ERM

7311 W Greenfield Avenue
West Allis, WI 53214

Telephone: +1 414 289 9505
Fax: +1 414 755 7076

www.erm.com

Memo

To	Tauren Beggs
From	David de Courcy-Bower
Date	24 August 2023
Reference	0383990
Subject	Groundwater Analytical Results for Polyfluorinated Alkyl Substances (PFAS) Former Hamilton Industries Property, Two Rivers, Wisconsin BRRTS Activity #02-36-578316

Dear Mr. Beggs,

This memorandum has been prepared to provide the Wisconsin Department of Natural Resources (WDNR) of the results of groundwater sampling for polyfluorinated alkyl substances (PFAS) at the Former Hamilton Industries Property located in Two Rivers, Wisconsin, BRRTS Activity #02-36-578316 (Site).

Background

WDNR issued a letter, *Review of the Site Status Report and Remedial Action Options Evaluation*, on July 16, 2021, which included a determination that additional work was necessary to complete the site investigation under Wis. Admin. Code ch. NR 716. This determination included the request for additional scoping, contaminant, and media evaluations. In response, ERM submitted the *2021 Work Plan Addendum – Additional Groundwater and Soil Investigation* on September 10, 2021 that included a comprehensive groundwater sampling for emerging contaminants including PFAS. A site investigation work plan notice to proceed was issued by DNR on September 23, 2021. A round of groundwater sampling for PFAS was completed between October 4th and 7th 2021. The *October and November 2021 Additional Groundwater and Soil Investigation* memorandum dated February 11, 2022, was submitted to the WDNR for Technical Assistance (TA) review. A portion of the memorandum presented Site groundwater sampling data for PFAS. In the Technical Assistance response letter dated May 4, 2022, the WDNR made the following determination regarding PFAS at the Site:

PFAS: Additional sampling is needed before a determination can be made that PFAS is not associated with releases on-site. The highest PFAS concentrations are found where the highest chlorinated VOC concentrations are found. While there are PFAS concentrations upgradient as well, it is not conclusive that PFAS is not a contaminant of concern on-site at this time.

In response, ERM submitted an *Additional Evaluation of Polyfluorinated Alkyl Substances Memorandum* to provide the WDNR with further evaluation for the October 4th – 7th, 2021 PFAS groundwater data for the Site in April 2023. The WDNR's response to this memorandum cited the previous May 4th, 2022 Technical Assistance Review indicating that another round of PFAS sampling was required. An additional round of groundwater PFAS sampling was completed at the

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Site between June 19th and 23rd 2023. This memorandum summarizes the results of the June 2023 PFAS sampling and compares the results to those from the October 2021 PFAS sampling.

June 2023 PFAS Groundwater Sampling Event

During the June 2023 groundwater sampling event all 29 routinely sampled and accessible Site monitoring wells were sampled for PFAS. Low flow sampling techniques using a peristaltic pump and a YSI flow through cell were utilized. Samples were taken once field parameters stabilized and/or 4 well volumes were purged. Samples were collected lab provided bottle ware, appropriately labelled and maintained on ice until delivered under proper chain-of-custody documentation to Pace Analytical. Samples were dropped off by ERM personnel at Pace Analytical of Green Bay, Wisconsin, a Wisconsin-certified environmental laboratory for PFAS/PFOA analysis using EPA method 537, same as the 2021 analysis. Laboratory analytical results are provided at Attachment A.

2023 Groundwater PFAS Analytical Results

The results of the June 2023 PFAS sampling were compared to the WDNR proposed preventive action limit (PAL) and enforcement standard (ES). The results of the October 2021 groundwater sampling for PFAS are also included in Table 1 for comparison purposes. The following conclusions are based on evaluation of the data:

1. Consistent with 2021, three PFAS compounds (PFHxS, PFOS, PFOA) were detected at concentrations that exceeded the proposed groundwater ES values for specific compounds.

2. Groundwater analytical results for PFAS for each well location are substantially consistent from October 2021 to June 2023. For example:

    a. PFHxS detected in MW-04 shows the largest difference in single analyte concentrations between October 2021 (120 ng/L) and June 2023 (72.6 ng/L).

    b. The highest concentrations of PFOA in October 2021 was at MW-15S (110 ng/L) which is consistent with June 2023 (101 ng/L).

    c. The concentrations for each well shown in Table 1 are substantially similar between October 2021 and June 2023 and do not indicate significant variation in groundwater PFAS concentrations between the sampling events.

Recommendations

Based on the results of the additional PFAS groundwater sampling, there is no significant difference between the October 2021 and June 2023 groundwater PFAS results. As such, the conclusions of the *October and November 2021 Additional Groundwater and Soil Investigation* are valid and WDNR concurrence with the following is requested:

1) The nature and extent of PFAS at the Site has been sufficiently delineated for the purposes of Site Investigation.

2) The presence of PFAS in groundwater at the Site at concentrations that exceed the proposed PAL, proposed ES and the NR 809 MCL can be managed with a groundwater use restriction for the Site and no active remediation or further groundwater sampling for PFAS is required.

Please let us know if you would like to schedule a time to discuss the findings of this memorandum.

David de Courcy-Bower, P.E.
Partner

Attachments

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	Unit	MW-01 10/06/2021 17:30 N	MW-01 06/20/2023 09:30 N	MW-03 10/05/2021 15:55 N	MW-03 10/05/2021 00:00 FD	MW-03 06/19/2023 18:20 N
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	ng/l	< 0.42	< 0.431	< 0.43	< 0.42	< 0.436
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	ng/l	< 0.54	< 0.594	< 0.55	< 0.54	< 0.601
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	ng/l	< 0.63	< 0.718	< 0.64	< 0.62	< 0.727
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	ng/l	< 0.63	< 0.507	< 0.65	< 0.63	< 0.513
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	ng/l	< 0.30	< 0.431	< 0.30	< 0.29	< 0.436
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	ng/l	< 0.50	< 0.412	< 0.51	< 0.50	< 0.417
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	ng/l	< 0.51	< 3.19	< 0.53	< 0.51	< 3.23
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	ng/l	< 0.59	< 0.670	< 0.60	< 0.59	< 0.678
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	ng/l	< 0.54	< 0.756	< 0.55	< 0.53	< 0.765
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	ng/l	< 0.48	< 0.483	< 0.49	< 0.48	< 0.489
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	ng/l	< 0.50	< 0.795	< 0.51	< 0.49	< 0.804
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	ng/l	< 0.42	< 0.431	< 0.43	< 0.42	< 0.436
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	ng/l	< 0.32	< 0.622	< 0.33	< 0.32	< 0.630
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	ng/l	7.8	9.74	2.7	2.6	4.75
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	ng/l	2.9	8.54	1.3 J	1.4 J	2.87
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	ng/l	< 0.55	< 0.689	< 0.56	< 0.54	< 0.698
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	ng/l	< 0.47	< 0.622	< 0.48	< 0.47	< 0.630
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	ng/l	< 0.45	< 0.627	< 0.46	< 0.44	< 0.635
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	ng/l	< 0.44	< 0.584	< 0.45	< 0.43	< 0.591
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	ng/l	6.7	5.48	0.87 J	0.88 J	2.49
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	ng/l	< 0.40	< 0.584	< 0.41	< 0.40	< 0.591
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	ng/l	4.9	4.25	1.9 J	2.1	3.52
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	ng/l	1.0 J	3.09	1.5 J	1.4 J	3.82
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	ng/l	< 0.72	< 0.469	< 0.73	< 0.71	< 0.475
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	ng/l	< 0.43	< 0.833	< 0.44	< 0.43	< 0.843
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	ng/l	**41**	**71.8**	18	15	**33.2**
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	ng/l	2.0	< 0.364	1.2 BJ	1.4 BJ	< 0.368
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	ng/l	< 0.79	< 0.354	< 0.81	< 0.79	< 0.358
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	ng/l	5.0	6.10	2.2	2.2	3.38
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	ng/l	0.48 IJ	2.37	< 0.47	< 0.46	< 0.494
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	ng/l	< 0.46	< 0.546	< 0.47	< 0.46	< 0.552
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	ng/l	< 0.60	< 0.589	< 0.62	< 0.60	< 0.596
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	ng/l	< 0.52	< 0.594	< 0.54	< 0.52	< 0.601
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	ng/l	**45.4**	**74.427**	**21.65**	18.79	**35.858**

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
NS = No Standard
B = Compound was found in the blank and sample
H3 = Sample was analyzed past holding time
I = The lower value for the two columns has been reported due to obvious interference.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-04 10/07/2021 09:40 N	MW-04 06/22/2023 16:00 N	MW-04 06/22/2023 00:00 FD	MW-05 10/05/2021 16:30 N	MW-05 06/21/2023 11:30 N	MW-6S 10/06/2021 13:55 N	MW-6S 06/22/2023 12:10 N
PFAS/PFOS											
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.42	< 0.422	< 0.443	< 1.1	< 0.445	< 0.43	< 0.306
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.53	< 0.582	< 0.611	< 1.4	< 0.613	< 0.55	< 0.421
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	< 0.61	< 0.704	< 0.739	< 1.6	< 0.742	< 0.64	< 0.510
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.62	< 0.498	< 0.522	< 1.6	< 0.524	< 0.64	< 0.360
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.422	< 0.443	< 0.75	< 0.445	< 0.30	< 0.306
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.49	< 0.404	< 0.424	< 1.3	< 0.425	< 0.51	< 0.292
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.50	< 3.13	< 3.29	< 1.3	< 3.30	< 0.52	< 2.27
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.58	< 0.657	< 0.690	< 1.5	< 0.693	< 0.60	< 0.476
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.53	< 0.742	< 0.779	< 1.4	< 0.782	< 0.55	< 0.537
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.47	< 0.474	< 0.498	< 1.2	< 0.500	< 0.49	< 0.343
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.49	< 0.779	< 0.818	< 1.3	< 0.821	< 0.50	< 0.564
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.41	< 0.422	< 0.443	< 1.1	< 0.445	< 0.43	< 0.306
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.31	< 0.610	< 0.641	< 0.81	< 0.643	< 0.32	< 0.442
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	13	11.9	11.9	4.4 J	3.47	0.65 J	1.64
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	13	8.65	8.78	1.7 J	2.47	< 0.47	< 0.211
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.54	< 0.676	< 0.710	< 1.4	< 0.712	< 0.56	< 0.489
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.46	< 0.610	< 0.641	< 1.2	< 0.643	< 0.48	< 0.442
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.44	< 0.615	< 0.645	< 1.1	< 0.648	< 0.45	< 0.445
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.43	< 0.573	< 0.601	< 1.1	< 0.604	< 0.44	< 0.415
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	23	15.2	16.3	< 1.4	< 0.574	0.63 J	2.60
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	6.7	3.90	4.26	< 1.0	< 0.604	< 0.41	< 0.415
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	27	21.7	23.3	< 1.1	< 0.465	< 0.43	1.65
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	**120**	**64.4**	**72.6**	< 1.3	< 0.613	< 0.50	1.53
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.70	< 0.460	< 0.483	< 1.8	< 0.485	< 0.73	< 0.333
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.42	< 0.817	< 0.857	< 1.1	< 0.861	< 0.44	< 0.591
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	**62**	**40.5**	**41.5**	12 I	12.4	8.8	**32.3**
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	17	18.9	19.8	6.2 B	2.64	< 0.54	< 0.258
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.78	< 0.347	< 0.365	< 2.0	< 0.366	< 0.81	< 0.252
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	27	23.8	25.9	< 1.1	< 0.435	< 0.43	1.43
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	16	8.55	9.43	< 1.2	< 0.505	< 0.47	< 0.347
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.45	< 0.535	< 0.562	< 1.2	< 0.564	< 0.47	< 0.387
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.59	< 0.577	< 0.606	< 1.5	< 0.609	< 0.61	< 0.418
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.51	< 0.582	< 0.611	< 1.3	< 0.613	< 0.53	< 0.421
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	**81.36**	**61.62**	**63.632**	**24.3**	17.381	11.79	**34.166**

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
NS = No Standard
B = Compound was found in the blank and sample
H3 = Sample was analyzed past holding time
I = The lower value for the two columns has been reported due to obvious interference.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-7S 10/06/2021 12:45 N	MW-7S 06/22/2023 14:20 N	MW-08 10/05/2021 09:20 N	MW-08 06/21/2023 08:30 N	MW-8S 10/05/2021 10:40 N	MW-8S 06/21/2023 09:40 N
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.42	< 0.426	< 0.41	< 0.436	< 0.41	< 0.441
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.54	< 0.587	< 0.53	< 0.601	< 0.53	< 0.608
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	< 0.62	< 0.710	< 0.61	< 0.727	< 0.61	< 0.736
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.63	< 0.502	< 0.62	< 0.513	< 0.62	< 0.520
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.426	< 0.29	< 0.436	< 0.29	< 0.441
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.50	< 0.407	< 0.49	< 0.417	< 0.49	< 0.422
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.51	< 3.16	< 0.50	< 3.23	< 0.50	< 3.27
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.59	< 0.662	< 0.58	< 0.678	< 0.58	< 0.687
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.53	< 0.721	< 0.53	< 0.765	< 0.53	< 0.775
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.48	< 0.478	< 0.47	< 0.489	< 0.47	< 0.495
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.49	< 0.785	< 0.49	< 0.804	< 0.48	< 0.814
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.42	< 0.411	< 0.41	< 0.436	< 0.41	< 0.441
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.32	< 0.615	< 0.31	< 0.630	< 0.31	< 0.637
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	5.1	9.96	52	107	20	19.1
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	1.3 J	3.36	2.1	5.84	3.5	22.0
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.54	< 0.657	< 0.54	< 0.697	< 0.54	< 0.706
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.47	< 0.615	< 0.46	< 0.630	< 0.46	< 0.637
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.44	< 0.620	< 0.44	< 0.635	< 0.44	< 0.642
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.43	< 0.577	< 0.43	< 0.591	< 0.43	< 0.598
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	4.1	6.80	32	53.2	< 0.52	3.85
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	< 0.40	< 0.577	< 0.39	< 0.591	< 0.39	< 0.598
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	6.1	11.6	150	339	24	19.4
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	1.7 J	< 0.587	2.9	4.00	< 0.48	2.13
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.71	< 0.464	< 0.70	< 0.475	< 0.70	< 0.481
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.43	< 0.823	< 0.42	< 0.843	< 0.42	< 0.853
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	20	19.8	**22**	**28.8**	5.6	10.6
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	< 0.53	< 0.360	< 0.52	< 0.368	< 0.52	< 0.373
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.79	< 0.338	< 0.78	< 0.358	< 0.78	< 0.363
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	8.6	17.0	190	409	6.1	7.06
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	0.76 J	< 0.483	< 0.45	< 0.494	< 0.45	6.34
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.46	< 0.539	< 0.45	< 0.552	< 0.45	< 0.559
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.60	< 0.582	< 0.59	< 0.596	< 0.59	< 0.603
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.52	< 0.566	< 0.51	< 0.601	< 0.51	< 0.608
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	**22.92**	**22.359**	**24.88**	**31.458**	8.48	13.293

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
NS = No Standard
B = Compound was found in the blank and sample
H3 = Sample was analyzed past holding time
I = The lower value for the two columns has been reported due to obvious interference.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-09 10/06/2021 10:05 N	MW-09 06/22/2023 08:25 N	MW-9S 10/05/2021 15:30 N	MW-9S 06/21/2023 15:35 N	MW-10D 10/05/2021 11:00 N	MW-10D 06/21/2023 13:15 N
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.42	< 0.410	< 0.41	< 0.453	< 0.42	< 0.436
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.54	< 0.564	< 0.53	< 0.624	< 0.53	< 0.601
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	1.1 J	< 0.683	< 0.61	< 0.755	< 0.61	< 0.727
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.63	< 0.482	< 0.62	< 0.533	< 0.62	< 0.514
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.410	< 0.29	< 0.453	< 0.29	< 0.436
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.50	< 0.391	< 0.49	< 0.433	< 0.49	< 0.417
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.51	< 3.04	< 0.50	< 3.36	< 0.50	< 3.23
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.59	< 0.637	< 0.58	< 0.705	< 0.58	< 0.678
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.54	< 0.719	< 0.53	< 0.795	< 0.53	< 0.766
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.48	< 0.460	< 0.47	< 0.508	< 0.47	< 0.489
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.49	< 0.756	< 0.48	< 0.835	< 0.49	< 0.804
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.42	< 0.410	< 0.41	< 0.453	< 0.41	< 0.436
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.32	< 0.592	< 0.31	< 0.654	< 0.31	< 0.630
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	1.9 J	1.85	1.2 J	6.78	< 0.42	< 0.736
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	1.8	2.18	0.95 J	2.66	< 0.45	< 0.300
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.54	< 0.655	< 0.53	< 0.725	< 0.54	< 0.698
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.47	< 0.592	< 0.46	< 0.654	< 0.46	< 0.630
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.44	< 0.596	< 0.44	< 0.659	< 0.44	< 0.635
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.43	< 0.555	< 0.43	< 0.614	< 0.43	< 0.591
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	0.97 J	< 0.528	< 0.52	< 0.584	< 0.52	< 0.562
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	< 0.40	< 0.555	< 0.39	< 0.614	< 0.39	< 0.591
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	1.1 IJ	< 0.428	< 0.42	< 0.473	< 0.42	< 0.455
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	1.3 J	< 0.564	0.58 J	< 0.624	< 0.48	< 0.601
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.71	< 0.446	< 0.70	< 0.493	< 0.71	< 0.475
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.43	< 0.792	< 0.42	< 0.876	< 0.43	< 0.843
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	13	5.09	3.8	4.79	< 0.56	< 0.407
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	5.0 B	1.94	4.6	3.95	< 0.52	< 0.368
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.79	< 0.337	< 0.78	< 0.372	< 0.78	< 0.359
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	0.70 J	< 0.401	< 0.42	< 0.443	< 0.42	< 0.426
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	< 0.46	< 0.464	< 0.45	< 0.513	< 0.45	< 0.494
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.46	< 0.519	< 0.45	< 0.574	< 0.45	< 0.552
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.60	< 0.560	< 0.59	< 0.619	< 0.59	< 0.596
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.52	< 0.564	< 0.51	< 0.624	< 0.51	< 0.601
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	**20.4**	9.183	10.76	11.12	3.44	3.067

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).

** Non-detect values were treated as zero in sum calculations.

Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).

Non-detect results reported to the method detection limit.

PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.

N = Normal sample

FD = Field duplicate sample

"-" = Not Analyzed

NS = No Standard

B = Compound was found in the blank and sample

H3 = Sample was analyzed past holding time

I = The lower value for the two columns has been reported due to obvious interference.

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

Bold denotes exceedance of Ch. NR 140 Enforcement Standard

Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-10S 10/06/2021 10:30 N	MW-10S 06/20/2023 16:25 N	MW-12S 10/05/2021 14:50 N	MW-12S 06/21/2023 15:10 N	MW-13D 10/05/2021 12:00 N	MW-13D 06/20/2023 10:10 N
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.42	< 0.444	< 0.43	< 0.422	< 0.41	< 0.446
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.53	< 0.611	< 0.55	< 0.581	< 0.53	< 0.614
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	< 0.62	< 0.739	< 0.63	< 0.703	< 0.61	2.81
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.62	< 0.522	< 0.64	< 0.497	< 0.62	< 0.525
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.444	< 0.30	< 0.422	< 0.29	< 0.446
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.49	< 0.424	< 0.50	< 0.403	< 0.49	< 0.426
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.50	< 3.29	< 0.52	< 3.13	< 0.50	< 3.30
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.58	< 0.690	< 0.59	< 0.656	< 0.58	< 0.693
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.53	< 0.779	< 0.54	< 0.741	< 0.53	< 0.782
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.47	< 0.498	< 0.49	< 0.474	< 0.47	< 0.500
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.49	< 0.818	< 0.50	< 0.778	< 0.49	< 0.822
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.41	< 0.444	< 0.42	< 0.422	< 0.41	< 0.446
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.31	< 0.641	< 0.32	< 0.610	< 0.31	< 0.644
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	4.7	5.69	2.7	4.60	< 0.42	< 0.753
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	1.6 J	< 0.306	4.8	5.80	< 0.45	< 0.307
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.54	< 0.710	< 0.55	< 0.675	< 0.54	< 0.713
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.46	< 0.641	< 0.47	< 0.610	< 0.46	< 0.644
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.44	< 0.646	< 0.45	< 0.614	< 0.44	< 0.649
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.43	< 0.601	< 0.44	< 0.572	< 0.43	< 0.604
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	1.9	2.35	4.1	3.12	< 0.52	< 0.574
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	< 0.39	< 0.601	< 0.40	< 0.572	< 0.39	< 0.604
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	1.3 J	2.28	3.4	3.24	< 0.42	< 0.465
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	0.63 IJ	< 0.611	< 0.50	< 0.581	< 0.48	< 0.614
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.71	< 0.483	< 0.72	< 0.460	< 0.70	< 0.485
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.43	< 0.858	< 0.44	< 0.816	< 0.42	< 0.862
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	**32**	**25.6**	18	17.9	< 0.56	< 0.416
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	4.1 B	< 0.375	< 0.54	< 0.356	< 0.52	< 0.376
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.78	< 0.365	< 0.80	< 0.347	< 0.78	< 0.366
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	0.72 J	< 0.434	2.2	3.77	< 0.42	3.33
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	< 0.45	< 0.503	< 0.46	< 0.478	< 0.45	< 0.505
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.45	< 0.562	< 0.46	< 0.535	< 0.45	< 0.564
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.59	< 0.606	< 0.61	< 0.577	< 0.59	< 0.609
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.52	< 0.611	< 0.53	< 0.581	< 0.51	< 0.614
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	**38.46**	**28.307**	**20.96**	**20.474**	3.44	3.133

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
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B = Compound was found in the blank and sample
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J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-13S 10/07/2021 10:50 N	MW-13S 10/07/2021 00:00 FD	MW-13S 06/20/2023 11:40 N	MW-14S 10/06/2021 11:10 N	MW-14S 10/06/2021 00:00 FD	MW-14S 06/22/2023 10:30 N
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.41	< 0.43	< 0.431	< 0.42	< 0.41	< 0.412
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.53	< 0.55	< 0.594	< 0.54	< 0.53	< 0.567
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	< 0.61	< 0.64	< 0.718	< 0.62	< 0.61	< 0.686
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.62	< 0.65	< 0.508	< 0.63	< 0.62	< 0.485
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.30	< 0.431	< 0.29	< 0.29	< 0.412
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.49	< 0.51	< 0.412	< 0.49	< 0.48	< 0.393
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.50	< 0.52	< 3.19	< 0.51	< 0.50	< 3.05
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.57	< 0.60	< 0.670	< 0.58	< 0.57	< 0.640
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.52	< 0.55	< 0.757	< 0.53	< 0.52	< 0.723
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.47	< 0.49	< 0.484	< 0.48	< 0.47	< 0.462
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.48	< 0.50	< 0.795	< 0.49	< 0.48	< 0.759
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.41	< 0.43	< 0.431	< 0.42	< 0.41	< 0.412
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.31	< 0.33	< 0.623	< 0.32	< 0.31	< 0.595
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	3.6	3.9	7.95	1.7 J	1.8 J	4.43
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	1.8	2.5	3.54	1.8	1.9	5.32
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.53	< 0.56	< 0.690	< 0.54	< 0.53	< 0.659
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.46	< 0.48	< 0.623	< 0.46	< 0.46	< 0.595
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.43	< 0.45	< 0.627	< 0.44	< 0.43	< 0.599
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.43	< 0.44	< 0.584	< 0.43	< 0.42	< 0.558
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	1.5 J	1.6 J	3.77	1.6 J	2.0	< 0.530
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	< 0.39	< 0.41	< 0.584	< 0.40	< 0.39	< 0.558
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	3.1	4.6	5.29	0.78 IJ	0.56 IJ	2.05
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	0.59 J	2.4	< 0.594	2.3	2.2	< 0.567
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.70	< 0.73	< 0.469	< 0.71	< 0.70	< 0.448
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.42	< 0.44	< 0.833	< 0.43	< 0.42	< 0.796
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	4.3	3.8	6.58	**45**	**44**	**57.7**
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	1.1 J	2.0	< 0.364	3.6 B	3.6 B	< 0.348
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.77	< 0.81	< 0.354	< 0.79	< 0.77	< 0.338
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	3.7	4.6	8.63	0.66 J	0.59 J	2.31
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	< 0.45	0.66 J	< 0.488	< 0.46	< 0.45	< 0.466
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.45	< 0.47	< 0.546	< 0.46	< 0.45	< 0.521
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.59	< 0.61	< 0.589	< 0.60	< 0.59	< 0.563
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.51	< 0.53	< 0.594	< 0.52	< 0.51	< 0.567
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	7.73	8.25	9.209	**50.98**	**49.93**	**60.211**

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
NS = No Standard
B = Compound was found in the blank and sample
H3 = Sample was analyzed past holding time
I = The lower value for the two columns has been reported due to obvious interference.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-15D 10/06/2021 13:35 N	MW-15D 06/22/2023 12:40 N	MW-15D 06/22/2023 00:00 FD	MW-15I 10/07/2021 12:45 N	MW-15I 06/23/2023 09:05 N	MW-15I 06/23/2023 00:00 FD
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.41	< 0.436	< 0.429	< 0.41	< 0.431	< 0.415
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.53	< 0.600	< 0.590	< 0.53	< 0.594	< 0.572
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	< 0.61	< 0.726	< 0.714	< 0.61	< 0.719	< 0.692
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.62	< 0.513	< 0.505	< 0.62	< 0.508	< 0.489
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.436	< 0.429	< 0.29	< 0.431	< 0.415
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.49	< 0.416	< 0.409	< 0.49	< 0.412	< 0.397
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.50	< 3.23	< 3.18	< 0.50	< 3.20	< 3.08
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.58	< 0.677	< 0.667	< 0.57	< 0.671	< 0.646
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.53	< 0.765	< 0.752	< 0.52	< 0.757	< 0.729
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.47	< 0.489	< 0.481	< 0.47	< 0.484	< 0.466
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.48	< 0.803	< 0.790	< 0.48	< 0.795	< 0.766
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.41	< 0.436	< 0.429	< 0.41	< 0.431	< 0.415
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.31	< 0.629	< 0.619	< 0.31	< 0.623	< 0.600
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	0.45 J	< 0.736	< 0.724	8.1	10.4	10.1
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	< 0.45	< 0.300	< 0.295	1.1 J	11.6	11.0
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.53	< 0.697	< 0.686	< 0.53	< 0.690	< 0.665
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.46	< 0.629	< 0.619	< 0.46	< 0.623	< 0.600
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.44	< 0.634	< 0.624	< 0.43	< 0.628	< 0.605
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.43	< 0.590	< 0.581	< 0.42	< 0.585	< 0.563
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	< 0.52	< 0.561	< 0.552	2.0	3.95	3.82
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	< 0.39	< 0.590	< 0.581	< 0.39	< 0.585	< 0.563
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	< 0.41	< 0.455	< 0.448	3.5	5.13	5.18
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	< 0.48	< 0.600	< 0.590	< 0.48	< 0.594	< 0.572
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.70	< 0.474	< 0.467	< 0.70	< 0.470	< 0.452
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.42	< 0.842	< 0.828	< 0.42	< 0.834	< 0.803
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	< 0.55	< 0.406	< 0.400	6.7	12.8	12.4
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	0.57 IJ	< 0.368	< 0.362	< 0.52	< 0.364	< 0.351
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.77	< 0.358	< 0.352	< 0.77	< 0.355	< 0.342
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	< 0.41	< 0.426	< 0.419	2.9	5.78	5.91
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	< 0.45	< 0.494	< 0.486	< 0.45	< 0.489	< 0.471
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.45	< 0.552	< 0.543	< 0.45	< 0.546	< 0.526
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.59	< 0.595	< 0.586	< 0.59	< 0.589	< 0.568
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.51	< 0.600	< 0.590	< 0.51	< 0.594	< 0.572
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	3.47	3.063	3.014	9.55	15.431	14.934

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
NS = No Standard
B = Compound was found in the blank and sample
H3 = Sample was analyzed past holding time
I = The lower value for the two columns has been reported due to obvious interference.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-15S 10/06/2021 11:30 N	MW-15S 06/22/2023 09:25 N	MW-16S 10/05/2021 12:40 N	MW-16S 06/20/2023 14:50 N	MW-17S 10/06/2021 15:25 N	MW-17S 06/22/2023 08:45 N
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.42	< 0.423	< 0.42	< 0.432	< 0.43	< 0.423
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.53	< 0.583	< 0.54	< 0.596	< 0.55	< 0.583
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	0.64 J	< 0.705	< 0.63	< 0.720	< 0.64	< 0.705
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.63	< 0.498	< 0.63	< 0.509	< 0.64	< 0.498
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.423	< 0.30	< 0.432	< 0.30	< 0.423
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.49	< 0.404	< 0.50	< 0.413	< 0.51	< 0.404
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.51	< 3.13	< 0.51	< 3.20	< 0.52	< 3.13
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.58	< 0.658	< 0.59	< 0.672	< 0.60	< 0.658
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.53	< 0.742	< 0.54	< 0.759	< 0.55	< 0.742
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.48	< 0.475	< 0.48	< 0.485	< 0.49	< 0.475
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.49	< 0.780	< 0.50	< 0.797	< 0.50	< 0.780
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.42	< 0.423	< 0.42	< 0.432	< 0.43	< 0.423
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.32	< 0.611	< 0.32	< 0.624	< 0.32	< 0.611
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	5.2	4.32	< 0.43	11.0	4.4	4.36
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	1.5 J	< 0.291	33	37.1	23	37.8
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.54	< 0.677	< 0.55	< 0.692	< 0.56	< 0.677
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.46	< 0.611	< 0.47	< 0.624	< 0.48	< 0.611
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.44	< 0.616	< 0.45	< 0.629	< 0.45	< 0.616
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.43	< 0.573	< 0.44	< 0.586	< 0.44	< 0.573
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	3.5	4.50	< 0.53	< 0.557	2.0	2.80
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	0.51 J	< 0.573	< 0.40	< 0.586	< 0.41	< 0.573
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	1.4 IJ	3.39	< 0.42	< 0.451	2.2	4.17
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	2.8	< 0.583	< 0.49	2.02	9.7	9.80
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.71	< 0.460	< 0.72	< 0.471	< 0.73	< 0.460
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.43	< 0.818	< 0.43	< 0.836	< 0.44	< 0.818
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	**110**	**101**	10	10.1	18	16.3
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	8.2 B	3.79	< 0.53	< 0.365	5.5	2.81
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.78	< 0.348	< 0.79	< 0.355	< 0.81	< 0.348
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	1.1 J	2.62	< 0.42	< 0.423	1.7 J	5.31
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	< 0.46	< 0.479	< 0.46	< 0.490	0.69 J	< 0.479
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.46	< 0.536	< 0.46	< 0.548	< 0.47	< 0.536
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.60	< 0.578	< 0.60	< 0.591	< 0.61	< 0.578
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.52	< 0.583	< 0.52	< 0.596	< 0.53	< 0.583
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	**120.57**	**107.013**	12.93	12.736	**25.95**	**21.333**

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
NS = No Standard
B = Compound was found in the blank and sample
H3 = Sample was analyzed past holding time
I = The lower value for the two columns has been reported due to obvious interference.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-18S 10/05/2021 13:15 N	MW-18S 06/20/2023 16:35 N	MW-19S 10/05/2021 14:00 N	MW-19S 06/21/2023 08:50 N	MW-20S 10/06/2021 15:05 N	MW-20S 06/22/2023 11:00 N
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.42	< 0.417	< 0.42	< 0.431	< 0.42	< 0.416
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.54	< 0.575	< 0.54	< 0.594	< 0.54	< 0.574
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	< 0.62	< 0.696	< 0.63	< 0.719	< 0.62	2.19
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.63	< 0.492	< 0.64	< 0.508	< 0.63	< 0.491
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.417	< 0.30	< 0.431	< 0.29	< 0.416
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.49	< 0.399	< 0.50	< 0.412	< 0.49	< 0.398
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.51	< 3.09	< 0.51	< 3.20	< 0.51	< 3.09
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.59	< 0.649	< 0.59	< 0.671	< 0.58	< 0.648
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.53	< 0.733	4.3	< 0.757	< 0.53	< 0.731
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.48	< 0.468	< 0.48	< 0.484	< 0.48	< 0.467
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.49	< 0.770	< 0.50	< 0.795	< 0.49	< 0.768
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.42	< 0.417	6.8	8.41	< 0.42	< 0.416
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.32	< 0.603	< 0.32	< 0.623	< 0.32	< 0.602
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	5.6	2.34	4.3	< 0.728	5.7	8.32
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	1.7	3.02	3.9	15.8	3.4	4.09
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.54	< 0.668	< 0.55	< 0.690	< 0.54	< 0.666
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.46	< 0.603	< 0.47	< 0.623	< 0.46	< 0.602
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.44	< 0.607	< 0.45	< 0.628	< 0.44	< 0.606
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.43	< 0.566	< 0.44	< 0.584	< 0.43	< 0.565
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	< 0.53	< 0.538	5.2	2.95	2.1	3.06
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	< 0.40	< 0.566	< 0.40	< 0.584	0.47 J	< 0.565
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	< 0.42	< 0.436	7.3	< 0.450	2.0	3.30
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	< 0.49	< 0.575	3.9	6.40	3.2	5.94
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.71	< 0.454	< 0.72	< 0.469	< 0.71	< 0.454
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.43	< 0.807	< 0.43	< 0.833	< 0.43	< 0.805
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	**24**	13.3	15	**24.1**	**21**	**24.4**
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	2.9 I	11.5	10	**21.4**	**24**	14.8
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.79	< 0.343	< 0.80	2.09	< 0.79	< 0.342
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	< 0.42	< 0.408	2.9	< 0.422	1.7 J	3.13
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	< 0.46	< 0.473	4.1	3.34	< 0.46	< 0.472
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.46	< 0.529	< 0.46	< 0.546	< 0.46	< 0.528
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.60	< 0.570	< 0.61	< 0.589	< 0.60	< 0.569
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.52	< 0.575	< 0.53	< 0.594	< 0.52	< 0.574
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	**29.29**	**26.993**	**31.17**	**49.502**	**47.38**	**41.388**

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
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B = Compound was found in the blank and sample
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Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-21S 10/05/2021 08:30 N	MW-21S 06/20/2023 14:30 N	MW-23S 10/05/2021 13:35 N	MW-23S 06/21/2023 14:10 N	MW-24S 10/05/2021 09:40 N	MW-24S 06/21/2023 10:20 N
PFAS/PFOS										
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.43	< 0.431	< 0.42	< 0.457	< 0.42	< 0.437
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.55	< 0.594	< 0.54	< 0.629	< 0.54	< 0.603
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	< 0.63	< 0.718	< 0.62	< 0.761	< 0.62	< 0.729
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.64	< 0.507	< 0.63	< 0.538	< 0.63	< 0.515
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.30	< 0.431	< 0.29	< 0.457	< 0.29	< 0.437
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.51	< 0.412	< 0.50	< 0.436	< 0.49	< 0.418
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.52	< 3.19	< 0.51	< 3.38	< 0.51	< 3.24
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.60	< 0.670	< 0.59	< 0.710	< 0.59	< 0.680
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.55	< 0.756	< 0.54	< 0.801	< 0.53	< 0.768
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.49	< 0.483	< 0.48	< 0.542	< 0.48	< 0.491
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.50	< 0.795	< 0.49	< 0.842	< 0.49	< 0.807
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.43	< 0.431	< 0.42	< 0.457	< 0.42	< 0.437
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.32	< 0.622	< 0.32	< 0.697	< 0.32	< 0.632
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	4.4	7.17	< 0.43	3.03	5.2	7.13
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	< 0.47	1.94	3.0	4.27	5.4	7.26
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.55	< 0.689	< 0.54	< 0.730	< 0.54	< 0.700
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.48	< 0.622	< 0.47	< 0.659	< 0.47	< 0.632
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.45	< 0.627	< 0.44	< 0.665	< 0.44	< 0.637
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.44	< 0.584	< 0.43	< 0.619	< 0.43	< 0.593
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	< 0.54	< 0.555	< 0.53	3.49	5.6	5.24
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	< 0.40	< 0.584	< 0.40	< 0.619	< 0.40	< 0.593
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	< 0.43	2.65	< 0.42	3.09	5.3	4.37
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	< 0.50	< 0.594	3.0	2.91	3.8	2.32
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.73	< 0.469	< 0.71	< 0.497	< 0.71	< 0.476
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.44	< 0.833	< 0.43	< 0.883	< 0.43	< 0.846
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	**28**	**34.6**	**25**	**37.0**	**72**	**63.6**
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	< 0.54	< 0.364	3.2	3.11	2.8	2.37
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.80	< 0.354	< 0.79	< 0.375	< 0.79	< 0.360
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	< 0.43	1.94	< 0.42	< 0.446	3.0	2.84
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	< 0.47	< 0.488	< 0.46	< 0.517	< 0.46	< 0.496
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.47	< 0.546	< 0.46	< 0.578	< 0.46	< 0.554
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.61	< 0.589	< 0.60	< 0.624	< 0.60	< 0.598
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.53	< 0.594	< 0.52	< 0.629	< 0.52	< 0.603
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	**30.98**	**37.227**	**30.6**	**42.538**	**77.19**	**68.269**

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).

** Non-detect values were treated as zero in sum calculations.

Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).

Non-detect results reported to the method detection limit.

PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.

N = Normal sample

FD = Field duplicate sample

"-" = Not Analyzed

NS = No Standard

B = Compound was found in the blank and sample

H3 = Sample was analyzed past holding time

I = The lower value for the two columns has been reported due to obvious interference.

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

Bold denotes exceedance of Ch. NR 140 Enforcement Standard

Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

TABLE 1: Groundwater Sampling Results (PFAS)

BRRTS #02-36-578316
SITE NAME: Former Hamilton Industries
SITE ADDRESS: 1316 18th Street, Two Rivers, WI

Acronym (EPA)	Parameter	Cas #	Ch. NR 140 Enforcement Standard	Ch. NR 140 Preventive Action Limit	MW-25S 10/06/2021 08:40 N	MW-25S 06/21/2023 12:10 N	MW-26S 10/06/2021 08:45 N	MW-26S 06/20/2023 11:50 N
PFAS/PFOS								
11Cl-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	763051-92-9	NS	NS	< 0.41	< 0.463	< 1.1	< 0.485
4:2 FTS	4:2 fluorotelomersulfonic acid [C6]	757124-72-4	NS	NS	< 0.52	< 0.639	< 1.3	< 0.669
6:2 FTS	6:2 fluorotelomersulfonic acid [C8]	27619-97-2	NS	NS	< 0.60	< 0.772	< 1.6	< 0.809
8:2 FTS	8:2 fluorotelomersulfonic acid [C10]	39108-34-4	NS	NS	< 0.61	< 0.546	< 1.6	< 0.572
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	756426-58-1	NS	NS	< 0.29	< 0.463	< 0.74	< 0.485
DONA	4,8-dioxa-3H-perfluorononanoic acid [C7]	919005-14-4	3000	600	< 0.48	< 0.443	< 1.2	< 0.464
HFPO-DA	Hexafluoropropylene oxide dimer acid [C6	13252-13-6	300	30	< 0.50	< 3.43	< 1.3	< 3.60
NEtFOSA	N-Ethylperfluorooctanesulfonamide [C10]	4151-50-2	20	2	< 0.57	< 0.721	< 1.5	< 0.755
NEtFOSAA	N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	2991-50-6	20	2	< 0.52	< 0.814	< 1.3	< 0.852
NEtFOSE	N-Ethylperfluorooctanesulfonamidoethanol [C12]	1691-99-2	20	2	< 0.47	< 0.520	< 1.2	< 0.545
NMeFOSA	N-Methylperfluorooctanesulfonamide [C9]	31506-32-8	NS	NS	< 0.48	< 0.855	< 1.2	< 0.895
NMeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid [C11]	2355-31-9	NS	NS	< 0.41	< 0.463	< 1.0	< 0.485
NMeFOSE	N-Methylperfluorooctanesulfonamidoethanol [C11]	24448-09-7	NS	NS	< 0.31	< 0.669	< 0.79	< 0.701
PFBA	Perfluorobutanoic acid [C4]	375-22-4	10000	2000	5.8	5.37	5.3	7.60
PFBS	Perfluorobutanesulfonic acid [C4]	375-73-5	450000	90000	4.4	4.19	23	6.85
PFDA	Perfluorodecanoic acid [C10]	335-76-2	300	60	< 0.53	< 0.742	< 1.4	< 0.776
PFDoA	Perfluorododecanoic acid [C12]	307-55-1	500	100	< 0.45	< 0.669	< 1.2	< 0.701
PFDoS	Perfluorododecanesulfonic acid [C12]	79780-39-5	NS	NS	< 0.43	< 0.675	< 1.1	< 0.706
PFDS	Perfluorodecanesulfonic acid [C10]	335-77-3	NS	NS	< 0.42	< 0.628	< 1.1	< 0.658
PFHpA	Perfluoroheptanoic acid [C7]	375-85-9	NS	NS	3.7	4.00	2.7 J	6.29
PFHpS	Perfluoroheptanesulfonic acid [C7]	375-92-8	NS	NS	< 0.38	< 0.628	< 0.99	< 0.658
PFHxA	Perfluorohexanoic acid [C6]	307-24-4	150000	30000	3.7	4.46	1.8 IJ	6.22
PFHxS	Perfluorohexanesulfonic acid [C6]	355-46-4	**40**	4	3.6	2.66	< 1.2	4.72
PFNA	Perfluorononanoic acid [C9]	375-95-1	30	3	< 0.69	< 0.505	< 1.8	< 0.528
PFNS	Perfluorononanesulfonic acid [C9]	68259-12-1	NS	NS	< 0.42	< 0.896	< 1.1	< 0.938
PFOA	Perfluorooctanoic acid [C8]	335-67-1	**20**	2	**38**	**43.4**	**31**	**73.4**
PFOS	Perfluorooctanesulfonic acid [C8]	1763-23-1	**20**	2	2.4 B	< 0.391	7.3 B	< 0.410
PFOSA	Perfluorooctanesulfonamide [C8]	754-91-6	20	2	< 0.77	< 0.381	< 2.0	< 0.399
PFPeA	Perfluoropentanoic acid [C5]	2706-90-3	NS	NS	2.4	3.01	2.4 J	4.27
PFPeS	Perfluoropentanesulfonic acid [C5]	2706-91-4	NS	NS	0.56 J	< 0.525	< 1.1	< 0.550
PFTA	Perfluorotetradecanoic acid [C14]	376-06-7	10000	2000	< 0.45	< 0.587	< 1.1	< 0.615
PFTrDA	Perfluorotridecanoic acid [C13]	72629-94-8	NS	NS	< 0.58	< 0.633	< 1.5	< 0.663
PFUnA	Perfluoroundecanoic acid [C11]	2058-94-8	3000	600	< 0.51	< 0.639	< 1.3	< 0.669
	Sum of NEtFOSA, NEtFOSAA, NEtFOSE, FOSA, PFOS, and PFOA**	Sum of NEtFOSA, N	20	2	**42.73**	**46.227**	**44.3**	**76.361**

Notes:

* Standards for 1,4-Dioxane are established. PFAS/PFOS standards are proposed by the WI Department of Health Services DHS (November 2020).
** Non-detect values were treated as zero in sum calculations.
Results reported in milligrams per liter (ug/L) or nanograms per liter (ng/L).
Non-detect results reported to the method detection limit.
PFAS/PFOS analyzed by Method 537, 1,4- Dioxane analyzed by Method 8270.
N = Normal sample
FD = Field duplicate sample
"-" = Not Analyzed
NS = No Standard
B = Compound was found in the blank and sample
H3 = Sample was analyzed past holding time
I = The lower value for the two columns has been reported due to obvious interference.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Bold denotes exceedance of Ch. NR 140 Enforcement Standard
Shading indicates exceedance of Ch. NR 140 Preventive Action Limit

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

July 14, 2023

Ryan Plath
ERM, INC.
7311 W. Greenfield Ave.
Milwaukee, WI 53214

RE: Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Dear Ryan Plath:

Enclosed are the analytical results for sample(s) received by the laboratory on June 23, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Gulf Coast
- Pace Analytical Services - Green Bay

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

Sincerely,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: John Roberts, ERM, Inc.
David deCourcy-Bower, ERM, Inc.

