	307-24-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-EB1-EB-230502 **Lab ID: 10652169038** Collected: 05/02/23 16:15 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	--------------	----	----------	----------	---------	------

WI ID NPW

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

Pace Analytical Services - Minneapolis

11CI-PF3OUdS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	763051-92-9	N2
4:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	757124-72-4	N2
6:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	27619-97-2	N2
8:2 FTS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	39108-34-4	N2
9CI-PF3ONS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	756426-58-1	N2
ADONA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	919005-14-4	N2
HFPO-DA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	13252-13-6	N2
NEtFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	2991-50-6	N2
NEtFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	4151-50-2	N2
NEtFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	1691-99-2	N2
NMeFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	2355-31-9	N2
NMeFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	31506-32-8	N2
NMeFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:10	375-73-5	N2
Perfluorodecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	335-76-2	N2
Perfluorohexanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	307-24-4	N2
PFBA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	375-22-4	N2
PFDS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	335-77-3	N2
PFDoS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	79780-39-5	N2
PFHpS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	375-92-8	N2
PFNS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	68259-12-1	N2
PFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	754-91-6	N2
PFPeA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	2706-90-3	N2
PFPeS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	355-46-4	N2
Perfluorononanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:10	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:10	2058-94-8	N2

Surrogates

13C4-PFBA (S)	98	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	375-22-4	
13C5-PFPeA (S)	102	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	2706-90-3	
13C3-PFBS (S)	104	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	375-73-5	
13C24:2FTS (S)	108	%.	25-150	1	05/16/23 13:50	05/19/23 15:10		
13C3HFPO-DA (S)	104	%.	25-150	1	05/16/23 13:50	05/19/23 15:10		
13C4-PFHpA (S)	106	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	375-85-9	
13C3-PFHxS (S)	104	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	355-46-4	
13C26:2FTS (S)	145	%.	25-150	1	05/16/23 13:50	05/19/23 15:10		
13C8-PFOA (S)	111	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	335-67-1	
13C8-PFOS (S)	98	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	1763-23-1	
13C9-PFNA (S)	106	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	375-95-1	
13C6-PFDA (S)	119	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	335-76-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-EB1-EB-230502 **Lab ID: 10652169038** Collected: 05/02/23 16:15 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	--------------	----	----------	----------	---------	------

WI ID NPW

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

Pace Analytical Services - Minneapolis

Surrogates

13C28:2FTS (S)	215	%.	25-150	1	05/16/23 13:50	05/19/23 15:10		S3
d3-MeFOSAA (S)	102	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	2355-31-9	
13C7-PFUdA (S)	123	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	2058-94-8	
13C8-PFOA (S)	72	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	754-91-6	
d5-EtFOSAA (S)	121	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	2991-50-6	
13C2-PFDoA (S)	111	%.	25-150	1	05/16/23 13:50	05/19/23 15:10		
d3-NMeFOSA (S)	1	%.	10-150	1	05/16/23 13:50	05/19/23 15:10	31506-32-8	S0
d7-NMeFOSE (S)	32	%.	10-150	1	05/16/23 13:50	05/19/23 15:10	24448-09-7	
13C2-PFTA (S)	98	%.	25-150	1	05/16/23 13:50	05/19/23 15:10		
d9-NEtFOSE (S)	30	%.	10-150	1	05/16/23 13:50	05/19/23 15:10	1691-99-2	
d5-NEtFOSA (S)	1	%.	10-150	1	05/16/23 13:50	05/19/23 15:10	4151-50-2	S0
13C5-PFHxA (S)	104	%.	25-150	1	05/16/23 13:50	05/19/23 15:10	307-24-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-EB2-EB-230503 **Lab ID: 10652169039** Collected: 05/03/23 17:40 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
------------	---------	-------	--------------	----	----------	----------	---------	------

WI ID NPW

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

Pace Analytical Services - Minneapolis

11CI-PF3OUdS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	763051-92-9	N2
4:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	757124-72-4	N2
6:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	27619-97-2	N2
8:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	39108-34-4	N2
9CI-PF3ONS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	756426-58-1	N2
ADONA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	919005-14-4	N2
HFPO-DA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	13252-13-6	N2
NEtFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	2991-50-6	N2
NEtFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	4151-50-2	N2
NEtFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	1691-99-2	N2
NMeFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	2355-31-9	N2
NMeFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	31506-32-8	N2
NMeFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:17	375-73-5	N2
Perfluorodecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	335-76-2	N2
Perfluorohexanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	307-24-4	N2
PFBA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	375-22-4	N2
PFDS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	335-77-3	N2
PFDoS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	79780-39-5	N2
PFHpS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	375-92-8	N2
PFNS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	68259-12-1	N2
PFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	754-91-6	N2
PFPeA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	2706-90-3	N2
PFPeS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:17	355-46-4	N2
Perfluorononanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:17	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:17	2058-94-8	N2