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Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

Pace Analytical Gulf Coast
7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618
North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

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SAMPLE SUMMARY

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40264224001	**MW-03-WG-20230619**	Water	06/19/23 08:20	06/23/23 10:37
40264224002	**TB-01-WQ-20230620**	Water	06/20/23 09:25	06/23/23 10:37
40264224003	**TB-02-WQ-20230620**	Water	06/20/23 09:25	06/23/23 10:37
40264224004	**MW-13D-WG-20230620**	Water	06/20/23 10:10	06/23/23 10:37
40264224005	**MW-13S-WG-20230620**	Water	06/20/23 11:40	06/23/23 10:37
40264224006	**MW-01-WG-20230620**	Water	06/20/23 09:30	06/23/23 10:37
40264224007	**MW-26-WG-20230620**	Water	06/20/23 11:50	06/23/23 10:37
40264224008	**MW-21S-WG-20230620**	Water	06/20/23 14:30	06/23/23 10:37
40264224009	**MW-16-WG-20230620**	Water	06/20/23 14:50	06/23/23 10:37
40264224010	**MW-10S-WG-20230620**	Water	06/20/23 16:25	06/23/23 10:37
40264224011	**MW-18S-WG-20230620**	Water	06/20/23 16:35	06/23/23 10:37
40264224012	**MW-08-WG-20230621**	Water	06/21/23 08:30	06/23/23 10:37
40264224013	**MW-19S-WG-20230621**	Water	06/21/23 08:50	06/23/23 10:37
40264224014	**MW-8S-WG-20230621**	Water	06/21/23 09:40	06/23/23 10:37
40264224015	**MW-05-WG-20230621**	Water	06/21/23 11:30	06/23/23 10:37
40264224016	**MW-24S-WG-20230621**	Water	06/21/23 10:20	06/23/23 10:37
40264224017	**MW-25S-WG-20230621**	Water	06/21/23 12:10	06/23/23 10:37
40264224018	**MW-10D-WG-20230621**	Water	06/21/23 13:15	06/23/23 10:37
40264224019	**MW-12S-WG-20230621**	Water	06/21/23 15:10	06/23/23 10:37
40264224020	**FB-01-WQ-20230621**	Water	06/21/23 16:10	06/23/23 10:37
40264224021	**FB-02-WQ-20230621**	Water	06/21/23 16:10	06/23/23 10:37
40264224022	**MW-9S-WG-20230621**	Water	06/21/23 15:35	06/23/23 10:37
40264224023	**MW-09-WG-20230622**	Water	06/22/23 08:25	06/23/23 10:37
40264224024	**MW-15S-WG-20230622**	Water	06/22/23 09:25	06/23/23 10:37
40264224025	**MW-17S-WG-20230622**	Water	06/22/23 08:45	06/23/23 10:37
40264224026	**MW-14S-WG-20230622**	Water	06/22/23 10:30	06/23/23 10:37
40264224027	**MW-20S-WG-20230622**	Water	06/22/23 11:00	06/23/23 10:37
40264224028	**MW-15D-WG-20230622**	Water	06/22/23 12:40	06/23/23 10:37
40264224029	**MW-13S-WG-20230622**	Water	06/22/23 14:40	06/23/23 10:37
40264224030	**MW-6S-WG-20230622**	Water	06/22/23 12:10	06/23/23 10:37
40264224031	**MW-7S-WG-20230622**	Water	06/22/23 14:20	06/23/23 10:37
40264224032	**MW-04-WG-20230622**	Water	06/22/23 16:00	06/23/23 10:37
40264224033	**MW-15I-WG-20230623**	Water	06/23/23 09:05	06/23/23 10:37
40264224034	**MW-23S-WG-20230621**	Water	06/21/23 14:10	06/23/23 10:37
40264224035	**DUP-01-WG-20230622**	Water	06/22/23 00:00	06/23/23 10:37
40264224036	**DUP-02-WG-20230622**	Water	06/22/23 00:00	06/23/23 10:37
40264224037	**DUP-03-WG-20230623**	Water	06/23/23 00:00	06/23/23 10:37

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40264224001	**MW-03-WG-20230619**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224002	**TB-01-WQ-20230620**	EPA 8260	EIB	13	PASI-G
40264224003	**TB-02-WQ-20230620**	EPA 8260	EIB	13	PASI-G
40264224004	**MW-13D-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224005	**MW-13S-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224006	**MW-01-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224007	**MW-26-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224008	**MW-21S-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224009	**MW-16-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224010	**MW-10S-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224011	**MW-18S-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224012	**MW-08-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224013	**MW-19S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224014	**MW-8S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 537 Modified	KCR	58	GCLA
40264224015	**MW-05-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224016	**MW-24S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224017	**MW-25S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224018	**MW-10D-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224019	**MW-12S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224020	**FB-01-WQ-20230621**	EPA 8260	EIB	13	PASI-G
40264224021	**FB-02-WQ-20230621**	EPA 8260	EIB	13	PASI-G
40264224022	**MW-9S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224023	**MW-09-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224024	**MW-15S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224025	**MW-17S-WG-20230622**	EPA 8082A	BLM	10	PASI-G
		ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224026	**MW-14S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224027	**MW-20S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA

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SAMPLE ANALYTE COUNT

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40264224028	**MW-15D-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224029	**MW-13S-WG-20230622**	EPA 8082A	BLM	10	PASI-G
40264224030	**MW-6S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224031	**MW-7S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224032	**MW-04-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224033	**MW-15I-WG-20230623**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224034	**MW-23S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224035	**DUP-01-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224036	**DUP-02-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA
40264224037	**DUP-03-WG-20230623**	ASTM 6520 / EPA 8260 (SIM)	JLN	2	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 537 Modified	KCR	58	GCLA

GCLA = Pace Analytical Gulf Coast
PASI-G = Pace Analytical Services - Green Bay

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-03-WG-20230619 **Lab ID: 40264224001** Collected: 06/19/23 08:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 14:33	123-91-1	
Surrogates									
1,3-Dioxane (S)	116	%	70-130		1		06/27/23 14:33		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 16:13	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 16:13	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 16:13	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 16:13	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 16:13	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 16:13	127-18-4	
Trichloroethene	**0.55J**	ug/L	1.0	0.32	1		06/28/23 16:13	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 16:13	75-01-4	
cis-1,2-Dichloroethene	**0.85J**	ug/L	1.0	0.47	1		06/28/23 16:13	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 16:13	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/28/23 16:13	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/28/23 16:13	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/28/23 16:13	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.601**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 05:43	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.727**	ng/L	1.94	0.727	1	06/30/23 11:34	07/11/23 05:43	27619-97-2	
8:2 FTS	**<0.513**	ng/L	1.94	0.513	1	06/30/23 11:34	07/11/23 05:43	39108-34-4	
9Cl-PF3ONS	**<0.436**	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 05:43	756426-58-1	
11Cl-PF3OUdS	**<0.436**	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 05:43	763051-92-9	
ADONA	**<0.417**	ng/L	1.94	0.417	1	06/30/23 11:34	07/11/23 05:43	919005-14-4	
Perfluorooctanesulfonamide	**<0.358**	ng/L	1.94	0.358	1	06/30/23 11:34	07/11/23 05:43	754-91-6	
HFPO-DA	**<3.23**	ng/L	9.69	3.23	1	06/30/23 11:34	07/11/23 05:43	13252-13-6	
NEtFOSA	**<0.678**	ng/L	3.88	0.678	1	06/30/23 11:34	07/11/23 05:43	4151-50-2	
NEtFOSAA	**<0.765**	ng/L	3.88	0.765	1	06/30/23 11:34	07/11/23 05:43	2991-50-6	
NEtFOSE	**<0.489**	ng/L	3.88	0.489	1	06/30/23 11:34	07/11/23 05:43	1691-99-2	
NMeFOSA	**<0.804**	ng/L	3.88	0.804	1	06/30/23 11:34	07/11/23 05:43	31506-32-8	
NMeFOSAA	**<0.436**	ng/L	3.88	0.436	1	06/30/23 11:34	07/11/23 05:43	2355-31-9	
NMeFOSE	**<0.630**	ng/L	3.88	0.630	1	06/30/23 11:34	07/11/23 05:43	24448-09-7	
Perfluorobutanoic acid	**4.75**	ng/L	1.94	0.736	1	06/30/23 11:34	07/11/23 05:43	375-22-4	
Perfluorobutanesulfonic acid	**2.87**	ng/L	1.94	0.300	1	06/30/23 11:34	07/11/23 05:43	375-73-5	
Perfluorodecanoic acid	**<0.698**	ng/L	1.94	0.698	1	06/30/23 11:34	07/11/23 05:43	335-76-2	
Perfluorododecanoic acid	**<0.630**	ng/L	1.94	0.630	1	06/30/23 11:34	07/11/23 05:43	307-55-1	
PFDoS	**<0.635**	ng/L	1.94	0.635	1	06/30/23 11:34	07/11/23 05:43	79780-39-5	
PFDS	**<0.591**	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 05:43	335-77-3	
Perfluoroheptanoic acid	**2.49**	ng/L	1.94	0.562	1	06/30/23 11:34	07/11/23 05:43	375-85-9	
PFHpS	**<0.591**	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 05:43	375-92-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-03-WG-20230619 **Lab ID: 40264224001** Collected: 06/19/23 08:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**3.52**	ng/L	1.94	0.455	1	06/30/23 11:34	07/11/23 05:43	307-24-4	
Perfluorohexanesulfonic acid	**3.82**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 05:43	355-46-4	
Perfluorononanoic acid	**<0.475**	ng/L	1.94	0.475	1	06/30/23 11:34	07/11/23 05:43	375-95-1	
PFNS	**<0.843**	ng/L	1.94	0.843	1	06/30/23 11:34	07/11/23 05:43	68259-12-1	
Perfluorooctanoic acid	**33.2**	ng/L	1.94	0.407	1	06/30/23 11:34	07/11/23 05:43	335-67-1	
Perfluorooctanesulfonic acid	**<0.368**	ng/L	1.94	0.368	1	06/30/23 11:34	07/11/23 05:43	1763-23-1	
Perfluoropentanoic acid	**3.38**	ng/L	1.94	0.426	1	06/30/23 11:34	07/11/23 05:43	2706-90-3	
PFPeS	**<0.494**	ng/L	1.94	0.494	1	06/30/23 11:34	07/11/23 05:43	2706-91-4	
Perfluorotetradecanoic acid	**<0.552**	ng/L	1.94	0.552	1	06/30/23 11:34	07/11/23 05:43	376-06-7	
Perfluorotridecanoic acid	**<0.596**	ng/L	1.94	0.596	1	06/30/23 11:34	07/11/23 05:43	72629-94-8	
Perfluoroundecanoic acid	**<0.601**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 05:43	2058-94-8	
Surrogates									
d-NEtFOSA	5	%	50-150		1	06/30/23 11:34	07/11/23 05:43	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	6	%	50-150		1	06/30/23 11:34	07/11/23 05:43	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	76	%	50-150		1	06/30/23 11:34	07/11/23 05:43	2355-31-9-EI	
d5-NEtFOSAA	79	%	50-150		1	06/30/23 11:34	07/11/23 05:43	2991-50-6-EI	
d7-NMeFOSE	32	%	50-150		1	06/30/23 11:34	07/11/23 05:43	24448-09-7-	
d9-NEtFOSE	27	%	50-150		1	06/30/23 11:34	07/11/23 05:43	1691-99-2-EI	
M2 4:2 FTS	131	%	50-150		1	06/30/23 11:34	07/11/23 05:43	757124-72-4	
M2 6:2 FTS	113	%	50-150		1	06/30/23 11:34	07/11/23 05:43	27619-97-2-	
M2 8:2 FTS	91	%	50-150		1	06/30/23 11:34	07/11/23 05:43	39108-34-4-	
M2PFHxDA	65	%	50-150		1	06/30/23 11:34	07/11/23 05:43	67905-19-5-	
M2PFTeDA	65	%	50-150		1	06/30/23 11:34	07/11/23 05:43	376-06-7-EI	
M3HFPODA	81	%	50-150		1	06/30/23 11:34	07/11/23 05:43	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 05:43	375-73-5-EI	
M3PFHxS	83	%	50-150		1	06/30/23 11:34	07/11/23 05:43	355-46-4-EI	
M4PFHpA	89	%	50-150		1	06/30/23 11:34	07/11/23 05:43	375-85-9-EI	
M5PFHxA	90	%	50-150		1	06/30/23 11:34	07/11/23 05:43	307-24-4-EI	
M5PFPeA	92	%	50-150		1	06/30/23 11:34	07/11/23 05:43	2706-90-3-EI	
M6PFDA	87	%	50-150		1	06/30/23 11:34	07/11/23 05:43	335-76-2-EI	
M7PFUdA	84	%	50-150		1	06/30/23 11:34	07/11/23 05:43	2058-94-8-EI	
M8FOSA	64	%	50-150		1	06/30/23 11:34	07/11/23 05:43	754-91-6-EI	
M8PFOA	92	%	50-150		1	06/30/23 11:34	07/11/23 05:43	335-67-1-EI	
M8PFOS	84	%	50-150		1	06/30/23 11:34	07/11/23 05:43	1763-23-1-EI	
M9PFNA	90	%	50-150		1	06/30/23 11:34	07/11/23 05:43	375-95-1-EI	
MPFBA	85	%	50-150		1	06/30/23 11:34	07/11/23 05:43	375-22-4-EI	
MPFDoA	72	%	50-150		1	06/30/23 11:34	07/11/23 05:43	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: TB-01-WQ-20230620 **Lab ID: 40264224002** Collected: 06/20/23 09:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 15:11	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 15:11	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 15:11	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 15:11	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 15:11	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 15:11	127-18-4	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/28/23 15:11	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 15:11	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 15:11	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 15:11	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	107	%	70-130		1		06/28/23 15:11	460-00-4	HS
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		06/28/23 15:11	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/28/23 15:11	2037-26-5	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: TB-02-WQ-20230620 **Lab ID: 40264224003** Collected: 06/20/23 09:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 15:31	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 15:31	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 15:31	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 15:31	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 15:31	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 15:31	127-18-4	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/28/23 15:31	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 15:31	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 15:31	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 15:31	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/28/23 15:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/28/23 15:31	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/28/23 15:31	2037-26-5	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-13D-WG-20230620 **Lab ID: 40264224004** Collected: 06/20/23 10:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**0.64**	ug/L	0.20	0.057	1		06/27/23 14:52	123-91-1	
Surrogates									
1,3-Dioxane (S)	109	%	70-130		1		06/27/23 14:52		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 16:33	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 16:33	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 16:33	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 16:33	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 16:33	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 16:33	127-18-4	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/28/23 16:33	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 16:33	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 16:33	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 16:33	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		06/28/23 16:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/28/23 16:33	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/28/23 16:33	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.614**	ng/L	1.98	0.614	1	06/30/23 11:34	07/11/23 05:59	757124-72-4	
6:2 Fluorotelomer sulfonate	**2.81**	ng/L	1.98	0.743	1	06/30/23 11:34	07/11/23 05:59	27619-97-2	
8:2 FTS	**<0.525**	ng/L	1.98	0.525	1	06/30/23 11:34	07/11/23 05:59	39108-34-4	
9Cl-PF3ONS	**<0.446**	ng/L	1.98	0.446	1	06/30/23 11:34	07/11/23 05:59	756426-58-1	
11Cl-PF3OUdS	**<0.446**	ng/L	1.98	0.446	1	06/30/23 11:34	07/11/23 05:59	763051-92-9	
ADONA	**<0.426**	ng/L	1.98	0.426	1	06/30/23 11:34	07/11/23 05:59	919005-14-4	
Perfluorooctanesulfonamide	**<0.366**	ng/L	1.98	0.366	1	06/30/23 11:34	07/11/23 05:59	754-91-6	
HFPO-DA	**<3.30**	ng/L	9.90	3.30	1	06/30/23 11:34	07/11/23 05:59	13252-13-6	
NEtFOSA	**<0.693**	ng/L	3.96	0.693	1	06/30/23 11:34	07/11/23 05:59	4151-50-2	
NEtFOSAA	**<0.782**	ng/L	3.96	0.782	1	06/30/23 11:34	07/11/23 05:59	2991-50-6	
NEtFOSE	**<0.500**	ng/L	3.96	0.500	1	06/30/23 11:34	07/11/23 05:59	1691-99-2	
NMeFOSA	**<0.822**	ng/L	3.96	0.822	1	06/30/23 11:34	07/11/23 05:59	31506-32-8	
NMeFOSAA	**<0.446**	ng/L	3.96	0.446	1	06/30/23 11:34	07/11/23 05:59	2355-31-9	
NMeFOSE	**<0.644**	ng/L	3.96	0.644	1	06/30/23 11:34	07/11/23 05:59	24448-09-7	
Perfluorobutanoic acid	**<0.753**	ng/L	1.98	0.753	1	06/30/23 11:34	07/11/23 05:59	375-22-4	
Perfluorobutanesulfonic acid	**<0.307**	ng/L	1.98	0.307	1	06/30/23 11:34	07/11/23 05:59	375-73-5	
Perfluorodecanoic acid	**<0.713**	ng/L	1.98	0.713	1	06/30/23 11:34	07/11/23 05:59	335-76-2	
Perfluorododecanoic acid	**<0.644**	ng/L	1.98	0.644	1	06/30/23 11:34	07/11/23 05:59	307-55-1	
PFDoS	**<0.649**	ng/L	1.98	0.649	1	06/30/23 11:34	07/11/23 05:59	79780-39-5	
PFDS	**<0.604**	ng/L	1.98	0.604	1	06/30/23 11:34	07/11/23 05:59	335-77-3	
Perfluoroheptanoic acid	**<0.574**	ng/L	1.98	0.574	1	06/30/23 11:34	07/11/23 05:59	375-85-9	
PFHpS	**<0.604**	ng/L	1.98	0.604	1	06/30/23 11:34	07/11/23 05:59	375-92-8	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-13D-WG-20230620 **Lab ID: 40264224004** Collected: 06/20/23 10:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.465**	ng/L	1.98	0.465	1	06/30/23 11:34	07/11/23 05:59	307-24-4	
Perfluorohexanesulfonic acid	**<0.614**	ng/L	1.98	0.614	1	06/30/23 11:34	07/11/23 05:59	355-46-4	
Perfluorononanoic acid	**<0.485**	ng/L	1.98	0.485	1	06/30/23 11:34	07/11/23 05:59	375-95-1	
PFNS	**<0.862**	ng/L	1.98	0.862	1	06/30/23 11:34	07/11/23 05:59	68259-12-1	
Perfluorooctanoic acid	**<0.416**	ng/L	1.98	0.416	1	06/30/23 11:34	07/11/23 05:59	335-67-1	
Perfluorooctanesulfonic acid	**<0.376**	ng/L	1.98	0.376	1	06/30/23 11:34	07/11/23 05:59	1763-23-1	
Perfluoropentanoic acid	**3.33**	ng/L	1.98	0.436	1	06/30/23 11:34	07/11/23 05:59	2706-90-3	
PFPeS	**<0.505**	ng/L	1.98	0.505	1	06/30/23 11:34	07/11/23 05:59	2706-91-4	
Perfluorotetradecanoic acid	**<0.564**	ng/L	1.98	0.564	1	06/30/23 11:34	07/11/23 05:59	376-06-7	
Perfluorotridecanoic acid	**<0.609**	ng/L	1.98	0.609	1	06/30/23 11:34	07/11/23 05:59	72629-94-8	
Perfluoroundecanoic acid	**<0.614**	ng/L	1.98	0.614	1	06/30/23 11:34	07/11/23 05:59	2058-94-8	
Surrogates									
d-NEtFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 05:59	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 05:59	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	66	%	50-150		1	06/30/23 11:34	07/11/23 05:59	2355-31-9-EI	
d5-NEtFOSAA	62	%	50-150		1	06/30/23 11:34	07/11/23 05:59	2991-50-6-EI	
d7-NMeFOSE	2	%	50-150		1	06/30/23 11:34	07/11/23 05:59	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	1	%	50-150		1	06/30/23 11:34	07/11/23 05:59	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	144	%	50-150		1	06/30/23 11:34	07/11/23 05:59	757124-72-4	
M2 6:2 FTS	128	%	50-150		1	06/30/23 11:34	07/11/23 05:59	27619-97-2-	
M2 8:2 FTS	93	%	50-150		1	06/30/23 11:34	07/11/23 05:59	39108-34-4-	
M2PFHxDA	11	%	50-150		1	06/30/23 11:34	07/11/23 05:59	67905-19-5-	MSSV1 2.3
M2PFTeDA	12	%	50-150		1	06/30/23 11:34	07/11/23 05:59	376-06-7-EI	MSSV1 2.3
M3HFPODA	77	%	50-150		1	06/30/23 11:34	07/11/23 05:59	13252-13-6-	
M3PFBS	81	%	50-150		1	06/30/23 11:34	07/11/23 05:59	375-73-5-EI	
M3PFHxS	81	%	50-150		1	06/30/23 11:34	07/11/23 05:59	355-46-4-EI	
M4PFHpA	89	%	50-150		1	06/30/23 11:34	07/11/23 05:59	375-85-9-EI	
M5PFHxA	91	%	50-150		1	06/30/23 11:34	07/11/23 05:59	307-24-4-EI	
M5PFPeA	91	%	50-150		1	06/30/23 11:34	07/11/23 05:59	2706-90-3-EI	
M6PFDA	78	%	50-150		1	06/30/23 11:34	07/11/23 05:59	335-76-2-EI	
M7PFUdA	59	%	50-150		1	06/30/23 11:34	07/11/23 05:59	2058-94-8-EI	
M8FOSA	51	%	50-150		1	06/30/23 11:34	07/11/23 05:59	754-91-6-EI	
M8PFOA	91	%	50-150		1	06/30/23 11:34	07/11/23 05:59	335-67-1-EI	
M8PFOS	77	%	50-150		1	06/30/23 11:34	07/11/23 05:59	1763-23-1-EI	
M9PFNA	87	%	50-150		1	06/30/23 11:34	07/11/23 05:59	375-95-1-EI	
MPFBA	82	%	50-150		1	06/30/23 11:34	07/11/23 05:59	375-22-4-EI	
MPFDoA	35	%	50-150		1	06/30/23 11:34	07/11/23 05:59	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-13S-WG-20230620 **Lab ID: 40264224005** Collected: 06/20/23 11:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**11.5**	ug/L	0.20	0.057	1		06/27/23 15:11	123-91-1	
Surrogates									
1,3-Dioxane (S)	101	%	70-130		1		06/27/23 15:11		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**0.41J**	ug/L	1.0	0.30	1		06/28/23 16:54	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 16:54	79-00-5	
1,1-Dichloroethane	**0.60J**	ug/L	1.0	0.30	1		06/28/23 16:54	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 16:54	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 16:54	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 16:54	127-18-4	
Trichloroethene	**32.9**	ug/L	1.0	0.32	1		06/28/23 16:54	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 16:54	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 16:54	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 16:54	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/28/23 16:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		06/28/23 16:54	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		06/28/23 16:54	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.594**	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 06:14	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.718**	ng/L	1.92	0.718	1	06/30/23 11:34	07/11/23 06:14	27619-97-2	
8:2 FTS	**<0.508**	ng/L	1.92	0.508	1	06/30/23 11:34	07/11/23 06:14	39108-34-4	
9Cl-PF3ONS	**<0.431**	ng/L	1.92	0.431	1	06/30/23 11:34	07/11/23 06:14	756426-58-1	
11Cl-PF3OUdS	**<0.431**	ng/L	1.92	0.431	1	06/30/23 11:34	07/11/23 06:14	763051-92-9	
ADONA	**<0.412**	ng/L	1.92	0.412	1	06/30/23 11:34	07/11/23 06:14	919005-14-4	
Perfluorooctanesulfonamide	**<0.354**	ng/L	1.92	0.354	1	06/30/23 11:34	07/11/23 06:14	754-91-6	
HFPO-DA	**<3.19**	ng/L	9.58	3.19	1	06/30/23 11:34	07/11/23 06:14	13252-13-6	
NEtFOSA	**<0.670**	ng/L	3.83	0.670	1	06/30/23 11:34	07/11/23 06:14	4151-50-2	
NEtFOSAA	**<0.757**	ng/L	3.83	0.757	1	06/30/23 11:34	07/11/23 06:14	2991-50-6	
NEtFOSE	**<0.484**	ng/L	3.83	0.484	1	06/30/23 11:34	07/11/23 06:14	1691-99-2	
NMeFOSA	**<0.795**	ng/L	3.83	0.795	1	06/30/23 11:34	07/11/23 06:14	31506-32-8	
NMeFOSAA	**<0.431**	ng/L	3.83	0.431	1	06/30/23 11:34	07/11/23 06:14	2355-31-9	
NMeFOSE	**<0.623**	ng/L	3.83	0.623	1	06/30/23 11:34	07/11/23 06:14	24448-09-7	
Perfluorobutanoic acid	**7.95**	ng/L	1.92	0.728	1	06/30/23 11:34	07/11/23 06:14	375-22-4	
Perfluorobutanesulfonic acid	**3.54**	ng/L	1.92	0.297	1	06/30/23 11:34	07/11/23 06:14	375-73-5	
Perfluorodecanoic acid	**<0.690**	ng/L	1.92	0.690	1	06/30/23 11:34	07/11/23 06:14	335-76-2	
Perfluorododecanoic acid	**<0.623**	ng/L	1.92	0.623	1	06/30/23 11:34	07/11/23 06:14	307-55-1	
PFDoS	**<0.627**	ng/L	1.92	0.627	1	06/30/23 11:34	07/11/23 06:14	79780-39-5	
PFDS	**<0.584**	ng/L	1.92	0.584	1	06/30/23 11:34	07/11/23 06:14	335-77-3	
Perfluoroheptanoic acid	**3.77**	ng/L	1.92	0.555	1	06/30/23 11:34	07/11/23 06:14	375-85-9	
PFHpS	**<0.584**	ng/L	1.92	0.584	1	06/30/23 11:34	07/11/23 06:14	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-13S-WG-20230620 **Lab ID: 40264224005** Collected: 06/20/23 11:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**5.29**	ng/L	1.92	0.450	1	06/30/23 11:34	07/11/23 06:14	307-24-4	
Perfluorohexanesulfonic acid	**<0.594**	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 06:14	355-46-4	
Perfluorononanoic acid	**<0.469**	ng/L	1.92	0.469	1	06/30/23 11:34	07/11/23 06:14	375-95-1	
PFNS	**<0.833**	ng/L	1.92	0.833	1	06/30/23 11:34	07/11/23 06:14	68259-12-1	
Perfluorooctanoic acid	**6.58**	ng/L	1.92	0.402	1	06/30/23 11:34	07/11/23 06:14	335-67-1	
Perfluorooctanesulfonic acid	**<0.364**	ng/L	1.92	0.364	1	06/30/23 11:34	07/11/23 06:14	1763-23-1	
Perfluoropentanoic acid	**8.63**	ng/L	1.92	0.421	1	06/30/23 11:34	07/11/23 06:14	2706-90-3	
PFPeS	**<0.488**	ng/L	1.92	0.488	1	06/30/23 11:34	07/11/23 06:14	2706-91-4	
Perfluorotetradecanoic acid	**<0.546**	ng/L	1.92	0.546	1	06/30/23 11:34	07/11/23 06:14	376-06-7	
Perfluorotridecanoic acid	**<0.589**	ng/L	1.92	0.589	1	06/30/23 11:34	07/11/23 06:14	72629-94-8	
Perfluoroundecanoic acid	**<0.594**	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 06:14	2058-94-8	
Surrogates									
d-NEtFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 06:14	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.4	%	50-150		1	06/30/23 11:34	07/11/23 06:14	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	82	%	50-150		1	06/30/23 11:34	07/11/23 06:14	2355-31-9-EI	
d5-NEtFOSAA	77	%	50-150		1	06/30/23 11:34	07/11/23 06:14	2991-50-6-EI	
d7-NMeFOSE	3	%	50-150		1	06/30/23 11:34	07/11/23 06:14	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	3	%	50-150		1	06/30/23 11:34	07/11/23 06:14	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	164	%	50-150		1	06/30/23 11:34	07/11/23 06:14	757124-72-4	MSSV1 2.5
M2 6:2 FTS	135	%	50-150		1	06/30/23 11:34	07/11/23 06:14	27619-97-2-	
M2 8:2 FTS	120	%	50-150		1	06/30/23 11:34	07/11/23 06:14	39108-34-4-	
M2PFHxDA	1	%	50-150		1	06/30/23 11:34	07/11/23 06:14	67905-19-5-	MSSV1 2.3
M2PFTeDA	14	%	50-150		1	06/30/23 11:34	07/11/23 06:14	376-06-7-EI	MSSV1 2.3
M3HFPODA	71	%	50-150		1	06/30/23 11:34	07/11/23 06:14	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 06:14	375-73-5-EI	
M3PFHxS	88	%	50-150		1	06/30/23 11:34	07/11/23 06:14	355-46-4-EI	
M4PFHpA	99	%	50-150		1	06/30/23 11:34	07/11/23 06:14	375-85-9-EI	
M5PFHxA	98	%	50-150		1	06/30/23 11:34	07/11/23 06:14	307-24-4-EI	
M5PFPeA	76	%	50-150		1	06/30/23 11:34	07/11/23 06:14	2706-90-3-EI	
M6PFDA	92	%	50-150		1	06/30/23 11:34	07/11/23 06:14	335-76-2-EI	
M7PFUdA	75	%	50-150		1	06/30/23 11:34	07/11/23 06:14	2058-94-8-EI	
M8FOSA	23	%	50-150		1	06/30/23 11:34	07/11/23 06:14	754-91-6-EI	
M8PFOA	102	%	50-150		1	06/30/23 11:34	07/11/23 06:14	335-67-1-EI	
M8PFOS	88	%	50-150		1	06/30/23 11:34	07/11/23 06:14	1763-23-1-EI	
M9PFNA	100	%	50-150		1	06/30/23 11:34	07/11/23 06:14	375-95-1-EI	
MPFBA	87	%	50-150		1	06/30/23 11:34	07/11/23 06:14	375-22-4-EI	
MPFDoA	49	%	50-150		1	06/30/23 11:34	07/11/23 06:14	307-55-1-EI	

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-01-WG-20230620 **Lab ID: 40264224006** Collected: 06/20/23 09:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 15:30	123-91-1	
Surrogates									
1,3-Dioxane (S)	101	%	70-130		1		06/27/23 15:30		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 10:02	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 10:02	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 10:02	75-35-4	
cis-1,2-Dichloroethene	**1.6**	ug/L	1.0	0.47	1		06/29/23 10:02	156-59-2	
trans-1,2-Dichloroethene	**1.6**	ug/L	1.0	0.53	1		06/29/23 10:02	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 10:02	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 10:02	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 10:02	79-00-5	
Trichloroethene	**16.8**	ug/L	1.0	0.32	1		06/29/23 10:02	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 10:02	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 10:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/29/23 10:02	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/29/23 10:02	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.594**	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 06:29	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.718**	ng/L	1.91	0.718	1	06/30/23 11:34	07/11/23 06:29	27619-97-2	
8:2 FTS	**<0.507**	ng/L	1.91	0.507	1	06/30/23 11:34	07/11/23 06:29	39108-34-4	
9Cl-PF3ONS	**<0.431**	ng/L	1.91	0.431	1	06/30/23 11:34	07/11/23 06:29	756426-58-1	
11Cl-PF3OUdS	**<0.431**	ng/L	1.91	0.431	1	06/30/23 11:34	07/11/23 06:29	763051-92-9	
ADONA	**<0.412**	ng/L	1.91	0.412	1	06/30/23 11:34	07/11/23 06:29	919005-14-4	
Perfluorooctanesulfonamide	**<0.354**	ng/L	1.91	0.354	1	06/30/23 11:34	07/11/23 06:29	754-91-6	
HFPO-DA	**<3.19**	ng/L	9.57	3.19	1	06/30/23 11:34	07/11/23 06:29	13252-13-6	
NEtFOSA	**<0.670**	ng/L	3.83	0.670	1	06/30/23 11:34	07/11/23 06:29	4151-50-2	
NEtFOSAA	**<0.756**	ng/L	3.83	0.756	1	06/30/23 11:34	07/11/23 06:29	2991-50-6	
NEtFOSE	**<0.483**	ng/L	3.83	0.483	1	06/30/23 11:34	07/11/23 06:29	1691-99-2	
NMeFOSA	**<0.795**	ng/L	3.83	0.795	1	06/30/23 11:34	07/11/23 06:29	31506-32-8	
NMeFOSAA	**<0.431**	ng/L	3.83	0.431	1	06/30/23 11:34	07/11/23 06:29	2355-31-9	
NMeFOSE	**<0.622**	ng/L	3.83	0.622	1	06/30/23 11:34	07/11/23 06:29	24448-09-7	
Perfluorobutanoic acid	**9.74**	ng/L	1.91	0.728	1	06/30/23 11:34	07/11/23 06:29	375-22-4	
Perfluorobutanesulfonic acid	**8.54**	ng/L	1.91	0.297	1	06/30/23 11:34	07/11/23 06:29	375-73-5	
Perfluorodecanoic acid	**<0.689**	ng/L	1.91	0.689	1	06/30/23 11:34	07/11/23 06:29	335-76-2	
Perfluorododecanoic acid	**<0.622**	ng/L	1.91	0.622	1	06/30/23 11:34	07/11/23 06:29	307-55-1	
PFDoS	**<0.627**	ng/L	1.91	0.627	1	06/30/23 11:34	07/11/23 06:29	79780-39-5	
PFDS	**<0.584**	ng/L	1.91	0.584	1	06/30/23 11:34	07/11/23 06:29	335-77-3	
Perfluoroheptanoic acid	**5.48**	ng/L	1.91	0.555	1	06/30/23 11:34	07/11/23 06:29	375-85-9	
PFHpS	**<0.584**	ng/L	1.91	0.584	1	06/30/23 11:34	07/11/23 06:29	375-92-8	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-01-WG-20230620 **Lab ID: 40264224006** Collected: 06/20/23 09:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**4.25**	ng/L	1.91	0.450	1	06/30/23 11:34	07/11/23 06:29	307-24-4	
Perfluorohexanesulfonic acid	**3.09**	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 06:29	355-46-4	
Perfluorononanoic acid	**<0.469**	ng/L	1.91	0.469	1	06/30/23 11:34	07/11/23 06:29	375-95-1	
PFNS	**<0.833**	ng/L	1.91	0.833	1	06/30/23 11:34	07/11/23 06:29	68259-12-1	
Perfluorooctanoic acid	**71.8**	ng/L	1.91	0.402	1	06/30/23 11:34	07/11/23 06:29	335-67-1	
Perfluorooctanesulfonic acid	**<0.364**	ng/L	1.91	0.364	1	06/30/23 11:34	07/11/23 06:29	1763-23-1	
Perfluoropentanoic acid	**6.10**	ng/L	1.91	0.421	1	06/30/23 11:34	07/11/23 06:29	2706-90-3	
PFPeS	**2.37**	ng/L	1.91	0.488	1	06/30/23 11:34	07/11/23 06:29	2706-91-4	
Perfluorotetradecanoic acid	**<0.546**	ng/L	1.91	0.546	1	06/30/23 11:34	07/11/23 06:29	376-06-7	
Perfluorotridecanoic acid	**<0.589**	ng/L	1.91	0.589	1	06/30/23 11:34	07/11/23 06:29	72629-94-8	
Perfluoroundecanoic acid	**<0.594**	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 06:29	2058-94-8	
Surrogates									
d-NEtFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 06:29	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 06:29	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	79	%	50-150		1	06/30/23 11:34	07/11/23 06:29	2355-31-9-EI	
d5-NEtFOSAA	78	%	50-150		1	06/30/23 11:34	07/11/23 06:29	2991-50-6-EI	
d7-NMeFOSE	9	%	50-150		1	06/30/23 11:34	07/11/23 06:29	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	6	%	50-150		1	06/30/23 11:34	07/11/23 06:29	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	139	%	50-150		1	06/30/23 11:34	07/11/23 06:29	757124-72-4	
M2 6:2 FTS	122	%	50-150		1	06/30/23 11:34	07/11/23 06:29	27619-97-2-	
M2 8:2 FTS	99	%	50-150		1	06/30/23 11:34	07/11/23 06:29	39108-34-4-	
M2PFHxDA	28	%	50-150		1	06/30/23 11:34	07/11/23 06:29	67905-19-5-	
M2PFTeDA	53	%	50-150		1	06/30/23 11:34	07/11/23 06:29	376-06-7-EI	
M3HFPODA	75	%	50-150		1	06/30/23 11:34	07/11/23 06:29	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 06:29	375-73-5-EI	
M3PFHxS	86	%	50-150		1	06/30/23 11:34	07/11/23 06:29	355-46-4-EI	
M4PFHpA	92	%	50-150		1	06/30/23 11:34	07/11/23 06:29	375-85-9-EI	
M5PFHxA	96	%	50-150		1	06/30/23 11:34	07/11/23 06:29	307-24-4-EI	
M5PFPeA	82	%	50-150		1	06/30/23 11:34	07/11/23 06:29	2706-90-3-EI	
M6PFDA	88	%	50-150		1	06/30/23 11:34	07/11/23 06:29	335-76-2-EI	
M7PFUdA	80	%	50-150		1	06/30/23 11:34	07/11/23 06:29	2058-94-8-EI	
M8FOSA	65	%	50-150		1	06/30/23 11:34	07/11/23 06:29	754-91-6-EI	
M8PFOA	93	%	50-150		1	06/30/23 11:34	07/11/23 06:29	335-67-1-EI	
M8PFOS	83	%	50-150		1	06/30/23 11:34	07/11/23 06:29	1763-23-1-EI	
M9PFNA	92	%	50-150		1	06/30/23 11:34	07/11/23 06:29	375-95-1-EI	
MPFBA	83	%	50-150		1	06/30/23 11:34	07/11/23 06:29	375-22-4-EI	
MPFDoA	69	%	50-150		1	06/30/23 11:34	07/11/23 06:29	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-26-WG-20230620 **Lab ID: 40264224007** Collected: 06/20/23 11:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 15:49	123-91-1	
Surrogates									
1,3-Dioxane (S)	98	%	70-130		1		06/27/23 15:49		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 10:22	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 10:22	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 10:22	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 10:22	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 10:22	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 10:22	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 10:22	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 10:22	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/29/23 10:22	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 10:22	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 10:22	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 10:22	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/29/23 10:22	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.669**	ng/L	2.16	0.669	1	06/30/23 11:34	07/11/23 06:45	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.809**	ng/L	2.16	0.809	1	06/30/23 11:34	07/11/23 06:45	27619-97-2	
8:2 FTS	**<0.572**	ng/L	2.16	0.572	1	06/30/23 11:34	07/11/23 06:45	39108-34-4	
9Cl-PF3ONS	**<0.485**	ng/L	2.16	0.485	1	06/30/23 11:34	07/11/23 06:45	756426-58-1	
11Cl-PF3OUdS	**<0.485**	ng/L	2.16	0.485	1	06/30/23 11:34	07/11/23 06:45	763051-92-9	
ADONA	**<0.464**	ng/L	2.16	0.464	1	06/30/23 11:34	07/11/23 06:45	919005-14-4	
Perfluorooctanesulfonamide	**<0.399**	ng/L	2.16	0.399	1	06/30/23 11:34	07/11/23 06:45	754-91-6	
HFPO-DA	**<3.60**	ng/L	10.8	3.60	1	06/30/23 11:34	07/11/23 06:45	13252-13-6	
NEtFOSA	**<0.755**	ng/L	4.31	0.755	1	06/30/23 11:34	07/11/23 06:45	4151-50-2	
NEtFOSAA	**<0.852**	ng/L	4.31	0.852	1	06/30/23 11:34	07/11/23 06:45	2991-50-6	
NEtFOSE	**<0.545**	ng/L	4.31	0.545	1	06/30/23 11:34	07/11/23 06:45	1691-99-2	
NMeFOSA	**<0.895**	ng/L	4.31	0.895	1	06/30/23 11:34	07/11/23 06:45	31506-32-8	
NMeFOSAA	**<0.485**	ng/L	4.31	0.485	1	06/30/23 11:34	07/11/23 06:45	2355-31-9	
NMeFOSE	**<0.701**	ng/L	4.31	0.701	1	06/30/23 11:34	07/11/23 06:45	24448-09-7	
Perfluorobutanoic acid	**7.60**	ng/L	2.16	0.820	1	06/30/23 11:34	07/11/23 06:45	375-22-4	
Perfluorobutanesulfonic acid	**6.85**	ng/L	2.16	0.334	1	06/30/23 11:34	07/11/23 06:45	375-73-5	
Perfluorodecanoic acid	**<0.776**	ng/L	2.16	0.776	1	06/30/23 11:34	07/11/23 06:45	335-76-2	
Perfluorododecanoic acid	**<0.701**	ng/L	2.16	0.701	1	06/30/23 11:34	07/11/23 06:45	307-55-1	
PFDoS	**<0.706**	ng/L	2.16	0.706	1	06/30/23 11:34	07/11/23 06:45	79780-39-5	
PFDS	**<0.658**	ng/L	2.16	0.658	1	06/30/23 11:34	07/11/23 06:45	335-77-3	
Perfluoroheptanoic acid	**6.29**	ng/L	2.16	0.625	1	06/30/23 11:34	07/11/23 06:45	375-85-9	
PFHpS	**<0.658**	ng/L	2.16	0.658	1	06/30/23 11:34	07/11/23 06:45	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-26-WG-20230620 **Lab ID: 40264224007** Collected: 06/20/23 11:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**6.22**	ng/L	2.16	0.507	1	06/30/23 11:34	07/11/23 06:45	307-24-4	
Perfluorohexanesulfonic acid	**4.72**	ng/L	2.16	0.669	1	06/30/23 11:34	07/11/23 06:45	355-46-4	
Perfluorononanoic acid	**<0.528**	ng/L	2.16	0.528	1	06/30/23 11:34	07/11/23 06:45	375-95-1	
PFNS	**<0.938**	ng/L	2.16	0.938	1	06/30/23 11:34	07/11/23 06:45	68259-12-1	
Perfluorooctanoic acid	**73.4**	ng/L	2.16	0.453	1	06/30/23 11:34	07/11/23 06:45	335-67-1	
Perfluorooctanesulfonic acid	**<0.410**	ng/L	2.16	0.410	1	06/30/23 11:34	07/11/23 06:45	1763-23-1	
Perfluoropentanoic acid	**4.27**	ng/L	2.16	0.474	1	06/30/23 11:34	07/11/23 06:45	2706-90-3	
PFPeS	**<0.550**	ng/L	2.16	0.550	1	06/30/23 11:34	07/11/23 06:45	2706-91-4	
Perfluorotetradecanoic acid	**<0.615**	ng/L	2.16	0.615	1	06/30/23 11:34	07/11/23 06:45	376-06-7	
Perfluorotridecanoic acid	**<0.663**	ng/L	2.16	0.663	1	06/30/23 11:34	07/11/23 06:45	72629-94-8	
Perfluoroundecanoic acid	**<0.669**	ng/L	2.16	0.669	1	06/30/23 11:34	07/11/23 06:45	2058-94-8	
Surrogates									
d-NEtFOSA	0.4	%	50-150		1	06/30/23 11:34	07/11/23 06:45	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.5	%	50-150		1	06/30/23 11:34	07/11/23 06:45	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	63	%	50-150		1	06/30/23 11:34	07/11/23 06:45	2355-31-9-EI	
d5-NEtFOSAA	56	%	50-150		1	06/30/23 11:34	07/11/23 06:45	2991-50-6-EI	
d7-NMeFOSE	5	%	50-150		1	06/30/23 11:34	07/11/23 06:45	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	3	%	50-150		1	06/30/23 11:34	07/11/23 06:45	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	119	%	50-150		1	06/30/23 11:34	07/11/23 06:45	757124-72-4	
M2 6:2 FTS	111	%	50-150		1	06/30/23 11:34	07/11/23 06:45	27619-97-2-	
M2 8:2 FTS	82	%	50-150		1	06/30/23 11:34	07/11/23 06:45	39108-34-4-	
M2PFHxDA	0.7	%	50-150		1	06/30/23 11:34	07/11/23 06:45	67905-19-5-	MSSV1 2.3
M2PFTeDA	12	%	50-150		1	06/30/23 11:34	07/11/23 06:45	376-06-7-EI	MSSV1 2.3
M3HFPODA	76	%	50-150		1	06/30/23 11:34	07/11/23 06:45	13252-13-6-	
M3PFBS	82	%	50-150		1	06/30/23 11:34	07/11/23 06:45	375-73-5-EI	
M3PFHxS	78	%	50-150		1	06/30/23 11:34	07/11/23 06:45	355-46-4-EI	
M4PFHpA	82	%	50-150		1	06/30/23 11:34	07/11/23 06:45	375-85-9-EI	
M5PFHxA	84	%	50-150		1	06/30/23 11:34	07/11/23 06:45	307-24-4-EI	
M5PFPeA	86	%	50-150		1	06/30/23 11:34	07/11/23 06:45	2706-90-3-EI	
M6PFDA	77	%	50-150		1	06/30/23 11:34	07/11/23 06:45	335-76-2-EI	
M7PFUdA	64	%	50-150		1	06/30/23 11:34	07/11/23 06:45	2058-94-8-EI	
M8FOSA	47	%	50-150		1	06/30/23 11:34	07/11/23 06:45	754-91-6-EI	
M8PFOA	85	%	50-150		1	06/30/23 11:34	07/11/23 06:45	335-67-1-EI	
M8PFOS	78	%	50-150		1	06/30/23 11:34	07/11/23 06:45	1763-23-1-EI	
M9PFNA	84	%	50-150		1	06/30/23 11:34	07/11/23 06:45	375-95-1-EI	
MPFBA	79	%	50-150		1	06/30/23 11:34	07/11/23 06:45	375-22-4-EI	
MPFDoA	42	%	50-150		1	06/30/23 11:34	07/11/23 06:45	307-55-1-EI	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-21S-WG-20230620 **Lab ID: 40264224008** Collected: 06/20/23 14:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 16:08	123-91-1	
Surrogates									
1,3-Dioxane (S)	105	%	70-130		1		06/27/23 16:08		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 17:15	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 17:15	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 17:15	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 17:15	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 17:15	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 17:15	127-18-4	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/28/23 17:15	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 17:15	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 17:15	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 17:15	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/28/23 17:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/28/23 17:15	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/28/23 17:15	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.594**	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 07:00	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.718**	ng/L	1.91	0.718	1	06/30/23 11:34	07/11/23 07:00	27619-97-2	
8:2 FTS	**<0.507**	ng/L	1.91	0.507	1	06/30/23 11:34	07/11/23 07:00	39108-34-4	
9Cl-PF3ONS	**<0.431**	ng/L	1.91	0.431	1	06/30/23 11:34	07/11/23 07:00	756426-58-1	
11Cl-PF3OUdS	**<0.431**	ng/L	1.91	0.431	1	06/30/23 11:34	07/11/23 07:00	763051-92-9	
ADONA	**<0.412**	ng/L	1.91	0.412	1	06/30/23 11:34	07/11/23 07:00	919005-14-4	
Perfluorooctanesulfonamide	**<0.354**	ng/L	1.91	0.354	1	06/30/23 11:34	07/11/23 07:00	754-91-6	
HFPO-DA	**<3.19**	ng/L	9.57	3.19	1	06/30/23 11:34	07/11/23 07:00	13252-13-6	
NEtFOSA	**<0.670**	ng/L	3.83	0.670	1	06/30/23 11:34	07/11/23 07:00	4151-50-2	
NEtFOSAA	**<0.756**	ng/L	3.83	0.756	1	06/30/23 11:34	07/11/23 07:00	2991-50-6	
NEtFOSE	**<0.483**	ng/L	3.83	0.483	1	06/30/23 11:34	07/11/23 07:00	1691-99-2	
NMeFOSA	**<0.795**	ng/L	3.83	0.795	1	06/30/23 11:34	07/11/23 07:00	31506-32-8	
NMeFOSAA	**<0.431**	ng/L	3.83	0.431	1	06/30/23 11:34	07/11/23 07:00	2355-31-9	
NMeFOSE	**<0.622**	ng/L	3.83	0.622	1	06/30/23 11:34	07/11/23 07:00	24448-09-7	
Perfluorobutanoic acid	**7.17**	ng/L	1.91	0.728	1	06/30/23 11:34	07/11/23 07:00	375-22-4	
Perfluorobutanesulfonic acid	**1.94**	ng/L	1.91	0.297	1	06/30/23 11:34	07/11/23 07:00	375-73-5	
Perfluorodecanoic acid	**<0.689**	ng/L	1.91	0.689	1	06/30/23 11:34	07/11/23 07:00	335-76-2	
Perfluorododecanoic acid	**<0.622**	ng/L	1.91	0.622	1	06/30/23 11:34	07/11/23 07:00	307-55-1	
PFDoS	**<0.627**	ng/L	1.91	0.627	1	06/30/23 11:34	07/11/23 07:00	79780-39-5	
PFDS	**<0.584**	ng/L	1.91	0.584	1	06/30/23 11:34	07/11/23 07:00	335-77-3	
Perfluoroheptanoic acid	**<0.555**	ng/L	1.91	0.555	1	06/30/23 11:34	07/11/23 07:00	375-85-9	
PFHpS	**<0.584**	ng/L	1.91	0.584	1	06/30/23 11:34	07/11/23 07:00	375-92-8	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-21S-WG-20230620 **Lab ID: 40264224008** Collected: 06/20/23 14:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**2.65**	ng/L	1.91	0.450	1	06/30/23 11:34	07/11/23 07:00	307-24-4	
Perfluorohexanesulfonic acid	**<0.594**	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 07:00	355-46-4	
Perfluorononanoic acid	**<0.469**	ng/L	1.91	0.469	1	06/30/23 11:34	07/11/23 07:00	375-95-1	
PFNS	**<0.833**	ng/L	1.91	0.833	1	06/30/23 11:34	07/11/23 07:00	68259-12-1	
Perfluorooctanoic acid	**34.6**	ng/L	1.91	0.402	1	06/30/23 11:34	07/11/23 07:00	335-67-1	
Perfluorooctanesulfonic acid	**<0.364**	ng/L	1.91	0.364	1	06/30/23 11:34	07/11/23 07:00	1763-23-1	
Perfluoropentanoic acid	**1.94**	ng/L	1.91	0.421	1	06/30/23 11:34	07/11/23 07:00	2706-90-3	
PFPeS	**<0.488**	ng/L	1.91	0.488	1	06/30/23 11:34	07/11/23 07:00	2706-91-4	
Perfluorotetradecanoic acid	**<0.546**	ng/L	1.91	0.546	1	06/30/23 11:34	07/11/23 07:00	376-06-7	
Perfluorotridecanoic acid	**<0.589**	ng/L	1.91	0.589	1	06/30/23 11:34	07/11/23 07:00	72629-94-8	
Perfluoroundecanoic acid	**<0.594**	ng/L	1.91	0.594	1	06/30/23 11:34	07/11/23 07:00	2058-94-8	
Surrogates									
d-NEtFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:00	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:00	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	68	%	50-150		1	06/30/23 11:34	07/11/23 07:00	2355-31-9-EI	
d5-NEtFOSAA	71	%	50-150		1	06/30/23 11:34	07/11/23 07:00	2991-50-6-EI	
d7-NMeFOSE	14	%	50-150		1	06/30/23 11:34	07/11/23 07:00	24448-09-7-	
d9-NEtFOSE	12	%	50-150		1	06/30/23 11:34	07/11/23 07:00	1691-99-2-EI	
M2 4:2 FTS	107	%	50-150		1	06/30/23 11:34	07/11/23 07:00	757124-72-4	
M2 6:2 FTS	95	%	50-150		1	06/30/23 11:34	07/11/23 07:00	27619-97-2-	
M2 8:2 FTS	80	%	50-150		1	06/30/23 11:34	07/11/23 07:00	39108-34-4-	
M2PFHxDA	53	%	50-150		1	06/30/23 11:34	07/11/23 07:00	67905-19-5-	
M2PFTeDA	56	%	50-150		1	06/30/23 11:34	07/11/23 07:00	376-06-7-EI	
M3HFPODA	76	%	50-150		1	06/30/23 11:34	07/11/23 07:00	13252-13-6-	
M3PFBS	77	%	50-150		1	06/30/23 11:34	07/11/23 07:00	375-73-5-EI	
M3PFHxS	78	%	50-150		1	06/30/23 11:34	07/11/23 07:00	355-46-4-EI	
M4PFHpA	81	%	50-150		1	06/30/23 11:34	07/11/23 07:00	375-85-9-EI	
M5PFHxA	81	%	50-150		1	06/30/23 11:34	07/11/23 07:00	307-24-4-EI	
M5PFPeA	85	%	50-150		1	06/30/23 11:34	07/11/23 07:00	2706-90-3-EI	
M6PFDA	81	%	50-150		1	06/30/23 11:34	07/11/23 07:00	335-76-2-EI	
M7PFUdA	75	%	50-150		1	06/30/23 11:34	07/11/23 07:00	2058-94-8-EI	
M8FOSA	46	%	50-150		1	06/30/23 11:34	07/11/23 07:00	754-91-6-EI	
M8PFOA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:00	335-67-1-EI	
M8PFOS	77	%	50-150		1	06/30/23 11:34	07/11/23 07:00	1763-23-1-EI	
M9PFNA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:00	375-95-1-EI	
MPFBA	77	%	50-150		1	06/30/23 11:34	07/11/23 07:00	375-22-4-EI	
MPFDoA	63	%	50-150		1	06/30/23 11:34	07/11/23 07:00	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-16-WG-20230620 **Lab ID: 40264224009** Collected: 06/20/23 14:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 17:06	123-91-1	
Surrogates									
1,3-Dioxane (S)	107	%	70-130		1		06/27/23 17:06		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 10:43	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 10:43	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 10:43	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 10:43	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 10:43	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 10:43	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 10:43	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 10:43	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/29/23 10:43	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 10:43	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/29/23 10:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/29/23 10:43	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/29/23 10:43	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.596**	ng/L	1.92	0.596	1	06/30/23 11:34	07/11/23 07:15	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.720**	ng/L	1.92	0.720	1	06/30/23 11:34	07/11/23 07:15	27619-97-2	
8:2 FTS	**<0.509**	ng/L	1.92	0.509	1	06/30/23 11:34	07/11/23 07:15	39108-34-4	
9Cl-PF3ONS	**<0.432**	ng/L	1.92	0.432	1	06/30/23 11:34	07/11/23 07:15	756426-58-1	
11Cl-PF3OUdS	**<0.432**	ng/L	1.92	0.432	1	06/30/23 11:34	07/11/23 07:15	763051-92-9	
ADONA	**<0.413**	ng/L	1.92	0.413	1	06/30/23 11:34	07/11/23 07:15	919005-14-4	
Perfluorooctanesulfonamide	**<0.355**	ng/L	1.92	0.355	1	06/30/23 11:34	07/11/23 07:15	754-91-6	
HFPO-DA	**<3.20**	ng/L	9.61	3.20	1	06/30/23 11:34	07/11/23 07:15	13252-13-6	
NEtFOSA	**<0.672**	ng/L	3.84	0.672	1	06/30/23 11:34	07/11/23 07:15	4151-50-2	
NEtFOSAA	**<0.759**	ng/L	3.84	0.759	1	06/30/23 11:34	07/11/23 07:15	2991-50-6	
NEtFOSE	**<0.485**	ng/L	3.84	0.485	1	06/30/23 11:34	07/11/23 07:15	1691-99-2	
NMeFOSA	**<0.797**	ng/L	3.84	0.797	1	06/30/23 11:34	07/11/23 07:15	31506-32-8	
NMeFOSAA	**<0.432**	ng/L	3.84	0.432	1	06/30/23 11:34	07/11/23 07:15	2355-31-9	
NMeFOSE	**<0.624**	ng/L	3.84	0.624	1	06/30/23 11:34	07/11/23 07:15	24448-09-7	
Perfluorobutanoic acid	**11.0**	ng/L	1.92	0.730	1	06/30/23 11:34	07/11/23 07:15	375-22-4	
Perfluorobutanesulfonic acid	**37.1**	ng/L	1.92	0.298	1	06/30/23 11:34	07/11/23 07:15	375-73-5	
Perfluorodecanoic acid	**<0.692**	ng/L	1.92	0.692	1	06/30/23 11:34	07/11/23 07:15	335-76-2	
Perfluorododecanoic acid	**<0.624**	ng/L	1.92	0.624	1	06/30/23 11:34	07/11/23 07:15	307-55-1	
PFDoS	**<0.629**	ng/L	1.92	0.629	1	06/30/23 11:34	07/11/23 07:15	79780-39-5	
PFDS	**<0.586**	ng/L	1.92	0.586	1	06/30/23 11:34	07/11/23 07:15	335-77-3	
Perfluoroheptanoic acid	**<0.557**	ng/L	1.92	0.557	1	06/30/23 11:34	07/11/23 07:15	375-85-9	
PFHpS	**<0.586**	ng/L	1.92	0.586	1	06/30/23 11:34	07/11/23 07:15	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-16-WG-20230620 **Lab ID: 40264224009** Collected: 06/20/23 14:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.451**	ng/L	1.92	0.451	1	06/30/23 11:34	07/11/23 07:15	307-24-4	
Perfluorohexanesulfonic acid	**2.02**	ng/L	1.92	0.596	1	06/30/23 11:34	07/11/23 07:15	355-46-4	
Perfluorononanoic acid	**<0.471**	ng/L	1.92	0.471	1	06/30/23 11:34	07/11/23 07:15	375-95-1	
PFNS	**<0.836**	ng/L	1.92	0.836	1	06/30/23 11:34	07/11/23 07:15	68259-12-1	
Perfluorooctanoic acid	**10.1**	ng/L	1.92	0.403	1	06/30/23 11:34	07/11/23 07:15	335-67-1	
Perfluorooctanesulfonic acid	**<0.365**	ng/L	1.92	0.365	1	06/30/23 11:34	07/11/23 07:15	1763-23-1	
Perfluoropentanoic acid	**<0.423**	ng/L	1.92	0.423	1	06/30/23 11:34	07/11/23 07:15	2706-90-3	
PFPeS	**<0.490**	ng/L	1.92	0.490	1	06/30/23 11:34	07/11/23 07:15	2706-91-4	
Perfluorotetradecanoic acid	**<0.548**	ng/L	1.92	0.548	1	06/30/23 11:34	07/11/23 07:15	376-06-7	
Perfluorotridecanoic acid	**<0.591**	ng/L	1.92	0.591	1	06/30/23 11:34	07/11/23 07:15	72629-94-8	
Perfluoroundecanoic acid	**<0.596**	ng/L	1.92	0.596	1	06/30/23 11:34	07/11/23 07:15	2058-94-8	
Surrogates									
d-NEtFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 07:15	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:15	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	73	%	50-150		1	06/30/23 11:34	07/11/23 07:15	2355-31-9-EI	
d5-NEtFOSAA	73	%	50-150		1	06/30/23 11:34	07/11/23 07:15	2991-50-6-EI	
d7-NMeFOSE	7	%	50-150		1	06/30/23 11:34	07/11/23 07:15	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	8	%	50-150		1	06/30/23 11:34	07/11/23 07:15	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	114	%	50-150		1	06/30/23 11:34	07/11/23 07:15	757124-72-4	
M2 6:2 FTS	111	%	50-150		1	06/30/23 11:34	07/11/23 07:15	27619-97-2-	
M2 8:2 FTS	88	%	50-150		1	06/30/23 11:34	07/11/23 07:15	39108-34-4-	
M2PFHxDA	78	%	50-150		1	06/30/23 11:34	07/11/23 07:15	67905-19-5-	
M2PFTeDA	70	%	50-150		1	06/30/23 11:34	07/11/23 07:15	376-06-7-EI	
M3HFPODA	77	%	50-150		1	06/30/23 11:34	07/11/23 07:15	13252-13-6-	
M3PFBS	81	%	50-150		1	06/30/23 11:34	07/11/23 07:15	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 07:15	355-46-4-EI	
M4PFHpA	85	%	50-150		1	06/30/23 11:34	07/11/23 07:15	375-85-9-EI	
M5PFHxA	87	%	50-150		1	06/30/23 11:34	07/11/23 07:15	307-24-4-EI	
M5PFPeA	89	%	50-150		1	06/30/23 11:34	07/11/23 07:15	2706-90-3-EI	
M6PFDA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:15	335-76-2-EI	
M7PFUdA	79	%	50-150		1	06/30/23 11:34	07/11/23 07:15	2058-94-8-EI	
M8FOSA	30	%	50-150		1	06/30/23 11:34	07/11/23 07:15	754-91-6-EI	
M8PFOA	87	%	50-150		1	06/30/23 11:34	07/11/23 07:15	335-67-1-EI	
M8PFOS	77	%	50-150		1	06/30/23 11:34	07/11/23 07:15	1763-23-1-EI	
M9PFNA	86	%	50-150		1	06/30/23 11:34	07/11/23 07:15	375-95-1-EI	
MPFBA	80	%	50-150		1	06/30/23 11:34	07/11/23 07:15	375-22-4-EI	
MPFDoA	72	%	50-150		1	06/30/23 11:34	07/11/23 07:15	307-55-1-EI	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-10S-WG-20230620 **Lab ID: 40264224010** Collected: 06/20/23 16:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 17:25	123-91-1	
Surrogates									
1,3-Dioxane (S)	106	%	70-130		1		06/27/23 17:25		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**0.45J**	ug/L	1.0	0.30	1		06/28/23 17:35	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 17:35	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 17:35	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 17:35	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 17:35	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 17:35	127-18-4	
Trichloroethene	**2.0**	ug/L	1.0	0.32	1		06/28/23 17:35	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 17:35	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 17:35	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 17:35	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/28/23 17:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		06/28/23 17:35	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/28/23 17:35	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.611**	ng/L	1.97	0.611	1	06/30/23 11:34	07/11/23 07:31	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.739**	ng/L	1.97	0.739	1	06/30/23 11:34	07/11/23 07:31	27619-97-2	
8:2 FTS	**<0.522**	ng/L	1.97	0.522	1	06/30/23 11:34	07/11/23 07:31	39108-34-4	
9Cl-PF3ONS	**<0.444**	ng/L	1.97	0.444	1	06/30/23 11:34	07/11/23 07:31	756426-58-1	
11Cl-PF3OUdS	**<0.444**	ng/L	1.97	0.444	1	06/30/23 11:34	07/11/23 07:31	763051-92-9	
ADONA	**<0.424**	ng/L	1.97	0.424	1	06/30/23 11:34	07/11/23 07:31	919005-14-4	
Perfluorooctanesulfonamide	**<0.365**	ng/L	1.97	0.365	1	06/30/23 11:34	07/11/23 07:31	754-91-6	
HFPO-DA	**<3.29**	ng/L	9.86	3.29	1	06/30/23 11:34	07/11/23 07:31	13252-13-6	
NEtFOSA	**<0.690**	ng/L	3.94	0.690	1	06/30/23 11:34	07/11/23 07:31	4151-50-2	
NEtFOSAA	**<0.779**	ng/L	3.94	0.779	1	06/30/23 11:34	07/11/23 07:31	2991-50-6	
NEtFOSE	**<0.498**	ng/L	3.94	0.498	1	06/30/23 11:34	07/11/23 07:31	1691-99-2	
NMeFOSA	**<0.818**	ng/L	3.94	0.818	1	06/30/23 11:34	07/11/23 07:31	31506-32-8	
NMeFOSAA	**<0.444**	ng/L	3.94	0.444	1	06/30/23 11:34	07/11/23 07:31	2355-31-9	
NMeFOSE	**<0.641**	ng/L	3.94	0.641	1	06/30/23 11:34	07/11/23 07:31	24448-09-7	
Perfluorobutanoic acid	**5.69**	ng/L	1.97	0.749	1	06/30/23 11:34	07/11/23 07:31	375-22-4	
Perfluorobutanesulfonic acid	**<0.306**	ng/L	1.97	0.306	1	06/30/23 11:34	07/11/23 07:31	375-73-5	
Perfluorodecanoic acid	**<0.710**	ng/L	1.97	0.710	1	06/30/23 11:34	07/11/23 07:31	335-76-2	
Perfluorododecanoic acid	**<0.641**	ng/L	1.97	0.641	1	06/30/23 11:34	07/11/23 07:31	307-55-1	
PFDoS	**<0.646**	ng/L	1.97	0.646	1	06/30/23 11:34	07/11/23 07:31	79780-39-5	
PFDS	**<0.601**	ng/L	1.97	0.601	1	06/30/23 11:34	07/11/23 07:31	335-77-3	
Perfluoroheptanoic acid	**2.35**	ng/L	1.97	0.572	1	06/30/23 11:34	07/11/23 07:31	375-85-9	
PFHpS	**<0.601**	ng/L	1.97	0.601	1	06/30/23 11:34	07/11/23 07:31	375-92-8	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-10S-WG-20230620 **Lab ID: 40264224010** Collected: 06/20/23 16:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**2.28**	ng/L	1.97	0.463	1	06/30/23 11:34	07/11/23 07:31	307-24-4	
Perfluorohexanesulfonic acid	**<0.611**	ng/L	1.97	0.611	1	06/30/23 11:34	07/11/23 07:31	355-46-4	
Perfluorononanoic acid	**<0.483**	ng/L	1.97	0.483	1	06/30/23 11:34	07/11/23 07:31	375-95-1	
PFNS	**<0.858**	ng/L	1.97	0.858	1	06/30/23 11:34	07/11/23 07:31	68259-12-1	
Perfluorooctanoic acid	**25.6**	ng/L	1.97	0.414	1	06/30/23 11:34	07/11/23 07:31	335-67-1	
Perfluorooctanesulfonic acid	**<0.375**	ng/L	1.97	0.375	1	06/30/23 11:34	07/11/23 07:31	1763-23-1	
Perfluoropentanoic acid	**<0.434**	ng/L	1.97	0.434	1	06/30/23 11:34	07/11/23 07:31	2706-90-3	
PFPeS	**<0.503**	ng/L	1.97	0.503	1	06/30/23 11:34	07/11/23 07:31	2706-91-4	
Perfluorotetradecanoic acid	**<0.562**	ng/L	1.97	0.562	1	06/30/23 11:34	07/11/23 07:31	376-06-7	
Perfluorotridecanoic acid	**<0.606**	ng/L	1.97	0.606	1	06/30/23 11:34	07/11/23 07:31	72629-94-8	
Perfluoroundecanoic acid	**<0.611**	ng/L	1.97	0.611	1	06/30/23 11:34	07/11/23 07:31	2058-94-8	
Surrogates									
d-NEtFOSA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 07:31	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.08	%	50-150		1	06/30/23 11:34	07/11/23 07:31	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	38	%	50-150		1	06/30/23 11:34	07/11/23 07:31	2355-31-9-EI	
d5-NEtFOSAA	28	%	50-150		1	06/30/23 11:34	07/11/23 07:31	2991-50-6-EI	
d7-NMeFOSE	0.1	%	50-150		1	06/30/23 11:34	07/11/23 07:31	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.04	%	50-150		1	06/30/23 11:34	07/11/23 07:31	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	119	%	50-150		1	06/30/23 11:34	07/11/23 07:31	757124-72-4	
M2 6:2 FTS	110	%	50-150		1	06/30/23 11:34	07/11/23 07:31	27619-97-2-	
M2 8:2 FTS	63	%	50-150		1	06/30/23 11:34	07/11/23 07:31	39108-34-4-	
M2PFHxDA	0.5	%	50-150		1	06/30/23 11:34	07/11/23 07:31	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 07:31	376-06-7-EI	MSSV1 2.3
M3HFPODA	80	%	50-150		1	06/30/23 11:34	07/11/23 07:31	13252-13-6-	
M3PFBS	84	%	50-150		1	06/30/23 11:34	07/11/23 07:31	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 07:31	355-46-4-EI	
M4PFHpA	87	%	50-150		1	06/30/23 11:34	07/11/23 07:31	375-85-9-EI	
M5PFHxA	89	%	50-150		1	06/30/23 11:34	07/11/23 07:31	307-24-4-EI	
M5PFPeA	93	%	50-150		1	06/30/23 11:34	07/11/23 07:31	2706-90-3-EI	
M6PFDA	56	%	50-150		1	06/30/23 11:34	07/11/23 07:31	335-76-2-EI	
M7PFUdA	26	%	50-150		1	06/30/23 11:34	07/11/23 07:31	2058-94-8-EI	
M8FOSA	4	%	50-150		1	06/30/23 11:34	07/11/23 07:31	754-91-6-EI	MSSV1 2.3
M8PFOA	86	%	50-150		1	06/30/23 11:34	07/11/23 07:31	335-67-1-EI	
M8PFOS	67	%	50-150		1	06/30/23 11:34	07/11/23 07:31	1763-23-1-EI	
M9PFNA	78	%	50-150		1	06/30/23 11:34	07/11/23 07:31	375-95-1-EI	
MPFBA	84	%	50-150		1	06/30/23 11:34	07/11/23 07:31	375-22-4-EI	
MPFDoA	6	%	50-150		1	06/30/23 11:34	07/11/23 07:31	307-55-1-EI	MSSV1 2.3

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-18S-WG-20230620 **Lab ID: 40264224011** Collected: 06/20/23 16:35 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 17:44	123-91-1	
Surrogates									
1,3-Dioxane (S)	111	%	70-130		1		06/27/23 17:44		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 17:56	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 17:56	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 17:56	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 17:56	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 17:56	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 17:56	127-18-4	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/28/23 17:56	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 17:56	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 17:56	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 17:56	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/28/23 17:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/28/23 17:56	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/28/23 17:56	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.575**	ng/L	1.85	0.575	1	06/30/23 11:34	07/11/23 07:46	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.696**	ng/L	1.85	0.696	1	06/30/23 11:34	07/11/23 07:46	27619-97-2	
8:2 FTS	**<0.492**	ng/L	1.85	0.492	1	06/30/23 11:34	07/11/23 07:46	39108-34-4	
9Cl-PF3ONS	**<0.417**	ng/L	1.85	0.417	1	06/30/23 11:34	07/11/23 07:46	756426-58-1	
11Cl-PF3OUdS	**<0.417**	ng/L	1.85	0.417	1	06/30/23 11:34	07/11/23 07:46	763051-92-9	
ADONA	**<0.399**	ng/L	1.85	0.399	1	06/30/23 11:34	07/11/23 07:46	919005-14-4	
Perfluorooctanesulfonamide	**<0.343**	ng/L	1.85	0.343	1	06/30/23 11:34	07/11/23 07:46	754-91-6	
HFPO-DA	**<3.09**	ng/L	9.27	3.09	1	06/30/23 11:34	07/11/23 07:46	13252-13-6	
NEtFOSA	**<0.649**	ng/L	3.71	0.649	1	06/30/23 11:34	07/11/23 07:46	4151-50-2	
NEtFOSAA	**<0.733**	ng/L	3.71	0.733	1	06/30/23 11:34	07/11/23 07:46	2991-50-6	
NEtFOSE	**<0.468**	ng/L	3.71	0.468	1	06/30/23 11:34	07/11/23 07:46	1691-99-2	
NMeFOSA	**<0.770**	ng/L	3.71	0.770	1	06/30/23 11:34	07/11/23 07:46	31506-32-8	
NMeFOSAA	**<0.417**	ng/L	3.71	0.417	1	06/30/23 11:34	07/11/23 07:46	2355-31-9	
NMeFOSE	**<0.603**	ng/L	3.71	0.603	1	06/30/23 11:34	07/11/23 07:46	24448-09-7	
Perfluorobutanoic acid	**2.34**	ng/L	1.85	0.705	1	06/30/23 11:34	07/11/23 07:46	375-22-4	
Perfluorobutanesulfonic acid	**3.02**	ng/L	1.85	0.287	1	06/30/23 11:34	07/11/23 07:46	375-73-5	
Perfluorodecanoic acid	**<0.668**	ng/L	1.85	0.668	1	06/30/23 11:34	07/11/23 07:46	335-76-2	
Perfluorododecanoic acid	**<0.603**	ng/L	1.85	0.603	1	06/30/23 11:34	07/11/23 07:46	307-55-1	
PFDoS	**<0.607**	ng/L	1.85	0.607	1	06/30/23 11:34	07/11/23 07:46	79780-39-5	
PFDS	**<0.566**	ng/L	1.85	0.566	1	06/30/23 11:34	07/11/23 07:46	335-77-3	
Perfluoroheptanoic acid	**<0.538**	ng/L	1.85	0.538	1	06/30/23 11:34	07/11/23 07:46	375-85-9	
PFHpS	**<0.566**	ng/L	1.85	0.566	1	06/30/23 11:34	07/11/23 07:46	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-18S-WG-20230620 **Lab ID: 40264224011** Collected: 06/20/23 16:35 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.436**	ng/L	1.85	0.436	1	06/30/23 11:34	07/11/23 07:46	307-24-4	
Perfluorohexanesulfonic acid	**<0.575**	ng/L	1.85	0.575	1	06/30/23 11:34	07/11/23 07:46	355-46-4	
Perfluorononanoic acid	**<0.454**	ng/L	1.85	0.454	1	06/30/23 11:34	07/11/23 07:46	375-95-1	
PFNS	**<0.807**	ng/L	1.85	0.807	1	06/30/23 11:34	07/11/23 07:46	68259-12-1	
Perfluorooctanoic acid	**13.3**	ng/L	1.85	0.389	1	06/30/23 11:34	07/11/23 07:46	335-67-1	
Perfluorooctanesulfonic acid	**11.5**	ng/L	1.85	0.352	1	06/30/23 11:34	07/11/23 07:46	1763-23-1	
Perfluoropentanoic acid	**<0.408**	ng/L	1.85	0.408	1	06/30/23 11:34	07/11/23 07:46	2706-90-3	
PFPeS	**<0.473**	ng/L	1.85	0.473	1	06/30/23 11:34	07/11/23 07:46	2706-91-4	
Perfluorotetradecanoic acid	**<0.529**	ng/L	1.85	0.529	1	06/30/23 11:34	07/11/23 07:46	376-06-7	
Perfluorotridecanoic acid	**<0.570**	ng/L	1.85	0.570	1	06/30/23 11:34	07/11/23 07:46	72629-94-8	
Perfluoroundecanoic acid	**<0.575**	ng/L	1.85	0.575	1	06/30/23 11:34	07/11/23 07:46	2058-94-8	
Surrogates									
d-NEtFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:46	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 07:46	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:46	2355-31-9-EI	
d5-NEtFOSAA	79	%	50-150		1	06/30/23 11:34	07/11/23 07:46	2991-50-6-EI	
d7-NMeFOSE	18	%	50-150		1	06/30/23 11:34	07/11/23 07:46	24448-09-7-	
d9-NEtFOSE	13	%	50-150		1	06/30/23 11:34	07/11/23 07:46	1691-99-2-EI	
M2 4:2 FTS	131	%	50-150		1	06/30/23 11:34	07/11/23 07:46	757124-72-4	
M2 6:2 FTS	125	%	50-150		1	06/30/23 11:34	07/11/23 07:46	27619-97-2-	
M2 8:2 FTS	103	%	50-150		1	06/30/23 11:34	07/11/23 07:46	39108-34-4-	
M2PFHxDA	71	%	50-150		1	06/30/23 11:34	07/11/23 07:46	67905-19-5-	
M2PFTeDA	72	%	50-150		1	06/30/23 11:34	07/11/23 07:46	376-06-7-EI	
M3HFPODA	75	%	50-150		1	06/30/23 11:34	07/11/23 07:46	13252-13-6-	
M3PFBS	81	%	50-150		1	06/30/23 11:34	07/11/23 07:46	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 07:46	355-46-4-EI	
M4PFHpA	92	%	50-150		1	06/30/23 11:34	07/11/23 07:46	375-85-9-EI	
M5PFHxA	92	%	50-150		1	06/30/23 11:34	07/11/23 07:46	307-24-4-EI	
M5PFPeA	84	%	50-150		1	06/30/23 11:34	07/11/23 07:46	2706-90-3-EI	
M6PFDA	85	%	50-150		1	06/30/23 11:34	07/11/23 07:46	335-76-2-EI	
M7PFUdA	83	%	50-150		1	06/30/23 11:34	07/11/23 07:46	2058-94-8-EI	
M8FOSA	51	%	50-150		1	06/30/23 11:34	07/11/23 07:46	754-91-6-EI	
M8PFOA	90	%	50-150		1	06/30/23 11:34	07/11/23 07:46	335-67-1-EI	
M8PFOS	80	%	50-150		1	06/30/23 11:34	07/11/23 07:46	1763-23-1-EI	
M9PFNA	90	%	50-150		1	06/30/23 11:34	07/11/23 07:46	375-95-1-EI	
MPFBA	81	%	50-150		1	06/30/23 11:34	07/11/23 07:46	375-22-4-EI	
MPFDoA	74	%	50-150		1	06/30/23 11:34	07/11/23 07:46	307-55-1-EI	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-08-WG-20230621 **Lab ID: 40264224012** Collected: 06/21/23 08:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 18:03	123-91-1	
Surrogates									
1,3-Dioxane (S)	109	%	70-130		1		06/27/23 18:03		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 18:16	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 18:16	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 18:16	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 18:16	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 18:16	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 18:16	127-18-4	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/28/23 18:16	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 18:16	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 18:16	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 18:16	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/28/23 18:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		06/28/23 18:16	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		06/28/23 18:16	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.601**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 08:01	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.727**	ng/L	1.94	0.727	1	06/30/23 11:34	07/11/23 08:01	27619-97-2	
8:2 FTS	**<0.513**	ng/L	1.94	0.513	1	06/30/23 11:34	07/11/23 08:01	39108-34-4	
9Cl-PF3ONS	**<0.436**	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 08:01	756426-58-1	
11Cl-PF3OUdS	**<0.436**	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 08:01	763051-92-9	
ADONA	**<0.417**	ng/L	1.94	0.417	1	06/30/23 11:34	07/11/23 08:01	919005-14-4	
Perfluorooctanesulfonamide	**<0.358**	ng/L	1.94	0.358	1	06/30/23 11:34	07/11/23 08:01	754-91-6	
HFPO-DA	**<3.23**	ng/L	9.69	3.23	1	06/30/23 11:34	07/11/23 08:01	13252-13-6	
NEtFOSA	**<0.678**	ng/L	3.87	0.678	1	06/30/23 11:34	07/11/23 08:01	4151-50-2	
NEtFOSAA	**<0.765**	ng/L	3.87	0.765	1	06/30/23 11:34	07/11/23 08:01	2991-50-6	
NEtFOSE	**<0.489**	ng/L	3.87	0.489	1	06/30/23 11:34	07/11/23 08:01	1691-99-2	
NMeFOSA	**<0.804**	ng/L	3.87	0.804	1	06/30/23 11:34	07/11/23 08:01	31506-32-8	
NMeFOSAA	**<0.436**	ng/L	3.87	0.436	1	06/30/23 11:34	07/11/23 08:01	2355-31-9	
NMeFOSE	**<0.630**	ng/L	3.87	0.630	1	06/30/23 11:34	07/11/23 08:01	24448-09-7	
Perfluorobutanoic acid	**107**	ng/L	1.94	0.736	1	06/30/23 11:34	07/11/23 08:01	375-22-4	
Perfluorobutanesulfonic acid	**5.84**	ng/L	1.94	0.300	1	06/30/23 11:34	07/11/23 08:01	375-73-5	
Perfluorodecanoic acid	**<0.697**	ng/L	1.94	0.697	1	06/30/23 11:34	07/11/23 08:01	335-76-2	
Perfluorododecanoic acid	**<0.630**	ng/L	1.94	0.630	1	06/30/23 11:34	07/11/23 08:01	307-55-1	
PFDoS	**<0.635**	ng/L	1.94	0.635	1	06/30/23 11:34	07/11/23 08:01	79780-39-5	
PFDS	**<0.591**	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 08:01	335-77-3	
Perfluoroheptanoic acid	**53.2**	ng/L	1.94	0.562	1	06/30/23 11:34	07/11/23 08:01	375-85-9	
PFHpS	**<0.591**	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 08:01	375-92-8	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-08-WG-20230621 **Lab ID: 40264224012** Collected: 06/21/23 08:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**339**	ng/L	1.94	0.455	1	06/30/23 11:34	07/11/23 08:01	307-24-4	
Perfluorohexanesulfonic acid	**4.00**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 08:01	355-46-4	
Perfluorononanoic acid	**<0.475**	ng/L	1.94	0.475	1	06/30/23 11:34	07/11/23 08:01	375-95-1	
PFNS	**<0.843**	ng/L	1.94	0.843	1	06/30/23 11:34	07/11/23 08:01	68259-12-1	
Perfluorooctanoic acid	**28.8**	ng/L	1.94	0.407	1	06/30/23 11:34	07/11/23 08:01	335-67-1	
Perfluorooctanesulfonic acid	**<0.368**	ng/L	1.94	0.368	1	06/30/23 11:34	07/11/23 08:01	1763-23-1	
Perfluoropentanoic acid	**409**	ng/L	1.94	0.426	1	06/30/23 11:34	07/11/23 08:01	2706-90-3	
PFPeS	**<0.494**	ng/L	1.94	0.494	1	06/30/23 11:34	07/11/23 08:01	2706-91-4	
Perfluorotetradecanoic acid	**<0.552**	ng/L	1.94	0.552	1	06/30/23 11:34	07/11/23 08:01	376-06-7	
Perfluorotridecanoic acid	**<0.596**	ng/L	1.94	0.596	1	06/30/23 11:34	07/11/23 08:01	72629-94-8	
Perfluoroundecanoic acid	**<0.601**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 08:01	2058-94-8	
Surrogates									
d-NEtFOSA	0.1	%	50-150		1	06/30/23 11:34	07/11/23 08:01	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 08:01	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	44	%	50-150		1	06/30/23 11:34	07/11/23 08:01	2355-31-9-EI	
d5-NEtFOSAA	28	%	50-150		1	06/30/23 11:34	07/11/23 08:01	2991-50-6-EI	
d7-NMeFOSE	0.06	%	50-150		1	06/30/23 11:34	07/11/23 08:01	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.09	%	50-150		1	06/30/23 11:34	07/11/23 08:01	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	130	%	50-150		1	06/30/23 11:34	07/11/23 08:01	757124-72-4	
M2 6:2 FTS	110	%	50-150		1	06/30/23 11:34	07/11/23 08:01	27619-97-2-	
M2 8:2 FTS	71	%	50-150		1	06/30/23 11:34	07/11/23 08:01	39108-34-4-	
M2PFHxDA	0.6	%	50-150		1	06/30/23 11:34	07/11/23 08:01	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.4	%	50-150		1	06/30/23 11:34	07/11/23 08:01	376-06-7-EI	MSSV1 2.3
M3HFPODA	82	%	50-150		1	06/30/23 11:34	07/11/23 08:01	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 08:01	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 08:01	355-46-4-EI	
M4PFHpA	90	%	50-150		1	06/30/23 11:34	07/11/23 08:01	375-85-9-EI	
M5PFHxA	90	%	50-150		1	06/30/23 11:34	07/11/23 08:01	307-24-4-EI	
M5PFPeA	91	%	50-150		1	06/30/23 11:34	07/11/23 08:01	2706-90-3-EI	
M6PFDA	67	%	50-150		1	06/30/23 11:34	07/11/23 08:01	335-76-2-EI	
M7PFUdA	28	%	50-150		1	06/30/23 11:34	07/11/23 08:01	2058-94-8-EI	
M8FOSA	12	%	50-150		1	06/30/23 11:34	07/11/23 08:01	754-91-6-EI	
M8PFOA	92	%	50-150		1	06/30/23 11:34	07/11/23 08:01	335-67-1-EI	
M8PFOS	78	%	50-150		1	06/30/23 11:34	07/11/23 08:01	1763-23-1-EI	
M9PFNA	93	%	50-150		1	06/30/23 11:34	07/11/23 08:01	375-95-1-EI	
MPFBA	88	%	50-150		1	06/30/23 11:34	07/11/23 08:01	375-22-4-EI	
MPFDoA	5	%	50-150		1	06/30/23 11:34	07/11/23 08:01	307-55-1-EI	MSSV1 2.3

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-19S-WG-20230621 **Lab ID: 40264224013** Collected: 06/21/23 08:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 18:22	123-91-1	
Surrogates									
1,3-Dioxane (S)	109	%	70-130		1		06/27/23 18:22		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 08:39	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 08:39	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 08:39	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 08:39	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 08:39	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 08:39	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 08:39	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 08:39	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/29/23 08:39	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 08:39	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 08:39	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 08:39	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/29/23 08:39	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.594**	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 08:47	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.719**	ng/L	1.92	0.719	1	06/30/23 11:34	07/11/23 08:47	27619-97-2	
8:2 FTS	**<0.508**	ng/L	1.92	0.508	1	06/30/23 11:34	07/11/23 08:47	39108-34-4	
9Cl-PF3ONS	**<0.431**	ng/L	1.92	0.431	1	06/30/23 11:34	07/11/23 08:47	756426-58-1	
11Cl-PF3OUdS	**<0.431**	ng/L	1.92	0.431	1	06/30/23 11:34	07/11/23 08:47	763051-92-9	
ADONA	**<0.412**	ng/L	1.92	0.412	1	06/30/23 11:34	07/11/23 08:47	919005-14-4	
Perfluorooctanesulfonamide	**2.09**	ng/L	1.92	0.354	1	06/30/23 11:34	07/11/23 08:47	754-91-6	
HFPO-DA	**<3.20**	ng/L	9.58	3.20	1	06/30/23 11:34	07/11/23 08:47	13252-13-6	
NEtFOSA	**<0.671**	ng/L	3.83	0.671	1	06/30/23 11:34	07/11/23 08:47	4151-50-2	
NEtFOSAA	**<0.757**	ng/L	3.83	0.757	1	06/30/23 11:34	07/11/23 08:47	2991-50-6	
NEtFOSE	**<0.484**	ng/L	3.83	0.484	1	06/30/23 11:34	07/11/23 08:47	1691-99-2	
NMeFOSA	**<0.795**	ng/L	3.83	0.795	1	06/30/23 11:34	07/11/23 08:47	31506-32-8	
NMeFOSAA	**8.41**	ng/L	3.83	0.431	1	06/30/23 11:34	07/11/23 08:47	2355-31-9	
NMeFOSE	**<0.623**	ng/L	3.83	0.623	1	06/30/23 11:34	07/11/23 08:47	24448-09-7	
Perfluorobutanoic acid	**<0.728**	ng/L	1.92	0.728	1	06/30/23 11:34	07/11/23 08:47	375-22-4	
Perfluorobutanesulfonic acid	**15.8**	ng/L	1.92	0.297	1	06/30/23 11:34	07/11/23 08:47	375-73-5	
Perfluorodecanoic acid	**<0.690**	ng/L	1.92	0.690	1	06/30/23 11:34	07/11/23 08:47	335-76-2	
Perfluorododecanoic acid	**<0.623**	ng/L	1.92	0.623	1	06/30/23 11:34	07/11/23 08:47	307-55-1	
PFDoS	**<0.628**	ng/L	1.92	0.628	1	06/30/23 11:34	07/11/23 08:47	79780-39-5	
PFDS	**<0.584**	ng/L	1.92	0.584	1	06/30/23 11:34	07/11/23 08:47	335-77-3	
Perfluoroheptanoic acid	**2.95**	ng/L	1.92	0.556	1	06/30/23 11:34	07/11/23 08:47	375-85-9	
PFHpS	**<0.584**	ng/L	1.92	0.584	1	06/30/23 11:34	07/11/23 08:47	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-19S-WG-20230621 **Lab ID: 40264224013** Collected: 06/21/23 08:50 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.450**	ng/L	1.92	0.450	1	06/30/23 11:34	07/11/23 08:47	307-24-4	
Perfluorohexanesulfonic acid	**6.40**	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 08:47	355-46-4	
Perfluorononanoic acid	**<0.469**	ng/L	1.92	0.469	1	06/30/23 11:34	07/11/23 08:47	375-95-1	
PFNS	**<0.833**	ng/L	1.92	0.833	1	06/30/23 11:34	07/11/23 08:47	68259-12-1	
Perfluorooctanoic acid	**24.1**	ng/L	1.92	0.402	1	06/30/23 11:34	07/11/23 08:47	335-67-1	
Perfluorooctanesulfonic acid	**21.4**	ng/L	1.92	0.364	1	06/30/23 11:34	07/11/23 08:47	1763-23-1	
Perfluoropentanoic acid	**<0.422**	ng/L	1.92	0.422	1	06/30/23 11:34	07/11/23 08:47	2706-90-3	
PFPeS	**3.34**	ng/L	1.92	0.489	1	06/30/23 11:34	07/11/23 08:47	2706-91-4	
Perfluorotetradecanoic acid	**<0.546**	ng/L	1.92	0.546	1	06/30/23 11:34	07/11/23 08:47	376-06-7	
Perfluorotridecanoic acid	**<0.589**	ng/L	1.92	0.589	1	06/30/23 11:34	07/11/23 08:47	72629-94-8	
Perfluoroundecanoic acid	**<0.594**	ng/L	1.92	0.594	1	06/30/23 11:34	07/11/23 08:47	2058-94-8	
Surrogates									
d-NEtFOSA	0.07	%	50-150		1	06/30/23 11:34	07/11/23 08:47	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.07	%	50-150		1	06/30/23 11:34	07/11/23 08:47	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	35	%	50-150		1	06/30/23 11:34	07/11/23 08:47	2355-31-9-EI	
d5-NEtFOSAA	28	%	50-150		1	06/30/23 11:34	07/11/23 08:47	2991-50-6-EI	
d7-NMeFOSE	0.3	%	50-150		1	06/30/23 11:34	07/11/23 08:47	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.2	%	50-150		1	06/30/23 11:34	07/11/23 08:47	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	178	%	50-150		1	06/30/23 11:34	07/11/23 08:47	757124-72-4	MSSV1 2.5
M2 6:2 FTS	128	%	50-150		1	06/30/23 11:34	07/11/23 08:47	27619-97-2-	
M2 8:2 FTS	65	%	50-150		1	06/30/23 11:34	07/11/23 08:47	39108-34-4-	
M2PFHxDA	0.8	%	50-150		1	06/30/23 11:34	07/11/23 08:47	67905-19-5-	MSSV1 2.3
M2PFTeDA	1	%	50-150		1	06/30/23 11:34	07/11/23 08:47	376-06-7-EI	MSSV1 2.3
M3HFPODA	61	%	50-150		1	06/30/23 11:34	07/11/23 08:47	13252-13-6-	
M3PFBS	74	%	50-150		1	06/30/23 11:34	07/11/23 08:47	375-73-5-EI	
M3PFHxS	76	%	50-150		1	06/30/23 11:34	07/11/23 08:47	355-46-4-EI	
M4PFHpA	90	%	50-150		1	06/30/23 11:34	07/11/23 08:47	375-85-9-EI	
M5PFHxA	88	%	50-150		1	06/30/23 11:34	07/11/23 08:47	307-24-4-EI	
M5PFPeA	68	%	50-150		1	06/30/23 11:34	07/11/23 08:47	2706-90-3-EI	
M6PFDA	42	%	50-150		1	06/30/23 11:34	07/11/23 08:47	335-76-2-EI	
M7PFUdA	21	%	50-150		1	06/30/23 11:34	07/11/23 08:47	2058-94-8-EI	MSSV1 2.3
M8FOSA	26	%	50-150		1	06/30/23 11:34	07/11/23 08:47	754-91-6-EI	
M8PFOA	86	%	50-150		1	06/30/23 11:34	07/11/23 08:47	335-67-1-EI	
M8PFOS	52	%	50-150		1	06/30/23 11:34	07/11/23 08:47	1763-23-1-EI	
M9PFNA	70	%	50-150		1	06/30/23 11:34	07/11/23 08:47	375-95-1-EI	
MPFBA	71	%	50-150		1	06/30/23 11:34	07/11/23 08:47	375-22-4-EI	
MPFDoA	9	%	50-150		1	06/30/23 11:34	07/11/23 08:47	307-55-1-EI	MSSV1 2.3