Surrogates

13C4-PFBA (S)	98	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	375-22-4	
13C5-PFPeA (S)	99	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	2706-90-3	
13C3-PFBS (S)	99	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	375-73-5	
13C24:2FTS (S)	106	%.	25-150	1	05/16/23 13:50	05/19/23 15:17		
13C3HFPO-DA (S)	101	%.	25-150	1	05/16/23 13:50	05/19/23 15:17		
13C4-PFHpA (S)	104	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	375-85-9	
13C3-PFHxS (S)	98	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	355-46-4	
13C26:2FTS (S)	160	%.	25-150	1	05/16/23 13:50	05/19/23 15:17		S3
13C8-PFOA (S)	107	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	335-67-1	
13C8-PFOS (S)	97	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	1763-23-1	
13C9-PFNA (S)	107	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	375-95-1	
13C6-PFDA (S)	121	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	335-76-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-EB2-EB-230503 **Lab ID: 10652169039** Collected: 05/03/23 17:40 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C28:2FTS (S)	201	%.	25-150	1	05/16/23 13:50	05/19/23 15:17		S3
d3-MeFOSAA (S)	100	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	2355-31-9	
13C7-PFUdA (S)	119	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	2058-94-8	
13C8-PFOA (S)	78	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	754-91-6	
d5-EtFOSAA (S)	118	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	2991-50-6	
13C2-PFDoA (S)	112	%.	25-150	1	05/16/23 13:50	05/19/23 15:17		
d3-NMeFOSA (S)	2	%.	10-150	1	05/16/23 13:50	05/19/23 15:17	31506-32-8	S0
d7-NMeFOSE (S)	35	%.	10-150	1	05/16/23 13:50	05/19/23 15:17	24448-09-7	
13C2-PFTA (S)	100	%.	25-150	1	05/16/23 13:50	05/19/23 15:17		
d9-NEtFOSE (S)	34	%.	10-150	1	05/16/23 13:50	05/19/23 15:17	1691-99-2	
d5-NEtFOSA (S)	1	%.	10-150	1	05/16/23 13:50	05/19/23 15:17	4151-50-2	S0
13C5-PFHxA (S)	101	%.	25-150	1	05/16/23 13:50	05/19/23 15:17	307-24-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-EB3-EB-230504 Lab ID: 10652169040 Collected: 05/04/23 13:30 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:24	763051-92-9	N2
4:2 FTS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:24	757124-72-4	N2
6:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:24	27619-97-2	N2
8:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:24	39108-34-4	N2
9CI-PF3ONS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:24	756426-58-1	N2
ADONA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:24	919005-14-4	N2
HFPO-DA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	13252-13-6	N2
NEtFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	2991-50-6	N2
NEtFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	4151-50-2	N2
NEtFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	1691-99-2	N2
NMeFOSAA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	2355-31-9	N2
NMeFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	31506-32-8	N2
NMeFOSE	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/L	0.0017	1	05/16/23 13:50	05/19/23 15:24	375-73-5	N2
Perfluorodecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	335-76-2	N2
Perfluorohexanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	307-24-4	N2
PFBA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	375-22-4	N2
PFDS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:24	335-77-3	N2
PFDoS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:24	79780-39-5	N2
PFHpS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:24	375-92-8	N2
PFNS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:24	68259-12-1	N2
PFOSA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	754-91-6	N2
PFPeA	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	2706-90-3	N2
PFPeS	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:24	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:24	355-46-4	N2
Perfluorononanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	375-95-1	N2
Perfluorooctanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:24	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:24	2058-94-8	N2
Surrogates								
13C4-PFBA (S)	96	%	25-150	1	05/16/23 13:50	05/19/23 15:24	375-22-4	
13C5-PFPeA (S)	102	%	25-150	1	05/16/23 13:50	05/19/23 15:24	2706-90-3	
13C3-PFBS (S)	105	%	25-150	1	05/16/23 13:50	05/19/23 15:24	375-73-5	
13C24:2FTS (S)	104	%	25-150	1	05/16/23 13:50	05/19/23 15:24		
13C3HFPO-DA (S)	107	%	25-150	1	05/16/23 13:50	05/19/23 15:24		
13C4-PFHpA (S)	105	%	25-150	1	05/16/23 13:50	05/19/23 15:24	375-85-9	
13C3-PFHxS (S)	102	%	25-150	1	05/16/23 13:50	05/19/23 15:24	355-46-4	
13C26:2FTS (S)	114	%	25-150	1	05/16/23 13:50	05/19/23 15:24		
13C8-PFOA (S)	102	%	25-150	1	05/16/23 13:50	05/19/23 15:24	335-67-1	
13C8-PFOS (S)	94	%	25-150	1	05/16/23 13:50	05/19/23 15:24	1763-23-1	
13C9-PFNA (S)	98	%	25-150	1	05/16/23 13:50	05/19/23 15:24	375-95-1	
13C6-PFDA (S)	114	%	25-150	1	05/16/23 13:50	05/19/23 15:24	335-76-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-EB3-EB-230504 **Lab ID: 10652169040** Collected: 05/04/23 13:30 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C28:2FTS (S)	200	%.	25-150	1	05/16/23 13:50	05/19/23 15:24		S3
d3-MeFOSAA (S)	84	%.	25-150	1	05/16/23 13:50	05/19/23 15:24	2355-31-9	
13C7-PFUdA (S)	99	%.	25-150	1	05/16/23 13:50	05/19/23 15:24	2058-94-8	
13C8-PFOA (S)	84	%.	25-150	1	05/16/23 13:50	05/19/23 15:24	754-91-6	
d5-EtFOSAA (S)	86	%.	25-150	1	05/16/23 13:50	05/19/23 15:24	2991-50-6	
13C2-PFDoA (S)	95	%.	25-150	1	05/16/23 13:50	05/19/23 15:24		
d3-NMeFOSA (S)	3	%.	10-150	1	05/16/23 13:50	05/19/23 15:24	31506-32-8	S0
d7-NMeFOSE (S)	47	%.	10-150	1	05/16/23 13:50	05/19/23 15:24	24448-09-7	
13C2-PFTA (S)	94	%.	25-150	1	05/16/23 13:50	05/19/23 15:24		
d9-NEtFOSE (S)	39	%.	10-150	1	05/16/23 13:50	05/19/23 15:24	1691-99-2	
d5-NEtFOSA (S)	3	%.	10-150	1	05/16/23 13:50	05/19/23 15:24	4151-50-2	S0
13C5-PFHxA (S)	103	%.	25-150	1	05/16/23 13:50	05/19/23 15:24	307-24-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-EB4-EB-230505	Lab ID: 10652169041	Collected: 05/05/23 11:35	Received: 05/05/23 15:18	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:31	763051-92-9	N2
4:2 FTS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:31	757124-72-4	N2
6:2 FTS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:31	27619-97-2	N2
8:2 FTS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:31	39108-34-4	N2
9CI-PF3ONS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:31	756426-58-1	N2
ADONA	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:31	919005-14-4	N2
HFPO-DA	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	13252-13-6	N2
NEtFOSAA	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	2991-50-6	N2
NEtFOSA	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	4151-50-2	N2
NEtFOSE	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	1691-99-2	N2
NMeFOSAA	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	2355-31-9	N2
NMeFOSA	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	31506-32-8	N2
NMeFOSE	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/L	0.0018	1	05/16/23 13:50	05/19/23 15:31	375-73-5	N2
Perfluorodecanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	335-76-2	N2
Perfluorohexanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	307-24-4	N2
PFBA	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	375-22-4	N2
PFDS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:31	335-77-3	N2
PFDoS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:31	79780-39-5	N2
PFHpS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:31	375-92-8	N2
PFNS	ND	ug/L	0.0020	1	05/16/23 13:50	05/19/23 15:31	68259-12-1	N2
PFOSA	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	754-91-6	N2
PFPeA	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	2706-90-3	N2
PFPeS	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:31	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	375-85-9	N2
Perfluorohexanesulfonic acid	ND	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:31	355-46-4	N2
Perfluorononanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	375-95-1	N2
Perfluorooctanesulfonic acid	0.0056	ug/L	0.0019	1	05/16/23 13:50	05/19/23 15:31	1763-23-1	N2
Perfluorooctanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/L	0.0021	1	05/16/23 13:50	05/19/23 15:31	2058-94-8	N2
Surrogates								
13C4-PFBA (S)	97	%	25-150	1	05/16/23 13:50	05/19/23 15:31	375-22-4	
13C5-PFPeA (S)	103	%	25-150	1	05/16/23 13:50	05/19/23 15:31	2706-90-3	
13C3-PFBS (S)	106	%	25-150	1	05/16/23 13:50	05/19/23 15:31	375-73-5	
13C24:2FTS (S)	103	%	25-150	1	05/16/23 13:50	05/19/23 15:31		
13C3HFPO-DA (S)	104	%	25-150	1	05/16/23 13:50	05/19/23 15:31		
13C4-PFHpA (S)	106	%	25-150	1	05/16/23 13:50	05/19/23 15:31	375-85-9	
13C3-PFHxS (S)	106	%	25-150	1	05/16/23 13:50	05/19/23 15:31	355-46-4	
13C26:2FTS (S)	124	%	25-150	1	05/16/23 13:50	05/19/23 15:31		
13C8-PFOA (S)	110	%	25-150	1	05/16/23 13:50	05/19/23 15:31	335-67-1	
13C8-PFOS (S)	102	%	25-150	1	05/16/23 13:50	05/19/23 15:31	1763-23-1	
13C9-PFNA (S)	111	%	25-150	1	05/16/23 13:50	05/19/23 15:31	375-95-1	
13C6-PFDA (S)	121	%	25-150	1	05/16/23 13:50	05/19/23 15:31	335-76-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-W-EB4-EB-230505 **Lab ID: 10652169041** Collected: 05/05/23 11:35 Received: 05/05/23 15:18 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID NPW								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C28:2FTS (S)	208	%.	25-150	1	05/16/23 13:50	05/19/23 15:31		S0
d3-MeFOSAA (S)	118	%.	25-150	1	05/16/23 13:50	05/19/23 15:31	2355-31-9	
13C7-PFUdA (S)	128	%.	25-150	1	05/16/23 13:50	05/19/23 15:31	2058-94-8	
13C8-PFOSA (S)	73	%.	25-150	1	05/16/23 13:50	05/19/23 15:31	754-91-6	
d5-EtFOSAA (S)	142	%.	25-150	1	05/16/23 13:50	05/19/23 15:31	2991-50-6	
13C2-PFDoA (S)	114	%.	25-150	1	05/16/23 13:50	05/19/23 15:31		
d3-NMeFOSA (S)	25	%.	10-150	1	05/16/23 13:50	05/19/23 15:31	31506-32-8	
d7-NMeFOSE (S)	71	%.	10-150	1	05/16/23 13:50	05/19/23 15:31	24448-09-7	
13C2-PFTA (S)	113	%.	25-150	1	05/16/23 13:50	05/19/23 15:31		
d9-NEtFOSE (S)	67	%.	10-150	1	05/16/23 13:50	05/19/23 15:31	1691-99-2	
d5-NEtFOSA (S)	22	%.	10-150	1	05/16/23 13:50	05/19/23 15:31	4151-50-2	
13C5-PFHxA (S)	104	%.	25-150	1	05/16/23 13:50	05/19/23 15:31	307-24-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW3-59-60 FT-0-230503 **Lab ID:** 10652169042 Collected: 05/03/23 11:05 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Dry Weight / %M by ASTM D2974								
Analytical Method: ASTM D2974 Pace Analytical Services - Minneapolis								
Percent Moisture	3.0	%	0.10	1		05/25/23 15:42		N2
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178 Pace Analytical Services - Minneapolis								
11CI-PF3OUdS	ND	ug/kg	0.094	1	05/18/23 15:05	06/06/23 16:44	763051-92-9	N2
4:2 FTS	ND	ug/kg	0.094	1	05/18/23 15:05	06/06/23 16:44	757124-72-4	N2
6:2 FTS	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 16:44	27619-97-2	N2
8:2 FTS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 16:44	39108-34-4	N2
9CI-PF3ONS	ND	ug/kg	0.093	1	05/18/23 15:05	06/06/23 16:44	756426-58-1	N2
ADONA	ND	ug/kg	0.095	1	05/18/23 15:05	06/06/23 16:44	919005-14-4	N2
HFPO-DA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	13252-13-6	N2
NEtFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	2991-50-6	N2
NEtFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	4151-50-2	N2
NEtFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	1691-99-2	N2
NMeFOSAA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	2355-31-9	N2
NMeFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	31506-32-8	N2
NMeFOSE	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	24448-09-7	N2
Perfluorobutanesulfonic acid	ND	ug/kg	0.089	1	05/18/23 15:05	06/06/23 16:44	375-73-5	N2
Perfluorodecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	335-76-2	N2
Perfluorohexanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	307-24-4	N2
PFBA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	375-22-4	N2
PFDS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 16:44	335-77-3	N2
PFDoS	ND	ug/kg	0.097	1	05/18/23 15:05	06/06/23 16:44	79780-39-5	N2
PFHpS	0.19	ug/kg	0.095	1	05/18/23 15:05	06/06/23 16:44	375-92-8	N2
PFNS	ND	ug/kg	0.096	1	05/18/23 15:05	06/06/23 16:44	68259-12-1	N2
PFOSA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	754-91-6	N2
PFPeA	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	2706-90-3	N2
PFPeS	0.10	ug/kg	0.094	1	05/18/23 15:05	06/06/23 16:44	2706-91-4	N2
Perfluorododecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	307-55-1	N2
Perfluoroheptanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	375-85-9	N2
Perfluorohexanesulfonic acid	12.8	ug/kg	0.91	10	05/18/23 15:05	05/25/23 16:24	355-46-4	N2
Perfluorononanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	375-95-1	N2
Perfluorooctanesulfonic acid	4.3	ug/kg	0.093	1	05/18/23 15:05	06/06/23 16:44	1763-23-1	N2
Perfluorooctanoic acid	0.53	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	335-67-1	N2
Perfluorotetradecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	376-06-7	N2
Perfluorotridecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	72629-94-8	N2
Perfluoroundecanoic acid	ND	ug/kg	0.10	1	05/18/23 15:05	06/06/23 16:44	2058-94-8	N2
Surrogates								
13C2-PFDoA (S)	110	%	25-150	1	05/18/23 15:05	06/06/23 16:44		
13C2-PFTA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 16:44		
13C24:2FTS (S)	96	%	25-150	1	05/18/23 15:05	06/06/23 16:44		
13C26:2FTS (S)	128	%	25-150	1	05/18/23 15:05	06/06/23 16:44		
13C28:2FTS (S)	113	%	25-150	1	05/18/23 15:05	06/06/23 16:44		
13C3-PFBS (S)	108	%	25-150	1	05/18/23 15:05	06/06/23 16:44	375-73-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Sample: MEWI-S-MW3-59-60 FT-0-230503 **Lab ID:** 10652169042 Collected: 05/03/23 11:05 Received: 05/05/23 15:18 Matrix: Solid

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

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
WI ID SL								
Analytical Method: ENV-SOP-MIN4-0178 Preparation Method: ENV-SOP-MIN4-0178								
Pace Analytical Services - Minneapolis								
Surrogates								
13C3-PFHxS (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 16:44	355-46-4	
13C3HFPO-DA (S)	113	%	25-150	1	05/18/23 15:05	06/06/23 16:44		
13C4-PFBA (S)	103	%	25-150	1	05/18/23 15:05	06/06/23 16:44	375-22-4	
13C4-PFHpA (S)	104	%	25-150	1	05/18/23 15:05	06/06/23 16:44	375-85-9	
13C5-PFHxA (S)	109	%	25-150	1	05/18/23 15:05	06/06/23 16:44	307-24-4	
13C5-PFPeA (S)	109	%	25-150	1	05/18/23 15:05	06/06/23 16:44	2706-90-3	
13C6-PFDA (S)	102	%	25-150	1	05/18/23 15:05	06/06/23 16:44	335-76-2	
13C7-PFUdA (S)	103	%	25-150	1	05/18/23 15:05	06/06/23 16:44	2058-94-8	
13C8-PFOA (S)	101	%	25-150	1	05/18/23 15:05	06/06/23 16:44	335-67-1	
13C8-PFOS (S)	112	%	25-150	1	05/18/23 15:05	06/06/23 16:44	1763-23-1	
13C8-PFOSA (S)	106	%	25-150	1	05/18/23 15:05	06/06/23 16:44	754-91-6	
13C9-PFNA (S)	103	%	25-150	1	05/18/23 15:05	06/06/23 16:44	375-95-1	
d3-MeFOSAA (S)	106	%	25-150	1	05/18/23 15:05	06/06/23 16:44	2355-31-9	
d3-NMeFOSA (S)	99	%	10-150	1	05/18/23 15:05	06/06/23 16:44	31506-32-8	
d5-EtFOSAA (S)	118	%	25-150	1	05/18/23 15:05	06/06/23 16:44	2991-50-6	
d5-NEtFOSA (S)	101	%	10-150	1	05/18/23 15:05	06/06/23 16:44	4151-50-2	
d7-NMeFOSE (S)	96	%	10-150	1	05/18/23 15:05	06/06/23 16:44	24448-09-7	
d9-NEtFOSE (S)	96	%	10-150	1	05/18/23 15:05	06/06/23 16:44	1691-99-2	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

QC Batch:	883406	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: 10652169001, 10652169002, 10652169003, 10652169004, 10652169005, 10652169006, 10652169007, 10652169008, 10652169009, 10652169010, 10652169011, 10652169012, 10652169013, 10652169014, 10652169015, 10652169016, 10652169017, 10652169018, 10652169019, 10652169020

SAMPLE DUPLICATE: 4654259

Parameter	Units	10652169001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	7.7	7.5	3	30	N2

SAMPLE DUPLICATE: 4654260

Parameter	Units	10652169020 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.8	8.3	6	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

QC Batch:	883476	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: 10652169021, 10652169022, 10652169023, 10652169024, 10652169025, 10652169026, 10652169027, 10652169028, 10652169029, 10652169030, 10652169031, 10652169032, 10652169033, 10652169042

SAMPLE DUPLICATE: 4654495

Parameter	Units	10652169021 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	3.9	4.0	2	30	N2

SAMPLE DUPLICATE: 4654496

Parameter	Units	10652169042 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	3.0	2.8	9	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

QC Batch: 880080

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: 10652169034, 10652169035, 10652169036, 10652169037, 10652169038, 10652169039, 10652169040, 10652169041

METHOD BLANK: 4638791

Matrix: Water

Associated Lab Samples: 10652169034, 10652169035, 10652169036, 10652169037, 10652169038, 10652169039, 10652169040, 10652169041

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
11Cl-PF3OUdS	ug/L	ND	0.0018	05/19/23 13:50	N2
4:2 FTS	ug/L	ND	0.0018	05/19/23 13:50	N2
6:2 FTS	ug/L	ND	0.0018	05/19/23 13:50	N2
8:2 FTS	ug/L	ND	0.0019	05/19/23 13:50	N2
9Cl-PF3ONS	ug/L	ND	0.0018	05/19/23 13:50	N2
ADONA	ug/L	ND	0.0018	05/19/23 13:50	N2
HFPO-DA	ug/L	ND	0.0019	05/19/23 13:50	N2
NEtFOSA	ug/L	ND	0.0019	05/19/23 13:50	N2
NEtFOSAA	ug/L	ND	0.0019	05/19/23 13:50	N2
NEtFOSE	ug/L	ND	0.0019	05/19/23 13:50	N2
NMeFOSA	ug/L	ND	0.0019	05/19/23 13:50	N2
NMeFOSAA	ug/L	ND	0.0019	05/19/23 13:50	N2
NMeFOSE	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluorobutanesulfonic acid	ug/L	ND	0.0017	05/19/23 13:50	N2
Perfluorodecanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluorododecanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluoroheptanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluorohexanesulfonic acid	ug/L	ND	0.0018	05/19/23 13:50	N2
Perfluorohexanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluorononanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluorooctanesulfonic acid	ug/L	ND	0.0018	05/19/23 13:50	N2
Perfluorooctanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluorotetradecanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluorotridecanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
Perfluoroundecanoic acid	ug/L	ND	0.0019	05/19/23 13:50	N2
PFBA	ug/L	ND	0.0019	05/19/23 13:50	N2
PFDoS	ug/L	ND	0.0019	05/19/23 13:50	N2
PFDS	ug/L	ND	0.0019	05/19/23 13:50	N2
PFHpS	ug/L	ND	0.0018	05/19/23 13:50	N2
PFNS	ug/L	ND	0.0019	05/19/23 13:50	N2
PFOSA	ug/L	ND	0.0019	05/19/23 13:50	N2
PFPeA	ug/L	ND	0.0019	05/19/23 13:50	N2
PFPeS	ug/L	ND	0.0018	05/19/23 13:50	N2
13C2-PFDoA (S)	%	88	25-150	05/19/23 13:50	
13C2-PFTA (S)	%	83	25-150	05/19/23 13:50	
13C24:2FTS (S)	%	91	25-150	05/19/23 13:50	
13C26:2FTS (S)	%	94	25-150	05/19/23 13:50	
13C28:2FTS (S)	%	110	25-150	05/19/23 13:50	
13C3-PFBS (S)	%	93	25-150	05/19/23 13:50	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

METHOD BLANK: 4638791

Matrix: Water

Associated Lab Samples: 10652169034, 10652169035, 10652169036, 10652169037, 10652169038, 10652169039, 10652169040, 10652169041

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
13C3-PFHxS (S)	%	94	25-150	05/19/23 13:50	
13C3HFPO-DA (S)	%	94	25-150	05/19/23 13:50	
13C4-PFBA (S)	%	83	25-150	05/19/23 13:50	
13C4-PFHpA (S)	%	93	25-150	05/19/23 13:50	
13C5-PFHxA (S)	%	91	25-150	05/19/23 13:50	
13C5-PFPeA (S)	%	90	25-150	05/19/23 13:50	
13C6-PFDA (S)	%	95	25-150	05/19/23 13:50	
13C7-PFUdA (S)	%	91	25-150	05/19/23 13:50	
13C8-PFOA (S)	%	92	25-150	05/19/23 13:50	
13C8-PFOS (S)	%	91	25-150	05/19/23 13:50	
13C8-PFOSA (S)	%	74	25-150	05/19/23 13:50	
13C9-PFNA (S)	%	89	25-150	05/19/23 13:50	
d3-MeFOSAA (S)	%	76	25-150	05/19/23 13:50	
d3-NMeFOSA (S)	%	46	20-150	05/19/23 13:50	
d5-EtFOSAA (S)	%	77	25-150	05/19/23 13:50	
d5-NEtFOSA (S)	%	45	20-150	05/19/23 13:50	
d7-NMeFOSE (S)	%	67	20-150	05/19/23 13:50	
d9-NEtFOSE (S)	%	62	20-150	05/19/23 13:50	

LABORATORY CONTROL SAMPLE & LCSD: 4638792

4644210

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
11CI-PF3OUdS	ug/L	0.0038	0.0032	0.0035	84	93	50-150	10	30	N2
4:2 FTS	ug/L	0.0037	0.0032	0.0033	86	90	50-150	4	30	N2
6:2 FTS	ug/L	0.0038	0.0036	0.0032	96	85	50-150	12	30	N2
8:2 FTS	ug/L	0.0038	0.0029	0.0033	76	87	50-150	13	30	N2
9CI-PF3ONS	ug/L	0.0037	0.0033	0.0036	88	96	50-150	8	30	N2
ADONA	ug/L	0.0038	0.0034	0.0033	91	88	50-150	4	30	N2
HFPO-DA	ug/L	0.004	0.0034	0.0036	85	90	50-150	5	30	N2
NEtFOSA	ug/L	0.004	0.0034	0.0037	85	92	50-150	8	30	N2
NEtFOSAA	ug/L	0.004	0.0037	0.0037	94	94	50-150	1	30	N2
NEtFOSE	ug/L	0.004	0.0038	0.0035	95	88	50-150	8	30	N2
NMeFOSA	ug/L	0.004	0.0037	0.0040	94	102	50-150	7	30	N2
NMeFOSAA	ug/L	0.004	0.0039	0.0035	99	88	50-150	13	30	N2
NMeFOSE	ug/L	0.004	0.0034	0.0038	86	95	50-150	9	30	N2
Perfluorobutanesulfonic acid	ug/L	0.0035	0.0031	0.0033	89	93	50-150	3	30	N2
Perfluorodecanoic acid	ug/L	0.004	0.0035	0.0038	87	97	50-150	10	30	N2
Perfluorododecanoic acid	ug/L	0.004	0.0036	0.0035	90	89	50-150	2	30	N2
Perfluoroheptanoic acid	ug/L	0.004	0.0036	0.0036	90	90	50-150	0	30	N2
Perfluorohexanesulfonic acid	ug/L	0.0037	0.0032	0.0034	87	94	50-150	7	30	N2
Perfluorohexanoic acid	ug/L	0.004	0.0036	0.0036	90	91	50-150	1	30	N2
Perfluorononanoic acid	ug/L	0.004	0.0035	0.0036	87	92	50-150	5	30	N2
Perfluorooctanesulfonic acid	ug/L	0.0037	0.0034	0.0040	90	109	50-150	18	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

LABORATORY CONTROL SAMPLE & LCSD:		4638792	4644210							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Perfluorooctanoic acid	ug/L	0.004	0.0038	0.0036	95	92	50-150	5	30	N2
Perfluorotetradecanoic acid	ug/L	0.004	0.0037	0.0039	94	98	50-150	4	30	N2
Perfluorotridecanoic acid	ug/L	0.004	0.0035	0.0039	89	98	50-150	9	30	N2
Perfluoroundecanoic acid	ug/L	0.004	0.0039	0.0037	97	94	50-150	4	30	N2
PFBA	ug/L	0.004	0.0035	0.0036	89	91	50-150	2	30	N2
PFDoS	ug/L	0.0039	0.0033	0.0036	86	94	50-150	7	30	N2
PFDS	ug/L	0.0038	0.0034	0.0035	88	91	50-150	2	30	N2
PFHpS	ug/L	0.0038	0.0033	0.0036	87	96	50-150	9	30	N2
PFNS	ug/L	0.0038	0.0033	0.0037	87	98	50-150	11	30	N2
PFOSA	ug/L	0.004	0.0035	0.0036	89	91	50-150	2	30	N2
PFPeA	ug/L	0.004	0.0035	0.0036	88	91	50-150	3	30	N2
PFPeS	ug/L	0.0037	0.0032	0.0033	86	90	50-150	3	30	N2
13C2-PFDoA (S)	%				92	95	25-150			
13C2-PFTA (S)	%				91	92	25-150			
13C24:2FTS (S)	%				96	99	25-150			
13C26:2FTS (S)	%				96	98	25-150			
13C28:2FTS (S)	%				140	113	25-150			
13C3-PFBS (S)	%				98	101	25-150			
13C3-PFHxS (S)	%				98	99	25-150			
13C3HFPO-DA (S)	%				103	103	25-150			
13C4-PFBA (S)	%				89	91	25-150			
13C4-PFHpA (S)	%				99	99	25-150			
13C5-PFHxA (S)	%				98	100	25-150			
13C5-PFPeA (S)	%				96	97	25-150			
13C6-PFDA (S)	%				105	102	25-150			
13C7-PFUdA (S)	%				91	95	25-150			
13C8-PFOA (S)	%				97	104	25-150			
13C8-PFOS (S)	%				95	92	25-150			
13C8-PFOSA (S)	%				82	86	25-150			
13C9-PFNA (S)	%				96	96	25-150			
d3-MeFOSAA (S)	%				78	89	25-150			
d3-NMeFOSA (S)	%				49	55	20-150			
d5-EtFOSAA (S)	%				83	86	25-150			
d5-NEtFOSA (S)	%				49	61	20-150			
d7-NMeFOSE (S)	%				74	78	20-150			
d9-NEtFOSE (S)	%				69	76	20-150			