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-8S-WG-20230621 **Lab ID: 40264224014** Collected: 06/21/23 09:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 18:41	123-91-1	
Surrogates									
1,3-Dioxane (S)	107	%	70-130		1		06/27/23 18:41		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 11:04	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 11:04	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 11:04	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 11:04	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 11:04	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 11:04	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 11:04	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 11:04	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/29/23 11:04	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 11:04	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 11:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/29/23 11:04	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/29/23 11:04	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.608**	ng/L	1.96	0.608	1	06/30/23 11:34	07/11/23 09:03	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.736**	ng/L	1.96	0.736	1	06/30/23 11:34	07/11/23 09:03	27619-97-2	
8:2 FTS	**<0.520**	ng/L	1.96	0.520	1	06/30/23 11:34	07/11/23 09:03	39108-34-4	
9Cl-PF3ONS	**<0.441**	ng/L	1.96	0.441	1	06/30/23 11:34	07/11/23 09:03	756426-58-1	
11Cl-PF3OUdS	**<0.441**	ng/L	1.96	0.441	1	06/30/23 11:34	07/11/23 09:03	763051-92-9	
ADONA	**<0.422**	ng/L	1.96	0.422	1	06/30/23 11:34	07/11/23 09:03	919005-14-4	
Perfluorooctanesulfonamide	**<0.363**	ng/L	1.96	0.363	1	06/30/23 11:34	07/11/23 09:03	754-91-6	
HFPO-DA	**<3.27**	ng/L	9.81	3.27	1	06/30/23 11:34	07/11/23 09:03	13252-13-6	
NEtFOSA	**<0.687**	ng/L	3.92	0.687	1	06/30/23 11:34	07/11/23 09:03	4151-50-2	
NEtFOSAA	**<0.775**	ng/L	3.92	0.775	1	06/30/23 11:34	07/11/23 09:03	2991-50-6	
NEtFOSE	**<0.495**	ng/L	3.92	0.495	1	06/30/23 11:34	07/11/23 09:03	1691-99-2	
NMeFOSA	**<0.814**	ng/L	3.92	0.814	1	06/30/23 11:34	07/11/23 09:03	31506-32-8	
NMeFOSAA	**<0.441**	ng/L	3.92	0.441	1	06/30/23 11:34	07/11/23 09:03	2355-31-9	
NMeFOSE	**<0.637**	ng/L	3.92	0.637	1	06/30/23 11:34	07/11/23 09:03	24448-09-7	
Perfluorobutanoic acid	**19.1**	ng/L	1.96	0.745	1	06/30/23 11:34	07/11/23 09:03	375-22-4	
Perfluorobutanesulfonic acid	**22.0**	ng/L	1.96	0.304	1	06/30/23 11:34	07/11/23 09:03	375-73-5	
Perfluorodecanoic acid	**<0.706**	ng/L	1.96	0.706	1	06/30/23 11:34	07/11/23 09:03	335-76-2	
Perfluorododecanoic acid	**<0.637**	ng/L	1.96	0.637	1	06/30/23 11:34	07/11/23 09:03	307-55-1	
PFDoS	**<0.642**	ng/L	1.96	0.642	1	06/30/23 11:34	07/11/23 09:03	79780-39-5	
PFDS	**<0.598**	ng/L	1.96	0.598	1	06/30/23 11:34	07/11/23 09:03	335-77-3	
Perfluoroheptanoic acid	**3.85**	ng/L	1.96	0.569	1	06/30/23 11:34	07/11/23 09:03	375-85-9	
PFHpS	**<0.598**	ng/L	1.96	0.598	1	06/30/23 11:34	07/11/23 09:03	375-92-8	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-8S-WG-20230621 **Lab ID: 40264224014** Collected: 06/21/23 09:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**19.4**	ng/L	1.96	0.461	1	06/30/23 11:34	07/11/23 09:03	307-24-4	
Perfluorohexanesulfonic acid	**2.13**	ng/L	1.96	0.608	1	06/30/23 11:34	07/11/23 09:03	355-46-4	
Perfluorononanoic acid	**<0.481**	ng/L	1.96	0.481	1	06/30/23 11:34	07/11/23 09:03	375-95-1	
PFNS	**<0.853**	ng/L	1.96	0.853	1	06/30/23 11:34	07/11/23 09:03	68259-12-1	
Perfluorooctanoic acid	**10.6**	ng/L	1.96	0.412	1	06/30/23 11:34	07/11/23 09:03	335-67-1	
Perfluorooctanesulfonic acid	**<0.373**	ng/L	1.96	0.373	1	06/30/23 11:34	07/11/23 09:03	1763-23-1	
Perfluoropentanoic acid	**7.06**	ng/L	1.96	0.432	1	06/30/23 11:34	07/11/23 09:03	2706-90-3	
PFPeS	**6.34**	ng/L	1.96	0.500	1	06/30/23 11:34	07/11/23 09:03	2706-91-4	
Perfluorotetradecanoic acid	**<0.559**	ng/L	1.96	0.559	1	06/30/23 11:34	07/11/23 09:03	376-06-7	
Perfluorotridecanoic acid	**<0.603**	ng/L	1.96	0.603	1	06/30/23 11:34	07/11/23 09:03	72629-94-8	
Perfluoroundecanoic acid	**<0.608**	ng/L	1.96	0.608	1	06/30/23 11:34	07/11/23 09:03	2058-94-8	
Surrogates									
d-NEtFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 09:03	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.05	%	50-150		1	06/30/23 11:34	07/11/23 09:03	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	33	%	50-150		1	06/30/23 11:34	07/11/23 09:03	2355-31-9-EI	
d5-NEtFOSAA	26	%	50-150		1	06/30/23 11:34	07/11/23 09:03	2991-50-6-EI	
d7-NMeFOSE	0.1	%	50-150		1	06/30/23 11:34	07/11/23 09:03	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.04	%	50-150		1	06/30/23 11:34	07/11/23 09:03	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	160	%	50-150		1	06/30/23 11:34	07/11/23 09:03	757124-72-4	MSSV1 2.5
M2 6:2 FTS	111	%	50-150		1	06/30/23 11:34	07/11/23 09:03	27619-97-2-	
M2 8:2 FTS	53	%	50-150		1	06/30/23 11:34	07/11/23 09:03	39108-34-4-	
M2PFHxDA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 09:03	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.5	%	50-150		1	06/30/23 11:34	07/11/23 09:03	376-06-7-EI	MSSV1 2.3
M3HFPODA	66	%	50-150		1	06/30/23 11:34	07/11/23 09:03	13252-13-6-	
M3PFBS	77	%	50-150		1	06/30/23 11:34	07/11/23 09:03	375-73-5-EI	
M3PFHxS	75	%	50-150		1	06/30/23 11:34	07/11/23 09:03	355-46-4-EI	
M4PFHpA	88	%	50-150		1	06/30/23 11:34	07/11/23 09:03	375-85-9-EI	
M5PFHxA	90	%	50-150		1	06/30/23 11:34	07/11/23 09:03	307-24-4-EI	
M5PFPeA	67	%	50-150		1	06/30/23 11:34	07/11/23 09:03	2706-90-3-EI	
M6PFDA	43	%	50-150		1	06/30/23 11:34	07/11/23 09:03	335-76-2-EI	
M7PFUdA	22	%	50-150		1	06/30/23 11:34	07/11/23 09:03	2058-94-8-EI	MSSV1 2.3
M8FOSA	4	%	50-150		1	06/30/23 11:34	07/11/23 09:03	754-91-6-EI	MSSV1 2.3
M8PFOA	80	%	50-150		1	06/30/23 11:34	07/11/23 09:03	335-67-1-EI	
M8PFOS	53	%	50-150		1	06/30/23 11:34	07/11/23 09:03	1763-23-1-EI	
M9PFNA	64	%	50-150		1	06/30/23 11:34	07/11/23 09:03	375-95-1-EI	
MPFBA	71	%	50-150		1	06/30/23 11:34	07/11/23 09:03	375-22-4-EI	
MPFDoA	7	%	50-150		1	06/30/23 11:34	07/11/23 09:03	307-55-1-EI	MSSV1 2.3

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-05-WG-20230621 **Lab ID: 40264224015** Collected: 06/21/23 11:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**0.19J**	ug/L	0.20	0.057	1		06/27/23 19:00	123-91-1	
Surrogates									
1,3-Dioxane (S)	111	%	70-130		1		06/27/23 19:00		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 08:59	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 08:59	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 08:59	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 08:59	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 08:59	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 08:59	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 08:59	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 08:59	79-00-5	
Trichloroethene	**0.33J**	ug/L	1.0	0.32	1		06/29/23 08:59	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 08:59	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/29/23 08:59	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 08:59	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/29/23 08:59	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.613**	ng/L	1.98	0.613	1	06/30/23 11:34	07/11/23 09:18	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.742**	ng/L	1.98	0.742	1	06/30/23 11:34	07/11/23 09:18	27619-97-2	
8:2 FTS	**<0.524**	ng/L	1.98	0.524	1	06/30/23 11:34	07/11/23 09:18	39108-34-4	
9Cl-PF3ONS	**<0.445**	ng/L	1.98	0.445	1	06/30/23 11:34	07/11/23 09:18	756426-58-1	
11Cl-PF3OUdS	**<0.445**	ng/L	1.98	0.445	1	06/30/23 11:34	07/11/23 09:18	763051-92-9	
ADONA	**<0.425**	ng/L	1.98	0.425	1	06/30/23 11:34	07/11/23 09:18	919005-14-4	
Perfluorooctanesulfonamide	**<0.366**	ng/L	1.98	0.366	1	06/30/23 11:34	07/11/23 09:18	754-91-6	
HFPO-DA	**<3.30**	ng/L	9.89	3.30	1	06/30/23 11:34	07/11/23 09:18	13252-13-6	
NEtFOSA	**<0.693**	ng/L	3.96	0.693	1	06/30/23 11:34	07/11/23 09:18	4151-50-2	
NEtFOSAA	**<0.782**	ng/L	3.96	0.782	1	06/30/23 11:34	07/11/23 09:18	2991-50-6	
NEtFOSE	**<0.500**	ng/L	3.96	0.500	1	06/30/23 11:34	07/11/23 09:18	1691-99-2	
NMeFOSA	**<0.821**	ng/L	3.96	0.821	1	06/30/23 11:34	07/11/23 09:18	31506-32-8	
NMeFOSAA	**<0.445**	ng/L	3.96	0.445	1	06/30/23 11:34	07/11/23 09:18	2355-31-9	
NMeFOSE	**<0.643**	ng/L	3.96	0.643	1	06/30/23 11:34	07/11/23 09:18	24448-09-7	
Perfluorobutanoic acid	**3.47**	ng/L	1.98	0.752	1	06/30/23 11:34	07/11/23 09:18	375-22-4	
Perfluorobutanesulfonic acid	**2.47**	ng/L	1.98	0.307	1	06/30/23 11:34	07/11/23 09:18	375-73-5	
Perfluorodecanoic acid	**<0.712**	ng/L	1.98	0.712	1	06/30/23 11:34	07/11/23 09:18	335-76-2	
Perfluorododecanoic acid	**<0.643**	ng/L	1.98	0.643	1	06/30/23 11:34	07/11/23 09:18	307-55-1	
PFDoS	**<0.648**	ng/L	1.98	0.648	1	06/30/23 11:34	07/11/23 09:18	79780-39-5	
PFDS	**<0.604**	ng/L	1.98	0.604	1	06/30/23 11:34	07/11/23 09:18	335-77-3	
Perfluoroheptanoic acid	**<0.574**	ng/L	1.98	0.574	1	06/30/23 11:34	07/11/23 09:18	375-85-9	
PFHpS	**<0.604**	ng/L	1.98	0.604	1	06/30/23 11:34	07/11/23 09:18	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-05-WG-20230621 **Lab ID: 40264224015** Collected: 06/21/23 11:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.465**	ng/L	1.98	0.465	1	06/30/23 11:34	07/11/23 09:18	307-24-4	
Perfluorohexanesulfonic acid	**<0.613**	ng/L	1.98	0.613	1	06/30/23 11:34	07/11/23 09:18	355-46-4	
Perfluorononanoic acid	**<0.485**	ng/L	1.98	0.485	1	06/30/23 11:34	07/11/23 09:18	375-95-1	
PFNS	**<0.861**	ng/L	1.98	0.861	1	06/30/23 11:34	07/11/23 09:18	68259-12-1	
Perfluorooctanoic acid	**12.4**	ng/L	1.98	0.416	1	06/30/23 11:34	07/11/23 09:18	335-67-1	
Perfluorooctanesulfonic acid	**2.64**	ng/L	1.98	0.376	1	06/30/23 11:34	07/11/23 09:18	1763-23-1	
Perfluoropentanoic acid	**<0.435**	ng/L	1.98	0.435	1	06/30/23 11:34	07/11/23 09:18	2706-90-3	
PFPeS	**<0.505**	ng/L	1.98	0.505	1	06/30/23 11:34	07/11/23 09:18	2706-91-4	
Perfluorotetradecanoic acid	**<0.564**	ng/L	1.98	0.564	1	06/30/23 11:34	07/11/23 09:18	376-06-7	
Perfluorotridecanoic acid	**<0.609**	ng/L	1.98	0.609	1	06/30/23 11:34	07/11/23 09:18	72629-94-8	
Perfluoroundecanoic acid	**<0.613**	ng/L	1.98	0.613	1	06/30/23 11:34	07/11/23 09:18	2058-94-8	
Surrogates									
d-NEtFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 09:18	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.04	%	50-150		1	06/30/23 11:34	07/11/23 09:18	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	23	%	50-150		1	06/30/23 11:34	07/11/23 09:18	2355-31-9-EI	MSSV1 2.3
d5-NEtFOSAA	15	%	50-150		1	06/30/23 11:34	07/11/23 09:18	2991-50-6-EI	MSSV1 2.3
d7-NMeFOSE	0.005	%	50-150		1	06/30/23 11:34	07/11/23 09:18	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.007	%	50-150		1	06/30/23 11:34	07/11/23 09:18	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	124	%	50-150		1	06/30/23 11:34	07/11/23 09:18	757124-72-4	
M2 6:2 FTS	111	%	50-150		1	06/30/23 11:34	07/11/23 09:18	27619-97-2-	
M2 8:2 FTS	43	%	50-150		1	06/30/23 11:34	07/11/23 09:18	39108-34-4-	
M2PFHxDA	1	%	50-150		1	06/30/23 11:34	07/11/23 09:18	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.8	%	50-150		1	06/30/23 11:34	07/11/23 09:18	376-06-7-EI	MSSV1 2.3
M3HFPODA	74	%	50-150		1	06/30/23 11:34	07/11/23 09:18	13252-13-6-	
M3PFBS	78	%	50-150		1	06/30/23 11:34	07/11/23 09:18	375-73-5-EI	
M3PFHxS	72	%	50-150		1	06/30/23 11:34	07/11/23 09:18	355-46-4-EI	
M4PFHpA	83	%	50-150		1	06/30/23 11:34	07/11/23 09:18	375-85-9-EI	
M5PFHxA	91	%	50-150		1	06/30/23 11:34	07/11/23 09:18	307-24-4-EI	
M5PFPeA	88	%	50-150		1	06/30/23 11:34	07/11/23 09:18	2706-90-3-EI	
M6PFDA	36	%	50-150		1	06/30/23 11:34	07/11/23 09:18	335-76-2-EI	
M7PFUdA	16	%	50-150		1	06/30/23 11:34	07/11/23 09:18	2058-94-8-EI	MSSV1 2.3
M8FOSA	12	%	50-150		1	06/30/23 11:34	07/11/23 09:18	754-91-6-EI	
M8PFOA	80	%	50-150		1	06/30/23 11:34	07/11/23 09:18	335-67-1-EI	
M8PFOS	49	%	50-150		1	06/30/23 11:34	07/11/23 09:18	1763-23-1-EI	
M9PFNA	65	%	50-150		1	06/30/23 11:34	07/11/23 09:18	375-95-1-EI	
MPFBA	84	%	50-150		1	06/30/23 11:34	07/11/23 09:18	375-22-4-EI	
MPFDoA	4	%	50-150		1	06/30/23 11:34	07/11/23 09:18	307-55-1-EI	MSSV1 2.3

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-24S-WG-20230621 **Lab ID: 40264224016** Collected: 06/21/23 10:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 19:19	123-91-1	
Surrogates									
1,3-Dioxane (S)	111	%	70-130		1		06/27/23 19:19		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 11:24	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 11:24	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 11:24	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 11:24	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 11:24	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 11:24	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 11:24	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 11:24	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/29/23 11:24	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 11:24	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/29/23 11:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 11:24	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		06/29/23 11:24	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.603**	ng/L	1.94	0.603	1	06/30/23 11:34	07/11/23 09:33	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.729**	ng/L	1.94	0.729	1	06/30/23 11:34	07/11/23 09:33	27619-97-2	
8:2 FTS	**<0.515**	ng/L	1.94	0.515	1	06/30/23 11:34	07/11/23 09:33	39108-34-4	
9Cl-PF3ONS	**<0.437**	ng/L	1.94	0.437	1	06/30/23 11:34	07/11/23 09:33	756426-58-1	
11Cl-PF3OUdS	**<0.437**	ng/L	1.94	0.437	1	06/30/23 11:34	07/11/23 09:33	763051-92-9	
ADONA	**<0.418**	ng/L	1.94	0.418	1	06/30/23 11:34	07/11/23 09:33	919005-14-4	
Perfluorooctanesulfonamide	**<0.360**	ng/L	1.94	0.360	1	06/30/23 11:34	07/11/23 09:33	754-91-6	
HFPO-DA	**<3.24**	ng/L	9.72	3.24	1	06/30/23 11:34	07/11/23 09:33	13252-13-6	
NEtFOSA	**<0.680**	ng/L	3.89	0.680	1	06/30/23 11:34	07/11/23 09:33	4151-50-2	
NEtFOSAA	**<0.768**	ng/L	3.89	0.768	1	06/30/23 11:34	07/11/23 09:33	2991-50-6	
NEtFOSE	**<0.491**	ng/L	3.89	0.491	1	06/30/23 11:34	07/11/23 09:33	1691-99-2	
NMeFOSA	**<0.807**	ng/L	3.89	0.807	1	06/30/23 11:34	07/11/23 09:33	31506-32-8	
NMeFOSAA	**<0.437**	ng/L	3.89	0.437	1	06/30/23 11:34	07/11/23 09:33	2355-31-9	
NMeFOSE	**<0.632**	ng/L	3.89	0.632	1	06/30/23 11:34	07/11/23 09:33	24448-09-7	
Perfluorobutanoic acid	**7.13**	ng/L	1.94	0.739	1	06/30/23 11:34	07/11/23 09:33	375-22-4	
Perfluorobutanesulfonic acid	**7.26**	ng/L	1.94	0.301	1	06/30/23 11:34	07/11/23 09:33	375-73-5	
Perfluorodecanoic acid	**<0.700**	ng/L	1.94	0.700	1	06/30/23 11:34	07/11/23 09:33	335-76-2	
Perfluorododecanoic acid	**<0.632**	ng/L	1.94	0.632	1	06/30/23 11:34	07/11/23 09:33	307-55-1	
PFDoS	**<0.637**	ng/L	1.94	0.637	1	06/30/23 11:34	07/11/23 09:33	79780-39-5	
PFDS	**<0.593**	ng/L	1.94	0.593	1	06/30/23 11:34	07/11/23 09:33	335-77-3	
Perfluoroheptanoic acid	**5.24**	ng/L	1.94	0.564	1	06/30/23 11:34	07/11/23 09:33	375-85-9	
PFHpS	**<0.593**	ng/L	1.94	0.593	1	06/30/23 11:34	07/11/23 09:33	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-24S-WG-20230621 **Lab ID: 40264224016** Collected: 06/21/23 10:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**4.37**	ng/L	1.94	0.457	1	06/30/23 11:34	07/11/23 09:33	307-24-4	
Perfluorohexanesulfonic acid	**2.32**	ng/L	1.94	0.603	1	06/30/23 11:34	07/11/23 09:33	355-46-4	
Perfluorononanoic acid	**<0.476**	ng/L	1.94	0.476	1	06/30/23 11:34	07/11/23 09:33	375-95-1	
PFNS	**<0.846**	ng/L	1.94	0.846	1	06/30/23 11:34	07/11/23 09:33	68259-12-1	
Perfluorooctanoic acid	**63.6**	ng/L	1.94	0.408	1	06/30/23 11:34	07/11/23 09:33	335-67-1	
Perfluorooctanesulfonic acid	**2.37**	ng/L	1.94	0.369	1	06/30/23 11:34	07/11/23 09:33	1763-23-1	
Perfluoropentanoic acid	**2.84**	ng/L	1.94	0.428	1	06/30/23 11:34	07/11/23 09:33	2706-90-3	
PFPeS	**<0.496**	ng/L	1.94	0.496	1	06/30/23 11:34	07/11/23 09:33	2706-91-4	
Perfluorotetradecanoic acid	**<0.554**	ng/L	1.94	0.554	1	06/30/23 11:34	07/11/23 09:33	376-06-7	
Perfluorotridecanoic acid	**<0.598**	ng/L	1.94	0.598	1	06/30/23 11:34	07/11/23 09:33	72629-94-8	
Perfluoroundecanoic acid	**<0.603**	ng/L	1.94	0.603	1	06/30/23 11:34	07/11/23 09:33	2058-94-8	
Surrogates									
d-NEtFOSA	1	%	50-150		1	06/30/23 11:34	07/11/23 09:33	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 09:33	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	87	%	50-150		1	06/30/23 11:34	07/11/23 09:33	2355-31-9-EI	
d5-NEtFOSAA	85	%	50-150		1	06/30/23 11:34	07/11/23 09:33	2991-50-6-EI	
d7-NMeFOSE	19	%	50-150		1	06/30/23 11:34	07/11/23 09:33	24448-09-7-	
d9-NEtFOSE	13	%	50-150		1	06/30/23 11:34	07/11/23 09:33	1691-99-2-EI	
M2 4:2 FTS	136	%	50-150		1	06/30/23 11:34	07/11/23 09:33	757124-72-4	
M2 6:2 FTS	116	%	50-150		1	06/30/23 11:34	07/11/23 09:33	27619-97-2-	
M2 8:2 FTS	95	%	50-150		1	06/30/23 11:34	07/11/23 09:33	39108-34-4-	
M2PFHxDA	28	%	50-150		1	06/30/23 11:34	07/11/23 09:33	67905-19-5-	
M2PFTeDA	67	%	50-150		1	06/30/23 11:34	07/11/23 09:33	376-06-7-EI	
M3HFPODA	95	%	50-150		1	06/30/23 11:34	07/11/23 09:33	13252-13-6-	
M3PFBS	94	%	50-150		1	06/30/23 11:34	07/11/23 09:33	375-73-5-EI	
M3PFHxS	93	%	50-150		1	06/30/23 11:34	07/11/23 09:33	355-46-4-EI	
M4PFHpA	98	%	50-150		1	06/30/23 11:34	07/11/23 09:33	375-85-9-EI	
M5PFHxA	101	%	50-150		1	06/30/23 11:34	07/11/23 09:33	307-24-4-EI	
M5PFPeA	106	%	50-150		1	06/30/23 11:34	07/11/23 09:33	2706-90-3-EI	
M6PFDA	94	%	50-150		1	06/30/23 11:34	07/11/23 09:33	335-76-2-EI	
M7PFUdA	89	%	50-150		1	06/30/23 11:34	07/11/23 09:33	2058-94-8-EI	
M8FOSA	53	%	50-150		1	06/30/23 11:34	07/11/23 09:33	754-91-6-EI	
M8PFOA	100	%	50-150		1	06/30/23 11:34	07/11/23 09:33	335-67-1-EI	
M8PFOS	91	%	50-150		1	06/30/23 11:34	07/11/23 09:33	1763-23-1-EI	
M9PFNA	101	%	50-150		1	06/30/23 11:34	07/11/23 09:33	375-95-1-EI	
MPFBA	96	%	50-150		1	06/30/23 11:34	07/11/23 09:33	375-22-4-EI	
MPFDoA	78	%	50-150		1	06/30/23 11:34	07/11/23 09:33	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-25S-WG-20230621 **Lab ID: 40264224017** Collected: 06/21/23 12:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 19:38	123-91-1	
Surrogates									
1,3-Dioxane (S)	110	%	70-130		1		06/27/23 19:38		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 11:45	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 11:45	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 11:45	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 11:45	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 11:45	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 11:45	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 11:45	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 11:45	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/29/23 11:45	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 11:45	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/29/23 11:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/29/23 11:45	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		06/29/23 11:45	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.639**	ng/L	2.06	0.639	1	06/30/23 11:34	07/11/23 09:49	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.772**	ng/L	2.06	0.772	1	06/30/23 11:34	07/11/23 09:49	27619-97-2	
8:2 FTS	**<0.546**	ng/L	2.06	0.546	1	06/30/23 11:34	07/11/23 09:49	39108-34-4	
9Cl-PF3ONS	**<0.463**	ng/L	2.06	0.463	1	06/30/23 11:34	07/11/23 09:49	756426-58-1	
11Cl-PF3OUdS	**<0.463**	ng/L	2.06	0.463	1	06/30/23 11:34	07/11/23 09:49	763051-92-9	
ADONA	**<0.443**	ng/L	2.06	0.443	1	06/30/23 11:34	07/11/23 09:49	919005-14-4	
Perfluorooctanesulfonamide	**<0.381**	ng/L	2.06	0.381	1	06/30/23 11:34	07/11/23 09:49	754-91-6	
HFPO-DA	**<3.43**	ng/L	10.3	3.43	1	06/30/23 11:34	07/11/23 09:49	13252-13-6	
NEtFOSA	**<0.721**	ng/L	4.12	0.721	1	06/30/23 11:34	07/11/23 09:49	4151-50-2	
NEtFOSAA	**<0.814**	ng/L	4.12	0.814	1	06/30/23 11:34	07/11/23 09:49	2991-50-6	
NEtFOSE	**<0.520**	ng/L	4.12	0.520	1	06/30/23 11:34	07/11/23 09:49	1691-99-2	
NMeFOSA	**<0.855**	ng/L	4.12	0.855	1	06/30/23 11:34	07/11/23 09:49	31506-32-8	
NMeFOSAA	**<0.463**	ng/L	4.12	0.463	1	06/30/23 11:34	07/11/23 09:49	2355-31-9	
NMeFOSE	**<0.669**	ng/L	4.12	0.669	1	06/30/23 11:34	07/11/23 09:49	24448-09-7	
Perfluorobutanoic acid	**5.37**	ng/L	2.06	0.783	1	06/30/23 11:34	07/11/23 09:49	375-22-4	
Perfluorobutanesulfonic acid	**4.19**	ng/L	2.06	0.319	1	06/30/23 11:34	07/11/23 09:49	375-73-5	
Perfluorodecanoic acid	**<0.742**	ng/L	2.06	0.742	1	06/30/23 11:34	07/11/23 09:49	335-76-2	
Perfluorododecanoic acid	**<0.669**	ng/L	2.06	0.669	1	06/30/23 11:34	07/11/23 09:49	307-55-1	
PFDoS	**<0.675**	ng/L	2.06	0.675	1	06/30/23 11:34	07/11/23 09:49	79780-39-5	
PFDS	**<0.628**	ng/L	2.06	0.628	1	06/30/23 11:34	07/11/23 09:49	335-77-3	
Perfluoroheptanoic acid	**4.00**	ng/L	2.06	0.597	1	06/30/23 11:34	07/11/23 09:49	375-85-9	
PFHpS	**<0.628**	ng/L	2.06	0.628	1	06/30/23 11:34	07/11/23 09:49	375-92-8	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-25S-WG-20230621 **Lab ID: 40264224017** Collected: 06/21/23 12:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**4.46**	ng/L	2.06	0.484	1	06/30/23 11:34	07/11/23 09:49	307-24-4	
Perfluorohexanesulfonic acid	**2.66**	ng/L	2.06	0.639	1	06/30/23 11:34	07/11/23 09:49	355-46-4	
Perfluorononanoic acid	**<0.505**	ng/L	2.06	0.505	1	06/30/23 11:34	07/11/23 09:49	375-95-1	
PFNS	**<0.896**	ng/L	2.06	0.896	1	06/30/23 11:34	07/11/23 09:49	68259-12-1	
Perfluorooctanoic acid	**43.4**	ng/L	2.06	0.433	1	06/30/23 11:34	07/11/23 09:49	335-67-1	
Perfluorooctanesulfonic acid	**<0.391**	ng/L	2.06	0.391	1	06/30/23 11:34	07/11/23 09:49	1763-23-1	
Perfluoropentanoic acid	**3.01**	ng/L	2.06	0.453	1	06/30/23 11:34	07/11/23 09:49	2706-90-3	
PFPeS	**<0.525**	ng/L	2.06	0.525	1	06/30/23 11:34	07/11/23 09:49	2706-91-4	
Perfluorotetradecanoic acid	**<0.587**	ng/L	2.06	0.587	1	06/30/23 11:34	07/11/23 09:49	376-06-7	
Perfluorotridecanoic acid	**<0.633**	ng/L	2.06	0.633	1	06/30/23 11:34	07/11/23 09:49	72629-94-8	
Perfluoroundecanoic acid	**<0.639**	ng/L	2.06	0.639	1	06/30/23 11:34	07/11/23 09:49	2058-94-8	
Surrogates									
d-NEtFOSA	0.1	%	50-150		1	06/30/23 11:34	07/11/23 09:49	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 09:49	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	42	%	50-150		1	06/30/23 11:34	07/11/23 09:49	2355-31-9-EI	
d5-NEtFOSAA	36	%	50-150		1	06/30/23 11:34	07/11/23 09:49	2991-50-6-EI	
d7-NMeFOSE	0.5	%	50-150		1	06/30/23 11:34	07/11/23 09:49	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.2	%	50-150		1	06/30/23 11:34	07/11/23 09:49	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	108	%	50-150		1	06/30/23 11:34	07/11/23 09:49	757124-72-4	
M2 6:2 FTS	99	%	50-150		1	06/30/23 11:34	07/11/23 09:49	27619-97-2-	
M2 8:2 FTS	66	%	50-150		1	06/30/23 11:34	07/11/23 09:49	39108-34-4-	
M2PFHxDA	0.6	%	50-150		1	06/30/23 11:34	07/11/23 09:49	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.9	%	50-150		1	06/30/23 11:34	07/11/23 09:49	376-06-7-EI	MSSV1 2.3
M3HFPODA	73	%	50-150		1	06/30/23 11:34	07/11/23 09:49	13252-13-6-	
M3PFBS	71	%	50-150		1	06/30/23 11:34	07/11/23 09:49	375-73-5-EI	
M3PFHxS	70	%	50-150		1	06/30/23 11:34	07/11/23 09:49	355-46-4-EI	
M4PFHpA	78	%	50-150		1	06/30/23 11:34	07/11/23 09:49	375-85-9-EI	
M5PFHxA	82	%	50-150		1	06/30/23 11:34	07/11/23 09:49	307-24-4-EI	
M5PFPeA	80	%	50-150		1	06/30/23 11:34	07/11/23 09:49	2706-90-3-EI	
M6PFDA	56	%	50-150		1	06/30/23 11:34	07/11/23 09:49	335-76-2-EI	
M7PFUdA	34	%	50-150		1	06/30/23 11:34	07/11/23 09:49	2058-94-8-EI	
M8FOSA	39	%	50-150		1	06/30/23 11:34	07/11/23 09:49	754-91-6-EI	
M8PFOA	77	%	50-150		1	06/30/23 11:34	07/11/23 09:49	335-67-1-EI	
M8PFOS	62	%	50-150		1	06/30/23 11:34	07/11/23 09:49	1763-23-1-EI	
M9PFNA	71	%	50-150		1	06/30/23 11:34	07/11/23 09:49	375-95-1-EI	
MPFBA	78	%	50-150		1	06/30/23 11:34	07/11/23 09:49	375-22-4-EI	
MPFDoA	12	%	50-150		1	06/30/23 11:34	07/11/23 09:49	307-55-1-EI	MSSV1 2.3

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-10D-WG-20230621 **Lab ID: 40264224018** Collected: 06/21/23 13:15 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/27/23 19:57	123-91-1	
Surrogates									
1,3-Dioxane (S)	107	%	70-130		1		06/27/23 19:57		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 09:20	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 09:20	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 09:20	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 09:20	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 09:20	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 09:20	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 09:20	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 09:20	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/29/23 09:20	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 09:20	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/29/23 09:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/29/23 09:20	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/29/23 09:20	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.601**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 10:04	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.727**	ng/L	1.94	0.727	1	06/30/23 11:34	07/11/23 10:04	27619-97-2	
8:2 FTS	**<0.514**	ng/L	1.94	0.514	1	06/30/23 11:34	07/11/23 10:04	39108-34-4	
9Cl-PF3ONS	**<0.436**	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 10:04	756426-58-1	
11Cl-PF3OUdS	**<0.436**	ng/L	1.94	0.436	1	06/30/23 11:34	07/11/23 10:04	763051-92-9	
ADONA	**<0.417**	ng/L	1.94	0.417	1	06/30/23 11:34	07/11/23 10:04	919005-14-4	
Perfluorooctanesulfonamide	**<0.359**	ng/L	1.94	0.359	1	06/30/23 11:34	07/11/23 10:04	754-91-6	
HFPO-DA	**<3.23**	ng/L	9.69	3.23	1	06/30/23 11:34	07/11/23 10:04	13252-13-6	
NEtFOSA	**<0.678**	ng/L	3.88	0.678	1	06/30/23 11:34	07/11/23 10:04	4151-50-2	
NEtFOSAA	**<0.766**	ng/L	3.88	0.766	1	06/30/23 11:34	07/11/23 10:04	2991-50-6	
NEtFOSE	**<0.489**	ng/L	3.88	0.489	1	06/30/23 11:34	07/11/23 10:04	1691-99-2	
NMeFOSA	**<0.804**	ng/L	3.88	0.804	1	06/30/23 11:34	07/11/23 10:04	31506-32-8	
NMeFOSAA	**<0.436**	ng/L	3.88	0.436	1	06/30/23 11:34	07/11/23 10:04	2355-31-9	
NMeFOSE	**<0.630**	ng/L	3.88	0.630	1	06/30/23 11:34	07/11/23 10:04	24448-09-7	
Perfluorobutanoic acid	**<0.736**	ng/L	1.94	0.736	1	06/30/23 11:34	07/11/23 10:04	375-22-4	
Perfluorobutanesulfonic acid	**<0.300**	ng/L	1.94	0.300	1	06/30/23 11:34	07/11/23 10:04	375-73-5	
Perfluorodecanoic acid	**<0.698**	ng/L	1.94	0.698	1	06/30/23 11:34	07/11/23 10:04	335-76-2	
Perfluorododecanoic acid	**<0.630**	ng/L	1.94	0.630	1	06/30/23 11:34	07/11/23 10:04	307-55-1	
PFDoS	**<0.635**	ng/L	1.94	0.635	1	06/30/23 11:34	07/11/23 10:04	79780-39-5	
PFDS	**<0.591**	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 10:04	335-77-3	
Perfluoroheptanoic acid	**<0.562**	ng/L	1.94	0.562	1	06/30/23 11:34	07/11/23 10:04	375-85-9	
PFHpS	**<0.591**	ng/L	1.94	0.591	1	06/30/23 11:34	07/11/23 10:04	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-10D-WG-20230621 **Lab ID: 40264224018** Collected: 06/21/23 13:15 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.455**	ng/L	1.94	0.455	1	06/30/23 11:34	07/11/23 10:04	307-24-4	
Perfluorohexanesulfonic acid	**<0.601**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 10:04	355-46-4	
Perfluorononanoic acid	**<0.475**	ng/L	1.94	0.475	1	06/30/23 11:34	07/11/23 10:04	375-95-1	
PFNS	**<0.843**	ng/L	1.94	0.843	1	06/30/23 11:34	07/11/23 10:04	68259-12-1	
Perfluorooctanoic acid	**<0.407**	ng/L	1.94	0.407	1	06/30/23 11:34	07/11/23 10:04	335-67-1	
Perfluorooctanesulfonic acid	**<0.368**	ng/L	1.94	0.368	1	06/30/23 11:34	07/11/23 10:04	1763-23-1	
Perfluoropentanoic acid	**<0.426**	ng/L	1.94	0.426	1	06/30/23 11:34	07/11/23 10:04	2706-90-3	
PFPeS	**<0.494**	ng/L	1.94	0.494	1	06/30/23 11:34	07/11/23 10:04	2706-91-4	
Perfluorotetradecanoic acid	**<0.552**	ng/L	1.94	0.552	1	06/30/23 11:34	07/11/23 10:04	376-06-7	
Perfluorotridecanoic acid	**<0.596**	ng/L	1.94	0.596	1	06/30/23 11:34	07/11/23 10:04	72629-94-8	
Perfluoroundecanoic acid	**<0.601**	ng/L	1.94	0.601	1	06/30/23 11:34	07/11/23 10:04	2058-94-8	
Surrogates									
d-NEtFOSA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 10:04	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.08	%	50-150		1	06/30/23 11:34	07/11/23 10:04	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	36	%	50-150		1	06/30/23 11:34	07/11/23 10:04	2355-31-9-EI	
d5-NEtFOSAA	28	%	50-150		1	06/30/23 11:34	07/11/23 10:04	2991-50-6-EI	
d7-NMeFOSE	0.4	%	50-150		1	06/30/23 11:34	07/11/23 10:04	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.2	%	50-150		1	06/30/23 11:34	07/11/23 10:04	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	134	%	50-150		1	06/30/23 11:34	07/11/23 10:04	757124-72-4	
M2 6:2 FTS	109	%	50-150		1	06/30/23 11:34	07/11/23 10:04	27619-97-2-	
M2 8:2 FTS	51	%	50-150		1	06/30/23 11:34	07/11/23 10:04	39108-34-4-	
M2PFHxDA	5	%	50-150		1	06/30/23 11:34	07/11/23 10:04	67905-19-5-	MSSV1 2.3
M2PFTeDA	3	%	50-150		1	06/30/23 11:34	07/11/23 10:04	376-06-7-EI	MSSV1 2.3
M3HFPODA	71	%	50-150		1	06/30/23 11:34	07/11/23 10:04	13252-13-6-	
M3PFBS	73	%	50-150		1	06/30/23 11:34	07/11/23 10:04	375-73-5-EI	
M3PFHxS	73	%	50-150		1	06/30/23 11:34	07/11/23 10:04	355-46-4-EI	
M4PFHpA	80	%	50-150		1	06/30/23 11:34	07/11/23 10:04	375-85-9-EI	
M5PFHxA	84	%	50-150		1	06/30/23 11:34	07/11/23 10:04	307-24-4-EI	
M5PFPeA	81	%	50-150		1	06/30/23 11:34	07/11/23 10:04	2706-90-3-EI	
M6PFDA	41	%	50-150		1	06/30/23 11:34	07/11/23 10:04	335-76-2-EI	
M7PFUdA	23	%	50-150		1	06/30/23 11:34	07/11/23 10:04	2058-94-8-EI	MSSV1 2.3
M8FOSA	8	%	50-150		1	06/30/23 11:34	07/11/23 10:04	754-91-6-EI	MSSV1 2.3
M8PFOA	77	%	50-150		1	06/30/23 11:34	07/11/23 10:04	335-67-1-EI	
M8PFOS	53	%	50-150		1	06/30/23 11:34	07/11/23 10:04	1763-23-1-EI	
M9PFNA	64	%	50-150		1	06/30/23 11:34	07/11/23 10:04	375-95-1-EI	
MPFBA	74	%	50-150		1	06/30/23 11:34	07/11/23 10:04	375-22-4-EI	
MPFDoA	9	%	50-150		1	06/30/23 11:34	07/11/23 10:04	307-55-1-EI	MSSV1 2.3

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-12S-WG-20230621 **Lab ID: 40264224019** Collected: 06/21/23 15:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/29/23 17:53	123-91-1	
Surrogates									
1,3-Dioxane (S)	96	%	70-130		1		06/29/23 17:53		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 09:41	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/29/23 09:41	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/29/23 09:41	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/29/23 09:41	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/29/23 09:41	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/29/23 09:41	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/29/23 09:41	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/29/23 09:41	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/29/23 09:41	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/29/23 09:41	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		1		06/29/23 09:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		1		06/29/23 09:41	2199-69-1	
Toluene-d8 (S)	97	%	70-130		1		06/29/23 09:41	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.581**	ng/L	1.88	0.581	1	06/30/23 11:34	07/11/23 10:19	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.703**	ng/L	1.88	0.703	1	06/30/23 11:34	07/11/23 10:19	27619-97-2	
8:2 FTS	**<0.497**	ng/L	1.88	0.497	1	06/30/23 11:34	07/11/23 10:19	39108-34-4	
9Cl-PF3ONS	**<0.422**	ng/L	1.88	0.422	1	06/30/23 11:34	07/11/23 10:19	756426-58-1	
11Cl-PF3OUdS	**<0.422**	ng/L	1.88	0.422	1	06/30/23 11:34	07/11/23 10:19	763051-92-9	
ADONA	**<0.403**	ng/L	1.88	0.403	1	06/30/23 11:34	07/11/23 10:19	919005-14-4	
Perfluorooctanesulfonamide	**<0.347**	ng/L	1.88	0.347	1	06/30/23 11:34	07/11/23 10:19	754-91-6	
HFPO-DA	**<3.13**	ng/L	9.38	3.13	1	06/30/23 11:34	07/11/23 10:19	13252-13-6	
NEtFOSA	**<0.656**	ng/L	3.75	0.656	1	06/30/23 11:34	07/11/23 10:19	4151-50-2	
NEtFOSAA	**<0.741**	ng/L	3.75	0.741	1	06/30/23 11:34	07/11/23 10:19	2991-50-6	
NEtFOSE	**<0.474**	ng/L	3.75	0.474	1	06/30/23 11:34	07/11/23 10:19	1691-99-2	
NMeFOSA	**<0.778**	ng/L	3.75	0.778	1	06/30/23 11:34	07/11/23 10:19	31506-32-8	
NMeFOSAA	**<0.422**	ng/L	3.75	0.422	1	06/30/23 11:34	07/11/23 10:19	2355-31-9	
NMeFOSE	**<0.610**	ng/L	3.75	0.610	1	06/30/23 11:34	07/11/23 10:19	24448-09-7	
Perfluorobutanoic acid	**4.60**	ng/L	1.88	0.713	1	06/30/23 11:34	07/11/23 10:19	375-22-4	
Perfluorobutanesulfonic acid	**5.80**	ng/L	1.88	0.291	1	06/30/23 11:34	07/11/23 10:19	375-73-5	
Perfluorodecanoic acid	**<0.675**	ng/L	1.88	0.675	1	06/30/23 11:34	07/11/23 10:19	335-76-2	
Perfluorododecanoic acid	**<0.610**	ng/L	1.88	0.610	1	06/30/23 11:34	07/11/23 10:19	307-55-1	
PFDoS	**<0.614**	ng/L	1.88	0.614	1	06/30/23 11:34	07/11/23 10:19	79780-39-5	
PFDS	**<0.572**	ng/L	1.88	0.572	1	06/30/23 11:34	07/11/23 10:19	335-77-3	
Perfluoroheptanoic acid	**3.12**	ng/L	1.88	0.544	1	06/30/23 11:34	07/11/23 10:19	375-85-9	
PFHpS	**<0.572**	ng/L	1.88	0.572	1	06/30/23 11:34	07/11/23 10:19	375-92-8	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-12S-WG-20230621 **Lab ID: 40264224019** Collected: 06/21/23 15:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**3.24**	ng/L	1.88	0.441	1	06/30/23 11:34	07/11/23 10:19	307-24-4	
Perfluorohexanesulfonic acid	**<0.581**	ng/L	1.88	0.581	1	06/30/23 11:34	07/11/23 10:19	355-46-4	
Perfluorononanoic acid	**<0.460**	ng/L	1.88	0.460	1	06/30/23 11:34	07/11/23 10:19	375-95-1	
PFNS	**<0.816**	ng/L	1.88	0.816	1	06/30/23 11:34	07/11/23 10:19	68259-12-1	
Perfluorooctanoic acid	**17.9**	ng/L	1.88	0.394	1	06/30/23 11:34	07/11/23 10:19	335-67-1	
Perfluorooctanesulfonic acid	**<0.356**	ng/L	1.88	0.356	1	06/30/23 11:34	07/11/23 10:19	1763-23-1	
Perfluoropentanoic acid	**3.77**	ng/L	1.88	0.413	1	06/30/23 11:34	07/11/23 10:19	2706-90-3	
PFPeS	**<0.478**	ng/L	1.88	0.478	1	06/30/23 11:34	07/11/23 10:19	2706-91-4	
Perfluorotetradecanoic acid	**<0.535**	ng/L	1.88	0.535	1	06/30/23 11:34	07/11/23 10:19	376-06-7	
Perfluorotridecanoic acid	**<0.577**	ng/L	1.88	0.577	1	06/30/23 11:34	07/11/23 10:19	72629-94-8	
Perfluoroundecanoic acid	**<0.581**	ng/L	1.88	0.581	1	06/30/23 11:34	07/11/23 10:19	2058-94-8	
Surrogates									
d-NEtFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 10:19	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 10:19	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	59	%	50-150		1	06/30/23 11:34	07/11/23 10:19	2355-31-9-EI	
d5-NEtFOSAA	50	%	50-150		1	06/30/23 11:34	07/11/23 10:19	2991-50-6-EI	
d7-NMeFOSE	4	%	50-150		1	06/30/23 11:34	07/11/23 10:19	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	1	%	50-150		1	06/30/23 11:34	07/11/23 10:19	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	137	%	50-150		1	06/30/23 11:34	07/11/23 10:19	757124-72-4	
M2 6:2 FTS	130	%	50-150		1	06/30/23 11:34	07/11/23 10:19	27619-97-2-	
M2 8:2 FTS	85	%	50-150		1	06/30/23 11:34	07/11/23 10:19	39108-34-4-	
M2PFHxDA	0.5	%	50-150		1	06/30/23 11:34	07/11/23 10:19	67905-19-5-	MSSV1 2.3
M2PFTeDA	2	%	50-150		1	06/30/23 11:34	07/11/23 10:19	376-06-7-EI	MSSV1 2.3
M3HFPODA	79	%	50-150		1	06/30/23 11:34	07/11/23 10:19	13252-13-6-	
M3PFBS	86	%	50-150		1	06/30/23 11:34	07/11/23 10:19	375-73-5-EI	
M3PFHxS	84	%	50-150		1	06/30/23 11:34	07/11/23 10:19	355-46-4-EI	
M4PFHpA	95	%	50-150		1	06/30/23 11:34	07/11/23 10:19	375-85-9-EI	
M5PFHxA	97	%	50-150		1	06/30/23 11:34	07/11/23 10:19	307-24-4-EI	
M5PFPeA	87	%	50-150		1	06/30/23 11:34	07/11/23 10:19	2706-90-3-EI	
M6PFDA	72	%	50-150		1	06/30/23 11:34	07/11/23 10:19	335-76-2-EI	
M7PFUdA	48	%	50-150		1	06/30/23 11:34	07/11/23 10:19	2058-94-8-EI	
M8FOSA	31	%	50-150		1	06/30/23 11:34	07/11/23 10:19	754-91-6-EI	
M8PFOA	91	%	50-150		1	06/30/23 11:34	07/11/23 10:19	335-67-1-EI	
M8PFOS	73	%	50-150		1	06/30/23 11:34	07/11/23 10:19	1763-23-1-EI	
M9PFNA	85	%	50-150		1	06/30/23 11:34	07/11/23 10:19	375-95-1-EI	
MPFBA	90	%	50-150		1	06/30/23 11:34	07/11/23 10:19	375-22-4-EI	
MPFDoA	24	%	50-150		1	06/30/23 11:34	07/11/23 10:19	307-55-1-EI	MSSV1 2.3