MATRIX SPIKE SAMPLE:		4644211	10652482001		MS		MS		% Rec	
Parameter	Units	Result	Spike Conc.	Result	% Rec	Limit	Qualifiers			
11CI-PF3OUdS	ug/L	ND	0.0037	0.0027	72	50-150	N2			
4:2 FTS	ug/L	ND	0.0037	0.0032	86	50-150	N2			
6:2 FTS	ug/L	ND	0.0038	0.0048	99	50-150	N2			
8:2 FTS	ug/L	ND	0.0038	0.0035	90	50-150	N2			
9CI-PF3ONS	ug/L	ND	0.0037	0.0028	76	50-150	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

MATRIX SPIKE SAMPLE: 4644211		10652482001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
ADONA	ug/L	ND	0.0037	0.0029	78	50-150	N2
HFPO-DA	ug/L	ND	0.004	0.0033	84	50-150	N2
NEtFOSA	ug/L	ND	0.004	0.0043	107	50-150	N2
NEtFOSAA	ug/L	ND	0.004	0.0039	98	50-150	N2
NEtFOSE	ug/L	ND	0.004	0.0033	84	50-150	N2
NMeFOSA	ug/L	ND	0.004	0.0036	89	50-150	N2
NMeFOSAA	ug/L	ND	0.004	0.0035	80	50-150	N2
NMeFOSE	ug/L	ND	0.004	0.0033	84	50-150	N2
Perfluorobutanesulfonic acid	ug/L	ND	0.0035	0.0039	86	50-150	N2
Perfluorodecanoic acid	ug/L	ND	0.004	0.0033	82	50-150	N2
Perfluorododecanoic acid	ug/L	ND	0.004	0.0034	86	50-150	N2
Perfluoroheptanoic acid	ug/L	ND	0.004	0.0034	85	50-150	N2
Perfluorohexanesulfonic acid	ug/L	ND	0.0036	0.0039	78	50-150	N2
Perfluorohexanoic acid	ug/L	ND	0.004	0.0034	87	50-150	N2
Perfluorononanoic acid	ug/L	ND	0.004	0.0034	86	50-150	N2
Perfluorooctanesulfonic acid	ug/L	ND	0.0037	0.0031	79	50-150	N2
Perfluorooctanoic acid	ug/L	ND	0.004	0.0035	81	50-150	N2
Perfluorotetradecanoic acid	ug/L	ND	0.004	0.0034	85	50-150	N2
Perfluorotridecanoic acid	ug/L	ND	0.004	0.0031	78	50-150	N2
Perfluoroundecanoic acid	ug/L	ND	0.004	0.0032	81	50-150	N2
PFBA	ug/L	0.0052	0.004	0.0088	91	50-150	N2
PFDoS	ug/L	ND	0.0038	0.0026	69	50-150	N2
PFDS	ug/L	ND	0.0038	0.0029	77	50-150	N2
PFHpS	ug/L	ND	0.0038	0.0031	80	50-150	N2
PFNS	ug/L	ND	0.0038	0.0031	80	50-150	N2
PFOSA	ug/L	ND	0.004	0.0030	75	50-150	N2
PFPeA	ug/L	ND	0.004	0.0043	90	50-150	N2
PFPeS	ug/L	ND	0.0037	0.0031	83	50-150	N2
13C2-PFDoS (S)	%				119	25-150	
13C2-PFTA (S)	%				100	25-150	
13C24:2FTS (S)	%				108	25-150	
13C26:2FTS (S)	%				115	25-150	
13C28:2FTS (S)	%				123	25-150	
13C3-PFBS (S)	%				105	25-150	
13C3-PFHxS (S)	%				110	25-150	
13C3HFPO-DA (S)	%				103	25-150	
13C4-PFBA (S)	%				88	25-150	
13C4-PFHpA (S)	%				112	25-150	
13C5-PFHxA (S)	%				107	25-150	
13C5-PFPeA (S)	%				106	25-150	
13C6-PFDA (S)	%				115	25-150	
13C7-PFUdA (S)	%				107	25-150	
13C8-PFOA (S)	%				116	25-150	
13C8-PFOS (S)	%				108	25-150	
13C8-PFOSA (S)	%				81	25-150	
13C9-PFNA (S)	%				114	25-150	
d3-MeFOSAA (S)	%				103	25-150	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

MATRIX SPIKE SAMPLE: 4644211		10652482001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
d3-NMeFOSA (S)	%				4	10-150	S0
d5-EtFOSAA (S)	%				88	25-150	
d5-NEtFOSA (S)	%				3	10-150	S0
d7-NMeFOSE (S)	%				50	10-150	
d9-NEtFOSE (S)	%				43	10-150	

SAMPLE DUPLICATE: 4644212

Parameter	Units	10652482002	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
11CI-PF3OUdS	ug/L	ND	ND		30	N2
4:2 FTS	ug/L	ND	ND		30	N2
6:2 FTS	ug/L	ND	ND		30	N2
8:2 FTS	ug/L	ND	ND		30	N2
9CI-PF3ONS	ug/L	ND	ND		30	N2
ADONA	ug/L	ND	ND		30	N2
HFPO-DA	ug/L	ND	ND		30	N2
NEtFOSA	ug/L	ND	ND		30	N2
NEtFOSAA	ug/L	ND	ND		30	N2
NEtFOSE	ug/L	ND	ND		30	N2
NMeFOSA	ug/L	ND	ND		30	N2
NMeFOSAA	ug/L	ND	ND		30	N2
NMeFOSE	ug/L	ND	ND		30	N2
Perfluorobutanesulfonic acid	ug/L	ND	ND		30	N2
Perfluorodecanoic acid	ug/L	ND	ND		30	N2
Perfluorododecanoic acid	ug/L	ND	ND		30	N2
Perfluoroheptanoic acid	ug/L	ND	ND		30	N2
Perfluorohexanesulfonic acid	ug/L	0.23	0.23	1	30	N2
Perfluorohexanoic acid	ug/L	ND	ND		30	N2
Perfluorononanoic acid	ug/L	ND	ND		30	N2
Perfluorooctanesulfonic acid	ug/L	0.20	0.22	10	30	N2
Perfluorooctanoic acid	ug/L	ND	0.020		30	N2
Perfluorotetradecanoic acid	ug/L	ND	ND		30	N2
Perfluorotridecanoic acid	ug/L	ND	ND		30	N2
Perfluoroundecanoic acid	ug/L	ND	ND		30	N2
PFBA	ug/L	ND	.0083J		30	N2
PFDoS	ug/L	ND	ND		30	N2
PFDS	ug/L	ND	ND		30	N2
PFHpS	ug/L	0.022	0.025	15	30	N2
PFNS	ug/L	ND	ND		30	N2
PFOSA	ug/L	ND	ND		30	N2
PFPeA	ug/L	ND	ND		30	N2
PFPeS	ug/L	ND	.0059J		30	N2
13C2-PFDoA (S)	%	79	71			
13C2-PFTA (S)	%	67	69			
13C24:2FTS (S)	%	84	83			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

SAMPLE DUPLICATE: 4644212

Parameter	Units	10652482002 Result	Dup Result	RPD	Max RPD	Qualifiers
13C26:2FTS (S)	%.	71	79			
13C28:2FTS (S)	%.	81	93			
13C3-PFBS (S)	%.	83	75			
13C3-PFHxS (S)	%.	80	77			
13C3HFPO-DA (S)	%.	88	77			
13C4-PFBA (S)	%.	74	69			
13C4-PFHpA (S)	%.	82	74			
13C5-PFHxA (S)	%.	78	73			
13C5-PFPeA (S)	%.	77	72			
13C6-PFDA (S)	%.	86	74			
13C7-PFUdA (S)	%.	78	75			
13C8-PFOA (S)	%.	81	76			
13C8-PFOS (S)	%.	79	66			
13C8-PFOSA (S)	%.	46	50			
13C9-PFNA (S)	%.	80	75			
d3-MeFOSAA (S)	%.	70	69			
d3-NMeFOSA (S)	%.	2	2			S4
d5-EtFOSAA (S)	%.	74	62			
d5-NEtFOSA (S)	%.	2	2			S4
d7-NMeFOSE (S)	%.	24	37			
d9-NEtFOSE (S)	%.	26	25			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

METHOD BLANK: 4644807

Matrix: Solid

Associated Lab Samples: 10652169001, 10652169002, 10652169003, 10652169004, 10652169005, 10652169006, 10652169007, 10652169008, 10652169009, 10652169010, 10652169011, 10652169012, 10652169013, 10652169014, 10652169015, 10652169016, 10652169017, 10652169018, 10652169019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
13C28:2FTS (S)	%	94	25-150	05/22/23 17:57	
13C3-PFBS (S)	%	83	25-150	05/22/23 17:57	
13C3-PFHxS (S)	%	86	25-150	05/22/23 17:57	
13C3HFPO-DA (S)	%	87	25-150	05/22/23 17:57	
13C4-PFBA (S)	%	85	25-150	05/22/23 17:57	
13C4-PFHpA (S)	%	92	25-150	05/22/23 17:57	
13C5-PFHxA (S)	%	91	25-150	05/22/23 17:57	
13C5-PFPeA (S)	%	88	25-150	05/22/23 17:57	
13C6-PFDA (S)	%	108	25-150	05/22/23 17:57	
13C7-PFUdA (S)	%	118	25-150	05/22/23 17:57	
13C8-PFOA (S)	%	106	25-150	05/22/23 17:57	
13C8-PFOS (S)	%	97	25-150	05/22/23 17:57	
13C8-PFOSA (S)	%	87	25-150	05/22/23 17:57	
13C9-PFNA (S)	%	125	25-150	05/22/23 17:57	
d3-MeFOSAA (S)	%	99	25-150	05/22/23 17:57	
d3-NMeFOSA (S)	%	87	20-150	05/22/23 17:57	
d5-EtFOSAA (S)	%	96	25-150	05/22/23 17:57	
d5-NEtFOSA (S)	%	81	20-150	05/22/23 17:57	
d7-NMeFOSE (S)	%	67	20-150	05/22/23 17:57	
d9-NEtFOSE (S)	%	68	20-150	05/22/23 17:57	