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: FB-01-WQ-20230621 **Lab ID: 40264224020** Collected: 06/21/23 16:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 15:52	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/28/23 15:52	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/28/23 15:52	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/28/23 15:52	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/28/23 15:52	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/28/23 15:52	127-18-4	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/28/23 15:52	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/28/23 15:52	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/28/23 15:52	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/28/23 15:52	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/28/23 15:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/28/23 15:52	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/28/23 15:52	2037-26-5	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: FB-02-WQ-20230621 **Lab ID: 40264224021** Collected: 06/21/23 16:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 19:32	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 19:32	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 19:32	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 19:32	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 19:32	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 19:32	127-18-4	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/27/23 19:32	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 19:32	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 19:32	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 19:32	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/27/23 19:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		06/27/23 19:32	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 19:32	2037-26-5	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-9S-WG-20230621 **Lab ID: 40264224022** Collected: 06/21/23 15:35 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/29/23 18:12	123-91-1	
Surrogates									
1,3-Dioxane (S)	97	%	70-130		1		06/29/23 18:12		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 20:11	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 20:11	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 20:11	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 20:11	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 20:11	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 20:11	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 20:11	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 20:11	79-00-5	
Trichloroethene	**0.56J**	ug/L	1.0	0.32	1		06/27/23 20:11	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 20:11	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	107	%	70-130		1		06/27/23 20:11	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		06/27/23 20:11	2199-69-1	
Toluene-d8 (S)	105	%	70-130		1		06/27/23 20:11	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.624**	ng/L	2.01	0.624	1	06/30/23 11:34	07/11/23 10:35	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.755**	ng/L	2.01	0.755	1	06/30/23 11:34	07/11/23 10:35	27619-97-2	
8:2 FTS	**<0.533**	ng/L	2.01	0.533	1	06/30/23 11:34	07/11/23 10:35	39108-34-4	
9Cl-PF3ONS	**<0.453**	ng/L	2.01	0.453	1	06/30/23 11:34	07/11/23 10:35	756426-58-1	
11Cl-PF3OUdS	**<0.453**	ng/L	2.01	0.453	1	06/30/23 11:34	07/11/23 10:35	763051-92-9	
ADONA	**<0.433**	ng/L	2.01	0.433	1	06/30/23 11:34	07/11/23 10:35	919005-14-4	
Perfluorooctanesulfonamide	**<0.372**	ng/L	2.01	0.372	1	06/30/23 11:34	07/11/23 10:35	754-91-6	
HFPO-DA	**<3.36**	ng/L	10.1	3.36	1	06/30/23 11:34	07/11/23 10:35	13252-13-6	
NEtFOSA	**<0.705**	ng/L	4.03	0.705	1	06/30/23 11:34	07/11/23 10:35	4151-50-2	
NEtFOSAA	**<0.795**	ng/L	4.03	0.795	1	06/30/23 11:34	07/11/23 10:35	2991-50-6	
NEtFOSE	**<0.508**	ng/L	4.03	0.508	1	06/30/23 11:34	07/11/23 10:35	1691-99-2	
NMeFOSA	**<0.835**	ng/L	4.03	0.835	1	06/30/23 11:34	07/11/23 10:35	31506-32-8	
NMeFOSAA	**<0.453**	ng/L	4.03	0.453	1	06/30/23 11:34	07/11/23 10:35	2355-31-9	
NMeFOSE	**<0.654**	ng/L	4.03	0.654	1	06/30/23 11:34	07/11/23 10:35	24448-09-7	
Perfluorobutanoic acid	**6.78**	ng/L	2.01	0.765	1	06/30/23 11:34	07/11/23 10:35	375-22-4	
Perfluorobutanesulfonic acid	**2.66**	ng/L	2.01	0.312	1	06/30/23 11:34	07/11/23 10:35	375-73-5	
Perfluorodecanoic acid	**<0.725**	ng/L	2.01	0.725	1	06/30/23 11:34	07/11/23 10:35	335-76-2	
Perfluorododecanoic acid	**<0.654**	ng/L	2.01	0.654	1	06/30/23 11:34	07/11/23 10:35	307-55-1	
PFDoS	**<0.659**	ng/L	2.01	0.659	1	06/30/23 11:34	07/11/23 10:35	79780-39-5	
PFDS	**<0.614**	ng/L	2.01	0.614	1	06/30/23 11:34	07/11/23 10:35	335-77-3	
Perfluoroheptanoic acid	**<0.584**	ng/L	2.01	0.584	1	06/30/23 11:34	07/11/23 10:35	375-85-9	
PFHpS	**<0.614**	ng/L	2.01	0.614	1	06/30/23 11:34	07/11/23 10:35	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-9S-WG-20230621 **Lab ID: 40264224022** Collected: 06/21/23 15:35 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.473**	ng/L	2.01	0.473	1	06/30/23 11:34	07/11/23 10:35	307-24-4	
Perfluorohexanesulfonic acid	**<0.624**	ng/L	2.01	0.624	1	06/30/23 11:34	07/11/23 10:35	355-46-4	
Perfluorononanoic acid	**<0.493**	ng/L	2.01	0.493	1	06/30/23 11:34	07/11/23 10:35	375-95-1	
PFNS	**<0.876**	ng/L	2.01	0.876	1	06/30/23 11:34	07/11/23 10:35	68259-12-1	
Perfluorooctanoic acid	**4.79**	ng/L	2.01	0.423	1	06/30/23 11:34	07/11/23 10:35	335-67-1	
Perfluorooctanesulfonic acid	**3.95**	ng/L	2.01	0.382	1	06/30/23 11:34	07/11/23 10:35	1763-23-1	
Perfluoropentanoic acid	**<0.443**	ng/L	2.01	0.443	1	06/30/23 11:34	07/11/23 10:35	2706-90-3	
PFPeS	**<0.513**	ng/L	2.01	0.513	1	06/30/23 11:34	07/11/23 10:35	2706-91-4	
Perfluorotetradecanoic acid	**<0.574**	ng/L	2.01	0.574	1	06/30/23 11:34	07/11/23 10:35	376-06-7	
Perfluorotridecanoic acid	**<0.619**	ng/L	2.01	0.619	1	06/30/23 11:34	07/11/23 10:35	72629-94-8	
Perfluoroundecanoic acid	**<0.624**	ng/L	2.01	0.624	1	06/30/23 11:34	07/11/23 10:35	2058-94-8	
Surrogates									
d-NEtFOSA	0.05	%	50-150		1	06/30/23 11:34	07/11/23 10:35	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.07	%	50-150		1	06/30/23 11:34	07/11/23 10:35	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	32	%	50-150		1	06/30/23 11:34	07/11/23 10:35	2355-31-9-EI	
d5-NEtFOSAA	23	%	50-150		1	06/30/23 11:34	07/11/23 10:35	2991-50-6-EI	MSSV1 2.3
d7-NMeFOSE	0.08	%	50-150		1	06/30/23 11:34	07/11/23 10:35	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.1	%	50-150		1	06/30/23 11:34	07/11/23 10:35	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	141	%	50-150		1	06/30/23 11:34	07/11/23 10:35	757124-72-4	
M2 6:2 FTS	137	%	50-150		1	06/30/23 11:34	07/11/23 10:35	27619-97-2-	
M2 8:2 FTS	69	%	50-150		1	06/30/23 11:34	07/11/23 10:35	39108-34-4-	
M2PFHxDA	0.2	%	50-150		1	06/30/23 11:34	07/11/23 10:35	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.3	%	50-150		1	06/30/23 11:34	07/11/23 10:35	376-06-7-EI	MSSV1 2.3
M3HFPODA	73	%	50-150		1	06/30/23 11:34	07/11/23 10:35	13252-13-6-	
M3PFBS	85	%	50-150		1	06/30/23 11:34	07/11/23 10:35	375-73-5-EI	
M3PFHxS	82	%	50-150		1	06/30/23 11:34	07/11/23 10:35	355-46-4-EI	
M4PFHpA	97	%	50-150		1	06/30/23 11:34	07/11/23 10:35	375-85-9-EI	
M5PFHxA	100	%	50-150		1	06/30/23 11:34	07/11/23 10:35	307-24-4-EI	
M5PFPeA	87	%	50-150		1	06/30/23 11:34	07/11/23 10:35	2706-90-3-EI	
M6PFDA	47	%	50-150		1	06/30/23 11:34	07/11/23 10:35	335-76-2-EI	
M7PFUdA	21	%	50-150		1	06/30/23 11:34	07/11/23 10:35	2058-94-8-EI	MSSV1 2.3
M8FOSA	27	%	50-150		1	06/30/23 11:34	07/11/23 10:35	754-91-6-EI	
M8PFOA	92	%	50-150		1	06/30/23 11:34	07/11/23 10:35	335-67-1-EI	
M8PFOS	57	%	50-150		1	06/30/23 11:34	07/11/23 10:35	1763-23-1-EI	
M9PFNA	75	%	50-150		1	06/30/23 11:34	07/11/23 10:35	375-95-1-EI	
MPFBA	89	%	50-150		1	06/30/23 11:34	07/11/23 10:35	375-22-4-EI	
MPFDoA	5	%	50-150		1	06/30/23 11:34	07/11/23 10:35	307-55-1-EI	MSSV1 2.3

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1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-09-WG-20230622 **Lab ID: 40264224023** Collected: 06/22/23 08:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**0.080J**	ug/L	0.20	0.057	1		06/28/23 22:31	123-91-1	
Surrogates									
1,3-Dioxane (S)	103	%	70-130		1		06/28/23 22:31		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 20:31	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 20:31	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 20:31	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 20:31	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 20:31	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 20:31	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 20:31	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 20:31	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/27/23 20:31	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 20:31	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/27/23 20:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 20:31	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		06/27/23 20:31	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.564**	ng/L	1.82	0.564	1	06/30/23 11:34	07/11/23 10:50	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.683**	ng/L	1.82	0.683	1	06/30/23 11:34	07/11/23 10:50	27619-97-2	
8:2 FTS	**<0.482**	ng/L	1.82	0.482	1	06/30/23 11:34	07/11/23 10:50	39108-34-4	
9Cl-PF3ONS	**<0.410**	ng/L	1.82	0.410	1	06/30/23 11:34	07/11/23 10:50	756426-58-1	
11Cl-PF3OUdS	**<0.410**	ng/L	1.82	0.410	1	06/30/23 11:34	07/11/23 10:50	763051-92-9	
ADONA	**<0.391**	ng/L	1.82	0.391	1	06/30/23 11:34	07/11/23 10:50	919005-14-4	
Perfluorooctanesulfonamide	**<0.337**	ng/L	1.82	0.337	1	06/30/23 11:34	07/11/23 10:50	754-91-6	
HFPO-DA	**<3.04**	ng/L	9.10	3.04	1	06/30/23 11:34	07/11/23 10:50	13252-13-6	
NEtFOSA	**<0.637**	ng/L	3.64	0.637	1	06/30/23 11:34	07/11/23 10:50	4151-50-2	
NEtFOSAA	**<0.719**	ng/L	3.64	0.719	1	06/30/23 11:34	07/11/23 10:50	2991-50-6	
NEtFOSE	**<0.460**	ng/L	3.64	0.460	1	06/30/23 11:34	07/11/23 10:50	1691-99-2	
NMeFOSA	**<0.756**	ng/L	3.64	0.756	1	06/30/23 11:34	07/11/23 10:50	31506-32-8	
NMeFOSAA	**<0.410**	ng/L	3.64	0.410	1	06/30/23 11:34	07/11/23 10:50	2355-31-9	
NMeFOSE	**<0.592**	ng/L	3.64	0.592	1	06/30/23 11:34	07/11/23 10:50	24448-09-7	
Perfluorobutanoic acid	**1.85**	ng/L	1.82	0.692	1	06/30/23 11:34	07/11/23 10:50	375-22-4	
Perfluorobutanesulfonic acid	**2.18**	ng/L	1.82	0.282	1	06/30/23 11:34	07/11/23 10:50	375-73-5	
Perfluorodecanoic acid	**<0.655**	ng/L	1.82	0.655	1	06/30/23 11:34	07/11/23 10:50	335-76-2	
Perfluorododecanoic acid	**<0.592**	ng/L	1.82	0.592	1	06/30/23 11:34	07/11/23 10:50	307-55-1	
PFDoS	**<0.596**	ng/L	1.82	0.596	1	06/30/23 11:34	07/11/23 10:50	79780-39-5	
PFDS	**<0.555**	ng/L	1.82	0.555	1	06/30/23 11:34	07/11/23 10:50	335-77-3	
Perfluoroheptanoic acid	**<0.528**	ng/L	1.82	0.528	1	06/30/23 11:34	07/11/23 10:50	375-85-9	
PFHpS	**<0.555**	ng/L	1.82	0.555	1	06/30/23 11:34	07/11/23 10:50	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-09-WG-20230622 **Lab ID: 40264224023** Collected: 06/22/23 08:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.428**	ng/L	1.82	0.428	1	06/30/23 11:34	07/11/23 10:50	307-24-4	
Perfluorohexanesulfonic acid	**<0.564**	ng/L	1.82	0.564	1	06/30/23 11:34	07/11/23 10:50	355-46-4	
Perfluorononanoic acid	**<0.446**	ng/L	1.82	0.446	1	06/30/23 11:34	07/11/23 10:50	375-95-1	
PFNS	**<0.792**	ng/L	1.82	0.792	1	06/30/23 11:34	07/11/23 10:50	68259-12-1	
Perfluorooctanoic acid	**5.09**	ng/L	1.82	0.382	1	06/30/23 11:34	07/11/23 10:50	335-67-1	
Perfluorooctanesulfonic acid	**1.94**	ng/L	1.82	0.346	1	06/30/23 11:34	07/11/23 10:50	1763-23-1	
Perfluoropentanoic acid	**<0.401**	ng/L	1.82	0.401	1	06/30/23 11:34	07/11/23 10:50	2706-90-3	
PFPeS	**<0.464**	ng/L	1.82	0.464	1	06/30/23 11:34	07/11/23 10:50	2706-91-4	
Perfluorotetradecanoic acid	**<0.519**	ng/L	1.82	0.519	1	06/30/23 11:34	07/11/23 10:50	376-06-7	
Perfluorotridecanoic acid	**<0.560**	ng/L	1.82	0.560	1	06/30/23 11:34	07/11/23 10:50	72629-94-8	
Perfluoroundecanoic acid	**<0.564**	ng/L	1.82	0.564	1	06/30/23 11:34	07/11/23 10:50	2058-94-8	
Surrogates									
d-NEtFOSA	0.09	%	50-150		1	06/30/23 11:34	07/11/23 10:50	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	0.07	%	50-150		1	06/30/23 11:34	07/11/23 10:50	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	33	%	50-150		1	06/30/23 11:34	07/11/23 10:50	2355-31-9-EI	
d5-NEtFOSAA	22	%	50-150		1	06/30/23 11:34	07/11/23 10:50	2991-50-6-EI	MSSV1 2.3
d7-NMeFOSE	0.2	%	50-150		1	06/30/23 11:34	07/11/23 10:50	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	0.05	%	50-150		1	06/30/23 11:34	07/11/23 10:50	1691-99-2-EI	MSSV1 2.3
M2 4:2 FTS	137	%	50-150		1	06/30/23 11:34	07/11/23 10:50	757124-72-4	
M2 6:2 FTS	116	%	50-150		1	06/30/23 11:34	07/11/23 10:50	27619-97-2-	
M2 8:2 FTS	54	%	50-150		1	06/30/23 11:34	07/11/23 10:50	39108-34-4-	
M2PFHxDA	1	%	50-150		1	06/30/23 11:34	07/11/23 10:50	67905-19-5-	MSSV1 2.3
M2PFTeDA	0.6	%	50-150		1	06/30/23 11:34	07/11/23 10:50	376-06-7-EI	MSSV1 2.3
M3HFPODA	90	%	50-150		1	06/30/23 11:34	07/11/23 10:50	13252-13-6-	
M3PFBS	92	%	50-150		1	06/30/23 11:34	07/11/23 10:50	375-73-5-EI	
M3PFHxS	89	%	50-150		1	06/30/23 11:34	07/11/23 10:50	355-46-4-EI	
M4PFHpA	97	%	50-150		1	06/30/23 11:34	07/11/23 10:50	375-85-9-EI	
M5PFHxA	99	%	50-150		1	06/30/23 11:34	07/11/23 10:50	307-24-4-EI	
M5PFPeA	103	%	50-150		1	06/30/23 11:34	07/11/23 10:50	2706-90-3-EI	
M6PFDA	49	%	50-150		1	06/30/23 11:34	07/11/23 10:50	335-76-2-EI	
M7PFUdA	17	%	50-150		1	06/30/23 11:34	07/11/23 10:50	2058-94-8-EI	MSSV1 2.3
M8FOSA	8	%	50-150		1	06/30/23 11:34	07/11/23 10:50	754-91-6-EI	MSSV1 2.3
M8PFOA	94	%	50-150		1	06/30/23 11:34	07/11/23 10:50	335-67-1-EI	
M8PFOS	66	%	50-150		1	06/30/23 11:34	07/11/23 10:50	1763-23-1-EI	
M9PFNA	79	%	50-150		1	06/30/23 11:34	07/11/23 10:50	375-95-1-EI	
MPFBA	92	%	50-150		1	06/30/23 11:34	07/11/23 10:50	375-22-4-EI	
MPFDoA	2	%	50-150		1	06/30/23 11:34	07/11/23 10:50	307-55-1-EI	MSSV1 2.3

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-15S-WG-20230622 **Lab ID: 40264224024** Collected: 06/22/23 09:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/28/23 22:50	123-91-1	
Surrogates									
1,3-Dioxane (S)	101	%	70-130		1		06/28/23 22:50		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 20:50	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 20:50	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 20:50	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 20:50	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 20:50	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 20:50	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 20:50	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 20:50	79-00-5	
Trichloroethene	**1.7**	ug/L	1.0	0.32	1		06/27/23 20:50	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 20:50	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	109	%	70-130		1		06/27/23 20:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 20:50	2199-69-1	
Toluene-d8 (S)	106	%	70-130		1		06/27/23 20:50	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.583**	ng/L	1.88	0.583	1	06/30/23 11:34	07/11/23 11:06	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.705**	ng/L	1.88	0.705	1	06/30/23 11:34	07/11/23 11:06	27619-97-2	
8:2 FTS	**<0.498**	ng/L	1.88	0.498	1	06/30/23 11:34	07/11/23 11:06	39108-34-4	
9Cl-PF3ONS	**<0.423**	ng/L	1.88	0.423	1	06/30/23 11:34	07/11/23 11:06	756426-58-1	
11Cl-PF3OUdS	**<0.423**	ng/L	1.88	0.423	1	06/30/23 11:34	07/11/23 11:06	763051-92-9	
ADONA	**<0.404**	ng/L	1.88	0.404	1	06/30/23 11:34	07/11/23 11:06	919005-14-4	
Perfluorooctanesulfonamide	**<0.348**	ng/L	1.88	0.348	1	06/30/23 11:34	07/11/23 11:06	754-91-6	
HFPO-DA	**<3.13**	ng/L	9.40	3.13	1	06/30/23 11:34	07/11/23 11:06	13252-13-6	
NEtFOSA	**<0.658**	ng/L	3.76	0.658	1	06/30/23 11:34	07/11/23 11:06	4151-50-2	
NEtFOSAA	**<0.742**	ng/L	3.76	0.742	1	06/30/23 11:34	07/11/23 11:06	2991-50-6	
NEtFOSE	**<0.475**	ng/L	3.76	0.475	1	06/30/23 11:34	07/11/23 11:06	1691-99-2	
NMeFOSA	**<0.780**	ng/L	3.76	0.780	1	06/30/23 11:34	07/11/23 11:06	31506-32-8	
NMeFOSAA	**<0.423**	ng/L	3.76	0.423	1	06/30/23 11:34	07/11/23 11:06	2355-31-9	
NMeFOSE	**<0.611**	ng/L	3.76	0.611	1	06/30/23 11:34	07/11/23 11:06	24448-09-7	
Perfluorobutanoic acid	**4.32**	ng/L	1.88	0.714	1	06/30/23 11:34	07/11/23 11:06	375-22-4	
Perfluorobutanesulfonic acid	**<0.291**	ng/L	1.88	0.291	1	06/30/23 11:34	07/11/23 11:06	375-73-5	
Perfluorodecanoic acid	**<0.677**	ng/L	1.88	0.677	1	06/30/23 11:34	07/11/23 11:06	335-76-2	
Perfluorododecanoic acid	**<0.611**	ng/L	1.88	0.611	1	06/30/23 11:34	07/11/23 11:06	307-55-1	
PFDoS	**<0.616**	ng/L	1.88	0.616	1	06/30/23 11:34	07/11/23 11:06	79780-39-5	
PFDS	**<0.573**	ng/L	1.88	0.573	1	06/30/23 11:34	07/11/23 11:06	335-77-3	
Perfluoroheptanoic acid	**4.50**	ng/L	1.88	0.545	1	06/30/23 11:34	07/11/23 11:06	375-85-9	
PFHpS	**<0.573**	ng/L	1.88	0.573	1	06/30/23 11:34	07/11/23 11:06	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-15S-WG-20230622 **Lab ID: 40264224024** Collected: 06/22/23 09:25 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**3.39**	ng/L	1.88	0.442	1	06/30/23 11:34	07/11/23 11:06	307-24-4	
Perfluorohexanesulfonic acid	**<0.583**	ng/L	1.88	0.583	1	06/30/23 11:34	07/11/23 11:06	355-46-4	
Perfluorononanoic acid	**<0.460**	ng/L	1.88	0.460	1	06/30/23 11:34	07/11/23 11:06	375-95-1	
PFNS	**<0.818**	ng/L	1.88	0.818	1	06/30/23 11:34	07/11/23 11:06	68259-12-1	
Perfluorooctanoic acid	**101**	ng/L	1.88	0.395	1	06/30/23 11:34	07/11/23 11:06	335-67-1	
Perfluorooctanesulfonic acid	**3.79**	ng/L	1.88	0.357	1	06/30/23 11:34	07/11/23 11:06	1763-23-1	
Perfluoropentanoic acid	**2.62**	ng/L	1.88	0.413	1	06/30/23 11:34	07/11/23 11:06	2706-90-3	
PFPeS	**<0.479**	ng/L	1.88	0.479	1	06/30/23 11:34	07/11/23 11:06	2706-91-4	
Perfluorotetradecanoic acid	**<0.536**	ng/L	1.88	0.536	1	06/30/23 11:34	07/11/23 11:06	376-06-7	
Perfluorotridecanoic acid	**<0.578**	ng/L	1.88	0.578	1	06/30/23 11:34	07/11/23 11:06	72629-94-8	
Perfluoroundecanoic acid	**<0.583**	ng/L	1.88	0.583	1	06/30/23 11:34	07/11/23 11:06	2058-94-8	
Surrogates									
d-NEtFOSA	0.9	%	50-150		1	06/30/23 11:34	07/11/23 11:06	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	2	%	50-150		1	06/30/23 11:34	07/11/23 11:06	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	94	%	50-150		1	06/30/23 11:34	07/11/23 11:06	2355-31-9-EI	
d5-NEtFOSAA	89	%	50-150		1	06/30/23 11:34	07/11/23 11:06	2991-50-6-EI	
d7-NMeFOSE	14	%	50-150		1	06/30/23 11:34	07/11/23 11:06	24448-09-7-	
d9-NEtFOSE	11	%	50-150		1	06/30/23 11:34	07/11/23 11:06	1691-99-2-EI	
M2 4:2 FTS	157	%	50-150		1	06/30/23 11:34	07/11/23 11:06	757124-72-4	MSSV1 2.5
M2 6:2 FTS	149	%	50-150		1	06/30/23 11:34	07/11/23 11:06	27619-97-2-	
M2 8:2 FTS	115	%	50-150		1	06/30/23 11:34	07/11/23 11:06	39108-34-4-	
M2PFHxDA	4	%	50-150		1	06/30/23 11:34	07/11/23 11:06	67905-19-5-	MSSV1 2.3
M2PFTeDA	30	%	50-150		1	06/30/23 11:34	07/11/23 11:06	376-06-7-EI	
M3HFPODA	96	%	50-150		1	06/30/23 11:34	07/11/23 11:06	13252-13-6-	
M3PFBS	98	%	50-150		1	06/30/23 11:34	07/11/23 11:06	375-73-5-EI	
M3PFHxS	97	%	50-150		1	06/30/23 11:34	07/11/23 11:06	355-46-4-EI	
M4PFHpA	110	%	50-150		1	06/30/23 11:34	07/11/23 11:06	375-85-9-EI	
M5PFHxA	113	%	50-150		1	06/30/23 11:34	07/11/23 11:06	307-24-4-EI	
M5PFPeA	106	%	50-150		1	06/30/23 11:34	07/11/23 11:06	2706-90-3-EI	
M6PFDA	100	%	50-150		1	06/30/23 11:34	07/11/23 11:06	335-76-2-EI	
M7PFUdA	92	%	50-150		1	06/30/23 11:34	07/11/23 11:06	2058-94-8-EI	
M8FOSA	46	%	50-150		1	06/30/23 11:34	07/11/23 11:06	754-91-6-EI	
M8PFOA	108	%	50-150		1	06/30/23 11:34	07/11/23 11:06	335-67-1-EI	
M8PFOS	95	%	50-150		1	06/30/23 11:34	07/11/23 11:06	1763-23-1-EI	
M9PFNA	108	%	50-150		1	06/30/23 11:34	07/11/23 11:06	375-95-1-EI	
MPFBA	102	%	50-150		1	06/30/23 11:34	07/11/23 11:06	375-22-4-EI	
MPFDoA	75	%	50-150		1	06/30/23 11:34	07/11/23 11:06	307-55-1-EI	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-17S-WG-20230622 **Lab ID: 40264224025** Collected: 06/22/23 08:45 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082A GCS PCB	Analytical Method: EPA 8082A Preparation Method: EPA 3510								
	Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<0.11**	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.11**	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.11**	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.11**	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.11**	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.11**	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.11**	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	11096-82-5	
PCB, Total	**<0.11**	ug/L	0.48	0.11	1	06/27/23 13:44	06/28/23 07:18	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	92	%	20-128		1	06/27/23 13:44	06/28/23 07:18	877-09-8	
Decachlorobiphenyl (S)	79	%	10-120		1	06/27/23 13:44	06/28/23 07:18	2051-24-3	
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM)								
	Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/28/23 23:09	123-91-1	
Surrogates									
1,3-Dioxane (S)	102	%	70-130		1		06/28/23 23:09		
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 12:36	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 12:36	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 12:36	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 12:36	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 12:36	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 12:36	127-18-4	
Trichloroethene	**2.0**	ug/L	1.0	0.32	1		06/27/23 12:36	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 12:36	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 12:36	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 12:36	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/27/23 12:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	104	%	70-130		1		06/27/23 12:36	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 12:36	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD								
	Pace Analytical Gulf Coast								
4:2 FTS	**<0.583**	ng/L	1.88	0.583	1	07/01/23 11:00	07/11/23 00:06	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.705**	ng/L	1.88	0.705	1	07/01/23 11:00	07/11/23 00:06	27619-97-2	
8:2 FTS	**<0.498**	ng/L	1.88	0.498	1	07/01/23 11:00	07/11/23 00:06	39108-34-4	
9Cl-PF3ONS	**<0.423**	ng/L	1.88	0.423	1	07/01/23 11:00	07/11/23 00:06	756426-58-1	
11Cl-PF3OUdS	**<0.423**	ng/L	1.88	0.423	1	07/01/23 11:00	07/11/23 00:06	763051-92-9	
ADONA	**<0.404**	ng/L	1.88	0.404	1	07/01/23 11:00	07/11/23 00:06	919005-14-4	
Perfluorooctanesulfonamide	**<0.348**	ng/L	1.88	0.348	1	07/01/23 11:00	07/11/23 00:06	754-91-6	
HFPO-DA	**<3.13**	ng/L	9.40	3.13	1	07/01/23 11:00	07/11/23 00:06	13252-13-6	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-17S-WG-20230622 **Lab ID: 40264224025** Collected: 06/22/23 08:45 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
NEtFOSA	**<0.658**	ng/L	3.76	0.658	1	07/01/23 11:00	07/11/23 00:06	4151-50-2	
NEtFOSAA	**<0.742**	ng/L	3.76	0.742	1	07/01/23 11:00	07/11/23 00:06	2991-50-6	
NEtFOSE	**<0.475**	ng/L	3.76	0.475	1	07/01/23 11:00	07/11/23 00:06	1691-99-2	
NMeFOSA	**<0.780**	ng/L	3.76	0.780	1	07/01/23 11:00	07/11/23 00:06	31506-32-8	
NMeFOSAA	**<0.423**	ng/L	3.76	0.423	1	07/01/23 11:00	07/11/23 00:06	2355-31-9	
NMeFOSE	**<0.611**	ng/L	3.76	0.611	1	07/01/23 11:00	07/11/23 00:06	24448-09-7	
Perfluorobutanoic acid	**4.36**	ng/L	1.88	0.714	1	07/01/23 11:00	07/11/23 00:06	375-22-4	
Perfluorobutanesulfonic acid	**37.8**	ng/L	1.88	0.291	1	07/01/23 11:00	07/11/23 00:06	375-73-5	
Perfluorodecanoic acid	**<0.677**	ng/L	1.88	0.677	1	07/01/23 11:00	07/11/23 00:06	335-76-2	
Perfluorododecanoic acid	**<0.611**	ng/L	1.88	0.611	1	07/01/23 11:00	07/11/23 00:06	307-55-1	
PFDoS	**<0.616**	ng/L	1.88	0.616	1	07/01/23 11:00	07/11/23 00:06	79780-39-5	
PFDS	**<0.573**	ng/L	1.88	0.573	1	07/01/23 11:00	07/11/23 00:06	335-77-3	
Perfluoroheptanoic acid	**2.80**	ng/L	1.88	0.545	1	07/01/23 11:00	07/11/23 00:06	375-85-9	
PFHpS	**<0.573**	ng/L	1.88	0.573	1	07/01/23 11:00	07/11/23 00:06	375-92-8	
Perfluorohexanoic acid	**4.17**	ng/L	1.88	0.442	1	07/01/23 11:00	07/11/23 00:06	307-24-4	
Perfluorohexanesulfonic acid	**9.80**	ng/L	1.88	0.583	1	07/01/23 11:00	07/11/23 00:06	355-46-4	
Perfluorononanoic acid	**<0.460**	ng/L	1.88	0.460	1	07/01/23 11:00	07/11/23 00:06	375-95-1	
PFNS	**<0.818**	ng/L	1.88	0.818	1	07/01/23 11:00	07/11/23 00:06	68259-12-1	
Perfluorooctanoic acid	**16.3**	ng/L	1.88	0.395	1	07/01/23 11:00	07/11/23 00:06	335-67-1	
Perfluorooctanesulfonic acid	**2.81**	ng/L	1.88	0.357	1	07/01/23 11:00	07/11/23 00:06	1763-23-1	
Perfluoropentanoic acid	**5.31**	ng/L	1.88	0.413	1	07/01/23 11:00	07/11/23 00:06	2706-90-3	
PFPeS	**<0.479**	ng/L	1.88	0.479	1	07/01/23 11:00	07/11/23 00:06	2706-91-4	
Perfluorotetradecanoic acid	**<0.536**	ng/L	1.88	0.536	1	07/01/23 11:00	07/11/23 00:06	376-06-7	
Perfluorotridecanoic acid	**<0.578**	ng/L	1.88	0.578	1	07/01/23 11:00	07/11/23 00:06	72629-94-8	
Perfluoroundecanoic acid	**<0.583**	ng/L	1.88	0.583	1	07/01/23 11:00	07/11/23 00:06	2058-94-8	
Surrogates									
d-NEtFOSA	46	%	50-150		1	07/01/23 11:00	07/11/23 00:06	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	50	%	50-150		1	07/01/23 11:00	07/11/23 00:06	31506-32-8-	
d3-NMeFOSAA	92	%	50-150		1	07/01/23 11:00	07/11/23 00:06	2355-31-9-EI	
d5-NEtFOSAA	88	%	50-150		1	07/01/23 11:00	07/11/23 00:06	2991-50-6-EI	
d7-NMeFOSE	79	%	50-150		1	07/01/23 11:00	07/11/23 00:06	24448-09-7-	
d9-NEtFOSE	78	%	50-150		1	07/01/23 11:00	07/11/23 00:06	1691-99-2-EI	
M2 4:2 FTS	154	%	50-150		1	07/01/23 11:00	07/11/23 00:06	757124-72-4	MSSV1 2.5
M2 6:2 FTS	144	%	50-150		1	07/01/23 11:00	07/11/23 00:06	27619-97-2-	
M2 8:2 FTS	130	%	50-150		1	07/01/23 11:00	07/11/23 00:06	39108-34-4-	
M2PFHxDA	80	%	50-150		1	07/01/23 11:00	07/11/23 00:06	67905-19-5-	
M2PFTeDA	77	%	50-150		1	07/01/23 11:00	07/11/23 00:06	376-06-7-EI	
M3HFPODA	67	%	50-150		1	07/01/23 11:00	07/11/23 00:06	13252-13-6-	
M3PFBS	84	%	50-150		1	07/01/23 11:00	07/11/23 00:06	375-73-5-EI	
M3PFHxS	88	%	50-150		1	07/01/23 11:00	07/11/23 00:06	355-46-4-EI	
M4PFHpA	96	%	50-150		1	07/01/23 11:00	07/11/23 00:06	375-85-9-EI	
M5PFHxA	95	%	50-150		1	07/01/23 11:00	07/11/23 00:06	307-24-4-EI	
M5PFPeA	77	%	50-150		1	07/01/23 11:00	07/11/23 00:06	2706-90-3-EI	
M6PFDA	98	%	50-150		1	07/01/23 11:00	07/11/23 00:06	335-76-2-EI	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-17S-WG-20230622 **Lab ID: 40264224025** Collected: 06/22/23 08:45 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M7PFUdA	93	%	50-150		1	07/01/23 11:00	07/11/23 00:06	2058-94-8-EI	
M8FOSA	91	%	50-150		1	07/01/23 11:00	07/11/23 00:06	754-91-6-EI	
M8PFOA	98	%	50-150		1	07/01/23 11:00	07/11/23 00:06	335-67-1-EI	
M8PFOS	89	%	50-150		1	07/01/23 11:00	07/11/23 00:06	1763-23-1-EI	
M9PFNA	101	%	50-150		1	07/01/23 11:00	07/11/23 00:06	375-95-1-EI	
MPFBA	85	%	50-150		1	07/01/23 11:00	07/11/23 00:06	375-22-4-EI	
MPFDoA	86	%	50-150		1	07/01/23 11:00	07/11/23 00:06	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-14S-WG-20230622 **Lab ID: 40264224026** Collected: 06/22/23 10:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/28/23 23:28	123-91-1	
Surrogates									
1,3-Dioxane (S)	102	%	70-130		1		06/28/23 23:28		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 12:56	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 12:56	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 12:56	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 12:56	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 12:56	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 12:56	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 12:56	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 12:56	79-00-5	
Trichloroethene	**1.2**	ug/L	1.0	0.32	1		06/27/23 12:56	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 12:56	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/27/23 12:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 12:56	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 12:56	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.567**	ng/L	1.83	0.567	1	07/01/23 11:00	07/11/23 00:21	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.686**	ng/L	1.83	0.686	1	07/01/23 11:00	07/11/23 00:21	27619-97-2	
8:2 FTS	**<0.485**	ng/L	1.83	0.485	1	07/01/23 11:00	07/11/23 00:21	39108-34-4	
9Cl-PF3ONS	**<0.412**	ng/L	1.83	0.412	1	07/01/23 11:00	07/11/23 00:21	756426-58-1	
11Cl-PF3OUdS	**<0.412**	ng/L	1.83	0.412	1	07/01/23 11:00	07/11/23 00:21	763051-92-9	
ADONA	**<0.393**	ng/L	1.83	0.393	1	07/01/23 11:00	07/11/23 00:21	919005-14-4	
Perfluorooctanesulfonamide	**<0.338**	ng/L	1.83	0.338	1	07/01/23 11:00	07/11/23 00:21	754-91-6	
HFPO-DA	**<3.05**	ng/L	9.15	3.05	1	07/01/23 11:00	07/11/23 00:21	13252-13-6	
NEtFOSA	**<0.640**	ng/L	3.66	0.640	1	07/01/23 11:00	07/11/23 00:21	4151-50-2	
NEtFOSAA	**<0.723**	ng/L	3.66	0.723	1	07/01/23 11:00	07/11/23 00:21	2991-50-6	
NEtFOSE	**<0.462**	ng/L	3.66	0.462	1	07/01/23 11:00	07/11/23 00:21	1691-99-2	
NMeFOSA	**<0.759**	ng/L	3.66	0.759	1	07/01/23 11:00	07/11/23 00:21	31506-32-8	
NMeFOSAA	**<0.412**	ng/L	3.66	0.412	1	07/01/23 11:00	07/11/23 00:21	2355-31-9	
NMeFOSE	**<0.595**	ng/L	3.66	0.595	1	07/01/23 11:00	07/11/23 00:21	24448-09-7	
Perfluorobutanoic acid	**4.43**	ng/L	1.83	0.695	1	07/01/23 11:00	07/11/23 00:21	375-22-4	
Perfluorobutanesulfonic acid	**5.32**	ng/L	1.83	0.284	1	07/01/23 11:00	07/11/23 00:21	375-73-5	
Perfluorodecanoic acid	**<0.659**	ng/L	1.83	0.659	1	07/01/23 11:00	07/11/23 00:21	335-76-2	
Perfluorododecanoic acid	**<0.595**	ng/L	1.83	0.595	1	07/01/23 11:00	07/11/23 00:21	307-55-1	
PFDoS	**<0.599**	ng/L	1.83	0.599	1	07/01/23 11:00	07/11/23 00:21	79780-39-5	
PFDS	**<0.558**	ng/L	1.83	0.558	1	07/01/23 11:00	07/11/23 00:21	335-77-3	
Perfluoroheptanoic acid	**<0.530**	ng/L	1.83	0.530	1	07/01/23 11:00	07/11/23 00:21	375-85-9	
PFHpS	**<0.558**	ng/L	1.83	0.558	1	07/01/23 11:00	07/11/23 00:21	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-14S-WG-20230622 **Lab ID: 40264224026** Collected: 06/22/23 10:30 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**2.05**	ng/L	1.83	0.430	1	07/01/23 11:00	07/11/23 00:21	307-24-4	
Perfluorohexanesulfonic acid	**<0.567**	ng/L	1.83	0.567	1	07/01/23 11:00	07/11/23 00:21	355-46-4	
Perfluorononanoic acid	**<0.448**	ng/L	1.83	0.448	1	07/01/23 11:00	07/11/23 00:21	375-95-1	
PFNS	**<0.796**	ng/L	1.83	0.796	1	07/01/23 11:00	07/11/23 00:21	68259-12-1	
Perfluorooctanoic acid	**57.7**	ng/L	1.83	0.384	1	07/01/23 11:00	07/11/23 00:21	335-67-1	
Perfluorooctanesulfonic acid	**<0.348**	ng/L	1.83	0.348	1	07/01/23 11:00	07/11/23 00:21	1763-23-1	
Perfluoropentanoic acid	**2.31**	ng/L	1.83	0.402	1	07/01/23 11:00	07/11/23 00:21	2706-90-3	
PFPeS	**<0.466**	ng/L	1.83	0.466	1	07/01/23 11:00	07/11/23 00:21	2706-91-4	
Perfluorotetradecanoic acid	**<0.521**	ng/L	1.83	0.521	1	07/01/23 11:00	07/11/23 00:21	376-06-7	
Perfluorotridecanoic acid	**<0.563**	ng/L	1.83	0.563	1	07/01/23 11:00	07/11/23 00:21	72629-94-8	
Perfluoroundecanoic acid	**<0.567**	ng/L	1.83	0.567	1	07/01/23 11:00	07/11/23 00:21	2058-94-8	
Surrogates									
d-NEtFOSA	43	%	50-150		1	07/01/23 11:00	07/11/23 00:21	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	48	%	50-150		1	07/01/23 11:00	07/11/23 00:21	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	92	%	50-150		1	07/01/23 11:00	07/11/23 00:21	2355-31-9-EI	
d5-NEtFOSAA	94	%	50-150		1	07/01/23 11:00	07/11/23 00:21	2991-50-6-EI	
d7-NMeFOSE	78	%	50-150		1	07/01/23 11:00	07/11/23 00:21	24448-09-7-	
d9-NEtFOSE	75	%	50-150		1	07/01/23 11:00	07/11/23 00:21	1691-99-2-EI	
M2 4:2 FTS	165	%	50-150		1	07/01/23 11:00	07/11/23 00:21	757124-72-4	MSSV1 2.5
M2 6:2 FTS	141	%	50-150		1	07/01/23 11:00	07/11/23 00:21	27619-97-2-	
M2 8:2 FTS	138	%	50-150		1	07/01/23 11:00	07/11/23 00:21	39108-34-4-	
M2PFHxDA	41	%	50-150		1	07/01/23 11:00	07/11/23 00:21	67905-19-5-	MSSV1 2.7
M2PFTeDA	68	%	50-150		1	07/01/23 11:00	07/11/23 00:21	376-06-7-EI	
M3HFPODA	56	%	50-150		1	07/01/23 11:00	07/11/23 00:21	13252-13-6-	
M3PFBS	75	%	50-150		1	07/01/23 11:00	07/11/23 00:21	375-73-5-EI	
M3PFHxS	83	%	50-150		1	07/01/23 11:00	07/11/23 00:21	355-46-4-EI	
M4PFHpA	92	%	50-150		1	07/01/23 11:00	07/11/23 00:21	375-85-9-EI	
M5PFHxA	84	%	50-150		1	07/01/23 11:00	07/11/23 00:21	307-24-4-EI	
M5PFPeA	59	%	50-150		1	07/01/23 11:00	07/11/23 00:21	2706-90-3-EI	
M6PFDA	98	%	50-150		1	07/01/23 11:00	07/11/23 00:21	335-76-2-EI	
M7PFUdA	92	%	50-150		1	07/01/23 11:00	07/11/23 00:21	2058-94-8-EI	
M8FOSA	89	%	50-150		1	07/01/23 11:00	07/11/23 00:21	754-91-6-EI	
M8PFOA	97	%	50-150		1	07/01/23 11:00	07/11/23 00:21	335-67-1-EI	
M8PFOS	89	%	50-150		1	07/01/23 11:00	07/11/23 00:21	1763-23-1-EI	
M9PFNA	100	%	50-150		1	07/01/23 11:00	07/11/23 00:21	375-95-1-EI	
MPFBA	72	%	50-150		1	07/01/23 11:00	07/11/23 00:21	375-22-4-EI	
MPFDoA	83	%	50-150		1	07/01/23 11:00	07/11/23 00:21	307-55-1-EI	