LABORATORY CONTROL SAMPLE: 4644808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
11CI-PF3OUdS	ug/kg	0.18	0.16	87	50-150	N2
4:2 FTS	ug/kg	0.18	0.17	96	50-150	N2
6:2 FTS	ug/kg	0.18	0.16	88	50-150	N2
8:2 FTS	ug/kg	0.19	0.17	94	50-150	N2
9CI-PF3ONS	ug/kg	0.18	0.16	87	50-150	N2
ADONA	ug/kg	0.18	0.15	81	50-150	N2
HFPO-DA	ug/kg	0.19	0.17	88	50-150	N2
NEtFOSA	ug/kg	0.19	0.17	90	50-150	N2
NEtFOSAA	ug/kg	0.19	0.21	106	50-150	N2
NEtFOSE	ug/kg	0.19	0.18	90	50-150	N2
NMeFOSA	ug/kg	0.19	0.20	102	50-150	N2
NMeFOSAA	ug/kg	0.19	0.20	102	50-150	N2
NMeFOSE	ug/kg	0.19	0.18	93	50-150	N2
Perfluorobutanesulfonic acid	ug/kg	0.17	0.15	88	50-150	N2
Perfluorodecanoic acid	ug/kg	0.19	0.19	96	50-150	N2
Perfluorododecanoic acid	ug/kg	0.19	0.17	89	50-150	N2
Perfluoroheptanoic acid	ug/kg	0.19	0.17	89	50-150	N2
Perfluorohexanesulfonic acid	ug/kg	0.18	0.16	90	50-150	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

LABORATORY CONTROL SAMPLE: 4644808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Perfluorohexanoic acid	ug/kg	0.19	0.19	95	50-150	N2
Perfluorononanoic acid	ug/kg	0.19	0.17	88	50-150	N2
Perfluorooctanesulfonic acid	ug/kg	0.18	0.15	85	50-150	N2
Perfluorooctanoic acid	ug/kg	0.19	0.17	87	50-150	N2
Perfluorotetradecanoic acid	ug/kg	0.19	0.17	89	50-150	N2
Perfluorotridecanoic acid	ug/kg	0.19	0.17	88	50-150	N2
Perfluoroundecanoic acid	ug/kg	0.19	0.16	81	50-150	N2
PFBA	ug/kg	0.19	0.17	87	50-150	N2
PFDoS	ug/kg	0.19	0.15	79	50-150	N2
PFDS	ug/kg	0.19	0.12	64	50-150	N2
PFHpS	ug/kg	0.19	0.17	94	50-150	N2
PFNS	ug/kg	0.19	0.16	88	50-150	N2
PFOSA	ug/kg	0.19	0.16	84	50-150	N2
PFPeA	ug/kg	0.19	0.20	101	50-150	N2
PFPeS	ug/kg	0.18	0.16	87	50-150	N2
13C2-PFDoA (S)	%			127	25-150	
13C2-PFTA (S)	%			124	25-150	
13C24:2FTS (S)	%			72	25-150	
13C26:2FTS (S)	%			79	25-150	
13C28:2FTS (S)	%			110	25-150	
13C3-PFBS (S)	%			95	25-150	
13C3-PFHxS (S)	%			97	25-150	
13C3HFPO-DA (S)	%			96	25-150	
13C4-PFBA (S)	%			99	25-150	
13C4-PFHpA (S)	%			102	25-150	
13C5-PFHxA (S)	%			101	25-150	
13C5-PFPeA (S)	%			101	25-150	
13C6-PFDA (S)	%			114	25-150	
13C7-PFUdA (S)	%			138	25-150	
13C8-PFOA (S)	%			109	25-150	
13C8-PFOS (S)	%			112	25-150	
13C8-PFOSA (S)	%			101	25-150	
13C9-PFNA (S)	%			126	25-150	
d3-MeFOSAA (S)	%			104	25-150	
d3-NMeFOSA (S)	%			95	20-150	
d5-EtFOSAA (S)	%			111	25-150	
d5-NEtFOSA (S)	%			93	20-150	
d7-NMeFOSE (S)	%			77	20-150	
d9-NEtFOSE (S)	%			79	20-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4645248 4645249

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		10652169019	Spike Conc.	Spike Conc.	Result							Result
11CI-PF3OUdS	ug/kg	ND	0.2	0.19	0.14	0.16	73	87	50-150	15	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4645248												4645249	
Parameter	Units	10652169019		MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual	
		Result	Conc.	Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD		RPD
4:2 FTS	ug/kg	ND	0.2	0.19	0.16	0.17	85	92	50-150	5	30	N2	
6:2 FTS	ug/kg	ND	0.2	0.19	0.14	0.18	71	94	50-150	25	30	N2	
8:2 FTS	ug/kg	ND	0.2	0.2	0.13	0.15	67	76	50-150	10	30	N2	
9Cl-PF3ONS	ug/kg	ND	0.2	0.19	0.14	0.16	75	85	50-150	9	30	N2	
ADONA	ug/kg	ND	0.2	0.19	0.16	0.17	80	90	50-150	9	30	N2	
HFPO-DA	ug/kg	ND	0.21	0.2	0.16	0.16	79	82	50-150	1	30	N2	
NEtFOSA	ug/kg	ND	0.21	0.2	0.16	0.17	78	86	50-150	7	30	N2	
NEtFOSAA	ug/kg	ND	0.21	0.2	0.13	0.15	61	75	50-150	18	30	N2	
NEtFOSE	ug/kg	ND	0.21	0.2	0.15	0.19	73	93	50-150	22	30	N2	
NMeFOSA	ug/kg	ND	0.21	0.2	0.14	0.16	68	79	50-150	11	30	N2	
NMeFOSAA	ug/kg	ND	0.21	0.2	0.14	0.17	66	86	50-150	23	30	N2	
NMeFOSE	ug/kg	ND	0.21	0.2	0.15	0.16	74	81	50-150	7	30	N2	
Perfluorobutanesulfonic acid	ug/kg	ND	0.18	0.18	0.15	0.16	82	89	50-150	5	30	N2	
Perfluorodecanoic acid	ug/kg	ND	0.21	0.2	0.16	0.17	77	83	50-150	4	30	N2	
Perfluorododecanoic acid	ug/kg	ND	0.21	0.2	0.15	0.16	71	77	50-150	5	30	N2	
Perfluoroheptanoic acid	ug/kg	ND	0.21	0.2	0.16	0.17	77	82	50-150	4	30	N2	
Perfluorohexanesulfonic acid	ug/kg	ND	0.19	0.19	0.20	0.20	71	73	50-150	0	30	N2	
Perfluorohexanoic acid	ug/kg	ND	0.21	0.2	0.15	0.16	69	77	50-150	8	30	N2	
Perfluorononanoic acid	ug/kg	ND	0.21	0.2	0.17	0.17	81	86	50-150	4	30	N2	
Perfluorooctanesulfonic acid	ug/kg	ND	0.19	0.19	0.23	0.19	107	87	50-150	19	30	N2	
Perfluorooctanoic acid	ug/kg	ND	0.21	0.2	0.18	0.19	75	80	50-150	4	30	N2	
Perfluorotetradecanoic acid	ug/kg	ND	0.21	0.2	0.15	0.16	74	81	50-150	6	30	N2	
Perfluorotridecanoic acid	ug/kg	ND	0.21	0.2	0.15	0.16	74	82	50-150	7	30	N2	
Perfluoroundecanoic acid	ug/kg	ND	0.21	0.2	0.16	0.17	78	85	50-150	6	30	N2	
PFBA	ug/kg	ND	0.21	0.2	0.17	0.17	78	82	50-150	3	30	N2	
PFDoS	ug/kg	ND	0.2	0.2	0.15	0.15	76	77	50-150	1	30	N2	
PFDS	ug/kg	ND	0.2	0.2	0.15	0.16	74	83	50-150	9	30	N2	
PFHpS	ug/kg	ND	0.2	0.19	0.13	0.14	67	72	50-150	5	30	N2	
PFNS	ug/kg	ND	0.2	0.2	0.18	0.17	93	87	50-150	9	30	N2	
PFOSA	ug/kg	ND	0.21	0.2	0.16	0.17	76	87	50-150	11	30	N2	
PFPeA	ug/kg	ND	0.21	0.2	0.15	0.16	73	79	50-150	5	30	N2	
PFPeS	ug/kg	ND	0.2	0.19	0.15	0.16	78	85	50-150	6	30	N2	
13C2-PFDoA (S)	%						87	85	25-150				
13C2-PFTA (S)	%						79	80	25-150				
13C24:2FTS (S)	%						74	73	25-150				
13C26:2FTS (S)	%						95	84	25-150				
13C28:2FTS (S)	%						90	83	25-150				
13C3-PFBS (S)	%						88	85	25-150				
13C3-PFHxS (S)	%						89	87	25-150				
13C3HFPO-DA (S)	%						94	92	25-150				
13C4-PFBA (S)	%						84	82	25-150				
13C4-PFHpA (S)	%						83	81	25-150				
13C5-PFHxA (S)	%						90	88	25-150				

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4645248 4645249												
Parameter	Units	10652169019		4645249		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result							
13C5-PFPeA (S)	%							89	86	25-150		
13C6-PFDA (S)	%							88	84	25-150		
13C7-PFUDa (S)	%							82	81	25-150		
13C8-PFOA (S)	%							83	78	25-150		
13C8-PFOS (S)	%							92	91	25-150		
13C8-PFOSA (S)	%							85	83	25-150		
13C9-PFNA (S)	%							89	85	25-150		
d3-MeFOSAA (S)	%							82	77	25-150		
d3-NMeFOSA (S)	%							79	81	10-150		
d5-EtFOSAA (S)	%							95	87	25-150		
d5-NEtFOSA (S)	%							81	81	10-150		
d7-NMeFOSE (S)	%							79	82	10-150		
d9-NEtFOSE (S)	%							77	74	10-150		

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

METHOD BLANK: 4647589

Matrix: Solid

Associated Lab Samples: 10652169020, 10652169021, 10652169022, 10652169023, 10652169024, 10652169025, 10652169026, 10652169027, 10652169028, 10652169029, 10652169030, 10652169031, 10652169032, 10652169033, 10652169042

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
13C28:2FTS (S)	%.	96	25-150	05/25/23 14:07	
13C3-PFBS (S)	%.	94	25-150	05/25/23 14:07	
13C3-PFHxS (S)	%.	96	25-150	05/25/23 14:07	
13C3HFPO-DA (S)	%.	101	25-150	05/25/23 14:07	
13C4-PFBA (S)	%.	97	25-150	05/25/23 14:07	
13C4-PFHpA (S)	%.	105	25-150	05/25/23 14:07	
13C5-PFHxA (S)	%.	105	25-150	05/25/23 14:07	
13C5-PFPeA (S)	%.	103	25-150	05/25/23 14:07	
13C6-PFDA (S)	%.	122	25-150	05/25/23 14:07	
13C7-PFUdA (S)	%.	118	25-150	05/25/23 14:07	
13C8-PFOA (S)	%.	110	25-150	05/25/23 14:07	
13C8-PFOS (S)	%.	87	25-150	05/25/23 14:07	
13C8-PFOSA (S)	%.	98	25-150	05/25/23 14:07	
13C9-PFNA (S)	%.	101	25-150	05/25/23 14:07	
d3-MeFOSAA (S)	%.	113	25-150	05/25/23 14:07	
d3-NMeFOSA (S)	%.	93	20-150	05/25/23 14:07	
d5-EtFOSAA (S)	%.	114	25-150	05/25/23 14:07	
d5-NEtFOSA (S)	%.	94	20-150	05/25/23 14:07	
d7-NMeFOSE (S)	%.	78	20-150	05/25/23 14:07	
d9-NEtFOSE (S)	%.	83	20-150	05/25/23 14:07	

LABORATORY CONTROL SAMPLE: 4647590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
11CI-PF3OUdS	ug/kg	0.19	0.16	88	50-150	N2
4:2 FTS	ug/kg	0.18	0.16	84	50-150	N2
6:2 FTS	ug/kg	0.19	0.16	87	50-150	N2
8:2 FTS	ug/kg	0.19	0.15	79	50-150	N2
9CI-PF3ONS	ug/kg	0.18	0.17	92	50-150	N2
ADONA	ug/kg	0.19	0.18	97	50-150	N2
HFPO-DA	ug/kg	0.2	0.17	88	50-150	N2
NEtFOSA	ug/kg	0.2	0.17	88	50-150	N2
NEtFOSAA	ug/kg	0.2	0.17	86	50-150	N2
NEtFOSE	ug/kg	0.2	0.16	81	50-150	N2
NMeFOSA	ug/kg	0.2	0.16	82	50-150	N2
NMeFOSAA	ug/kg	0.2	0.16	82	50-150	N2
NMeFOSE	ug/kg	0.2	0.17	88	50-150	N2
Perfluorobutanesulfonic acid	ug/kg	0.17	0.16	89	50-150	N2
Perfluorodecanoic acid	ug/kg	0.2	0.17	86	50-150	N2
Perfluorododecanoic acid	ug/kg	0.2	0.17	85	50-150	N2
Perfluoroheptanoic acid	ug/kg	0.2	0.18	91	50-150	N2
Perfluorohexanesulfonic acid	ug/kg	0.18	0.15	86	50-150	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

LABORATORY CONTROL SAMPLE: 4647590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Perfluorohexanoic acid	ug/kg	0.2	0.16	82	50-150	N2
Perfluorononanoic acid	ug/kg	0.2	0.18	90	50-150	N2
Perfluorooctanesulfonic acid	ug/kg	0.18	0.18	97	50-150	N2
Perfluorooctanoic acid	ug/kg	0.2	0.18	90	50-150	N2
Perfluorotetradecanoic acid	ug/kg	0.2	0.17	85	50-150	N2
Perfluorotridecanoic acid	ug/kg	0.2	0.17	85	50-150	N2
Perfluoroundecanoic acid	ug/kg	0.2	0.18	90	50-150	N2
PFBA	ug/kg	0.2	0.18	91	50-150	N2
PFDoS	ug/kg	0.19	0.17	89	50-150	N2
PFDS	ug/kg	0.19	0.15	78	50-150	N2
PFHpS	ug/kg	0.19	0.13	70	50-150	N2
PFNS	ug/kg	0.19	0.15	78	50-150	N2
PFOSA	ug/kg	0.2	0.17	84	50-150	N2
PFPeA	ug/kg	0.2	0.16	82	50-150	N2
PFPeS	ug/kg	0.19	0.16	88	50-150	N2
13C2-PFDoA (S)	%			95	25-150	
13C2-PFTA (S)	%			89	25-150	
13C24:2FTS (S)	%			110	25-150	
13C26:2FTS (S)	%			111	25-150	
13C28:2FTS (S)	%			101	25-150	
13C3-PFBS (S)	%			101	25-150	
13C3-PFHxS (S)	%			99	25-150	
13C3HFPO-DA (S)	%			101	25-150	
13C4-PFBA (S)	%			98	25-150	
13C4-PFHpA (S)	%			93	25-150	
13C5-PFHxA (S)	%			101	25-150	
13C5-PFPeA (S)	%			101	25-150	
13C6-PFDA (S)	%			89	25-150	
13C7-PFUdA (S)	%			88	25-150	
13C8-PFOA (S)	%			90	25-150	
13C8-PFOS (S)	%			97	25-150	
13C8-PFOSA (S)	%			93	25-150	
13C9-PFNA (S)	%			92	25-150	
d3-MeFOSAA (S)	%			92	25-150	
d3-NMeFOSA (S)	%			90	20-150	
d5-EtFOSAA (S)	%			109	25-150	
d5-NEtFOSA (S)	%			91	20-150	
d7-NMeFOSE (S)	%			86	20-150	
d9-NEtFOSE (S)	%			81	20-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4647698 4647699

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		10652169021 Result	Spike Conc.	Spike Conc.	Result							Result
11CI-PF3OUdS	ug/kg	ND	0.2	0.2	0.13	0.14	68	73	50-150	8	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.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4647698 4647699												
Parameter	Units	10652169021		MS	MSD	MS		MSD		% Rec Limits	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
4:2 FTS	ug/kg	ND	0.19	0.2	0.16	0.17	82	85	50-150	6	30	N2
6:2 FTS	ug/kg	ND	0.2	0.2	0.12	0.15	63	76	50-150	20	30	N2
8:2 FTS	ug/kg	ND	0.2	0.2	0.13	0.15	68	75	50-150	12	30	N2
9Cl-PF3ONS	ug/kg	ND	0.19	0.2	0.15	0.16	80	82	50-150	5	30	N2
ADONA	ug/kg	ND	0.2	0.2	0.16	0.16	82	83	50-150	3	30	N2
HFPO-DA	ug/kg	ND	0.21	0.21	0.15	0.17	74	81	50-150	10	30	N2
NEtFOSA	ug/kg	ND	0.21	0.21	0.16	0.16	79	78	50-150	0	30	N2
NEtFOSAA	ug/kg	ND	0.21	0.21	0.13	0.16	65	76	50-150	17	30	N2
NEtFOSE	ug/kg	ND	0.21	0.21	0.15	0.17	73	83	50-150	14	30	N2
NMeFOSA	ug/kg	ND	0.21	0.21	0.15	0.14	71	68	50-150	3	30	N2
NMeFOSAA	ug/kg	ND	0.21	0.21	0.14	0.15	67	73	50-150	11	30	N2
NMeFOSE	ug/kg	ND	0.21	0.21	0.15	0.16	76	76	50-150	3	30	N2
Perfluorobutanesulfonic acid	ug/kg	ND	0.18	0.19	0.15	0.16	81	85	50-150	6	30	N2
Perfluorodecanoic acid	ug/kg	ND	0.21	0.21	0.16	0.17	76	84	50-150	11	30	N2
Perfluorododecanoic acid	ug/kg	ND	0.21	0.21	0.14	0.16	69	77	50-150	13	30	N2
Perfluoroheptanoic acid	ug/kg	ND	0.21	0.21	0.18	0.20	75	83	50-150	10	30	N2
Perfluorohexanesulfonic acid	ug/kg	0.61	0.19	0.19	0.74	0.74	75	73	50-150	0	30	N2
Perfluorohexanoic acid	ug/kg	ND	0.21	0.21	0.15	0.16	70	74	50-150	6	30	N2
Perfluorononanoic acid	ug/kg	ND	0.21	0.21	0.16	0.17	77	80	50-150	6	30	N2
Perfluorooctanesulfonic acid	ug/kg	ND	0.19	0.2	0.16	0.18	76	82	50-150	8	30	N2
Perfluorooctanoic acid	ug/kg	0.19	0.21	0.21	0.34	0.34	76	74	50-150	1	30	N2
Perfluorotetradecanoic acid	ug/kg	ND	0.21	0.21	0.15	0.17	74	83	50-150	13	30	N2
Perfluorotridecanoic acid	ug/kg	ND	0.21	0.21	0.15	0.16	73	77	50-150	6	30	N2
Perfluoroundecanoic acid	ug/kg	ND	0.21	0.21	0.16	0.16	77	78	50-150	3	30	N2
PFBA	ug/kg	ND	0.21	0.21	0.17	0.17	76	74	50-150	0	30	N2
PFDoS	ug/kg	ND	0.2	0.2	0.15	0.16	76	78	50-150	4	30	N2
PFDS	ug/kg	ND	0.2	0.2	0.13	0.16	67	82	50-150	22	30	N2
PFHpS	ug/kg	ND	0.2	0.2	0.13	0.13	65	67	50-150	4	30	N2
PFNS	ug/kg	ND	0.2	0.2	0.14	0.17	70	87	50-150	22	30	N2
PFOSA	ug/kg	ND	0.21	0.21	0.14	0.16	69	77	50-150	12	30	N2
PFPeA	ug/kg	ND	0.21	0.21	0.15	0.16	68	74	50-150	10	30	N2
PFPeS	ug/kg	ND	0.19	0.2	0.16	0.17	81	84	50-150	5	30	N2
13C2-PFDoA (S)	%						97	98	25-150			
13C2-PFTA (S)	%						93	88	25-150			
13C24:2FTS (S)	%						100	93	25-150			
13C26:2FTS (S)	%						119	101	25-150			
13C28:2FTS (S)	%						106	104	25-150			
13C3-PFBS (S)	%						103	98	25-150			
13C3-PFHxS (S)	%						100	97	25-150			
13C3HFPO-DA (S)	%						109	103	25-150			
13C4-PFBA (S)	%						98	98	25-150			
13C4-PFHpA (S)	%						96	94	25-150			
13C5-PFHxA (S)	%						103	101	25-150			

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4647698 4647699													
Parameter	Units	10652169021		MS	MSD	MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
13C5-PFPeA (S)	%						102	100	25-150				
13C6-PFDA (S)	%						90	93	25-150				
13C7-PFUdA (S)	%						88	90	25-150				
13C8-PFOA (S)	%						93	94	25-150				
13C8-PFOS (S)	%						106	100	25-150				
13C8-PFOSA (S)	%						96	92	25-150				
13C9-PFNA (S)	%						96	95	25-150				
d3-MeFOSAA (S)	%						101	97	25-150				
d3-NMeFOSA (S)	%						89	86	10-150				
d5-EtFOSAA (S)	%						113	108	25-150				
d5-NEtFOSA (S)	%						91	86	10-150				
d7-NMeFOSE (S)	%						97	91	10-150				
d9-NEtFOSE (S)	%						89	86	10-150				

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

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 adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

- | | |
|----|---|
| 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. |
| S4 | Surrogate recovery not evaluated against control limits due to sample dilution. |