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-20S-WG-20230622 **Lab ID: 40264224027** Collected: 06/22/23 11:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/29/23 10:55	123-91-1	
Surrogates									
1,3-Dioxane (S)	95	%	70-130		1		06/29/23 10:55		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 09:38	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 09:38	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 09:38	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 09:38	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 09:38	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 09:38	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 09:38	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 09:38	79-00-5	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/27/23 09:38	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 09:38	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/27/23 09:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		06/27/23 09:38	2199-69-1	
Toluene-d8 (S)	106	%	70-130		1		06/27/23 09:38	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.574**	ng/L	1.85	0.574	1	07/01/23 11:00	07/11/23 00:36	757124-72-4	
6:2 Fluorotelomer sulfonate	**2.19**	ng/L	1.85	0.694	1	07/01/23 11:00	07/11/23 00:36	27619-97-2	
8:2 FTS	**<0.491**	ng/L	1.85	0.491	1	07/01/23 11:00	07/11/23 00:36	39108-34-4	
9Cl-PF3ONS	**<0.416**	ng/L	1.85	0.416	1	07/01/23 11:00	07/11/23 00:36	756426-58-1	
11Cl-PF3OUdS	**<0.416**	ng/L	1.85	0.416	1	07/01/23 11:00	07/11/23 00:36	763051-92-9	
ADONA	**<0.398**	ng/L	1.85	0.398	1	07/01/23 11:00	07/11/23 00:36	919005-14-4	
Perfluorooctanesulfonamide	**<0.342**	ng/L	1.85	0.342	1	07/01/23 11:00	07/11/23 00:36	754-91-6	
HFPO-DA	**<3.09**	ng/L	9.26	3.09	1	07/01/23 11:00	07/11/23 00:36	13252-13-6	
NEtFOSA	**<0.648**	ng/L	3.70	0.648	1	07/01/23 11:00	07/11/23 00:36	4151-50-2	
NEtFOSAA	**<0.731**	ng/L	3.70	0.731	1	07/01/23 11:00	07/11/23 00:36	2991-50-6	
NEtFOSE	**<0.467**	ng/L	3.70	0.467	1	07/01/23 11:00	07/11/23 00:36	1691-99-2	
NMeFOSA	**<0.768**	ng/L	3.70	0.768	1	07/01/23 11:00	07/11/23 00:36	31506-32-8	
NMeFOSAA	**<0.416**	ng/L	3.70	0.416	1	07/01/23 11:00	07/11/23 00:36	2355-31-9	
NMeFOSE	**<0.602**	ng/L	3.70	0.602	1	07/01/23 11:00	07/11/23 00:36	24448-09-7	
Perfluorobutanoic acid	**8.32**	ng/L	1.85	0.703	1	07/01/23 11:00	07/11/23 00:36	375-22-4	
Perfluorobutanesulfonic acid	**4.09**	ng/L	1.85	0.287	1	07/01/23 11:00	07/11/23 00:36	375-73-5	
Perfluorodecanoic acid	**<0.666**	ng/L	1.85	0.666	1	07/01/23 11:00	07/11/23 00:36	335-76-2	
Perfluorododecanoic acid	**<0.602**	ng/L	1.85	0.602	1	07/01/23 11:00	07/11/23 00:36	307-55-1	
PFDoS	**<0.606**	ng/L	1.85	0.606	1	07/01/23 11:00	07/11/23 00:36	79780-39-5	
PFDS	**<0.565**	ng/L	1.85	0.565	1	07/01/23 11:00	07/11/23 00:36	335-77-3	
Perfluoroheptanoic acid	**3.06**	ng/L	1.85	0.537	1	07/01/23 11:00	07/11/23 00:36	375-85-9	
PFHpS	**<0.565**	ng/L	1.85	0.565	1	07/01/23 11:00	07/11/23 00:36	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-20S-WG-20230622 **Lab ID: 40264224027** Collected: 06/22/23 11:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**3.30**	ng/L	1.85	0.435	1	07/01/23 11:00	07/11/23 00:36	307-24-4	
Perfluorohexanesulfonic acid	**5.94**	ng/L	1.85	0.574	1	07/01/23 11:00	07/11/23 00:36	355-46-4	
Perfluorononanoic acid	**<0.454**	ng/L	1.85	0.454	1	07/01/23 11:00	07/11/23 00:36	375-95-1	
PFNS	**<0.805**	ng/L	1.85	0.805	1	07/01/23 11:00	07/11/23 00:36	68259-12-1	
Perfluorooctanoic acid	**24.4**	ng/L	1.85	0.389	1	07/01/23 11:00	07/11/23 00:36	335-67-1	
Perfluorooctanesulfonic acid	**14.8**	ng/L	1.85	0.352	1	07/01/23 11:00	07/11/23 00:36	1763-23-1	
Perfluoropentanoic acid	**3.13**	ng/L	1.85	0.407	1	07/01/23 11:00	07/11/23 00:36	2706-90-3	
PFPeS	**<0.472**	ng/L	1.85	0.472	1	07/01/23 11:00	07/11/23 00:36	2706-91-4	
Perfluorotetradecanoic acid	**<0.528**	ng/L	1.85	0.528	1	07/01/23 11:00	07/11/23 00:36	376-06-7	
Perfluorotridecanoic acid	**<0.569**	ng/L	1.85	0.569	1	07/01/23 11:00	07/11/23 00:36	72629-94-8	
Perfluoroundecanoic acid	**<0.574**	ng/L	1.85	0.574	1	07/01/23 11:00	07/11/23 00:36	2058-94-8	
Surrogates									
d-NEtFOSA	60	%	50-150		1	07/01/23 11:00	07/11/23 00:36	4151-50-2-EI	
d-NMeFOSA	65	%	50-150		1	07/01/23 11:00	07/11/23 00:36	31506-32-8-	
d3-NMeFOSAA	86	%	50-150		1	07/01/23 11:00	07/11/23 00:36	2355-31-9-EI	
d5-NEtFOSAA	86	%	50-150		1	07/01/23 11:00	07/11/23 00:36	2991-50-6-EI	
d7-NMeFOSE	83	%	50-150		1	07/01/23 11:00	07/11/23 00:36	24448-09-7-	
d9-NEtFOSE	84	%	50-150		1	07/01/23 11:00	07/11/23 00:36	1691-99-2-EI	
M2 4:2 FTS	130	%	50-150		1	07/01/23 11:00	07/11/23 00:36	757124-72-4	
M2 6:2 FTS	117	%	50-150		1	07/01/23 11:00	07/11/23 00:36	27619-97-2-	
M2 8:2 FTS	100	%	50-150		1	07/01/23 11:00	07/11/23 00:36	39108-34-4-	
M2PFHxDA	95	%	50-150		1	07/01/23 11:00	07/11/23 00:36	67905-19-5-	
M2PFTeDA	83	%	50-150		1	07/01/23 11:00	07/11/23 00:36	376-06-7-EI	
M3HFPODA	87	%	50-150		1	07/01/23 11:00	07/11/23 00:36	13252-13-6-	
M3PFBS	90	%	50-150		1	07/01/23 11:00	07/11/23 00:36	375-73-5-EI	
M3PFHxS	91	%	50-150		1	07/01/23 11:00	07/11/23 00:36	355-46-4-EI	
M4PFHpA	94	%	50-150		1	07/01/23 11:00	07/11/23 00:36	375-85-9-EI	
M5PFHxA	96	%	50-150		1	07/01/23 11:00	07/11/23 00:36	307-24-4-EI	
M5PFPeA	97	%	50-150		1	07/01/23 11:00	07/11/23 00:36	2706-90-3-EI	
M6PFDA	96	%	50-150		1	07/01/23 11:00	07/11/23 00:36	335-76-2-EI	
M7PFUdA	94	%	50-150		1	07/01/23 11:00	07/11/23 00:36	2058-94-8-EI	
M8FOSA	89	%	50-150		1	07/01/23 11:00	07/11/23 00:36	754-91-6-EI	
M8PFOA	98	%	50-150		1	07/01/23 11:00	07/11/23 00:36	335-67-1-EI	
M8PFOS	91	%	50-150		1	07/01/23 11:00	07/11/23 00:36	1763-23-1-EI	
M9PFNA	97	%	50-150		1	07/01/23 11:00	07/11/23 00:36	375-95-1-EI	
MPFBA	90	%	50-150		1	07/01/23 11:00	07/11/23 00:36	375-22-4-EI	
MPFDoA	87	%	50-150		1	07/01/23 11:00	07/11/23 00:36	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-15D-WG-20230622 **Lab ID: 40264224028** Collected: 06/22/23 12:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**5.3**	ug/L	0.20	0.057	1		06/29/23 11:14	123-91-1	
Surrogates									
1,3-Dioxane (S)	92	%	70-130		1		06/29/23 11:14		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 09:58	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 09:58	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 09:58	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 09:58	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 09:58	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 09:58	127-18-4	
Trichloroethene	**1.6**	ug/L	1.0	0.32	1		06/27/23 09:58	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 09:58	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 09:58	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 09:58	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/27/23 09:58	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	70-130		1		06/27/23 09:58	2199-69-1	
Toluene-d8 (S)	109	%	70-130		1		06/27/23 09:58	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.600**	ng/L	1.94	0.600	1	07/01/23 11:00	07/11/23 00:52	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.726**	ng/L	1.94	0.726	1	07/01/23 11:00	07/11/23 00:52	27619-97-2	
8:2 FTS	**<0.513**	ng/L	1.94	0.513	1	07/01/23 11:00	07/11/23 00:52	39108-34-4	
9Cl-PF3ONS	**<0.436**	ng/L	1.94	0.436	1	07/01/23 11:00	07/11/23 00:52	756426-58-1	
11Cl-PF3OUdS	**<0.436**	ng/L	1.94	0.436	1	07/01/23 11:00	07/11/23 00:52	763051-92-9	
ADONA	**<0.416**	ng/L	1.94	0.416	1	07/01/23 11:00	07/11/23 00:52	919005-14-4	
Perfluorooctanesulfonamide	**<0.358**	ng/L	1.94	0.358	1	07/01/23 11:00	07/11/23 00:52	754-91-6	
HFPO-DA	**<3.23**	ng/L	9.68	3.23	1	07/01/23 11:00	07/11/23 00:52	13252-13-6	
NEtFOSA	**<0.677**	ng/L	3.87	0.677	1	07/01/23 11:00	07/11/23 00:52	4151-50-2	
NEtFOSAA	**<0.765**	ng/L	3.87	0.765	1	07/01/23 11:00	07/11/23 00:52	2991-50-6	
NEtFOSE	**<0.489**	ng/L	3.87	0.489	1	07/01/23 11:00	07/11/23 00:52	1691-99-2	
NMeFOSA	**<0.803**	ng/L	3.87	0.803	1	07/01/23 11:00	07/11/23 00:52	31506-32-8	
NMeFOSAA	**<0.436**	ng/L	3.87	0.436	1	07/01/23 11:00	07/11/23 00:52	2355-31-9	
NMeFOSE	**<0.629**	ng/L	3.87	0.629	1	07/01/23 11:00	07/11/23 00:52	24448-09-7	
Perfluorobutanoic acid	**<0.736**	ng/L	1.94	0.736	1	07/01/23 11:00	07/11/23 00:52	375-22-4	
Perfluorobutanesulfonic acid	**<0.300**	ng/L	1.94	0.300	1	07/01/23 11:00	07/11/23 00:52	375-73-5	
Perfluorodecanoic acid	**<0.697**	ng/L	1.94	0.697	1	07/01/23 11:00	07/11/23 00:52	335-76-2	
Perfluorododecanoic acid	**<0.629**	ng/L	1.94	0.629	1	07/01/23 11:00	07/11/23 00:52	307-55-1	
PFDoS	**<0.634**	ng/L	1.94	0.634	1	07/01/23 11:00	07/11/23 00:52	79780-39-5	
PFDS	**<0.590**	ng/L	1.94	0.590	1	07/01/23 11:00	07/11/23 00:52	335-77-3	
Perfluoroheptanoic acid	**<0.561**	ng/L	1.94	0.561	1	07/01/23 11:00	07/11/23 00:52	375-85-9	
PFHpS	**<0.590**	ng/L	1.94	0.590	1	07/01/23 11:00	07/11/23 00:52	375-92-8	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-15D-WG-20230622 **Lab ID: 40264224028** Collected: 06/22/23 12:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.455**	ng/L	1.94	0.455	1	07/01/23 11:00	07/11/23 00:52	307-24-4	
Perfluorohexanesulfonic acid	**<0.600**	ng/L	1.94	0.600	1	07/01/23 11:00	07/11/23 00:52	355-46-4	
Perfluorononanoic acid	**<0.474**	ng/L	1.94	0.474	1	07/01/23 11:00	07/11/23 00:52	375-95-1	
PFNS	**<0.842**	ng/L	1.94	0.842	1	07/01/23 11:00	07/11/23 00:52	68259-12-1	
Perfluorooctanoic acid	**<0.406**	ng/L	1.94	0.406	1	07/01/23 11:00	07/11/23 00:52	335-67-1	
Perfluorooctanesulfonic acid	**<0.368**	ng/L	1.94	0.368	1	07/01/23 11:00	07/11/23 00:52	1763-23-1	
Perfluoropentanoic acid	**<0.426**	ng/L	1.94	0.426	1	07/01/23 11:00	07/11/23 00:52	2706-90-3	
PFPeS	**<0.494**	ng/L	1.94	0.494	1	07/01/23 11:00	07/11/23 00:52	2706-91-4	
Perfluorotetradecanoic acid	**<0.552**	ng/L	1.94	0.552	1	07/01/23 11:00	07/11/23 00:52	376-06-7	
Perfluorotridecanoic acid	**<0.595**	ng/L	1.94	0.595	1	07/01/23 11:00	07/11/23 00:52	72629-94-8	
Perfluoroundecanoic acid	**<0.600**	ng/L	1.94	0.600	1	07/01/23 11:00	07/11/23 00:52	2058-94-8	
Surrogates									
d-NEtFOSA	42	%	50-150		1	07/01/23 11:00	07/11/23 00:52	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	44	%	50-150		1	07/01/23 11:00	07/11/23 00:52	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	58	%	50-150		1	07/01/23 11:00	07/11/23 00:52	2355-31-9-EI	
d5-NEtFOSAA	64	%	50-150		1	07/01/23 11:00	07/11/23 00:52	2991-50-6-EI	
d7-NMeFOSE	56	%	50-150		1	07/01/23 11:00	07/11/23 00:52	24448-09-7-	
d9-NEtFOSE	51	%	50-150		1	07/01/23 11:00	07/11/23 00:52	1691-99-2-EI	
M2 4:2 FTS	95	%	50-150		1	07/01/23 11:00	07/11/23 00:52	757124-72-4	
M2 6:2 FTS	93	%	50-150		1	07/01/23 11:00	07/11/23 00:52	27619-97-2-	
M2 8:2 FTS	73	%	50-150		1	07/01/23 11:00	07/11/23 00:52	39108-34-4-	
M2PFHxDA	28	%	50-150		1	07/01/23 11:00	07/11/23 00:52	67905-19-5-	MSSV1 2.7
M2PFTeDA	53	%	50-150		1	07/01/23 11:00	07/11/23 00:52	376-06-7-EI	
M3HFPODA	54	%	50-150		1	07/01/23 11:00	07/11/23 00:52	13252-13-6-	
M3PFBS	58	%	50-150		1	07/01/23 11:00	07/11/23 00:52	375-73-5-EI	
M3PFHxS	59	%	50-150		1	07/01/23 11:00	07/11/23 00:52	355-46-4-EI	
M4PFHpA	61	%	50-150		1	07/01/23 11:00	07/11/23 00:52	375-85-9-EI	
M5PFHxA	63	%	50-150		1	07/01/23 11:00	07/11/23 00:52	307-24-4-EI	
M5PFPeA	61	%	50-150		1	07/01/23 11:00	07/11/23 00:52	2706-90-3-EI	
M6PFDA	63	%	50-150		1	07/01/23 11:00	07/11/23 00:52	335-76-2-EI	
M7PFUdA	62	%	50-150		1	07/01/23 11:00	07/11/23 00:52	2058-94-8-EI	
M8FOSA	57	%	50-150		1	07/01/23 11:00	07/11/23 00:52	754-91-6-EI	
M8PFOA	64	%	50-150		1	07/01/23 11:00	07/11/23 00:52	335-67-1-EI	
M8PFOS	62	%	50-150		1	07/01/23 11:00	07/11/23 00:52	1763-23-1-EI	
M9PFNA	64	%	50-150		1	07/01/23 11:00	07/11/23 00:52	375-95-1-EI	
MPFBA	54	%	50-150		1	07/01/23 11:00	07/11/23 00:52	375-22-4-EI	
MPFDoA	57	%	50-150		1	07/01/23 11:00	07/11/23 00:52	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-13S-WG-20230622 **Lab ID: 40264224029** Collected: 06/22/23 14:40 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082A GCS PCB	Analytical Method: EPA 8082A Preparation Method: EPA 3510 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<0.11**	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	12674-11-2	
PCB-1221 (Aroclor 1221)	**<0.11**	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	11104-28-2	
PCB-1232 (Aroclor 1232)	**<0.11**	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	11141-16-5	
PCB-1242 (Aroclor 1242)	**<0.11**	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	53469-21-9	
PCB-1248 (Aroclor 1248)	**<0.11**	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	12672-29-6	
PCB-1254 (Aroclor 1254)	**<0.11**	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	11097-69-1	
PCB-1260 (Aroclor 1260)	**<0.11**	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	11096-82-5	
PCB, Total	**<0.11**	ug/L	0.49	0.11	1	06/27/23 13:44	06/28/23 07:42	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	94	%	20-128		1	06/27/23 13:44	06/28/23 07:42	877-09-8	
Decachlorobiphenyl (S)	79	%	10-120		1	06/27/23 13:44	06/28/23 07:42	2051-24-3	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-6S-WG-20230622 **Lab ID: 40264224030** Collected: 06/22/23 12:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/29/23 11:33	123-91-1	
Surrogates									
1,3-Dioxane (S)	96	%	70-130		1		06/29/23 11:33		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 13:15	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 13:15	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 13:15	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 13:15	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 13:15	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 13:15	127-18-4	
Trichloroethene	**4.9**	ug/L	1.0	0.32	1		06/27/23 13:15	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 13:15	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 13:15	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 13:15	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/27/23 13:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		06/27/23 13:15	2199-69-1	
Toluene-d8 (S)	104	%	70-130		1		06/27/23 13:15	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.421**	ng/L	1.36	0.421	1	07/01/23 11:00	07/11/23 01:38	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.510**	ng/L	1.36	0.510	1	07/01/23 11:00	07/11/23 01:38	27619-97-2	
8:2 FTS	**<0.360**	ng/L	1.36	0.360	1	07/01/23 11:00	07/11/23 01:38	39108-34-4	
9Cl-PF3ONS	**<0.306**	ng/L	1.36	0.306	1	07/01/23 11:00	07/11/23 01:38	756426-58-1	
11Cl-PF3OUdS	**<0.306**	ng/L	1.36	0.306	1	07/01/23 11:00	07/11/23 01:38	763051-92-9	
ADONA	**<0.292**	ng/L	1.36	0.292	1	07/01/23 11:00	07/11/23 01:38	919005-14-4	
Perfluorooctanesulfonamide	**<0.252**	ng/L	1.36	0.252	1	07/01/23 11:00	07/11/23 01:38	754-91-6	
HFPO-DA	**<2.27**	ng/L	6.80	2.27	1	07/01/23 11:00	07/11/23 01:38	13252-13-6	
NEtFOSA	**<0.476**	ng/L	2.72	0.476	1	07/01/23 11:00	07/11/23 01:38	4151-50-2	
NEtFOSAA	**<0.537**	ng/L	2.72	0.537	1	07/01/23 11:00	07/11/23 01:38	2991-50-6	
NEtFOSE	**<0.343**	ng/L	2.72	0.343	1	07/01/23 11:00	07/11/23 01:38	1691-99-2	
NMeFOSA	**<0.564**	ng/L	2.72	0.564	1	07/01/23 11:00	07/11/23 01:38	31506-32-8	
NMeFOSAA	**<0.306**	ng/L	2.72	0.306	1	07/01/23 11:00	07/11/23 01:38	2355-31-9	
NMeFOSE	**<0.442**	ng/L	2.72	0.442	1	07/01/23 11:00	07/11/23 01:38	24448-09-7	
Perfluorobutanoic acid	**1.64**	ng/L	1.36	0.517	1	07/01/23 11:00	07/11/23 01:38	375-22-4	
Perfluorobutanesulfonic acid	**<0.211**	ng/L	1.36	0.211	1	07/01/23 11:00	07/11/23 01:38	375-73-5	
Perfluorodecanoic acid	**<0.489**	ng/L	1.36	0.489	1	07/01/23 11:00	07/11/23 01:38	335-76-2	
Perfluorododecanoic acid	**<0.442**	ng/L	1.36	0.442	1	07/01/23 11:00	07/11/23 01:38	307-55-1	
PFDoS	**<0.445**	ng/L	1.36	0.445	1	07/01/23 11:00	07/11/23 01:38	79780-39-5	
PFDS	**<0.415**	ng/L	1.36	0.415	1	07/01/23 11:00	07/11/23 01:38	335-77-3	
Perfluoroheptanoic acid	**2.60**	ng/L	1.36	0.394	1	07/01/23 11:00	07/11/23 01:38	375-85-9	
PFHpS	**<0.415**	ng/L	1.36	0.415	1	07/01/23 11:00	07/11/23 01:38	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-6S-WG-20230622 **Lab ID: 40264224030** Collected: 06/22/23 12:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**1.65**	ng/L	1.36	0.319	1	07/01/23 11:00	07/11/23 01:38	307-24-4	
Perfluorohexanesulfonic acid	**1.53**	ng/L	1.36	0.421	1	07/01/23 11:00	07/11/23 01:38	355-46-4	
Perfluorononanoic acid	**<0.333**	ng/L	1.36	0.333	1	07/01/23 11:00	07/11/23 01:38	375-95-1	
PFNS	**<0.591**	ng/L	1.36	0.591	1	07/01/23 11:00	07/11/23 01:38	68259-12-1	
Perfluorooctanoic acid	**32.3**	ng/L	1.36	0.285	1	07/01/23 11:00	07/11/23 01:38	335-67-1	
Perfluorooctanesulfonic acid	**<0.258**	ng/L	1.36	0.258	1	07/01/23 11:00	07/11/23 01:38	1763-23-1	
Perfluoropentanoic acid	**1.43**	ng/L	1.36	0.299	1	07/01/23 11:00	07/11/23 01:38	2706-90-3	
PFPeS	**<0.347**	ng/L	1.36	0.347	1	07/01/23 11:00	07/11/23 01:38	2706-91-4	
Perfluorotetradecanoic acid	**<0.387**	ng/L	1.36	0.387	1	07/01/23 11:00	07/11/23 01:38	376-06-7	
Perfluorotridecanoic acid	**<0.418**	ng/L	1.36	0.418	1	07/01/23 11:00	07/11/23 01:38	72629-94-8	
Perfluoroundecanoic acid	**<0.421**	ng/L	1.36	0.421	1	07/01/23 11:00	07/11/23 01:38	2058-94-8	
Surrogates									
d-NEtFOSA	55	%	50-150		1	07/01/23 11:00	07/11/23 01:38	4151-50-2-EI	
d-NMeFOSA	57	%	50-150		1	07/01/23 11:00	07/11/23 01:38	31506-32-8-	
d3-NMeFOSAA	82	%	50-150		1	07/01/23 11:00	07/11/23 01:38	2355-31-9-EI	
d5-NEtFOSAA	85	%	50-150		1	07/01/23 11:00	07/11/23 01:38	2991-50-6-EI	
d7-NMeFOSE	81	%	50-150		1	07/01/23 11:00	07/11/23 01:38	24448-09-7-	
d9-NEtFOSE	79	%	50-150		1	07/01/23 11:00	07/11/23 01:38	1691-99-2-EI	
M2 4:2 FTS	125	%	50-150		1	07/01/23 11:00	07/11/23 01:38	757124-72-4	
M2 6:2 FTS	119	%	50-150		1	07/01/23 11:00	07/11/23 01:38	27619-97-2-	
M2 8:2 FTS	99	%	50-150		1	07/01/23 11:00	07/11/23 01:38	39108-34-4-	
M2PFHxDA	75	%	50-150		1	07/01/23 11:00	07/11/23 01:38	67905-19-5-	
M2PFTeDA	74	%	50-150		1	07/01/23 11:00	07/11/23 01:38	376-06-7-EI	
M3HFPODA	85	%	50-150		1	07/01/23 11:00	07/11/23 01:38	13252-13-6-	
M3PFBS	86	%	50-150		1	07/01/23 11:00	07/11/23 01:38	375-73-5-EI	
M3PFHxS	85	%	50-150		1	07/01/23 11:00	07/11/23 01:38	355-46-4-EI	
M4PFHpA	93	%	50-150		1	07/01/23 11:00	07/11/23 01:38	375-85-9-EI	
M5PFHxA	98	%	50-150		1	07/01/23 11:00	07/11/23 01:38	307-24-4-EI	
M5PFPeA	89	%	50-150		1	07/01/23 11:00	07/11/23 01:38	2706-90-3-EI	
M6PFDA	91	%	50-150		1	07/01/23 11:00	07/11/23 01:38	335-76-2-EI	
M7PFUdA	87	%	50-150		1	07/01/23 11:00	07/11/23 01:38	2058-94-8-EI	
M8FOSA	84	%	50-150		1	07/01/23 11:00	07/11/23 01:38	754-91-6-EI	
M8PFOA	94	%	50-150		1	07/01/23 11:00	07/11/23 01:38	335-67-1-EI	
M8PFOS	82	%	50-150		1	07/01/23 11:00	07/11/23 01:38	1763-23-1-EI	
M9PFNA	93	%	50-150		1	07/01/23 11:00	07/11/23 01:38	375-95-1-EI	
MPFBA	91	%	50-150		1	07/01/23 11:00	07/11/23 01:38	375-22-4-EI	
MPFDoA	80	%	50-150		1	07/01/23 11:00	07/11/23 01:38	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-7S-WG-20230622 **Lab ID: 40264224031** Collected: 06/22/23 14:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/29/23 11:52	123-91-1	
Surrogates									
1,3-Dioxane (S)	96	%	70-130		1		06/29/23 11:52		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 13:35	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 13:35	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 13:35	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 13:35	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 13:35	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 13:35	127-18-4	
Trichloroethene	**17.4**	ug/L	1.0	0.32	1		06/27/23 13:35	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 13:35	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 13:35	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 13:35	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	107	%	70-130		1		06/27/23 13:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		1		06/27/23 13:35	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 13:35	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.587**	ng/L	1.89	0.587	1	06/28/23 14:05	06/30/23 03:09	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.710**	ng/L	1.89	0.710	1	06/28/23 14:05	06/30/23 03:09	27619-97-2	
8:2 FTS	**<0.502**	ng/L	1.89	0.502	1	06/28/23 14:05	06/30/23 03:09	39108-34-4	
9Cl-PF3ONS	**<0.426**	ng/L	1.89	0.426	1	06/28/23 14:05	06/30/23 03:09	756426-58-1	
11Cl-PF3OUdS	**<0.426**	ng/L	1.89	0.426	1	06/28/23 14:05	06/30/23 03:09	763051-92-9	
ADONA	**<0.407**	ng/L	1.89	0.407	1	06/28/23 14:05	06/30/23 03:09	919005-14-4	
Perfluorooctanesulfonamide	**<0.338**	ng/L	1.83	0.338	1	07/01/23 11:00	07/12/23 18:04	754-91-6	
HFPO-DA	**<3.16**	ng/L	9.46	3.16	1	06/28/23 14:05	06/30/23 03:09	13252-13-6	
NEtFOSA	**<0.662**	ng/L	3.79	0.662	1	06/28/23 14:05	06/30/23 03:09	4151-50-2	
NEtFOSAA	**<0.721**	ng/L	3.65	0.721	1	07/01/23 11:00	07/12/23 18:04	2991-50-6	
NEtFOSE	**<0.478**	ng/L	3.79	0.478	1	06/28/23 14:05	06/30/23 03:09	1691-99-2	
NMeFOSA	**<0.785**	ng/L	3.79	0.785	1	06/28/23 14:05	06/30/23 03:09	31506-32-8	
NMeFOSAA	**<0.411**	ng/L	3.65	0.411	1	07/01/23 11:00	07/12/23 18:04	2355-31-9	
NMeFOSE	**<0.615**	ng/L	3.79	0.615	1	06/28/23 14:05	06/30/23 03:09	24448-09-7	
Perfluorobutanoic acid	**9.96**	ng/L	1.89	0.719	1	06/28/23 14:05	06/30/23 03:09	375-22-4	
Perfluorobutanesulfonic acid	**3.36**	ng/L	1.89	0.293	1	06/28/23 14:05	06/30/23 03:09	375-73-5	
Perfluorodecanoic acid	**<0.657**	ng/L	1.83	0.657	1	07/01/23 11:00	07/12/23 18:04	335-76-2	
Perfluorododecanoic acid	**<0.615**	ng/L	1.89	0.615	1	06/28/23 14:05	06/30/23 03:09	307-55-1	
PFDoS	**<0.620**	ng/L	1.89	0.620	1	06/28/23 14:05	06/30/23 03:09	79780-39-5	
PFDS	**<0.577**	ng/L	1.89	0.577	1	06/28/23 14:05	06/30/23 03:09	335-77-3	
Perfluoroheptanoic acid	**6.80**	ng/L	1.89	0.549	1	06/28/23 14:05	06/30/23 03:09	375-85-9	
PFHpS	**<0.577**	ng/L	1.89	0.577	1	06/28/23 14:05	06/30/23 03:09	375-92-8	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-7S-WG-20230622 **Lab ID: 40264224031** Collected: 06/22/23 14:20 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**11.6**	ng/L	1.89	0.445	1	06/28/23 14:05	06/30/23 03:09	307-24-4	
Perfluorohexanesulfonic acid	**<0.587**	ng/L	1.89	0.587	1	06/28/23 14:05	06/30/23 03:09	355-46-4	
Perfluorononanoic acid	**<0.464**	ng/L	1.89	0.464	1	06/28/23 14:05	06/30/23 03:09	375-95-1	
PFNS	**<0.823**	ng/L	1.89	0.823	1	06/28/23 14:05	06/30/23 03:09	68259-12-1	
Perfluorooctanoic acid	**19.8**	ng/L	1.89	0.397	1	06/28/23 14:05	06/30/23 03:09	335-67-1	
Perfluorooctanesulfonic acid	**<0.360**	ng/L	1.89	0.360	1	06/28/23 14:05	06/30/23 03:09	1763-23-1	
Perfluoropentanoic acid	**17.0**	ng/L	1.89	0.416	1	06/28/23 14:05	06/30/23 03:09	2706-90-3	
PFPeS	**<0.483**	ng/L	1.89	0.483	1	06/28/23 14:05	06/30/23 03:09	2706-91-4	
Perfluorotetradecanoic acid	**<0.539**	ng/L	1.89	0.539	1	06/28/23 14:05	06/30/23 03:09	376-06-7	
Perfluorotridecanoic acid	**<0.582**	ng/L	1.89	0.582	1	06/28/23 14:05	06/30/23 03:09	72629-94-8	
Perfluoroundecanoic acid	**<0.566**	ng/L	1.83	0.566	1	07/01/23 11:00	07/12/23 18:04	2058-94-8	
Surrogates									
d-NEtFOSA	0.1	%	50-150		1	06/28/23 14:05	06/30/23 03:09	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	0.09	%	50-150		1	06/28/23 14:05	06/30/23 03:09	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	67	%	50-150		1	07/01/23 11:00	07/12/23 18:04	2355-31-9-EI	
d5-NEtFOSAA	66	%	50-150		1	07/01/23 11:00	07/12/23 18:04	2991-50-6-EI	
d7-NMeFOSE	1	%	50-150		1	06/28/23 14:05	06/30/23 03:09	24448-09-7-	MSSV1 2.7
d9-NEtFOSE	0.3	%	50-150		1	06/28/23 14:05	06/30/23 03:09	1691-99-2-EI	MSSV1 2.7
M2 4:2 FTS	96	%	50-150		1	06/28/23 14:05	06/30/23 03:09	757124-72-4	
M2 6:2 FTS	86	%	50-150		1	06/28/23 14:05	06/30/23 03:09	27619-97-2-	
M2 8:2 FTS	50	%	50-150		1	06/28/23 14:05	06/30/23 03:09	39108-34-4-	
M2PFHxDA	0.4	%	50-150		1	06/28/23 14:05	06/30/23 03:09	67905-19-5-	MSSV1 2.7
M2PFTeDA	0.8	%	50-150		1	06/28/23 14:05	06/30/23 03:09	376-06-7-EI	MSSV1 2.7
M3HFPODA	71	%	50-150		1	06/28/23 14:05	06/30/23 03:09	13252-13-6-	
M3PFBS	71	%	50-150		1	06/28/23 14:05	06/30/23 03:09	375-73-5-EI	
M3PFHxS	69	%	50-150		1	06/28/23 14:05	06/30/23 03:09	355-46-4-EI	
M4PFHpA	73	%	50-150		1	06/28/23 14:05	06/30/23 03:09	375-85-9-EI	
M5PFHxA	75	%	50-150		1	06/28/23 14:05	06/30/23 03:09	307-24-4-EI	
M5PFPeA	77	%	50-150		1	06/28/23 14:05	06/30/23 03:09	2706-90-3-EI	
M6PFDA	74	%	50-150		1	07/01/23 11:00	07/12/23 18:04	335-76-2-EI	
M7PFUdA	61	%	50-150		1	07/01/23 11:00	07/12/23 18:04	2058-94-8-EI	
M8FOSA	60	%	50-150		1	07/01/23 11:00	07/12/23 18:04	754-91-6-EI	
M8PFOA	70	%	50-150		1	06/28/23 14:05	06/30/23 03:09	335-67-1-EI	
M8PFOS	56	%	50-150		1	06/28/23 14:05	06/30/23 03:09	1763-23-1-EI	
M9PFNA	63	%	50-150		1	06/28/23 14:05	06/30/23 03:09	375-95-1-EI	
MPFBA	69	%	50-150		1	06/28/23 14:05	06/30/23 03:09	375-22-4-EI	
MPFDoA	11	%	50-150		1	06/28/23 14:05	06/30/23 03:09	307-55-1-EI	MSSV1 2.7

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-04-WG-20230622 **Lab ID: 40264224032** Collected: 06/22/23 16:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.28**	ug/L	1.0	0.28	5		06/29/23 20:45	123-91-1	
Surrogates									
1,3-Dioxane (S)	103	%	70-130		5		06/29/23 20:45		D3
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 16:36	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 16:36	107-06-2	
1,1-Dichloroethene	**1.0**	ug/L	1.0	0.58	1		06/27/23 16:36	75-35-4	
cis-1,2-Dichloroethene	**29.8**	ug/L	1.0	0.47	1		06/27/23 16:36	156-59-2	
trans-1,2-Dichloroethene	**20.4**	ug/L	1.0	0.53	1		06/27/23 16:36	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 16:36	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 16:36	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 16:36	79-00-5	
Trichloroethene	**172**	ug/L	1.0	0.32	1		06/27/23 16:36	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 16:36	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/27/23 16:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 16:36	2199-69-1	
Toluene-d8 (S)	108	%	70-130		1		06/27/23 16:36	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.582**	ng/L	1.88	0.582	1	07/01/23 11:00	07/11/23 02:08	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.704**	ng/L	1.88	0.704	1	07/01/23 11:00	07/11/23 02:08	27619-97-2	
8:2 FTS	**<0.498**	ng/L	1.88	0.498	1	07/01/23 11:00	07/11/23 02:08	39108-34-4	
9Cl-PF3ONS	**<0.422**	ng/L	1.88	0.422	1	07/01/23 11:00	07/11/23 02:08	756426-58-1	
11Cl-PF3OUdS	**<0.422**	ng/L	1.88	0.422	1	07/01/23 11:00	07/11/23 02:08	763051-92-9	
ADONA	**<0.404**	ng/L	1.88	0.404	1	07/01/23 11:00	07/11/23 02:08	919005-14-4	
Perfluorooctanesulfonamide	**<0.347**	ng/L	1.88	0.347	1	07/01/23 11:00	07/11/23 02:08	754-91-6	
HFPO-DA	**<3.13**	ng/L	9.39	3.13	1	07/01/23 11:00	07/11/23 02:08	13252-13-6	
NEtFOSA	**<0.657**	ng/L	3.76	0.657	1	07/01/23 11:00	07/11/23 02:08	4151-50-2	
NEtFOSAA	**<0.742**	ng/L	3.76	0.742	1	07/01/23 11:00	07/11/23 02:08	2991-50-6	
NEtFOSE	**<0.474**	ng/L	3.76	0.474	1	07/01/23 11:00	07/11/23 02:08	1691-99-2	
NMeFOSA	**<0.779**	ng/L	3.76	0.779	1	07/01/23 11:00	07/11/23 02:08	31506-32-8	
NMeFOSAA	**<0.422**	ng/L	3.76	0.422	1	07/01/23 11:00	07/11/23 02:08	2355-31-9	
NMeFOSE	**<0.610**	ng/L	3.76	0.610	1	07/01/23 11:00	07/11/23 02:08	24448-09-7	
Perfluorobutanoic acid	**11.9**	ng/L	1.88	0.714	1	07/01/23 11:00	07/11/23 02:08	375-22-4	
Perfluorobutanesulfonic acid	**8.65**	ng/L	1.88	0.291	1	07/01/23 11:00	07/11/23 02:08	375-73-5	
Perfluorodecanoic acid	**<0.676**	ng/L	1.88	0.676	1	07/01/23 11:00	07/11/23 02:08	335-76-2	
Perfluorododecanoic acid	**<0.610**	ng/L	1.88	0.610	1	07/01/23 11:00	07/11/23 02:08	307-55-1	
PFDoS	**<0.615**	ng/L	1.88	0.615	1	07/01/23 11:00	07/11/23 02:08	79780-39-5	
PFDS	**<0.573**	ng/L	1.88	0.573	1	07/01/23 11:00	07/11/23 02:08	335-77-3	
Perfluoroheptanoic acid	**15.2**	ng/L	1.88	0.545	1	07/01/23 11:00	07/11/23 02:08	375-85-9	
PFHpS	**3.90**	ng/L	1.88	0.573	1	07/01/23 11:00	07/11/23 02:08	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-04-WG-20230622 **Lab ID: 40264224032** Collected: 06/22/23 16:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**21.7**	ng/L	1.88	0.441	1	07/01/23 11:00	07/11/23 02:08	307-24-4	
Perfluorohexanesulfonic acid	**64.4**	ng/L	1.88	0.582	1	07/01/23 11:00	07/11/23 02:08	355-46-4	
Perfluorononanoic acid	**<0.460**	ng/L	1.88	0.460	1	07/01/23 11:00	07/11/23 02:08	375-95-1	
PFNS	**<0.817**	ng/L	1.88	0.817	1	07/01/23 11:00	07/11/23 02:08	68259-12-1	
Perfluorooctanoic acid	**40.5**	ng/L	1.88	0.394	1	07/01/23 11:00	07/11/23 02:08	335-67-1	
Perfluorooctanesulfonic acid	**18.9**	ng/L	1.88	0.357	1	07/01/23 11:00	07/11/23 02:08	1763-23-1	
Perfluoropentanoic acid	**23.8**	ng/L	1.88	0.413	1	07/01/23 11:00	07/11/23 02:08	2706-90-3	
PFPeS	**8.55**	ng/L	1.88	0.479	1	07/01/23 11:00	07/11/23 02:08	2706-91-4	
Perfluorotetradecanoic acid	**<0.535**	ng/L	1.88	0.535	1	07/01/23 11:00	07/11/23 02:08	376-06-7	
Perfluorotridecanoic acid	**<0.577**	ng/L	1.88	0.577	1	07/01/23 11:00	07/11/23 02:08	72629-94-8	
Perfluoroundecanoic acid	**<0.582**	ng/L	1.88	0.582	1	07/01/23 11:00	07/11/23 02:08	2058-94-8	
Surrogates									
d-NEtFOSA	0.7	%	50-150		1	07/01/23 11:00	07/11/23 02:08	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	2	%	50-150		1	07/01/23 11:00	07/11/23 02:08	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	65	%	50-150		1	07/01/23 11:00	07/11/23 02:08	2355-31-9-EI	
d5-NEtFOSAA	65	%	50-150		1	07/01/23 11:00	07/11/23 02:08	2991-50-6-EI	
d7-NMeFOSE	24	%	50-150		1	07/01/23 11:00	07/11/23 02:08	24448-09-7-	MSSV1 2.7
d9-NEtFOSE	13	%	50-150		1	07/01/23 11:00	07/11/23 02:08	1691-99-2-EI	MSSV1 2.7
M2 4:2 FTS	127	%	50-150		1	07/01/23 11:00	07/11/23 02:08	757124-72-4	
M2 6:2 FTS	114	%	50-150		1	07/01/23 11:00	07/11/23 02:08	27619-97-2-	
M2 8:2 FTS	84	%	50-150		1	07/01/23 11:00	07/11/23 02:08	39108-34-4-	
M2PFHxDA	2	%	50-150		1	07/01/23 11:00	07/11/23 02:08	67905-19-5-	MSSV1 2.7
M2PFTeDA	4	%	50-150		1	07/01/23 11:00	07/11/23 02:08	376-06-7-EI	MSSV1 2.7
M3HFPODA	84	%	50-150		1	07/01/23 11:00	07/11/23 02:08	13252-13-6-	
M3PFBS	84	%	50-150		1	07/01/23 11:00	07/11/23 02:08	375-73-5-EI	
M3PFHxS	86	%	50-150		1	07/01/23 11:00	07/11/23 02:08	355-46-4-EI	
M4PFHpA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:08	375-85-9-EI	
M5PFHxA	94	%	50-150		1	07/01/23 11:00	07/11/23 02:08	307-24-4-EI	
M5PFPeA	94	%	50-150		1	07/01/23 11:00	07/11/23 02:08	2706-90-3-EI	
M6PFDA	76	%	50-150		1	07/01/23 11:00	07/11/23 02:08	335-76-2-EI	
M7PFUdA	59	%	50-150		1	07/01/23 11:00	07/11/23 02:08	2058-94-8-EI	
M8FOSA	51	%	50-150		1	07/01/23 11:00	07/11/23 02:08	754-91-6-EI	
M8PFOA	91	%	50-150		1	07/01/23 11:00	07/11/23 02:08	335-67-1-EI	
M8PFOS	80	%	50-150		1	07/01/23 11:00	07/11/23 02:08	1763-23-1-EI	
M9PFNA	88	%	50-150		1	07/01/23 11:00	07/11/23 02:08	375-95-1-EI	
MPFBA	87	%	50-150		1	07/01/23 11:00	07/11/23 02:08	375-22-4-EI	
MPFDoA	35	%	50-150		1	07/01/23 11:00	07/11/23 02:08	307-55-1-EI	MSSV1 2.7