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: E23-0254 3M Menomonie
Pace Project No.: 10652169

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10652169001	MEWI-S-HA30-5-6 FT-0-230505	ASTM D2974	883406		
10652169002	MEWI-S-HA30-9-10 FT-0-230505	ASTM D2974	883406		
10652169003	MEWI-S-HA30-9-10 FT-DB-230505	ASTM D2974	883406		
10652169004	MEWI-S-HA31-3.5-4.5 FT-0-23050	ASTM D2974	883406		
10652169005	MEWI-S-HA31-8.5-9.5 FT-0-23050	ASTM D2974	883406		
10652169006	MEWI-S-HA31-8.5-9.5 FT-DB-2305	ASTM D2974	883406		
10652169007	MEWI-S-HA32-4-5 FT-0-230505	ASTM D2974	883406		
10652169008	MEWI-S-HA32-8.5-9.5 FT-0-23050	ASTM D2974	883406		
10652169009	MEWI-S-HA33-4-5 FT-0-230505	ASTM D2974	883406		
10652169010	MEWI-S-HA33-8.5-9.5 FT-0-23050	ASTM D2974	883406		
10652169011	MEWI-S-SB28-24-25 FT-0-230504	ASTM D2974	883406		
10652169012	MEWI-S-SB28-29-30 FT-0-230504	ASTM D2974	883406		
10652169013	MEWI-S-SB29-24-25 FT-0-230504	ASTM D2974	883406		
10652169014	MEWI-S-SB29-29-30 FT-0-230504	ASTM D2974	883406		
10652169015	MEWI-S-SB30-4.5-5.5 FT-0-23050	ASTM D2974	883406		
10652169016	MEWI-S-SB31-9-10 FT-0-230502	ASTM D2974	883406		
10652169017	MEWI-S-SB30-12.5-13.5 FT-0-230	ASTM D2974	883406		
10652169018	MEWI-S-SB30-19-20 FT-0-230503	ASTM D2974	883406		
10652169019	MEWI-S-SB31-1-2 FT-0-230502	ASTM D2974	883406		
10652169020	MEWI-S-SB31-9-10 FT-DB-230502	ASTM D2974	883406		
10652169021	MEWI-S-SB32-1-2 FT-0-230503	ASTM D2974	883476		
10652169022	MEWI-S-SB32-9-10 FT-0-230503	ASTM D2974	883476		
10652169023	MEWI-S-MW2-4.5-5.5 FT-0-230504	ASTM D2974	883476		
10652169024	MEWI-S-MW2-11.5-12.5 FT-0-2305	ASTM D2974	883476		
10652169025	MEWI-S-MW2-59-60 FT-0-230504	ASTM D2974	883476		
10652169026	MEWI-S-MW3-4.5-5.5 FT-0-230503	ASTM D2974	883476		
10652169027	MEWI-S-MW3-12.5-13.5 FT-0-2305	ASTM D2974	883476		
10652169028	MEWI-S-MW4-63-64 FT-0-230501	ASTM D2974	883476		
10652169029	MEWI-S-MW5-64-65 FT-0-230501	ASTM D2974	883476		
10652169030	MEWI-S-MW6-2-3 FT-0-230503	ASTM D2974	883476		
10652169031	MEWI-S-MW6-58-59 FT-0-230503	ASTM D2974	883476		
10652169032	MEWI-S-MW7-2-3 FT-0-230502	ASTM D2974	883476		
10652169033	MEWI-S-MW7-58-59 FT-0-230502	ASTM D2974	883476		
10652169042	MEWI-S-MW3-59-60 FT-0-230503	ASTM D2974	883476		
10652169034	MEWI-W-FB1-FB-230501	ENV-SOP-MIN4-0178	880080	ENV-SOP-MIN4-0178	883059
10652169035	MEWI-W-FB2-FB-230502	ENV-SOP-MIN4-0178	880080	ENV-SOP-MIN4-0178	883059
10652169036	MEWI-W-FB3-FB-230504	ENV-SOP-MIN4-0178	880080	ENV-SOP-MIN4-0178	883059
10652169037	MEWI-W-FB4-FB-230505	ENV-SOP-MIN4-0178	880080	ENV-SOP-MIN4-0178	883059
10652169038	MEWI-W-EB1-EB-230502	ENV-SOP-MIN4-0178	880080	ENV-SOP-MIN4-0178	883059
10652169039	MEWI-W-EB2-EB-230503	ENV-SOP-MIN4-0178	880080	ENV-SOP-MIN4-0178	883059
10652169040	MEWI-W-EB3-EB-230504	ENV-SOP-MIN4-0178	880080	ENV-SOP-MIN4-0178	883059
10652169041	MEWI-W-EB4-EB-230505	ENV-SOP-MIN4-0178	880080	ENV-SOP-MIN4-0178	883059
10652169001	MEWI-S-HA30-5-6 FT-0-230505	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169002	MEWI-S-HA30-9-10 FT-0-230505	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169003	MEWI-S-HA30-9-10 FT-DB-230505	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169004	MEWI-S-HA31-3.5-4.5 FT-0-23050	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169005	MEWI-S-HA31-8.5-9.5 FT-0-23050	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: E23-0254 3M Menomonie

Pace Project No.: 10652169

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10652169006	MEWI-S-HA31-8.5-9.5 FT-DB-2305	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169007	MEWI-S-HA32-4-5 FT-0-230505	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169008	MEWI-S-HA32-8.5-9.5 FT-0-23050	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169009	MEWI-S-HA33-4-5 FT-0-230505	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169010	MEWI-S-HA33-8.5-9.5 FT-0-23050	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169011	MEWI-S-SB28-24-25 FT-0-230504	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169012	MEWI-S-SB28-29-30 FT-0-230504	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169013	MEWI-S-SB29-24-25 FT-0-230504	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169014	MEWI-S-SB29-29-30 FT-0-230504	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169015	MEWI-S-SB30-4.5-5.5 FT-0-23050	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169016	MEWI-S-SB31-9-10 FT-0-230502	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169017	MEWI-S-SB30-12.5-13.5 FT-0-230	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169018	MEWI-S-SB30-19-20 FT-0-230503	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169019	MEWI-S-SB31-1-2 FT-0-230502	ENV-SOP-MIN4-0178	881401	ENV-SOP-MIN4-0178	883095
10652169020	MEWI-S-SB31-9-10 FT-DB-230502	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169021	MEWI-S-SB32-1-2 FT-0-230503	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169022	MEWI-S-SB32-9-10 FT-0-230503	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169023	MEWI-S-MW2-4.5-5.5 FT-0-230504	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169024	MEWI-S-MW2-11.5-12.5 FT-0-2305	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169025	MEWI-S-MW2-59-60 FT-0-230504	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169026	MEWI-S-MW3-4.5-5.5 FT-0-230503	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169027	MEWI-S-MW3-12.5-13.5 FT-0-2305	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169028	MEWI-S-MW4-63-64 FT-0-230501	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169029	MEWI-S-MW5-64-65 FT-0-230501	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169030	MEWI-S-MW6-2-3 FT-0-230503	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169031	MEWI-S-MW6-58-59 FT-0-230503	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169032	MEWI-S-MW7-2-3 FT-0-230502	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169033	MEWI-S-MW7-58-59 FT-0-230502	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907
10652169042	MEWI-S-MW3-59-60 FT-0-230503	ENV-SOP-MIN4-0178	881983	ENV-SOP-MIN4-0178	883907

REPORT OF LABORATORY ANALYSIS

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

3M Global EHS Laboratory

Sample Shipping Address
 Pace Analytical Services, LLC - Minneapolis
 1700 Elm St SE
 Minneapolis, MN 55414
 612-607-6451
 Attn:Carolynne Trout

Chain of Custody / Request for Analytical

Project Description: 3M Menomonee Soil & Groundwater Investigation - 2023
Project Requester: Chambers, Britta (MAPLEWOOD-3MUS-MN 3M CENTER)
 Department: 530711 Site Source: 019C020
 Project Created: 4/20/2023

Project: E23-0254

WO# : 10652169



3M Project Lead
 Amanda Albrecht
 Email Address: aalbrecht2@
 Phone Number: 651-736-9415

Item	3M Sample Number	Sample Description	Date/Time Sampled	Matrix	Type of Sample	Sample Comment	Record each container type/ preservative collected
1	E23-0254-001	MEWI-S- SB28 5 - 6 FT-0-230505	5-5-23/8:40	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA30	1
2	E23-0254-002	MEWI-S- SB28 9 - 10 FT-0-230505	5-5-23/8:55	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA30	1
3	E23-0254-003	MEWI-S- SB28 9 - 10 FT-0-230505	5-5-23/9:00	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA30 (DB)	1
4	E23-0254-004	MEWI-S- SB28 3.5 - 4.5 FT-0-230505	5-5-23/9:10	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA31	1
5	E23-0254-005	MEWI-S- SB28 8.5 - 9.5 FT-0-230505	5-5-23/9:25	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA31	1
6	E23-0254-006	MEWI-S- SB28 8.5 - 9.5 FT-DB-230505	5-5-23/9:30	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA31 (DB)	1
7	E23-0254-007	MEWI-S- SB28 4 - 5 FT-0-230505	5-5-23/10:25	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA32	1
8	E23-0254-008	MEWI-S- SB28 8.5 - 9.5 FT-0-230505	5-5-23/10:45	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA32	1
9	E23-0254-009	MEWI-S- SB28 4 - 5 FT-0-230505	5-5-23/11:10	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA33	1
10	E23-0254-010	MEWI-S- SB28 8.5 - 9.5 FT-0-230505	5-5-23/11:25	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	HA33	1
11	E23-0254-011	MEWI-S- SB28 FT-0		SOIL	<input type="checkbox"/> Grab <input type="checkbox"/> Comp		
12	E23-0254-012	MEWI-S-SB28- 24 - 25 FT-0-230504	5-4-23/15:45	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp		1
13	E23-0254-013	MEWI-S-SB28- 27 - 30 FT-0-230504	5-4-23/16:00	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp		1
14	E23-0254-014	MEWI-S-SB29- 27 - 25 FT-0-230504	5-4-23/15:30	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp		1
15	E23-0254-015	MEWI-S-SB29- 27 - 30 FT-0-230504	5-4-23/15:35	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp		1
16	E23-0254-016	MEWI-S-SB30- 7.5 - 5.5 FT-0-230503	5-3-23/15:15	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp		1

Item	Relinquished by:	Date	Time	Shipped Via	Received by:	Date	Time	Comments
	Connor Lanson	5/5/23	15:00		Connor Lanson	5/5/23	15:18	

Collected by (Print): Connor Lanson Collector's signature: Connor Lanson

Contact EHS Lab project lead for requested tests and target analytes, if not specified.