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-15I-WG-20230623 **Lab ID: 40264224033** Collected: 06/23/23 09:05 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**27.8**	ug/L	2.0	0.57	10		06/29/23 21:04	123-91-1	
Surrogates									
1,3-Dioxane (S)	106	%	70-130		10		06/29/23 21:04		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<3.0**	ug/L	10.0	3.0	10		06/27/23 16:55	71-55-6	
1,1,2-Trichloroethane	**<3.4**	ug/L	10.0	3.4	10		06/27/23 16:55	79-00-5	
1,1-Dichloroethane	**<3.0**	ug/L	10.0	3.0	10		06/27/23 16:55	75-34-3	
1,1-Dichloroethene	**<5.8**	ug/L	10.0	5.8	10		06/27/23 16:55	75-35-4	
1,2-Dichloroethane	**<2.9**	ug/L	10.0	2.9	10		06/27/23 16:55	107-06-2	
Tetrachloroethene	**<4.1**	ug/L	10.0	4.1	10		06/27/23 16:55	127-18-4	
Trichloroethene	**739**	ug/L	10.0	3.2	10		06/27/23 16:55	79-01-6	
Vinyl chloride	**<1.7**	ug/L	10.0	1.7	10		06/27/23 16:55	75-01-4	
cis-1,2-Dichloroethene	**8.7J**	ug/L	10.0	4.7	10		06/27/23 16:55	156-59-2	
trans-1,2-Dichloroethene	**<5.3**	ug/L	10.0	5.3	10		06/27/23 16:55	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	107	%	70-130		10		06/27/23 16:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		10		06/27/23 16:55	2199-69-1	
Toluene-d8 (S)	105	%	70-130		10		06/27/23 16:55	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.594**	ng/L	1.92	0.594	1	07/01/23 11:00	07/11/23 02:24	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.719**	ng/L	1.92	0.719	1	07/01/23 11:00	07/11/23 02:24	27619-97-2	
8:2 FTS	**<0.508**	ng/L	1.92	0.508	1	07/01/23 11:00	07/11/23 02:24	39108-34-4	
9Cl-PF3ONS	**<0.431**	ng/L	1.92	0.431	1	07/01/23 11:00	07/11/23 02:24	756426-58-1	
11Cl-PF3OUdS	**<0.431**	ng/L	1.92	0.431	1	07/01/23 11:00	07/11/23 02:24	763051-92-9	
ADONA	**<0.412**	ng/L	1.92	0.412	1	07/01/23 11:00	07/11/23 02:24	919005-14-4	
Perfluorooctanesulfonamide	**<0.355**	ng/L	1.92	0.355	1	07/01/23 11:00	07/11/23 02:24	754-91-6	
HFPO-DA	**<3.20**	ng/L	9.58	3.20	1	07/01/23 11:00	07/11/23 02:24	13252-13-6	
NEtFOSA	**<0.671**	ng/L	3.83	0.671	1	07/01/23 11:00	07/11/23 02:24	4151-50-2	
NEtFOSAA	**<0.757**	ng/L	3.83	0.757	1	07/01/23 11:00	07/11/23 02:24	2991-50-6	
NEtFOSE	**<0.484**	ng/L	3.83	0.484	1	07/01/23 11:00	07/11/23 02:24	1691-99-2	
NMeFOSA	**<0.795**	ng/L	3.83	0.795	1	07/01/23 11:00	07/11/23 02:24	31506-32-8	
NMeFOSAA	**<0.431**	ng/L	3.83	0.431	1	07/01/23 11:00	07/11/23 02:24	2355-31-9	
NMeFOSE	**<0.623**	ng/L	3.83	0.623	1	07/01/23 11:00	07/11/23 02:24	24448-09-7	
Perfluorobutanoic acid	**10.4**	ng/L	1.92	0.728	1	07/01/23 11:00	07/11/23 02:24	375-22-4	
Perfluorobutanesulfonic acid	**11.6**	ng/L	1.92	0.297	1	07/01/23 11:00	07/11/23 02:24	375-73-5	
Perfluorodecanoic acid	**<0.690**	ng/L	1.92	0.690	1	07/01/23 11:00	07/11/23 02:24	335-76-2	
Perfluorododecanoic acid	**<0.623**	ng/L	1.92	0.623	1	07/01/23 11:00	07/11/23 02:24	307-55-1	
PFDoS	**<0.628**	ng/L	1.92	0.628	1	07/01/23 11:00	07/11/23 02:24	79780-39-5	
PFDS	**<0.585**	ng/L	1.92	0.585	1	07/01/23 11:00	07/11/23 02:24	335-77-3	
Perfluoroheptanoic acid	**3.95**	ng/L	1.92	0.556	1	07/01/23 11:00	07/11/23 02:24	375-85-9	
PFHpS	**<0.585**	ng/L	1.92	0.585	1	07/01/23 11:00	07/11/23 02:24	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-15I-WG-20230623 **Lab ID: 40264224033** Collected: 06/23/23 09:05 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**5.13**	ng/L	1.92	0.450	1	07/01/23 11:00	07/11/23 02:24	307-24-4	
Perfluorohexanesulfonic acid	**<0.594**	ng/L	1.92	0.594	1	07/01/23 11:00	07/11/23 02:24	355-46-4	
Perfluorononanoic acid	**<0.470**	ng/L	1.92	0.470	1	07/01/23 11:00	07/11/23 02:24	375-95-1	
PFNS	**<0.834**	ng/L	1.92	0.834	1	07/01/23 11:00	07/11/23 02:24	68259-12-1	
Perfluorooctanoic acid	**12.8**	ng/L	1.92	0.402	1	07/01/23 11:00	07/11/23 02:24	335-67-1	
Perfluorooctanesulfonic acid	**<0.364**	ng/L	1.92	0.364	1	07/01/23 11:00	07/11/23 02:24	1763-23-1	
Perfluoropentanoic acid	**5.78**	ng/L	1.92	0.422	1	07/01/23 11:00	07/11/23 02:24	2706-90-3	
PFPeS	**<0.489**	ng/L	1.92	0.489	1	07/01/23 11:00	07/11/23 02:24	2706-91-4	
Perfluorotetradecanoic acid	**<0.546**	ng/L	1.92	0.546	1	07/01/23 11:00	07/11/23 02:24	376-06-7	
Perfluorotridecanoic acid	**<0.589**	ng/L	1.92	0.589	1	07/01/23 11:00	07/11/23 02:24	72629-94-8	
Perfluoroundecanoic acid	**<0.594**	ng/L	1.92	0.594	1	07/01/23 11:00	07/11/23 02:24	2058-94-8	
Surrogates									
d-NEtFOSA	54	%	50-150		1	07/01/23 11:00	07/11/23 02:24	4151-50-2-EI	
d-NMeFOSA	58	%	50-150		1	07/01/23 11:00	07/11/23 02:24	31506-32-8-	
d3-NMeFOSAA	81	%	50-150		1	07/01/23 11:00	07/11/23 02:24	2355-31-9-EI	
d5-NEtFOSAA	78	%	50-150		1	07/01/23 11:00	07/11/23 02:24	2991-50-6-EI	
d7-NMeFOSE	76	%	50-150		1	07/01/23 11:00	07/11/23 02:24	24448-09-7-	
d9-NEtFOSE	70	%	50-150		1	07/01/23 11:00	07/11/23 02:24	1691-99-2-EI	
M2 4:2 FTS	150	%	50-150		1	07/01/23 11:00	07/11/23 02:24	757124-72-4	
M2 6:2 FTS	116	%	50-150		1	07/01/23 11:00	07/11/23 02:24	27619-97-2-	
M2 8:2 FTS	91	%	50-150		1	07/01/23 11:00	07/11/23 02:24	39108-34-4-	
M2PFHxDA	63	%	50-150		1	07/01/23 11:00	07/11/23 02:24	67905-19-5-	
M2PFTeDA	63	%	50-150		1	07/01/23 11:00	07/11/23 02:24	376-06-7-EI	
M3HFPODA	75	%	50-150		1	07/01/23 11:00	07/11/23 02:24	13252-13-6-	
M3PFBS	82	%	50-150		1	07/01/23 11:00	07/11/23 02:24	375-73-5-EI	
M3PFHxS	83	%	50-150		1	07/01/23 11:00	07/11/23 02:24	355-46-4-EI	
M4PFHpA	93	%	50-150		1	07/01/23 11:00	07/11/23 02:24	375-85-9-EI	
M5PFHxA	97	%	50-150		1	07/01/23 11:00	07/11/23 02:24	307-24-4-EI	
M5PFPeA	77	%	50-150		1	07/01/23 11:00	07/11/23 02:24	2706-90-3-EI	
M6PFDA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:24	335-76-2-EI	
M7PFUdA	84	%	50-150		1	07/01/23 11:00	07/11/23 02:24	2058-94-8-EI	
M8FOSA	84	%	50-150		1	07/01/23 11:00	07/11/23 02:24	754-91-6-EI	
M8PFOA	93	%	50-150		1	07/01/23 11:00	07/11/23 02:24	335-67-1-EI	
M8PFOS	83	%	50-150		1	07/01/23 11:00	07/11/23 02:24	1763-23-1-EI	
M9PFNA	92	%	50-150		1	07/01/23 11:00	07/11/23 02:24	375-95-1-EI	
MPFBA	78	%	50-150		1	07/01/23 11:00	07/11/23 02:24	375-22-4-EI	
MPFDoA	71	%	50-150		1	07/01/23 11:00	07/11/23 02:24	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-23S-WG-20230621 **Lab ID: 40264224034** Collected: 06/21/23 14:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.057**	ug/L	0.20	0.057	1		06/29/23 18:31	123-91-1	
Surrogates									
1,3-Dioxane (S)	97	%	70-130		1		06/29/23 18:31		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 13:55	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 13:55	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 13:55	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 13:55	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 13:55	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 13:55	127-18-4	
Trichloroethene	**2.1**	ug/L	1.0	0.32	1		06/27/23 13:55	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 13:55	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 13:55	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 13:55	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	104	%	70-130		1		06/27/23 13:55	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	70-130		1		06/27/23 13:55	2199-69-1	
Toluene-d8 (S)	105	%	70-130		1		06/27/23 13:55	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.629**	ng/L	2.03	0.629	1	06/28/23 14:05	06/30/23 03:57	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.761**	ng/L	2.03	0.761	1	06/28/23 14:05	06/30/23 03:57	27619-97-2	
8:2 FTS	**<0.538**	ng/L	2.03	0.538	1	06/28/23 14:05	06/30/23 03:57	39108-34-4	
9Cl-PF3ONS	**<0.457**	ng/L	2.03	0.457	1	06/28/23 14:05	06/30/23 03:57	756426-58-1	
11Cl-PF3OUdS	**<0.457**	ng/L	2.03	0.457	1	06/28/23 14:05	06/30/23 03:57	763051-92-9	
ADONA	**<0.436**	ng/L	2.03	0.436	1	06/28/23 14:05	06/30/23 03:57	919005-14-4	
Perfluorooctanesulfonamide	**<0.375**	ng/L	2.03	0.375	1	06/28/23 14:05	06/30/23 03:57	754-91-6	
HFPO-DA	**<3.38**	ng/L	10.1	3.38	1	06/28/23 14:05	06/30/23 03:57	13252-13-6	
NEtFOSA	**<0.710**	ng/L	4.06	0.710	1	06/28/23 14:05	06/30/23 03:57	4151-50-2	
NEtFOSAA	**<0.801**	ng/L	4.06	0.801	1	06/28/23 14:05	06/30/23 03:57	2991-50-6	
NEtFOSE	**<0.542**	ng/L	4.29	0.542	1	07/05/23 14:30	07/12/23 19:36	1691-99-2	
NMeFOSA	**<0.842**	ng/L	4.06	0.842	1	06/28/23 14:05	06/30/23 03:57	31506-32-8	
NMeFOSAA	**<0.457**	ng/L	4.06	0.457	1	06/28/23 14:05	06/30/23 03:57	2355-31-9	
NMeFOSE	**<0.697**	ng/L	4.29	0.697	1	07/05/23 14:30	07/12/23 19:36	24448-09-7	
Perfluorobutanoic acid	**3.03**	ng/L	2.03	0.771	1	06/28/23 14:05	06/30/23 03:57	375-22-4	
Perfluorobutanesulfonic acid	**4.27**	ng/L	2.03	0.315	1	06/28/23 14:05	06/30/23 03:57	375-73-5	
Perfluorodecanoic acid	**<0.730**	ng/L	2.03	0.730	1	06/28/23 14:05	06/30/23 03:57	335-76-2	
Perfluorododecanoic acid	**<0.659**	ng/L	2.03	0.659	1	06/28/23 14:05	06/30/23 03:57	307-55-1	
PFDoS	**<0.665**	ng/L	2.03	0.665	1	06/28/23 14:05	06/30/23 03:57	79780-39-5	
PFDS	**<0.619**	ng/L	2.03	0.619	1	06/28/23 14:05	06/30/23 03:57	335-77-3	
Perfluoroheptanoic acid	**3.49**	ng/L	2.03	0.588	1	06/28/23 14:05	06/30/23 03:57	375-85-9	
PFHpS	**<0.619**	ng/L	2.03	0.619	1	06/28/23 14:05	06/30/23 03:57	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: MW-23S-WG-20230621 **Lab ID: 40264224034** Collected: 06/21/23 14:10 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**3.09**	ng/L	2.03	0.477	1	06/28/23 14:05	06/30/23 03:57	307-24-4	
Perfluorohexanesulfonic acid	**2.91**	ng/L	2.03	0.629	1	06/28/23 14:05	06/30/23 03:57	355-46-4	
Perfluorononanoic acid	**<0.497**	ng/L	2.03	0.497	1	06/28/23 14:05	06/30/23 03:57	375-95-1	
PFNS	**<0.883**	ng/L	2.03	0.883	1	06/28/23 14:05	06/30/23 03:57	68259-12-1	
Perfluorooctanoic acid	**37.0**	ng/L	2.03	0.426	1	06/28/23 14:05	06/30/23 03:57	335-67-1	
Perfluorooctanesulfonic acid	**3.11**	ng/L	2.03	0.386	1	06/28/23 14:05	06/30/23 03:57	1763-23-1	
Perfluoropentanoic acid	**<0.446**	ng/L	2.03	0.446	1	06/28/23 14:05	06/30/23 03:57	2706-90-3	
PFPeS	**<0.517**	ng/L	2.03	0.517	1	06/28/23 14:05	06/30/23 03:57	2706-91-4	
Perfluorotetradecanoic acid	**<0.578**	ng/L	2.03	0.578	1	06/28/23 14:05	06/30/23 03:57	376-06-7	
Perfluorotridecanoic acid	**<0.624**	ng/L	2.03	0.624	1	06/28/23 14:05	06/30/23 03:57	72629-94-8	
Perfluoroundecanoic acid	**<0.629**	ng/L	2.03	0.629	1	06/28/23 14:05	06/30/23 03:57	2058-94-8	
Surrogates									
d-NEtFOSA	5	%	50-150		1	06/28/23 14:05	06/30/23 03:57	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	9	%	50-150		1	06/28/23 14:05	06/30/23 03:57	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	74	%	50-150		1	06/28/23 14:05	06/30/23 03:57	2355-31-9-EI	
d5-NEtFOSAA	82	%	50-150		1	06/28/23 14:05	06/30/23 03:57	2991-50-6-EI	
d7-NMeFOSE	74	%	50-150		1	07/05/23 14:30	07/12/23 19:36	24448-09-7-	
d9-NEtFOSE	66	%	50-150		1	07/05/23 14:30	07/12/23 19:36	1691-99-2-EI	
M2 4:2 FTS	107	%	50-150		1	06/28/23 14:05	06/30/23 03:57	757124-72-4	
M2 6:2 FTS	99	%	50-150		1	06/28/23 14:05	06/30/23 03:57	27619-97-2-	
M2 8:2 FTS	86	%	50-150		1	06/28/23 14:05	06/30/23 03:57	39108-34-4-	
M2PFHxDA	9	%	50-150		1	06/28/23 14:05	06/30/23 03:57	67905-19-5-	MSSV1 2.7
M2PFTeDA	48	%	50-150		1	06/28/23 14:05	06/30/23 03:57	376-06-7-EI	MSSV1 2.7
M3HFPODA	80	%	50-150		1	06/28/23 14:05	06/30/23 03:57	13252-13-6-	
M3PFBS	81	%	50-150		1	06/28/23 14:05	06/30/23 03:57	375-73-5-EI	
M3PFHxS	79	%	50-150		1	06/28/23 14:05	06/30/23 03:57	355-46-4-EI	
M4PFHpA	82	%	50-150		1	06/28/23 14:05	06/30/23 03:57	375-85-9-EI	
M5PFHxA	85	%	50-150		1	06/28/23 14:05	06/30/23 03:57	307-24-4-EI	
M5PFPeA	87	%	50-150		1	06/28/23 14:05	06/30/23 03:57	2706-90-3-EI	
M6PFDA	78	%	50-150		1	06/28/23 14:05	06/30/23 03:57	335-76-2-EI	
M7PFUdA	91	%	50-150		1	06/28/23 14:05	06/30/23 03:57	2058-94-8-EI	
M8FOSA	71	%	50-150		1	06/28/23 14:05	06/30/23 03:57	754-91-6-EI	
M8PFOA	83	%	50-150		1	06/28/23 14:05	06/30/23 03:57	335-67-1-EI	
M8PFOS	78	%	50-150		1	06/28/23 14:05	06/30/23 03:57	1763-23-1-EI	
M9PFNA	83	%	50-150		1	06/28/23 14:05	06/30/23 03:57	375-95-1-EI	
MPFBA	81	%	50-150		1	06/28/23 14:05	06/30/23 03:57	375-22-4-EI	
MPFDoA	77	%	50-150		1	06/28/23 14:05	06/30/23 03:57	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: DUP-01-WG-20230622 **Lab ID: 40264224035** Collected: 06/22/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**5.5**	ug/L	0.20	0.057	1		06/29/23 12:49	123-91-1	
Surrogates									
1,3-Dioxane (S)	95	%	70-130		1		06/29/23 12:49		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 15:37	75-34-3	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 15:37	107-06-2	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/27/23 15:37	75-35-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/27/23 15:37	156-59-2	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/27/23 15:37	156-60-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 15:37	127-18-4	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 15:37	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 15:37	79-00-5	
Trichloroethene	**1.6**	ug/L	1.0	0.32	1		06/27/23 15:37	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 15:37	75-01-4	
Surrogates									
4-Bromofluorobenzene (S)	109	%	70-130		1		06/27/23 15:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		1		06/27/23 15:37	2199-69-1	
Toluene-d8 (S)	107	%	70-130		1		06/27/23 15:37	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.590**	ng/L	1.90	0.590	1	06/28/23 14:05	06/30/23 04:13	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.714**	ng/L	1.90	0.714	1	06/28/23 14:05	06/30/23 04:13	27619-97-2	
8:2 FTS	**<0.505**	ng/L	1.90	0.505	1	06/28/23 14:05	06/30/23 04:13	39108-34-4	
9Cl-PF3ONS	**<0.429**	ng/L	1.90	0.429	1	06/28/23 14:05	06/30/23 04:13	756426-58-1	
11Cl-PF3OUdS	**<0.429**	ng/L	1.90	0.429	1	06/28/23 14:05	06/30/23 04:13	763051-92-9	
ADONA	**<0.409**	ng/L	1.90	0.409	1	06/28/23 14:05	06/30/23 04:13	919005-14-4	
Perfluorooctanesulfonamide	**<0.352**	ng/L	1.90	0.352	1	06/28/23 14:05	06/30/23 04:13	754-91-6	
HFPO-DA	**<3.18**	ng/L	9.52	3.18	1	06/28/23 14:05	06/30/23 04:13	13252-13-6	
NEtFOSA	**<0.667**	ng/L	3.81	0.667	1	06/28/23 14:05	06/30/23 04:13	4151-50-2	
NEtFOSAA	**<0.752**	ng/L	3.81	0.752	1	06/28/23 14:05	06/30/23 04:13	2991-50-6	
NEtFOSE	**<0.481**	ng/L	3.81	0.481	1	06/28/23 14:05	06/30/23 04:13	1691-99-2	
NMeFOSA	**<0.790**	ng/L	3.81	0.790	1	06/28/23 14:05	06/30/23 04:13	31506-32-8	
NMeFOSAA	**<0.429**	ng/L	3.81	0.429	1	06/28/23 14:05	06/30/23 04:13	2355-31-9	
NMeFOSE	**<0.619**	ng/L	3.81	0.619	1	06/28/23 14:05	06/30/23 04:13	24448-09-7	
Perfluorobutanoic acid	**<0.724**	ng/L	1.90	0.724	1	06/28/23 14:05	06/30/23 04:13	375-22-4	
Perfluorobutanesulfonic acid	**<0.295**	ng/L	1.90	0.295	1	06/28/23 14:05	06/30/23 04:13	375-73-5	
Perfluorodecanoic acid	**<0.686**	ng/L	1.90	0.686	1	06/28/23 14:05	06/30/23 04:13	335-76-2	
Perfluorododecanoic acid	**<0.619**	ng/L	1.90	0.619	1	06/28/23 14:05	06/30/23 04:13	307-55-1	
PFDoS	**<0.624**	ng/L	1.90	0.624	1	06/28/23 14:05	06/30/23 04:13	79780-39-5	
PFDS	**<0.581**	ng/L	1.90	0.581	1	06/28/23 14:05	06/30/23 04:13	335-77-3	
Perfluoroheptanoic acid	**<0.552**	ng/L	1.90	0.552	1	06/28/23 14:05	06/30/23 04:13	375-85-9	
PFHpS	**<0.581**	ng/L	1.90	0.581	1	06/28/23 14:05	06/30/23 04:13	375-92-8	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: DUP-01-WG-20230622 **Lab ID: 40264224035** Collected: 06/22/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**<0.448**	ng/L	1.90	0.448	1	06/28/23 14:05	06/30/23 04:13	307-24-4	
Perfluorohexanesulfonic acid	**<0.590**	ng/L	1.90	0.590	1	06/28/23 14:05	06/30/23 04:13	355-46-4	
Perfluorononanoic acid	**<0.467**	ng/L	1.90	0.467	1	06/28/23 14:05	06/30/23 04:13	375-95-1	
PFNS	**<0.828**	ng/L	1.90	0.828	1	06/28/23 14:05	06/30/23 04:13	68259-12-1	
Perfluorooctanoic acid	**<0.400**	ng/L	1.90	0.400	1	06/28/23 14:05	06/30/23 04:13	335-67-1	
Perfluorooctanesulfonic acid	**<0.362**	ng/L	1.90	0.362	1	06/28/23 14:05	06/30/23 04:13	1763-23-1	
Perfluoropentanoic acid	**<0.419**	ng/L	1.90	0.419	1	06/28/23 14:05	06/30/23 04:13	2706-90-3	
PFPeS	**<0.486**	ng/L	1.90	0.486	1	06/28/23 14:05	06/30/23 04:13	2706-91-4	
Perfluorotetradecanoic acid	**<0.543**	ng/L	1.90	0.543	1	06/28/23 14:05	06/30/23 04:13	376-06-7	
Perfluorotridecanoic acid	**<0.586**	ng/L	1.90	0.586	1	06/28/23 14:05	06/30/23 04:13	72629-94-8	
Perfluoroundecanoic acid	**<0.590**	ng/L	1.90	0.590	1	06/28/23 14:05	06/30/23 04:13	2058-94-8	
Surrogates									
d-NEtFOSA	1	%	50-150		1	06/28/23 14:05	06/30/23 04:13	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	2	%	50-150		1	06/28/23 14:05	06/30/23 04:13	31506-32-8-	MSSV1 2.7
d3-NMeFOSAA	69	%	50-150		1	06/28/23 14:05	06/30/23 04:13	2355-31-9-EI	
d5-NEtFOSAA	69	%	50-150		1	06/28/23 14:05	06/30/23 04:13	2991-50-6-EI	
d7-NMeFOSE	14	%	50-150		1	06/28/23 14:05	06/30/23 04:13	24448-09-7-	MSSV1 2.7
d9-NEtFOSE	9	%	50-150		1	06/28/23 14:05	06/30/23 04:13	1691-99-2-EI	MSSV1 2.7
M2 4:2 FTS	114	%	50-150		1	06/28/23 14:05	06/30/23 04:13	757124-72-4	
M2 6:2 FTS	102	%	50-150		1	06/28/23 14:05	06/30/23 04:13	27619-97-2-	
M2 8:2 FTS	80	%	50-150		1	06/28/23 14:05	06/30/23 04:13	39108-34-4-	
M2PFHxDA	11	%	50-150		1	06/28/23 14:05	06/30/23 04:13	67905-19-5-	MSSV1 2.7
M2PFTeDA	26	%	50-150		1	06/28/23 14:05	06/30/23 04:13	376-06-7-EI	MSSV1 2.7
M3HFPODA	69	%	50-150		1	06/28/23 14:05	06/30/23 04:13	13252-13-6-	
M3PFBS	75	%	50-150		1	06/28/23 14:05	06/30/23 04:13	375-73-5-EI	
M3PFHxS	75	%	50-150		1	06/28/23 14:05	06/30/23 04:13	355-46-4-EI	
M4PFHpA	77	%	50-150		1	06/28/23 14:05	06/30/23 04:13	375-85-9-EI	
M5PFHxA	80	%	50-150		1	06/28/23 14:05	06/30/23 04:13	307-24-4-EI	
M5PFPeA	80	%	50-150		1	06/28/23 14:05	06/30/23 04:13	2706-90-3-EI	
M6PFDA	73	%	50-150		1	06/28/23 14:05	06/30/23 04:13	335-76-2-EI	
M7PFUdA	73	%	50-150		1	06/28/23 14:05	06/30/23 04:13	2058-94-8-EI	
M8FOSA	45	%	50-150		1	06/28/23 14:05	06/30/23 04:13	754-91-6-EI	MSSV1 2.7
M8PFOA	77	%	50-150		1	06/28/23 14:05	06/30/23 04:13	335-67-1-EI	
M8PFOS	76	%	50-150		1	06/28/23 14:05	06/30/23 04:13	1763-23-1-EI	
M9PFNA	79	%	50-150		1	06/28/23 14:05	06/30/23 04:13	375-95-1-EI	
MPFBA	68	%	50-150		1	06/28/23 14:05	06/30/23 04:13	375-22-4-EI	
MPFDoA	53	%	50-150		1	06/28/23 14:05	06/30/23 04:13	307-55-1-EI	

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(920)469-2436

ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: DUP-02-WG-20230622 **Lab ID: 40264224036** Collected: 06/22/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**<0.28**	ug/L	1.0	0.28	5		06/29/23 21:23	123-91-1	
Surrogates									
1,3-Dioxane (S)	103	%	70-130		5		06/29/23 21:23		D3
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 15:57	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 15:57	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/27/23 15:57	75-34-3	
1,1-Dichloroethene	**0.99J**	ug/L	1.0	0.58	1		06/27/23 15:57	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 15:57	107-06-2	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/27/23 15:57	127-18-4	
Trichloroethene	**213**	ug/L	1.0	0.32	1		06/27/23 15:57	79-01-6	
Vinyl chloride	**0.25J**	ug/L	1.0	0.17	1		06/27/23 15:57	75-01-4	
cis-1,2-Dichloroethene	**31.4**	ug/L	1.0	0.47	1		06/27/23 15:57	156-59-2	
trans-1,2-Dichloroethene	**22.4**	ug/L	1.0	0.53	1		06/27/23 15:57	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/27/23 15:57	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		1		06/27/23 15:57	2199-69-1	
Toluene-d8 (S)	108	%	70-130		1		06/27/23 15:57	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.611**	ng/L	1.97	0.611	1	07/01/23 11:00	07/11/23 02:54	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.739**	ng/L	1.97	0.739	1	07/01/23 11:00	07/11/23 02:54	27619-97-2	
8:2 FTS	**<0.522**	ng/L	1.97	0.522	1	07/01/23 11:00	07/11/23 02:54	39108-34-4	
9Cl-PF3ONS	**<0.443**	ng/L	1.97	0.443	1	07/01/23 11:00	07/11/23 02:54	756426-58-1	
11Cl-PF3OUdS	**<0.443**	ng/L	1.97	0.443	1	07/01/23 11:00	07/11/23 02:54	763051-92-9	
ADONA	**<0.424**	ng/L	1.97	0.424	1	07/01/23 11:00	07/11/23 02:54	919005-14-4	
Perfluorooctanesulfonamide	**<0.365**	ng/L	1.97	0.365	1	07/01/23 11:00	07/11/23 02:54	754-91-6	
HFPO-DA	**<3.29**	ng/L	9.85	3.29	1	07/01/23 11:00	07/11/23 02:54	13252-13-6	
NEtFOSA	**<0.690**	ng/L	3.94	0.690	1	07/01/23 11:00	07/11/23 02:54	4151-50-2	
NEtFOSAA	**<0.779**	ng/L	3.94	0.779	1	07/01/23 11:00	07/11/23 02:54	2991-50-6	
NEtFOSE	**<0.498**	ng/L	3.94	0.498	1	07/01/23 11:00	07/11/23 02:54	1691-99-2	
NMeFOSA	**<0.818**	ng/L	3.94	0.818	1	07/01/23 11:00	07/11/23 02:54	31506-32-8	
NMeFOSAA	**<0.443**	ng/L	3.94	0.443	1	07/01/23 11:00	07/11/23 02:54	2355-31-9	
NMeFOSE	**<0.641**	ng/L	3.94	0.641	1	07/01/23 11:00	07/11/23 02:54	24448-09-7	
Perfluorobutanoic acid	**11.9**	ng/L	1.97	0.749	1	07/01/23 11:00	07/11/23 02:54	375-22-4	
Perfluorobutanesulfonic acid	**8.78**	ng/L	1.97	0.306	1	07/01/23 11:00	07/11/23 02:54	375-73-5	
Perfluorodecanoic acid	**<0.710**	ng/L	1.97	0.710	1	07/01/23 11:00	07/11/23 02:54	335-76-2	
Perfluorododecanoic acid	**<0.641**	ng/L	1.97	0.641	1	07/01/23 11:00	07/11/23 02:54	307-55-1	
PFDoS	**<0.645**	ng/L	1.97	0.645	1	07/01/23 11:00	07/11/23 02:54	79780-39-5	
PFDS	**<0.601**	ng/L	1.97	0.601	1	07/01/23 11:00	07/11/23 02:54	335-77-3	
Perfluoroheptanoic acid	**16.3**	ng/L	1.97	0.572	1	07/01/23 11:00	07/11/23 02:54	375-85-9	
PFHpS	**4.26**	ng/L	1.97	0.601	1	07/01/23 11:00	07/11/23 02:54	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: DUP-02-WG-20230622 **Lab ID: 40264224036** Collected: 06/22/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**23.3**	ng/L	1.97	0.463	1	07/01/23 11:00	07/11/23 02:54	307-24-4	
Perfluorohexanesulfonic acid	**72.6**	ng/L	1.97	0.611	1	07/01/23 11:00	07/11/23 02:54	355-46-4	
Perfluorononanoic acid	**<0.483**	ng/L	1.97	0.483	1	07/01/23 11:00	07/11/23 02:54	375-95-1	
PFNS	**<0.857**	ng/L	1.97	0.857	1	07/01/23 11:00	07/11/23 02:54	68259-12-1	
Perfluorooctanoic acid	**41.5**	ng/L	1.97	0.414	1	07/01/23 11:00	07/11/23 02:54	335-67-1	
Perfluorooctanesulfonic acid	**19.8**	ng/L	1.97	0.374	1	07/01/23 11:00	07/11/23 02:54	1763-23-1	
Perfluoropentanoic acid	**25.9**	ng/L	1.97	0.434	1	07/01/23 11:00	07/11/23 02:54	2706-90-3	
PFPeS	**9.43**	ng/L	1.97	0.503	1	07/01/23 11:00	07/11/23 02:54	2706-91-4	
Perfluorotetradecanoic acid	**<0.562**	ng/L	1.97	0.562	1	07/01/23 11:00	07/11/23 02:54	376-06-7	
Perfluorotridecanoic acid	**<0.606**	ng/L	1.97	0.606	1	07/01/23 11:00	07/11/23 02:54	72629-94-8	
Perfluoroundecanoic acid	**<0.611**	ng/L	1.97	0.611	1	07/01/23 11:00	07/11/23 02:54	2058-94-8	
Surrogates									
d-NEtFOSA	58	%	50-150		1	07/01/23 11:00	07/11/23 02:54	4151-50-2-EI	
d-NMeFOSA	59	%	50-150		1	07/01/23 11:00	07/11/23 02:54	31506-32-8-	
d3-NMeFOSAA	85	%	50-150		1	07/01/23 11:00	07/11/23 02:54	2355-31-9-EI	
d5-NEtFOSAA	81	%	50-150		1	07/01/23 11:00	07/11/23 02:54	2991-50-6-EI	
d7-NMeFOSE	85	%	50-150		1	07/01/23 11:00	07/11/23 02:54	24448-09-7-	
d9-NEtFOSE	79	%	50-150		1	07/01/23 11:00	07/11/23 02:54	1691-99-2-EI	
M2 4:2 FTS	129	%	50-150		1	07/01/23 11:00	07/11/23 02:54	757124-72-4	
M2 6:2 FTS	119	%	50-150		1	07/01/23 11:00	07/11/23 02:54	27619-97-2-	
M2 8:2 FTS	101	%	50-150		1	07/01/23 11:00	07/11/23 02:54	39108-34-4-	
M2PFHxDA	91	%	50-150		1	07/01/23 11:00	07/11/23 02:54	67905-19-5-	
M2PFTeDA	80	%	50-150		1	07/01/23 11:00	07/11/23 02:54	376-06-7-EI	
M3HFPODA	86	%	50-150		1	07/01/23 11:00	07/11/23 02:54	13252-13-6-	
M3PFBS	87	%	50-150		1	07/01/23 11:00	07/11/23 02:54	375-73-5-EI	
M3PFHxS	90	%	50-150		1	07/01/23 11:00	07/11/23 02:54	355-46-4-EI	
M4PFHpA	94	%	50-150		1	07/01/23 11:00	07/11/23 02:54	375-85-9-EI	
M5PFHxA	96	%	50-150		1	07/01/23 11:00	07/11/23 02:54	307-24-4-EI	
M5PFPeA	96	%	50-150		1	07/01/23 11:00	07/11/23 02:54	2706-90-3-EI	
M6PFDA	93	%	50-150		1	07/01/23 11:00	07/11/23 02:54	335-76-2-EI	
M7PFUdA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:54	2058-94-8-EI	
M8FOSA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:54	754-91-6-EI	
M8PFOA	98	%	50-150		1	07/01/23 11:00	07/11/23 02:54	335-67-1-EI	
M8PFOS	91	%	50-150		1	07/01/23 11:00	07/11/23 02:54	1763-23-1-EI	
M9PFNA	96	%	50-150		1	07/01/23 11:00	07/11/23 02:54	375-95-1-EI	
MPFBA	90	%	50-150		1	07/01/23 11:00	07/11/23 02:54	375-22-4-EI	
MPFDoA	82	%	50-150		1	07/01/23 11:00	07/11/23 02:54	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: DUP-03-WG-20230623 **Lab ID: 40264224037** Collected: 06/23/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260D (SIM) SPME 1,4-Dioxane	Analytical Method: ASTM 6520 / EPA 8260 (SIM) Pace Analytical Services - Green Bay								
1,4-Dioxane (p-Dioxane)	**30.1**	ug/L	2.0	0.57	10		06/29/23 21:42	123-91-1	
Surrogates									
1,3-Dioxane (S)	105	%	70-130		10		06/29/23 21:42		
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1-Trichloroethane	**2.9**	ug/L	1.0	0.30	1		06/27/23 16:16	71-55-6	
1,1,2-Trichloroethane	**<0.34**	ug/L	1.0	0.34	1		06/27/23 16:16	79-00-5	
1,1-Dichloroethane	**1.1**	ug/L	1.0	0.30	1		06/27/23 16:16	75-34-3	
1,1-Dichloroethene	**0.91J**	ug/L	1.0	0.58	1		06/27/23 16:16	75-35-4	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/27/23 16:16	107-06-2	
Tetrachloroethene	**0.56J**	ug/L	1.0	0.41	1		06/27/23 16:16	127-18-4	
Trichloroethene	**691**	ug/L	20.0	6.4	20		06/28/23 10:28	79-01-6	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/27/23 16:16	75-01-4	
cis-1,2-Dichloroethene	**9.5**	ug/L	1.0	0.47	1		06/27/23 16:16	156-59-2	
trans-1,2-Dichloroethene	**1.6**	ug/L	1.0	0.53	1		06/27/23 16:16	156-60-5	
Surrogates									
4-Bromofluorobenzene (S)	109	%	70-130		1		06/27/23 16:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/27/23 16:16	2199-69-1	
Toluene-d8 (S)	106	%	70-130		1		06/27/23 16:16	2037-26-5	
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
4:2 FTS	**<0.572**	ng/L	1.85	0.572	1	07/01/23 11:00	07/11/23 03:10	757124-72-4	
6:2 Fluorotelomer sulfonate	**<0.692**	ng/L	1.85	0.692	1	07/01/23 11:00	07/11/23 03:10	27619-97-2	
8:2 FTS	**<0.489**	ng/L	1.85	0.489	1	07/01/23 11:00	07/11/23 03:10	39108-34-4	
9Cl-PF3ONS	**<0.415**	ng/L	1.85	0.415	1	07/01/23 11:00	07/11/23 03:10	756426-58-1	
11Cl-PF3OUdS	**<0.415**	ng/L	1.85	0.415	1	07/01/23 11:00	07/11/23 03:10	763051-92-9	
ADONA	**<0.397**	ng/L	1.85	0.397	1	07/01/23 11:00	07/11/23 03:10	919005-14-4	
Perfluorooctanesulfonamide	**<0.342**	ng/L	1.85	0.342	1	07/01/23 11:00	07/11/23 03:10	754-91-6	
HFPO-DA	**<3.08**	ng/L	9.23	3.08	1	07/01/23 11:00	07/11/23 03:10	13252-13-6	
NEtFOSA	**<0.646**	ng/L	3.69	0.646	1	07/01/23 11:00	07/11/23 03:10	4151-50-2	
NEtFOSAA	**<0.729**	ng/L	3.69	0.729	1	07/01/23 11:00	07/11/23 03:10	2991-50-6	
NEtFOSE	**<0.466**	ng/L	3.69	0.466	1	07/01/23 11:00	07/11/23 03:10	1691-99-2	
NMeFOSA	**<0.766**	ng/L	3.69	0.766	1	07/01/23 11:00	07/11/23 03:10	31506-32-8	
NMeFOSAA	**<0.415**	ng/L	3.69	0.415	1	07/01/23 11:00	07/11/23 03:10	2355-31-9	
NMeFOSE	**<0.600**	ng/L	3.69	0.600	1	07/01/23 11:00	07/11/23 03:10	24448-09-7	
Perfluorobutanoic acid	**10.1**	ng/L	1.85	0.701	1	07/01/23 11:00	07/11/23 03:10	375-22-4	
Perfluorobutanesulfonic acid	**11.0**	ng/L	1.85	0.286	1	07/01/23 11:00	07/11/23 03:10	375-73-5	
Perfluorodecanoic acid	**<0.665**	ng/L	1.85	0.665	1	07/01/23 11:00	07/11/23 03:10	335-76-2	
Perfluorododecanoic acid	**<0.600**	ng/L	1.85	0.600	1	07/01/23 11:00	07/11/23 03:10	307-55-1	
PFDoS	**<0.605**	ng/L	1.85	0.605	1	07/01/23 11:00	07/11/23 03:10	79780-39-5	
PFDS	**<0.563**	ng/L	1.85	0.563	1	07/01/23 11:00	07/11/23 03:10	335-77-3	
Perfluoroheptanoic acid	**3.82**	ng/L	1.85	0.535	1	07/01/23 11:00	07/11/23 03:10	375-85-9	
PFHpS	**<0.563**	ng/L	1.85	0.563	1	07/01/23 11:00	07/11/23 03:10	375-92-8	

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ANALYTICAL RESULTS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Sample: DUP-03-WG-20230623 **Lab ID: 40264224037** Collected: 06/23/23 00:00 Received: 06/23/23 10:37 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Perfluorohexanoic acid	**5.18**	ng/L	1.85	0.434	1	07/01/23 11:00	07/11/23 03:10	307-24-4	
Perfluorohexanesulfonic acid	**<0.572**	ng/L	1.85	0.572	1	07/01/23 11:00	07/11/23 03:10	355-46-4	
Perfluorononanoic acid	**<0.452**	ng/L	1.85	0.452	1	07/01/23 11:00	07/11/23 03:10	375-95-1	
PFNS	**<0.803**	ng/L	1.85	0.803	1	07/01/23 11:00	07/11/23 03:10	68259-12-1	
Perfluorooctanoic acid	**12.4**	ng/L	1.85	0.388	1	07/01/23 11:00	07/11/23 03:10	335-67-1	
Perfluorooctanesulfonic acid	**<0.351**	ng/L	1.85	0.351	1	07/01/23 11:00	07/11/23 03:10	1763-23-1	
Perfluoropentanoic acid	**5.91**	ng/L	1.85	0.406	1	07/01/23 11:00	07/11/23 03:10	2706-90-3	
PFPeS	**<0.471**	ng/L	1.85	0.471	1	07/01/23 11:00	07/11/23 03:10	2706-91-4	
Perfluorotetradecanoic acid	**<0.526**	ng/L	1.85	0.526	1	07/01/23 11:00	07/11/23 03:10	376-06-7	
Perfluorotridecanoic acid	**<0.568**	ng/L	1.85	0.568	1	07/01/23 11:00	07/11/23 03:10	72629-94-8	
Perfluoroundecanoic acid	**<0.572**	ng/L	1.85	0.572	1	07/01/23 11:00	07/11/23 03:10	2058-94-8	
Surrogates									
d-NEtFOSA	57	%	50-150		1	07/01/23 11:00	07/11/23 03:10	4151-50-2-EI	
d-NMeFOSA	61	%	50-150		1	07/01/23 11:00	07/11/23 03:10	31506-32-8-	
d3-NMeFOSAA	76	%	50-150		1	07/01/23 11:00	07/11/23 03:10	2355-31-9-EI	
d5-NEtFOSAA	83	%	50-150		1	07/01/23 11:00	07/11/23 03:10	2991-50-6-EI	
d7-NMeFOSE	80	%	50-150		1	07/01/23 11:00	07/11/23 03:10	24448-09-7-	
d9-NEtFOSE	79	%	50-150		1	07/01/23 11:00	07/11/23 03:10	1691-99-2-EI	
M2 4:2 FTS	146	%	50-150		1	07/01/23 11:00	07/11/23 03:10	757124-72-4	
M2 6:2 FTS	123	%	50-150		1	07/01/23 11:00	07/11/23 03:10	27619-97-2-	
M2 8:2 FTS	93	%	50-150		1	07/01/23 11:00	07/11/23 03:10	39108-34-4-	
M2PFHxDA	70	%	50-150		1	07/01/23 11:00	07/11/23 03:10	67905-19-5-	
M2PFTeDA	73	%	50-150		1	07/01/23 11:00	07/11/23 03:10	376-06-7-EI	
M3HFPODA	75	%	50-150		1	07/01/23 11:00	07/11/23 03:10	13252-13-6-	
M3PFBS	81	%	50-150		1	07/01/23 11:00	07/11/23 03:10	375-73-5-EI	
M3PFHxS	89	%	50-150		1	07/01/23 11:00	07/11/23 03:10	355-46-4-EI	
M4PFHpA	96	%	50-150		1	07/01/23 11:00	07/11/23 03:10	375-85-9-EI	
M5PFHxA	96	%	50-150		1	07/01/23 11:00	07/11/23 03:10	307-24-4-EI	
M5PFPeA	76	%	50-150		1	07/01/23 11:00	07/11/23 03:10	2706-90-3-EI	
M6PFDA	93	%	50-150		1	07/01/23 11:00	07/11/23 03:10	335-76-2-EI	
M7PFUdA	85	%	50-150		1	07/01/23 11:00	07/11/23 03:10	2058-94-8-EI	
M8FOSA	85	%	50-150		1	07/01/23 11:00	07/11/23 03:10	754-91-6-EI	
M8PFOA	96	%	50-150		1	07/01/23 11:00	07/11/23 03:10	335-67-1-EI	
M8PFOS	89	%	50-150		1	07/01/23 11:00	07/11/23 03:10	1763-23-1-EI	
M9PFNA	97	%	50-150		1	07/01/23 11:00	07/11/23 03:10	375-95-1-EI	
MPFBA	78	%	50-150		1	07/01/23 11:00	07/11/23 03:10	375-22-4-EI	
MPFDoA	75	%	50-150		1	07/01/23 11:00	07/11/23 03:10	307-55-1-EI	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 448365
QC Batch Method: ASTM 6520 / EPA 8260 (SIM)
Analysis Method: ASTM 6520 / EPA 8260 (SIM)
Analysis Description: 8260D (SIM) SPME 1,4-Dioxane
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018

METHOD BLANK: 2575359 Matrix: Water
Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	06/27/23 13:17	
1,3-Dioxane (S)	%	113	70-130	06/27/23 13:17	

LABORATORY CONTROL SAMPLE: 2575360

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	29.3	117	70-130	
1,3-Dioxane (S)	%			113	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575361 2575362

Parameter	Units	40264224001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	25	25	31.1	30.3	124	121	70-130	3	20	
1,3-Dioxane (S)	%						111	112	70-130			

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 448378
QC Batch Method: ASTM 6520 / EPA 8260 (SIM)
Analysis Method: ASTM 6520 / EPA 8260 (SIM)
Analysis Description: 8260D (SIM) SPME 1,4-Dioxane
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40264224023, 40264224024, 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224035, 40264224036, 40264224037

METHOD BLANK: 2575397 Matrix: Water
Associated Lab Samples: 40264224023, 40264224024, 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224035, 40264224036, 40264224037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	06/29/23 10:36	
1,3-Dioxane (S)	%	102	70-130	06/29/23 10:36	

LABORATORY CONTROL SAMPLE: 2575398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	24.1	96	70-130	
1,3-Dioxane (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575399 2575400

Parameter	Units	40264255017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	0.15J	25	25	21.3	22.6	84	90	70-130	6	20	
1,3-Dioxane (S)	%						99	97	70-130			

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 448659
QC Batch Method: ASTM 6520 / EPA 8260 (SIM)
Analysis Method: ASTM 6520 / EPA 8260 (SIM)
Analysis Description: 8260D (SIM) SPME 1,4-Dioxane
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40264224019, 40264224022, 40264224034

METHOD BLANK: 2577094 Matrix: Water
Associated Lab Samples: 40264224019, 40264224022, 40264224034

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	0.20	06/29/23 15:40	
1,3-Dioxane (S)	%	102	70-130	06/29/23 15:40	

LABORATORY CONTROL SAMPLE: 2577095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	25	24.1	96	70-130	
1,3-Dioxane (S)	%			106	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2577096 2577097

Parameter	Units	40264224019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dioxane (p-Dioxane)	ug/L	<0.057	25	25	24.7	23.9	99	96	70-130	3	20	
1,3-Dioxane (S)	%						97	96	70-130			

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 448258
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40264224001, 40264224002, 40264224003, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224020

METHOD BLANK: 2575040
Matrix: Water
Associated Lab Samples: 40264224001, 40264224002, 40264224003, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/28/23 07:56	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	06/28/23 07:56	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/28/23 07:56	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/28/23 07:56	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/28/23 07:56	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/28/23 07:56	
Tetrachloroethene	ug/L	<0.41	1.0	06/28/23 07:56	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/28/23 07:56	
Trichloroethene	ug/L	<0.32	1.0	06/28/23 07:56	
Vinyl chloride	ug/L	<0.17	1.0	06/28/23 07:56	
1,2-Dichlorobenzene-d4 (S)	%	102	70-130	06/28/23 07:56	
4-Bromofluorobenzene (S)	%	103	70-130	06/28/23 07:56	
Toluene-d8 (S)	%	100	70-130	06/28/23 07:56	

LABORATORY CONTROL SAMPLE: 2575041

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	54.8	110	70-134	
1,1,2-Trichloroethane	ug/L	50	52.9	106	70-130	
1,1-Dichloroethane	ug/L	50	56.6	113	70-130	
1,1-Dichloroethene	ug/L	50	57.6	115	74-131	
1,2-Dichloroethane	ug/L	50	57.8	116	70-137	
cis-1,2-Dichloroethene	ug/L	50	54.5	109	70-130	
Tetrachloroethene	ug/L	50	49.5	99	70-130	
trans-1,2-Dichloroethene	ug/L	50	56.4	113	70-130	
Trichloroethene	ug/L	50	53.8	108	70-130	
Vinyl chloride	ug/L	50	52.9	106	63-134	
1,2-Dichlorobenzene-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			104	70-130	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575994 2575995

Parameter	Units	40264224001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.30	50	50	55.3	55.0	111	110	70-134	0	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	53.4	55.7	107	111	70-130	4	20	
1,1-Dichloroethane	ug/L	<0.30	50	50	56.6	57.8	113	116	70-130	2	20	
1,1-Dichloroethene	ug/L	<0.58	50	50	57.9	59.5	116	119	71-130	3	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	57.6	58.1	115	116	70-137	1	20	
cis-1,2-Dichloroethene	ug/L	0.85J	50	50	55.7	56.8	110	112	70-130	2	20	
Tetrachloroethene	ug/L	<0.41	50	50	51.0	51.7	102	103	70-130	1	20	
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	55.6	57.1	111	114	70-130	3	20	
Trichloroethene	ug/L	0.55J	50	50	54.2	56.0	107	111	70-130	3	20	
Vinyl chloride	ug/L	<0.17	50	50	52.6	53.4	105	107	60-137	1	20	
1,2-Dichlorobenzene-d4 (S)	%						102	102	70-130			
4-Bromofluorobenzene (S)	%						104	104	70-130			
Toluene-d8 (S)	%						104	107	70-130			

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 448259
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40264224021, 40264224022, 40264224023, 40264224024

METHOD BLANK: 2575042 Matrix: Water
Associated Lab Samples: 40264224021, 40264224022, 40264224023, 40264224024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/27/23 15:18	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	06/27/23 15:18	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/27/23 15:18	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/27/23 15:18	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/27/23 15:18	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/27/23 15:18	
Tetrachloroethene	ug/L	<0.41	1.0	06/27/23 15:18	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/27/23 15:18	
Trichloroethene	ug/L	<0.32	1.0	06/27/23 15:18	
Vinyl chloride	ug/L	<0.17	1.0	06/27/23 15:18	
1,2-Dichlorobenzene-d4 (S)	%	105	70-130	06/27/23 15:18	
4-Bromofluorobenzene (S)	%	107	70-130	06/27/23 15:18	
Toluene-d8 (S)	%	107	70-130	06/27/23 15:18	

LABORATORY CONTROL SAMPLE: 2575043

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.7	115	70-134	
1,1,2-Trichloroethane	ug/L	50	55.8	112	70-130	
1,1-Dichloroethane	ug/L	50	62.3	125	70-130	
1,1-Dichloroethene	ug/L	50	53.7	107	74-131	
1,2-Dichloroethane	ug/L	50	59.6	119	70-137	
cis-1,2-Dichloroethene	ug/L	50	49.7	99	70-130	
Tetrachloroethene	ug/L	50	50.9	102	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.6	107	70-130	
Trichloroethene	ug/L	50	55.1	110	70-130	
Vinyl chloride	ug/L	50	55.7	111	63-134	
1,2-Dichlorobenzene-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			105	70-130	
Toluene-d8 (S)	%			105	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575803 2575804

Parameter	Units	40264224022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.30	50	50	57.6	57.1	115	114	70-134	1	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	57.4	57.0	115	114	70-130	1	20	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575803 2575804

Parameter	Units	40264224022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	<0.30	50	50	62.5	61.7	125	123	70-130	1	20	
1,1-Dichloroethene	ug/L	<0.58	50	50	53.5	51.8	107	104	71-130	3	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	61.5	61.0	123	122	70-137	1	20	
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	51.0	51.2	102	102	70-130	0	20	
Tetrachloroethene	ug/L	<0.41	50	50	50.1	50.2	100	100	70-130	0	20	
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	53.3	52.8	107	106	70-130	1	20	
Trichloroethene	ug/L	0.56J	50	50	54.2	55.4	107	110	70-130	2	20	
Vinyl chloride	ug/L	<0.17	50	50	56.2	55.1	112	110	60-137	2	20	
1,2-Dichlorobenzene-d4 (S)	%						99	98	70-130			
4-Bromofluorobenzene (S)	%						103	106	70-130			
Toluene-d8 (S)	%						105	106	70-130			

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 448314
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224034, 40264224035, 40264224036, 40264224037

METHOD BLANK: 2575211 Matrix: Water
Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224034, 40264224035, 40264224036, 40264224037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/27/23 07:20	
1,1,2-Trichloroethane	ug/L	<0.34	1.0	06/27/23 07:20	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/27/23 07:20	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/27/23 07:20	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/27/23 07:20	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/27/23 07:20	
Tetrachloroethene	ug/L	<0.41	1.0	06/27/23 07:20	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/27/23 07:20	
Trichloroethene	ug/L	<0.32	1.0	06/27/23 07:20	
Vinyl chloride	ug/L	<0.17	1.0	06/27/23 07:20	
1,2-Dichlorobenzene-d4 (S)	%	102	70-130	06/27/23 07:20	
4-Bromofluorobenzene (S)	%	105	70-130	06/27/23 07:20	
Toluene-d8 (S)	%	106	70-130	06/27/23 07:20	

LABORATORY CONTROL SAMPLE: 2575212

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	56.9	114	70-134	
1,1,2-Trichloroethane	ug/L	50	55.2	110	70-130	
1,1-Dichloroethane	ug/L	50	60.5	121	70-130	
1,1-Dichloroethene	ug/L	50	53.2	106	74-131	
1,2-Dichloroethane	ug/L	50	57.8	116	70-137	
cis-1,2-Dichloroethene	ug/L	50	51.0	102	70-130	
Tetrachloroethene	ug/L	50	51.2	102	70-130	
trans-1,2-Dichloroethene	ug/L	50	52.3	105	70-130	
Trichloroethene	ug/L	50	54.0	108	70-130	
Vinyl chloride	ug/L	50	56.5	113	63-134	
1,2-Dichlorobenzene-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			106	70-130	
Toluene-d8 (S)	%			107	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575331 2575332

Parameter	Units	40264224027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.30	50	50	59.3	57.8	119	116	70-134	3	20	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2575331 2575332

Parameter	Units	40264224027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,2-Trichloroethane	ug/L	<0.34	50	50	57.2	55.1	114	110	70-130	4	20	
1,1-Dichloroethane	ug/L	<0.30	50	50	62.1	61.6	124	123	70-130	1	20	
1,1-Dichloroethene	ug/L	<0.58	50	50	54.7	53.6	109	107	71-130	2	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	61.2	59.0	122	118	70-137	4	20	
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	51.6	50.9	103	102	70-130	1	20	
Tetrachloroethene	ug/L	<0.41	50	50	52.3	49.1	105	98	70-130	6	20	
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	54.6	54.4	109	109	70-130	0	20	
Trichloroethene	ug/L	<0.32	50	50	55.8	55.4	112	111	70-130	1	20	
Vinyl chloride	ug/L	<0.17	50	50	59.4	57.8	119	116	60-137	3	20	
1,2-Dichlorobenzene-d4 (S)	%						102	101	70-130			
4-Bromofluorobenzene (S)	%						111	108	70-130			
Toluene-d8 (S)	%						107	106	70-130			