6.0

3M Global EHS Laboratory

Sample Shipping Address
 Pace Analytical Services, LLC - Minneapolis
 1700 Elm St SE
 Minneapolis, MN 55414
 612-607-6451
 Attn: Carolynne Trout

Chain of Custody / Request for Analytical

Project Description: 3M Menomonie Soil & Groundwater Investigation - 2023
Project Requester: Chambers, Britta (MAPLEWOOD-3MUS-MN 3M CENTER)
 Department: 530711 Site Source: 019C020
 Project Created: 4/20/2023

3M Project Lead
 Amanda Albrecht
 Email Address: aalbrecht2@mmm.com
 Phone Number: 651-736-9414

Project: E23-0254 (cont.)

Number of Containers

Item	3M Sample Number	Sample Description	Date/Time Sampled	Matrix	Type of Sample	Sample Comment	Record each container type/ preservative collected	Number of Containers
17	E23-0254-017	MEWI-S-SB31- 9 - 10 FT-0- 230502	5-2-23/8:00	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	SB31		016
18	E23-0254-018	MEWI-S-SB30- 12.5-13.5 FT-0- 230503	5-3-23/15:30	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			017
19	E23-0254-019	MEWI-S-SB30- 19 - 20 FT-0- 230503	5-3-23/15:45	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			018
20	E23-0254-020	MEWI-S-SB31- 1 - 2 FT-0- 230502	5-2-23/7:55	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			019
21	E23-0254-021	MEWI-S-SB31- 9 - 10 FT-DB- 230502	5-2-23/8:05	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			020
22	E23-0254-022	MEWI-S-SB32- 1 - 2 FT-0- 230503	5-3-23/15:25	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			021
23	E23-0254-023	MEWI-S-MW2- 9 - 10 FT-0- 230503	5-3-23/15:30	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	SB32		022
24	E23-0254-024	MEWI-S-MW2- 4.5 - 5.5 FT-0- 230504	5-4-23/8:40	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			023
25	E23-0254-025	MEWI-S-MW2- 11.5-12.5 FT-0- 230504	5-4-23/8:50	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			024
26	E23-0254-026	MEWI-S-MW2- 59 - 60 FT-0- 230504	5-4-23/13:15	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			025
27	E23-0254-027	MEWI-S-MW3- 4.5 - 5.5 FT-0- 230503	5-3-23/8:15	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			026
28	E23-0254-028	MEWI-S-MW3- 12.5-13.5 FT-0- 230503	5-3-23/8:35	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			027
29	E23-0254-029	MEWI-S-MW3- 59 - 60 FT-0- 230503	5-3-23/11:05	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			028
30	E23-0254-030	MEWI-S-MW4- 63 - 64 FT-0- 230501	5-1-23/16:35	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			029
31	E23-0254-031	MEWI-S-MW5- 64 - 65 FT-0- 230501	5-1-23/10:10	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			030
32	E23-0254-032	MEWI-S-MW6- 2 - 3 FT-0- 230503	5-3-23/8:15	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			030

Item	Relinquished by:	Date	Time	Shipped Via	Received by:	Date	Time	Comments
	Carolynne Trout	5/5/23	15:00		Carolynne Trout	5/5/23	15:18	

Collector's signature: Carolynne Trout

Contact EHS Lab project lead for requested tests and target analytes, if not specified.

3M Global EHS Laboratory

Sample Shipping Address
 Pace Analytical Services, LLC - Minneapolis
 1700 Elm St SE
 Minneapolis, MN 55414
 612-607-6451
 Attn: Carolynne Trout

Project Description: 3M Menomonie Soil & Groundwater Investigation - 2023
Project Requester: Chambers, Britta (MAPLEWOOD-3MUS-MN 3M CENTER)
 Department: 530711 Site Source: 019C020
 Project Created: 4/20/2023

3M Project Lead
 Amanda Albrecht
 Email Address: aalbrecht2@mmm.com
 Phone Number: 651-736-9414

Project: E23-0254 (cont.)

Number of Containers

Item	3M Sample Number	Sample Description	Date/Time Sampled	Matrix	Type of Sample	Sample Comment	Record each container type/ preservative collected	Number of Containers
33	E23-0254-033	MEWI-S-MW6-58-59 FT-0-230503	5-3-23/9:25	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp		90M3	1
34	E23-0254-034	MEWI-S-MW7-2-3 FT-0-230502	5-2-23/9:15	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			1
35	E23-0254-035	MEWI-S-MW7-58-59 FT-0-230502	5-2-23/11:40	SOIL	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			1
36	E23-0254-036	MEWI-GW-MW1-0-		WG	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
37	E23-0254-037	MEWI-GW-MW2-0-		WG	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
38	E23-0254-038	MEWI-GW-MW3-0-		WG	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
39	E23-0254-039	MEWI-GW-MW3-DB-		WG	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
40	E23-0254-040	MEWI-GW-MW4-0-		WG	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
41	E23-0254-041	MEWI-GW-MW5-0-		WG	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
42	E23-0254-042	MEWI-GW-MW6-0-		WG	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
43	E23-0254-043	MEWI-GW-MW7-0-		WG	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
44	E23-0254-044	MEWI-W-TB1-TB-		WQ	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
45	E23-0254-045	MEWI-W-TB2-TB-		WQ	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
46	E23-0254-046	MEWI-W-TB3-TB-		WQ	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
47	E23-0254-047	MEWI-W-TB4-TB-		WQ	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
48	E23-0254-048	MEWI-W-TB5-TB-		WQ	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			

031
032
033

Item	Relinquished by:	Date	Time	Shipped Via	Received by:	Date	Time	Comments
	Conrad Lanson	5/5/23	15:00		Conrad Lanson	5/5/23	15:18	

Contact EHS Lab project lead for requested tests and target analytes, if not specified.

4.0

3M Global EHS Laboratory

Sample Shipping Address
 Pace Analytical Services, LLC - Minneapolis
 1700 Elm St SE
 Minneapolis, MN 55414
 612-607-6451
 Attn: Carolynne Trout

Chain of Custody / Request for Analytical

Project Description: 3M Menomonie Soil & Groundwater Investigation - 2023
Project Requester: Chambers, Britta (MAPLEWOOD-3MUS-MN 3M CENTER)
 Department: 530711 Site Source: 019C020
 Project Created: 4/20/2023

3M Project Lead
 Amanda Albrecht
 Email Address: aalbrecht2@mmm.com
 Phone Number: 651-736-9414

Project: E23-0254 (cont.)

Number of Containers

Item	3M Sample Number	Sample Description	Date/Time Sampled	Matrix	Type of Sample	Sample Comment	Record each container type/ preservative collected	Number of Containers
49	E23-0254-049	MEWI-W-FB1-FB-230501	5/1/23 / 16:05	WQ	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp		250 mL H2O2	034
50	E23-0254-050	MEWI-W-FB2-FB-230502	5-2-23 / 16:10	WQ	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			035
51	E23-0254-051	MEWI-W-FB3-FB-230504	5-4-23 / 10:00	WQ	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			036
52	E23-0254-052	MEWI-W-FB4-FB-230505	5-5-23 / 11:40	WQ	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp			037
53	E23-0254-053	MEWI-W-FB5-FB-		WQ	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
54	E23-0254-054	MEWI-W-EB1-EB-230502	5-2-23 / 16:15	WQ	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	Bit rinseoff		038
55	E23-0254-055	MEWI-W-EB2-EB-230503	5-3-23 / 7:40	WQ	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	Bit rinseoff		039
56	E23-0254-056	MEWI-W-EB3-EB-230504	5-4-23 / 18:30	WQ	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	Sample sleeve		040
57	E23-0254-057	MEWI-W-EB4-EB-230505	5-5-23 / 11:35	WQ	<input checked="" type="checkbox"/> Grab <input type="checkbox"/> Comp	Hard auger		041
58	E23-0254-058	MEWI-W-EB5-EB-		WQ	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
59	E23-0254-059	MEWI-SIDW-IDW1-		SOIL	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
60	E23-0254-060	MEWI-SIDW-IDW2-		SOIL	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
61	E23-0254-061	MEWI-SIDW-IDW3-		SOIL	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
62	E23-0254-062	MEWI-SIDW-IDW4-		SOIL	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
63	E23-0254-063	MEWI-SIDW-IDW5-		SOIL	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			
64	E23-0254-064	MEWI-SIDW-IDW6-		SOIL	<input type="checkbox"/> Grab <input type="checkbox"/> Comp			

Collected by (print): Connor Lanyon Collector's signature: *Connor Lanyon*

Item	Relinquished by:	Date	Time	Shipped Via	Received by:	Date	Time	Comments
	Connor Lanyon	5/5/23	15:00		Alexander	5/5/23	15:18	

Contact EHS Lab project lead for requested tests and target analytes, if not specified.

Effective Date: 4/14/2023

Sample Condition Upon Receipt Client Name: 3M 61661 EHS Lab

Project #: WO#: 10652169 PM: CT1 Due Date: 05/22/23 CLIENT: 3M-COTTAGE

Courier: FedEx UPS USPS Client Pace Speedee Commercial

Tracking Number: See Exceptions ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? No Seals Intact? Biological Tissue Frozen? Packing Material: Bubble Wrap Bubble Bags None Other Temp Blank? Type of Ice: Wet Blue Dry None Melted Thermometer: T1-T9 01339252/1710

Did Samples Originate in West Virginia? Were All Container Temps Taken? Temp should be above freezing to 6 °C Cooler temp Read w/Temp Blank: 5.8 °C Average Corrected Temp (no temp blank only): Correction Factor: 0.2 Cooler Temp Corrected w/temp blank: 6.0 °C See Exceptions ENV-FRM-MIN4-0142 1 Container

USDA Regulated Soil: N/A, water sample/other: Date/Initials of Person Examining Contents: 5/5/23 ADL

Did samples originate in a quarantine zone within the United States: AL, AR, AZ CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check maps)? Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?

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

Table with 2 columns: Location (Check one) and COMMENTS. Rows include Chain of Custody Present and Filled Out?, Chain of Custody Relinquished?, Sampler Name and/or Signature on COC?, Samples Arrived within Hold Time?, Short Hold Time Analysis (<72 hr)?, Rush Turn Around Time Requested?, Sufficient Sample Volume?, Correct Containers Used?, Containers Intact?, Field Filtered Volume Received for Dissolved Tests?, Is sufficient information available to reconcile the samples to the COC?, All containers needing acid/base preservation have been checked?, All containers needing preservation are found to be in compliance with EPA recommendation?, Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxins/PFAS, Headspace in Methyl Mercury Container?, Extra labels present on soil VOA or WIDRO containers?, Headspace in VOA Vials (greater than 6mm)?, 3 Trip Blanks Present?, Trip Blank Custody Seals Present?.

CLIENT NOTIFICATION/RESOLUTION Person Contacted: Comments/Resolution: Project Manager Review: Carolynne Trout Date: 5/9/23 Field Data Required? Yes No

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

Labeled By: ADL Line: 1 Page 1 of 1