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 448387
QC Batch Method: EPA 3510
Analysis Method: EPA 8082A
Analysis Description: 8082A GCS PCB
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40264224025, 40264224029

METHOD BLANK: 2575451 Matrix: Water
Associated Lab Samples: 40264224025, 40264224029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1221 (Aroclor 1221)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1232 (Aroclor 1232)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1242 (Aroclor 1242)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1248 (Aroclor 1248)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1254 (Aroclor 1254)	ug/L	<0.11	0.50	06/28/23 01:36	
PCB-1260 (Aroclor 1260)	ug/L	<0.11	0.50	06/28/23 01:36	
Decachlorobiphenyl (S)	%	48	10-120	06/28/23 01:36	
Tetrachloro-m-xylene (S)	%	87	20-128	06/28/23 01:36	

METHOD BLANK: 2575454 Matrix: Water
Associated Lab Samples: 40264224025, 40264224029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1221 (Aroclor 1221)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1232 (Aroclor 1232)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1242 (Aroclor 1242)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1248 (Aroclor 1248)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1254 (Aroclor 1254)	ug/L	<0.56	2.5	06/28/23 06:08	
PCB-1260 (Aroclor 1260)	ug/L	<0.56	2.5	06/28/23 06:08	
Decachlorobiphenyl (S)	%	61	10-120	06/28/23 06:08	
Tetrachloro-m-xylene (S)	%	83	20-128	06/28/23 06:08	

LABORATORY CONTROL SAMPLE & LCSD: 2575452 2575453

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L		<0.11	<0.11					20	
PCB-1221 (Aroclor 1221)	ug/L		<0.11	<0.11					20	
PCB-1232 (Aroclor 1232)	ug/L		<0.11	<0.11					20	
PCB-1242 (Aroclor 1242)	ug/L		<0.11	<0.11					20	
PCB-1248 (Aroclor 1248)	ug/L		<0.11	<0.11					20	
PCB-1254 (Aroclor 1254)	ug/L		<0.11	<0.11					20	
PCB-1260 (Aroclor 1260)	ug/L	5	4.8	4.5	95	90	67-120	5	20	
Decachlorobiphenyl (S)	%				75	56	10-120			
Tetrachloro-m-xylene (S)	%				92	88	20-128			

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

MATRIX SPIKE SAMPLE: 2575455

Parameter	Units	40264041006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<0.56		<0.56			
PCB-1221 (Aroclor 1221)	ug/L	<0.56		<0.56			
PCB-1232 (Aroclor 1232)	ug/L	<0.56		<0.56			
PCB-1242 (Aroclor 1242)	ug/L	<0.56		<0.56			
PCB-1248 (Aroclor 1248)	ug/L	<0.56		<0.56			
PCB-1254 (Aroclor 1254)	ug/L	<0.56		<0.56			
PCB-1260 (Aroclor 1260)	ug/L	<0.56	25	23.4	94	29-131	
Decachlorobiphenyl (S)	%				73	10-120	
Tetrachloro-m-xylene (S)	%				96	20-128	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 768209
QC Batch Method: METHOD
Analysis Method: EPA 537 Modified
Analysis Description: PFAS 537 Mod Analysis Water
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 40264224031, 40264224034, 40264224035

METHOD BLANK: 2496231 Matrix: Water
Associated Lab Samples: 40264224031, 40264224034, 40264224035

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	06/30/23 00:47	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	06/30/23 00:47	
8:2 FTS	ng/L	<1.06	4.00	06/30/23 00:47	
9Cl-PF3ONS	ng/L	<0.900	4.00	06/30/23 00:47	
11Cl-PF3OUdS	ng/L	<0.900	4.00	06/30/23 00:47	
ADONA	ng/L	<0.860	4.00	06/30/23 00:47	
Perfluorooctanesulfonamide	ng/L	<0.740	4.00	06/30/23 00:47	
HFPO-DA	ng/L	<6.67	20.0	06/30/23 00:47	
NEtFOSA	ng/L	<1.40	8.00	06/30/23 00:47	
NEtFOSAA	ng/L	<1.58	8.00	06/30/23 00:47	
NEtFOSE	ng/L	<1.01	8.00	06/30/23 00:47	
NMeFOSA	ng/L	<1.66	8.00	06/30/23 00:47	
NMeFOSAA	ng/L	<0.900	8.00	06/30/23 00:47	
NMeFOSE	ng/L	<1.30	8.00	06/30/23 00:47	
Perfluorobutanoic acid	ng/L	<1.52	4.00	06/30/23 00:47	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	06/30/23 00:47	
Perfluorodecanoic acid	ng/L	<1.44	4.00	06/30/23 00:47	
Perfluorododecanoic acid	ng/L	<1.30	4.00	06/30/23 00:47	
PFDoS	ng/L	<1.31	4.00	06/30/23 00:47	
PFDS	ng/L	<1.22	4.00	06/30/23 00:47	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	06/30/23 00:47	
PFHpS	ng/L	<1.22	4.00	06/30/23 00:47	
Perfluorohexanoic acid	ng/L	<0.940	4.00	06/30/23 00:47	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	06/30/23 00:47	
Perfluorononanoic acid	ng/L	<0.980	4.00	06/30/23 00:47	
PFNS	ng/L	<1.74	4.00	06/30/23 00:47	
Perfluorooctanoic acid	ng/L	<0.840	4.00	06/30/23 00:47	
Perfluorooctanesulfonic acid	ng/L	<0.760	4.00	06/30/23 00:47	
Perfluoropentanoic acid	ng/L	<0.880	4.00	06/30/23 00:47	
PFPeS	ng/L	<1.02	4.00	06/30/23 00:47	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	06/30/23 00:47	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	06/30/23 00:47	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	06/30/23 00:47	
d-NEtFOSA	%	5	50-150	06/30/23 00:47	MSSV12.3
d-NMeFOSA	%	9	50-150	06/30/23 00:47	MSSV12.3
d3-NMeFOSAA	%	78	50-150	06/30/23 00:47	
d5-NEtFOSAA	%	74	50-150	06/30/23 00:47	
d7-NMeFOSE	%	33	50-150	06/30/23 00:47	MSSV12.3
d9-NEtFOSE	%	30	50-150	06/30/23 00:47	MSSV12.3
M2 4:2 FTS	%	93	50-150	06/30/23 00:47	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

METHOD BLANK: 2496231 Matrix: Water
Associated Lab Samples: 40264224031, 40264224034, 40264224035

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
M2 6:2 FTS	%	85	50-150	06/30/23 00:47	
M2 8:2 FTS	%	79	50-150	06/30/23 00:47	
M2PFHxDA	%	16	50-150	06/30/23 00:47	MSSV12.3
M2PFTeDA	%	73	50-150	06/30/23 00:47	
M3HFPODA	%	85	50-150	06/30/23 00:47	
M3PFBS	%	83	50-150	06/30/23 00:47	
M3PFHxS	%	80	50-150	06/30/23 00:47	
M4PFHpA	%	84	50-150	06/30/23 00:47	
M5PFHxA	%	85	50-150	06/30/23 00:47	
M5PFPeA	%	85	50-150	06/30/23 00:47	
M6PFDA	%	82	50-150	06/30/23 00:47	
M7PFUdA	%	87	50-150	06/30/23 00:47	
M8FOSA	%	68	50-150	06/30/23 00:47	
M8PFOA	%	83	50-150	06/30/23 00:47	
M8PFOS	%	80	50-150	06/30/23 00:47	
M9PFNA	%	84	50-150	06/30/23 00:47	
MPFBA	%	84	50-150	06/30/23 00:47	
MPFDoA	%	83	50-150	06/30/23 00:47	

LABORATORY CONTROL SAMPLE: 2496234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4:2 FTS	ng/L	7.5	7.13	95	70-130	
6:2 Fluorotelomer sulfonate	ng/L	7.61	7.50	99	70-130	
8:2 FTS	ng/L	7.68	7.93	103	70-130	
9Cl-PF3ONS	ng/L	7.46	6.93	93	70-130	
11Cl-PF3OUdS	ng/L	7.54	6.60	88	70-130	
ADONA	ng/L	7.56	6.63	88	70-130	
Perfluorooctanesulfonamide	ng/L	8	7.96	100	70-130	
HFPO-DA	ng/L	16	<6.67	93	70-130	
NEtFOSA	ng/L	8	<1.40	83	70-130	
NEtFOSAA	ng/L	8	<1.58	93	70-130	
NEtFOSE	ng/L	8	<1.01	96	70-130	
NMeFOSA	ng/L	8	8.25	103	70-130	
NMeFOSAA	ng/L	8	<0.900	97	70-130	
NMeFOSE	ng/L	8	<1.30	93	70-130	
Perfluorobutanoic acid	ng/L	8	7.35	92	70-130	
Perfluorobutanesulfonic acid	ng/L	7.1	6.58	93	70-130	
Perfluorodecanoic acid	ng/L	8	7.38	92	70-130	
Perfluorododecanoic acid	ng/L	8	7.29	91	70-130	
PFDoS	ng/L	7.76	5.97	77	70-130	
PFDS	ng/L	7.72	6.92	90	70-130	
Perfluoroheptanoic acid	ng/L	8	7.30	91	70-130	
PFHpS	ng/L	7.62	7.22	95	70-130	

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(920)469-2436

QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

LABORATORY CONTROL SAMPLE: 2496234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Perfluorohexanoic acid	ng/L	8	7.16	90	70-130	
Perfluorohexanesulfonic acid	ng/L	7.31	6.65	91	70-130	
Perfluorononanoic acid	ng/L	8	7.20	90	70-130	
PFNS	ng/L	7.7	6.74	88	70-130	
Perfluorooctanoic acid	ng/L	8	7.31	91	70-130	
Perfluorooctanesulfonic acid	ng/L	7.42	7.07	95	70-130	
Perfluoropentanoic acid	ng/L	8	7.32	92	70-130	
PFPeS	ng/L	7.53	6.54	87	70-130	
Perfluorotetradecanoic acid	ng/L	8	7.41	93	70-130	
Perfluorotridecanoic acid	ng/L	8	7.20	90	70-130	
Perfluoroundecanoic acid	ng/L	8	7.24	90	70-130	
d-NEtFOSA	%			3	50-150	MSSV12.3
d-NMeFOSA	%			5	50-150	MSSV12.3
d3-NMeFOSAA	%			73	50-150	
d5-NEtFOSAA	%			74	50-150	
d7-NMeFOSE	%			30	50-150	MSSV12.3
d9-NEtFOSE	%			25	50-150	MSSV12.3
M2 4:2 FTS	%			87	50-150	
M2 6:2 FTS	%			81	50-150	
M2 8:2 FTS	%			73	50-150	
M2PFHxDA	%			50	50-150	
M2PFTeDA	%			67	50-150	
M3HFPODA	%			81	50-150	
M3PFBS	%			79	50-150	
M3PFHxS	%			78	50-150	
M4PFHpA	%			80	50-150	
M5PFHxA	%			82	50-150	
M5PFPeA	%			81	50-150	
M6PFDA	%			77	50-150	
M7PFUdA	%			81	50-150	
M8FOSA	%			63	50-150	
M8PFOA	%			81	50-150	
M8PFOS	%			77	50-150	
M9PFNA	%			81	50-150	
MPFBA	%			80	50-150	
MPFDoA	%			75	50-150	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 768293
QC Batch Method: METHOD
Analysis Method: EPA 537 Modified
Analysis Description: PFAS 537 Mod Analysis Water
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224022, 40264224023, 40264224024

METHOD BLANK: 2496834
Matrix: Water
Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224022, 40264224023, 40264224024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	07/11/23 04:42	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	07/11/23 04:42	
8:2 FTS	ng/L	<1.06	4.00	07/11/23 04:42	
9Cl-PF3ONS	ng/L	<0.900	4.00	07/11/23 04:42	
11Cl-PF3OUdS	ng/L	<0.900	4.00	07/11/23 04:42	
ADONA	ng/L	<0.860	4.00	07/11/23 04:42	
Perfluorooctanesulfonamide	ng/L	<0.740	4.00	07/11/23 04:42	
HFPO-DA	ng/L	<6.67	20.0	07/11/23 04:42	
NEtFOSA	ng/L	<1.40	8.00	07/11/23 04:42	
NEtFOSAA	ng/L	<1.58	8.00	07/11/23 04:42	
NEtFOSE	ng/L	<1.01	8.00	07/11/23 04:42	
NMeFOSA	ng/L	<1.66	8.00	07/11/23 04:42	
NMeFOSAA	ng/L	<0.900	8.00	07/11/23 04:42	
NMeFOSE	ng/L	<1.30	8.00	07/11/23 04:42	
Perfluorobutanoic acid	ng/L	<1.52	4.00	07/11/23 04:42	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	07/11/23 04:42	
Perfluorodecanoic acid	ng/L	<1.44	4.00	07/11/23 04:42	
Perfluorododecanoic acid	ng/L	<1.30	4.00	07/11/23 04:42	
PFDoS	ng/L	<1.31	4.00	07/11/23 04:42	
PFDS	ng/L	<1.22	4.00	07/11/23 04:42	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	07/11/23 04:42	
PFHpS	ng/L	<1.22	4.00	07/11/23 04:42	
Perfluorohexanoic acid	ng/L	<0.940	4.00	07/11/23 04:42	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	07/11/23 04:42	
Perfluorononanoic acid	ng/L	<0.980	4.00	07/11/23 04:42	
PFNS	ng/L	<1.74	4.00	07/11/23 04:42	
Perfluorooctanoic acid	ng/L	<0.840	4.00	07/11/23 04:42	
Perfluorooctanesulfonic acid	ng/L	<0.760	4.00	07/11/23 04:42	
Perfluoropentanoic acid	ng/L	<0.880	4.00	07/11/23 04:42	
PFPeS	ng/L	<1.02	4.00	07/11/23 04:42	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	07/11/23 04:42	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	07/11/23 04:42	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	07/11/23 04:42	
d-NEtFOSA	%	1	50-150	07/11/23 04:42	MSSV12.3
d-NMeFOSA	%	2	50-150	07/11/23 04:42	MSSV12.3
d3-NMeFOSAA	%	83	50-150	07/11/23 04:42	
d5-NEtFOSAA	%	83	50-150	07/11/23 04:42	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

METHOD BLANK: 2496834 Matrix: Water

Associated Lab Samples: 40264224001, 40264224004, 40264224005, 40264224006, 40264224007, 40264224008, 40264224009, 40264224010, 40264224011, 40264224012, 40264224013, 40264224014, 40264224015, 40264224016, 40264224017, 40264224018, 40264224019, 40264224022, 40264224023, 40264224024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
d7-NMeFOSE	%	9	50-150	07/11/23 04:42	MSSV12.3
d9-NEtFOSE	%	6	50-150	07/11/23 04:42	MSSV12.3
M2 4:2 FTS	%	103	50-150	07/11/23 04:42	
M2 6:2 FTS	%	93	50-150	07/11/23 04:42	
M2 8:2 FTS	%	87	50-150	07/11/23 04:42	
M2PFHxDA	%	10	50-150	07/11/23 04:42	MSSV12.3
M2PFTeDA	%	61	50-150	07/11/23 04:42	
M3HFPODA	%	93	50-150	07/11/23 04:42	
M3PFBS	%	90	50-150	07/11/23 04:42	
M3PFHxS	%	86	50-150	07/11/23 04:42	
M4PFHpA	%	94	50-150	07/11/23 04:42	
M5PFHxA	%	96	50-150	07/11/23 04:42	
M5PFPeA	%	96	50-150	07/11/23 04:42	
M6PFDA	%	89	50-150	07/11/23 04:42	
M7PFUdA	%	85	50-150	07/11/23 04:42	
M8FOSA	%	65	50-150	07/11/23 04:42	
M8PFOA	%	95	50-150	07/11/23 04:42	
M8PFOS	%	84	50-150	07/11/23 04:42	
M9PFNA	%	94	50-150	07/11/23 04:42	
MPFBA	%	96	50-150	07/11/23 04:42	
MPFDoA	%	76	50-150	07/11/23 04:42	

LABORATORY CONTROL SAMPLE: 2496837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4:2 FTS	ng/L	7.5	9.03	120	70-130	
6:2 Fluorotelomer sulfonate	ng/L	7.61	9.42	124	70-130	
8:2 FTS	ng/L	7.68	9.47	123	70-130	
9Cl-PF3ONS	ng/L	7.46	8.30	111	70-130	
11Cl-PF3OUdS	ng/L	7.54	7.85	104	70-130	
ADONA	ng/L	7.56	8.04	106	70-130	
Perfluorooctanesulfonamide	ng/L	8	9.71	121	70-130	
HFPO-DA	ng/L	16	<6.67	100	70-130	
NEtFOSA	ng/L	8	10.6	133	70-130	L3
NEtFOSAA	ng/L	8	8.49	106	70-130	
NEtFOSE	ng/L	8	9.19	115	70-130	
NMeFOSA	ng/L	8	10.8	135	70-130	L3
NMeFOSAA	ng/L	8	9.20	115	70-130	
NMeFOSE	ng/L	8	8.08	101	70-130	
Perfluorobutanoic acid	ng/L	8	8.83	110	70-130	
Perfluorobutanesulfonic acid	ng/L	7.1	7.92	112	70-130	
Perfluorodecanoic acid	ng/L	8	8.61	108	70-130	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

LABORATORY CONTROL SAMPLE: 2496837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Perfluorododecanoic acid	ng/L	8	9.32	116	70-130	
PFDoS	ng/L	7.76	8.45	109	70-130	
PFDS	ng/L	7.72	8.02	104	70-130	
Perfluoroheptanoic acid	ng/L	8	8.83	110	70-130	
PFHpS	ng/L	7.62	8.59	113	70-130	
Perfluorohexanoic acid	ng/L	8	8.95	112	70-130	
Perfluorohexanesulfonic acid	ng/L	7.31	8.22	112	70-130	
Perfluorononanoic acid	ng/L	8	8.83	110	70-130	
PFNS	ng/L	7.7	8.57	111	70-130	
Perfluorooctanoic acid	ng/L	8	8.81	110	70-130	
Perfluorooctanesulfonic acid	ng/L	7.42	8.73	118	70-130	
Perfluoropentanoic acid	ng/L	8	8.74	109	70-130	
PFPeS	ng/L	7.53	8.40	112	70-130	
Perfluorotetradecanoic acid	ng/L	8	8.99	112	70-130	
Perfluorotridecanoic acid	ng/L	8	8.50	106	70-130	
Perfluoroundecanoic acid	ng/L	8	8.73	109	70-130	
d-NEtFOSA	%			2	50-150	MSSV12.3
d-NMeFOSA	%			3	50-150	MSSV12.3
d3-NMeFOSAA	%			79	50-150	
d5-NEtFOSAA	%			80	50-150	
d7-NMeFOSE	%			26	50-150	MSSV12.6
d9-NEtFOSE	%			19	50-150	MSSV12.6
M2 4:2 FTS	%			99	50-150	
M2 6:2 FTS	%			91	50-150	
M2 8:2 FTS	%			82	50-150	
M2PFHxDA	%			52	50-150	
M2PFTeDA	%			70	50-150	
M3HFPODA	%			92	50-150	
M3PFBS	%			88	50-150	
M3PFHxS	%			88	50-150	
M4PFHpA	%			93	50-150	
M5PFHxA	%			94	50-150	
M5PFPeA	%			92	50-150	
M6PFDA	%			88	50-150	
M7PFUdA	%			85	50-150	
M8FOSA	%			72	50-150	
M8PFOA	%			96	50-150	
M8PFOS	%			82	50-150	
M9PFNA	%			94	50-150	
MPFBA	%			93	50-150	
MPFDoA	%			78	50-150	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 768332
QC Batch Method: METHOD
Analysis Method: EPA 537 Modified
Analysis Description: PFAS 537 Mod Analysis Water
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224036, 40264224037

METHOD BLANK: 2496941
Matrix: Water
Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224036, 40264224037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	07/10/23 22:03	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	07/10/23 22:03	
8:2 FTS	ng/L	<1.06	4.00	07/10/23 22:03	
9Cl-PF3ONS	ng/L	<0.900	4.00	07/10/23 22:03	
11Cl-PF3OUdS	ng/L	<0.900	4.00	07/10/23 22:03	
ADONA	ng/L	<0.860	4.00	07/10/23 22:03	
Perfluorooctanesulfonamide	ng/L	<0.740	4.00	07/10/23 22:03	
HFPO-DA	ng/L	<6.67	20.0	07/10/23 22:03	
NEtFOSA	ng/L	<1.40	8.00	07/10/23 22:03	
NEtFOSAA	ng/L	<1.58	8.00	07/10/23 22:03	
NEtFOSE	ng/L	<1.01	8.00	07/10/23 22:03	
NMeFOSA	ng/L	<1.66	8.00	07/10/23 22:03	
NMeFOSAA	ng/L	<0.900	8.00	07/10/23 22:03	
NMeFOSE	ng/L	<1.30	8.00	07/10/23 22:03	
Perfluorobutanoic acid	ng/L	<1.52	4.00	07/10/23 22:03	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	07/10/23 22:03	
Perfluorodecanoic acid	ng/L	<1.44	4.00	07/10/23 22:03	
Perfluorododecanoic acid	ng/L	<1.30	4.00	07/10/23 22:03	
PFDoS	ng/L	<1.31	4.00	07/10/23 22:03	
PFDS	ng/L	<1.22	4.00	07/10/23 22:03	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	07/10/23 22:03	
PFHpS	ng/L	<1.22	4.00	07/10/23 22:03	
Perfluorohexanoic acid	ng/L	<0.940	4.00	07/10/23 22:03	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	07/10/23 22:03	
Perfluorononanoic acid	ng/L	<0.980	4.00	07/10/23 22:03	
PFNS	ng/L	<1.74	4.00	07/10/23 22:03	
Perfluorooctanoic acid	ng/L	<0.840	4.00	07/10/23 22:03	
Perfluorooctanesulfonic acid	ng/L	<0.760	4.00	07/10/23 22:03	
Perfluoropentanoic acid	ng/L	<0.880	4.00	07/10/23 22:03	
PFPeS	ng/L	<1.02	4.00	07/10/23 22:03	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	07/10/23 22:03	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	07/10/23 22:03	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	07/10/23 22:03	
d-NEtFOSA	%	55	50-150	07/10/23 22:03	
d-NMeFOSA	%	51	50-150	07/10/23 22:03	
d3-NMeFOSAA	%	87	50-150	07/10/23 22:03	
d5-NEtFOSAA	%	90	50-150	07/10/23 22:03	
d7-NMeFOSE	%	68	50-150	07/10/23 22:03	
d9-NEtFOSE	%	71	50-150	07/10/23 22:03	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

METHOD BLANK: 2496941 Matrix: Water

Associated Lab Samples: 40264224025, 40264224026, 40264224027, 40264224028, 40264224030, 40264224031, 40264224032, 40264224033, 40264224036, 40264224037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
M2 4:2 FTS	%	110	50-150	07/10/23 22:03	
M2 6:2 FTS	%	102	50-150	07/10/23 22:03	
M2 8:2 FTS	%	96	50-150	07/10/23 22:03	
M2PFHxDA	%	55	50-150	07/10/23 22:03	
M2PFTeDA	%	61	50-150	07/10/23 22:03	
M3HFPODA	%	95	50-150	07/10/23 22:03	
M3PFBS	%	97	50-150	07/10/23 22:03	
M3PFHxS	%	95	50-150	07/10/23 22:03	
M4PFHpA	%	97	50-150	07/10/23 22:03	
M5PFHxA	%	100	50-150	07/10/23 22:03	
M5PFPeA	%	98	50-150	07/10/23 22:03	
M6PFDA	%	97	50-150	07/10/23 22:03	
M7PFUdA	%	98	50-150	07/10/23 22:03	
M8FOSA	%	86	50-150	07/10/23 22:03	
M8PFOA	%	102	50-150	07/10/23 22:03	
M8PFOS	%	97	50-150	07/10/23 22:03	
M9PFNA	%	101	50-150	07/10/23 22:03	
MPFBA	%	98	50-150	07/10/23 22:03	
MPFDoA	%	90	50-150	07/10/23 22:03	

LABORATORY CONTROL SAMPLE & LCSD: 2496942 2496943

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Perfluorooctanesulfonamide	ng/L	80	92.6	94.5	116	118	70-130	2	30	
NEtFOSAA	ng/L	80	88.7	87.4	111	109	70-130	2	30	
NMeFOSAA	ng/L	80	93.7	90.6	117	113	70-130	3	30	
Perfluorodecanoic acid	ng/L	80	91.1	89.1	114	111	70-130	2	30	
Perfluoroundecanoic acid	ng/L	80	89.9	89.4	112	112	70-130	1	30	
d3-NMeFOSAA	%				90	76	50-150			
d5-NEtFOSAA	%				90	78	50-150			
M6PFDA	%				96	83	50-150			
M7PFUdA	%				95	81	50-150			
M8FOSA	%				89	75	50-150			

LABORATORY CONTROL SAMPLE: 2497078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4:2 FTS	ng/L	7.5	8.30	111	70-130	
6:2 Fluorotelomer sulfonate	ng/L	7.61	8.46	111	70-130	
8:2 FTS	ng/L	7.68	8.42	110	70-130	
9Cl-PF3ONS	ng/L	7.46	7.95	107	70-130	
11Cl-PF3OUdS	ng/L	7.54	7.23	96	70-130	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

LABORATORY CONTROL SAMPLE: 2497078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
ADONA	ng/L	7.56	7.50	99	70-130	
Perfluorooctanesulfonamide	ng/L	8	9.21	115	70-130	
HFPO-DA	ng/L	16	<6.67	99	70-130	
NEtFOSA	ng/L	8	<1.40	93	70-130	
NEtFOSAA	ng/L	8	8.75	109	70-130	
NEtFOSE	ng/L	8	<1.01	94	70-130	
NMeFOSA	ng/L	8	<1.66	83	70-130	
NMeFOSAA	ng/L	8	8.95	112	70-130	
NMeFOSE	ng/L	8	<1.30	93	70-130	
Perfluorobutanoic acid	ng/L	8	8.60	107	70-130	
Perfluorobutanesulfonic acid	ng/L	7.1	7.82	110	70-130	
Perfluorodecanoic acid	ng/L	8	8.60	108	70-130	
Perfluorododecanoic acid	ng/L	8	8.79	110	70-130	
PFDoS	ng/L	7.76	7.08	91	70-130	
PFDS	ng/L	7.72	8.09	105	70-130	
Perfluoroheptanoic acid	ng/L	8	8.62	108	70-130	
PFHpS	ng/L	7.62	8.52	112	70-130	
Perfluorohexanoic acid	ng/L	8	8.63	108	70-130	
Perfluorohexanesulfonic acid	ng/L	7.31	8.12	111	70-130	
Perfluorononanoic acid	ng/L	8	8.59	107	70-130	
PFNS	ng/L	7.7	8.14	106	70-130	
Perfluorooctanoic acid	ng/L	8	8.70	109	70-130	
Perfluorooctanesulfonic acid	ng/L	7.42	8.47	114	70-130	
Perfluoropentanoic acid	ng/L	8	8.62	108	70-130	
PFPeS	ng/L	7.53	7.97	106	70-130	
Perfluorotetradecanoic acid	ng/L	8	8.47	106	70-130	
Perfluorotridecanoic acid	ng/L	8	7.81	98	70-130	
Perfluoroundecanoic acid	ng/L	8	8.27	103	70-130	
d-NEtFOSA	%			76	50-150	
d-NMeFOSA	%			79	50-150	
d3-NMeFOSAA	%			81	50-150	
d5-NEtFOSAA	%			84	50-150	
d7-NMeFOSE	%			71	50-150	
d9-NEtFOSE	%			73	50-150	
M2 4:2 FTS	%			102	50-150	
M2 6:2 FTS	%			99	50-150	
M2 8:2 FTS	%			96	50-150	
M2PFHxDA	%			68	50-150	
M2PFTeDA	%			68	50-150	
M3HFPODA	%			92	50-150	
M3PFBS	%			91	50-150	
M3PFHxS	%			90	50-150	
M4PFHpA	%			93	50-150	
M5PFHxA	%			95	50-150	
M5PFPeA	%			93	50-150	
M6PFDA	%			94	50-150	
M7PFUdA	%			92	50-150	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

LABORATORY CONTROL SAMPLE: 2497078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
M8FOSA	%			82	50-150	
M8PFOA	%			97	50-150	
M8PFOS	%			90	50-150	
M9PFNA	%			96	50-150	
MPFBA	%			94	50-150	
MPFDoA	%			87	50-150	

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QUALITY CONTROL DATA

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

QC Batch: 768505
QC Batch Method: METHOD
Analysis Method: EPA 537 Modified
Analysis Description: PFAS 537 Mod Analysis Water
Laboratory: Pace Analytical Gulf Coast
Associated Lab Samples: 40264224034

METHOD BLANK: 2497826 Matrix: Water
Associated Lab Samples: 40264224034

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
NEtFOSE	ng/L	<1.01	8.00	07/12/23 18:35	
NMeFOSE	ng/L	<1.30	8.00	07/12/23 18:35	
d7-NMeFOSE	%	64	50-150	07/12/23 18:35	
d9-NEtFOSE	%	67	50-150	07/12/23 18:35	

LABORATORY CONTROL SAMPLE: 2497829

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
NEtFOSE	ng/L	8	9.73	122	70-130	
NMeFOSE	ng/L	8	8.09	101	70-130	
d7-NMeFOSE	%			18	50-150	MSSV12.6
d9-NEtFOSE	%			12	50-150	MSSV12.6

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QUALIFIERS

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

DL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

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

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

TNI - The NELAC Institute.

WORKORDER QUALIFIERS

WO: 40264224

[1]	In the EPA 537 Mod Isotope Dilution analysis in the prep batch 768208, the sample 22306280411 (MW-19S-WG-20230621) was originally extracted without low level LCS, which is a requirement for Wisconsin samples. The recoveries for extraction internal standards associated with multiple compounds were lower than the control limits in the sample 22306280411 (MW-19S-WG-20230621).
[2]	Samples 22306280401 (MW-03-WG-20230619), 22306280402 (MW-13D-WG-20230620), 22306280403 (MW-13S-WG-20230620), 22306280404 (MW-01-WG-20230620), 22306280405 (MW-26-WG-20230620), 22306280406 (MW-21S-WG-20230620), 22306280407 (MW-16-WG-20230620), 22306280408 (MW-10S-WG-20230620), 22306280409 (MW-18S-WG-20230620), 22306280410 (MW-08-WG-20230621), 22306280411 (MW-19S-WG-20230621), 22306280412 (MW-8S-WG-20230621), 22306280413 (MW-05-WG-20230621), 22306280414 (MW-24S-WG-20230621), 22306280415 (MW-25S-WG-20230621), 22306280416 (MW-10D-WG-20230621), 22306280417 (MW-12S-WG-20230621), 22306280418 (MW-9S-WG-20230621), 22306280419 (MW-09-WG-20230622) and 22306280420 (MW-15S-WG-20230622) were originally extracted without a LLLCS. The original extracts also contained multiple extracted internal standard failures.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.
MSSV12.3	In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
MSSV12.3	In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
MSSV12.3	In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280405 (MW-26-WG-20230620).

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Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

ANALYTE QUALIFIERS

MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280420 (MW-15S-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).

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Pace Project No.: 40264224

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MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M7PFUnA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280401 (MW-03-WG-20230619).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280404 (MW-01-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280406 (MW-21S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280407 (MW-16-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280409 (MW-18S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).

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Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

ANALYTE QUALIFIERS

MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280414 (MW-24S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280420 (MW-15S-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496233 (LCSD for HBN 768209 [LCMS/8191).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496234 (LCS for HBN 768209 [LCMS/8191]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496837 (LCS for HBN 768293 [LCMS/8204]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280401 (MW-03-WG-20230619).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280404 (MW-01-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280406 (MW-21S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280407 (MW-16-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280409 (MW-18S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280414 (MW-24S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).

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Green Bay, WI 54302
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Pace Project No.: 40264224

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MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280420 (MW-15S-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496233 (LCSD for HBN 768209 [LCMS/8191).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496234 (LCS for HBN 768209 [LCMS/8191]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496837 (LCS for HBN 768293 [LCMS/8204]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d3-NMeFOSAA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d5-NEtFOSAA is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d5-NEtFOSAA is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d5-NEtFOSAA is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280404 (MW-01-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280407 (MW-16-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).

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MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496234 (LCS for HBN 768209 [LCMS/8191]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280402 (MW-13D-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280403 (MW-13S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280404 (MW-01-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280405 (MW-26-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280407 (MW-16-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280408 (MW-10S-WG-20230620).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280410 (MW-08-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280411 (MW-19S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280412 (MW-8S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280413 (MW-05-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280415 (MW-25S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280416 (MW-10D-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280417 (MW-12S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280418 (MW-9S-WG-20230621).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280419 (MW-09-WG-20230622).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496231 (MB for HBN 768209 [LCMS/8191]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496234 (LCS for HBN 768209 [LCMS/8191]).
MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496834 (MB for HBN 768293 [LCMS/8204]).
MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280403 (MW-13S-WG-20230620). There are no target hits for the associated compounds.
MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280411 (MW-19S-WG-20230621). There are no target hits for the associated compounds.
MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280412 (MW-8S-WG-20230621). There are no target hits for the associated compounds.
MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280420 (MW-15S-WG-20230622). There are no target hits for the associated compounds.
MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280421 (MW-17S-WG-20230622). There are no target hits for the associated compounds.
MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22306280422 (MW-14S-WG-20230622). There are no target hits for the associated compounds.

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MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2496943 (LCSD for HBN 768332 [LCMS/8212). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 2496943 (LCSD for HBN 768332 [LCMS/8212). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496836 (LCSD for HBN 768293 [LCMS/8204). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2496943 (LCSD for HBN 768332 [LCMS/8212). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496836 (LCSD for HBN 768293 [LCMS/8204). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2496943 (LCSD for HBN 768332 [LCMS/8212). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496836 (LCSD for HBN 768293 [LCMS/8204). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2496837 (LCS for HBN 768293 [LCMS/8204]). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 2497829 (LCS for HBN 768505 [LCMS/8225]). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496836 (LCSD for HBN 768293 [LCMS/8204). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2496837 (LCS for HBN 768293 [LCMS/8204]). The recovery of the associated compounds is within control limits.

MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2497829 (LCS for HBN 768505 [LCMS/8225]). The recovery of the associated compounds is within control limits.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280422 (MW-14S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280424 (MW-15D-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280429 (MW-23S-WG-20230621). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

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Green Bay, WI 54302
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MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280429 (MW-23S-WG-20230621). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard MPFDoA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280421 (MW-17S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280422 (MW-14S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280424 (MW-15D-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280429 (MW-23S-WG-20230621). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280422 (MW-14S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280424 (MW-15D-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280429 (MW-23S-WG-20230621). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

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(920)469-2436

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MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280426 (MW-7S-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280427 (MW-04-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22306280430 (DUP-01-WG-20230622). The sample was re-extracted with similar results for this extracted internal standard.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

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Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40264224025	**MW-17S-WG-20230622**	EPA 3510	448387	EPA 8082A	448485
40264224029	**MW-13S-WG-20230622**	EPA 3510	448387	EPA 8082A	448485
40264224001	**MW-03-WG-20230619**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224004	**MW-13D-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224005	**MW-13S-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224006	**MW-01-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224007	**MW-26-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224008	**MW-21S-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224009	**MW-16-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224010	**MW-10S-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224011	**MW-18S-WG-20230620**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224012	**MW-08-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224013	**MW-19S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224014	**MW-8S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224015	**MW-05-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224016	**MW-24S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224017	**MW-25S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224018	**MW-10D-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448365		
40264224019	**MW-12S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448659		
40264224022	**MW-9S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448659		
40264224023	**MW-09-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224024	**MW-15S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224025	**MW-17S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224026	**MW-14S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224027	**MW-20S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224028	**MW-15D-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224030	**MW-6S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224031	**MW-7S-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40264224032	**MW-04-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224033	**MW-15I-WG-20230623**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224034	**MW-23S-WG-20230621**	ASTM 6520 / EPA 8260 (SIM)	448659		
40264224035	**DUP-01-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224036	**DUP-02-WG-20230622**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224037	**DUP-03-WG-20230623**	ASTM 6520 / EPA 8260 (SIM)	448378		
40264224001	**MW-03-WG-20230619**	EPA 8260	448258		
40264224002	**TB-01-WQ-20230620**	EPA 8260	448258		
40264224003	**TB-02-WQ-20230620**	EPA 8260	448258		
40264224004	**MW-13D-WG-20230620**	EPA 8260	448258		
40264224005	**MW-13S-WG-20230620**	EPA 8260	448258		
40264224006	**MW-01-WG-20230620**	EPA 8260	448258		
40264224007	**MW-26-WG-20230620**	EPA 8260	448258		
40264224008	**MW-21S-WG-20230620**	EPA 8260	448258		
40264224009	**MW-16-WG-20230620**	EPA 8260	448258		
40264224010	**MW-10S-WG-20230620**	EPA 8260	448258		
40264224011	**MW-18S-WG-20230620**	EPA 8260	448258		
40264224012	**MW-08-WG-20230621**	EPA 8260	448258		
40264224013	**MW-19S-WG-20230621**	EPA 8260	448258		
40264224014	**MW-8S-WG-20230621**	EPA 8260	448258		
40264224015	**MW-05-WG-20230621**	EPA 8260	448258		
40264224016	**MW-24S-WG-20230621**	EPA 8260	448258		
40264224017	**MW-25S-WG-20230621**	EPA 8260	448258		
40264224018	**MW-10D-WG-20230621**	EPA 8260	448258		
40264224019	**MW-12S-WG-20230621**	EPA 8260	448258		
40264224020	**FB-01-WQ-20230621**	EPA 8260	448258		
40264224021	**FB-02-WQ-20230621**	EPA 8260	448259		
40264224022	**MW-9S-WG-20230621**	EPA 8260	448259		
40264224023	**MW-09-WG-20230622**	EPA 8260	448259		
40264224024	**MW-15S-WG-20230622**	EPA 8260	448259		
40264224025	**MW-17S-WG-20230622**	EPA 8260	448314		
40264224026	**MW-14S-WG-20230622**	EPA 8260	448314		
40264224027	**MW-20S-WG-20230622**	EPA 8260	448314		
40264224028	**MW-15D-WG-20230622**	EPA 8260	448314		
40264224030	**MW-6S-WG-20230622**	EPA 8260	448314		
40264224031	**MW-7S-WG-20230622**	EPA 8260	448314		
40264224032	**MW-04-WG-20230622**	EPA 8260	448314		
40264224033	**MW-15I-WG-20230623**	EPA 8260	448314		
40264224034	**MW-23S-WG-20230621**	EPA 8260	448314		
40264224035	**DUP-01-WG-20230622**	EPA 8260	448314		
40264224036	**DUP-02-WG-20230622**	EPA 8260	448314		
40264224037	**DUP-03-WG-20230623**	EPA 8260	448314		

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 0383990-THERMOFISHER
Pace Project No.: 40264224

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40264224001	**MW-03-WG-20230619**	METHOD	768293	EPA 537 Modified	768736
40264224004	**MW-13D-WG-20230620**	METHOD	768293	EPA 537 Modified	768736
40264224005	**MW-13S-WG-20230620**	METHOD	768293	EPA 537 Modified	768736
40264224006	**MW-01-WG-20230620**	METHOD	768293	EPA 537 Modified	768736
40264224007	**MW-26-WG-20230620**	METHOD	768293	EPA 537 Modified	768736
40264224008	**MW-21S-WG-20230620**	METHOD	768293	EPA 537 Modified	768736
40264224009	**MW-16-WG-20230620**	METHOD	768293	EPA 537 Modified	768736
40264224010	**MW-10S-WG-20230620**	METHOD	768293	EPA 537 Modified	768736
40264224011	**MW-18S-WG-20230620**	METHOD	768293	EPA 537 Modified	768736
40264224012	**MW-08-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224013	**MW-19S-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224014	**MW-8S-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224015	**MW-05-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224016	**MW-24S-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224017	**MW-25S-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224018	**MW-10D-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224019	**MW-12S-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224022	**MW-9S-WG-20230621**	METHOD	768293	EPA 537 Modified	768736
40264224023	**MW-09-WG-20230622**	METHOD	768293	EPA 537 Modified	768736
40264224024	**MW-15S-WG-20230622**	METHOD	768293	EPA 537 Modified	768736
40264224025	**MW-17S-WG-20230622**	METHOD	768332	EPA 537 Modified	768734
40264224026	**MW-14S-WG-20230622**	METHOD	768332	EPA 537 Modified	768734
40264224027	**MW-20S-WG-20230622**	METHOD	768332	EPA 537 Modified	768734
40264224028	**MW-15D-WG-20230622**	METHOD	768332	EPA 537 Modified	768734
40264224030	**MW-6S-WG-20230622**	METHOD	768332	EPA 537 Modified	768734
40264224031	**MW-7S-WG-20230622**	METHOD	768209	EPA 537 Modified	768324
40264224031	**MW-7S-WG-20230622**	METHOD	768332	EPA 537 Modified	768871
40264224032	**MW-04-WG-20230622**	METHOD	768332	EPA 537 Modified	768734
40264224033	**MW-15I-WG-20230623**	METHOD	768332	EPA 537 Modified	768734
40264224034	**MW-23S-WG-20230621**	METHOD	768209	EPA 537 Modified	768324
40264224034	**MW-23S-WG-20230621**	METHOD	768505	EPA 537 Modified	768871
40264224035	**DUP-01-WG-20230622**	METHOD	768209	EPA 537 Modified	768324
40264224036	**DUP-02-WG-20230622**	METHOD	768332	EPA 537 Modified	768734
40264224037	**DUP-03-WG-20230623**	METHOD	768332	EPA 537 Modified	768734

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40264224

ALL SHADED AREAS are for LAB USE ONLY

Company: ERM	Billing Information:
Address: 731 W Greenfield Ave Milwaukee WI 53214	
Report To: John Roberts	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: 0388990-Thermo Fisher WV	State: County/City: Time Zone Collected: [ ] PT [ ] MT [X] CT [ ] ET
Phone: Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Leann Grahn Blumhook	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [X] No Analysis:

** Preservative Types (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Lab Project Manager:

Container Preservative Type **

Analyses: 8260 VOCs; 1-4 Dioxane; PFAS

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	8260 VOCs	1-4 Dioxane	PFAS	Lab Sample # / Comments
MW-03-WG-20230619	GW	Grab	06/19/23	0820				8	X	X	X	001
TB-01-WG-20230620			6/20	925				3	X			002
TB-02-WG-20230620			6/20	925				3				003
MW-13D-WG-20230620			6/20	1010				8	X	X	X	004
MW-13S-WG-20230620			6/20	1140					X	X	X	005
MW-01-WG-20230620			6/20	930					X	X	X	006
MW-26-WG-20230620			6/20	1150					X	X	X	007
MW-21S-WG-20230620			6/20	1430					X	X	X	008
MW-16-WG-20230620			6/20	1450					X	X	X	009
MW-10S-WG-20230620			6/20	1625					X	X	X	010

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used: bubble wrap and bags

Radchem sample(s) screened (<500 cpm): Y N (NA)

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A

Lab Tracking #: 2891994

Samples received via: FEDEX UPS (Client) Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 128
Cooler 1 Temp Upon Receipt: 0.5 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.5 oC
Comments:

Relinquished by/Company: (Signature) Leann Grahn-Erm	Date/Time: 6/23/23 1037	Received by/Company: (Signature) Matt Vandombek Pace	Date/Time: 06/23/2023 10:37
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

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40264224

ALL SHADED AREAS are for LAB USE ONLY

Company: GRM	Billing Information:
Address: 731 W Greenfield Ave milwaukee WI 53214	
Report To:	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: 0383990 - Thermo-Aztec	State: County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Leanna Graham Glue Hook	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [X] No Analysis:

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses: 8260 VOCs; 1-4 Dioxane; PFAS

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Lab Sample # / Comments
MW-48S-WG-20230620	GW		06/20	1635				8	011
MW-08W-WG-20230621			06/21	0830					012
MW-19S-WG-20230621			06/21	0850					013
MW-85-WG-20230621			06/21	0940					014
MW-05-WG-20230621			06/21	1130					015
MW-24S-WG-20230621			06/21	1020					016
MW-25S-WG-20230621			06/21	1210					017
MW-10D-WG-20230621			06/21	1315					018
MW-12S-WG-20230621			06/21	1510					019
FB-01-WG-20230621			06/21	1610				3	020

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used: bubble wrap and bags

Radchem sample(s) screened (<500 cpm): Y N (NA)

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A

Lab Tracking #: 2891997

Samples received via: FEDEX UPS (Client) Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: IR8
Cooler 1 Temp Upon Receipt: 0.5 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.5 oC
Comments:

Relinquished by/Company: (Signature) Leanna Graham GRM	Date/Time: 1037 6/23/23	Received by/Company: (Signature) Matt VanDamme Pace	Date/Time: 06/23/2023 10:37
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

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Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

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ALL SHADED AREAS are for LAB USE ONLY

Company: ERM	Billing Information:
Address: 7311 W Greenfield Ave Milwaukee WI 53214	
Report To: John Roberts	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: 0383990-Thermo Fisher-41	State: County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Glen Thode	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [X] No Analysis:

Container Preservative Type **: Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses: 8260D VOCs; 1-4 Dioxane 8270E

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

LAB USE ONLY:
Lab Sample # / Comments:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Lab Sample # / Comments
FB-02-WG-20230602	GW	Grab	06/21	1610				3	021
mw-9S-WG-20230601			06/21	1535				8	022
mw-09-WG-20230621			06/22	0825					023
mw-15S-WG-20230622			06/22	0925					024
mw-17S-WG-20230622			06/22	0845					025
mw-14S-WG-20230622			06/22	1030					026
mw-20S-WG-20230622			06/22	1100					027
MW-15D-WG-20230622			06/22	1240					028
MW-13S2-WG-20230622			06/22	1440					029
mw-6S-WG-20230622			06/22	1210					030

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used: bubble wrap and bags

Radchem sample(s) screened (<500 cpm): Y N (NA)

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A 6/23/23

Lab Tracking #: 2891995

Samples received via: FEDEX UPS (Client) Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 128
Cooler 1 Temp Upon Receipt: 0.3 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.3 oC
Comments:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Relinquished by/Company: (Signature) Leann Grubb ERM	Date/Time: 1037 6/23/23	Received by/Company: (Signature) Matt VanSomeek Pace	Date/Time: 06/23/2023 10:37
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

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Acctnum:
Template:
Prelogin:
PM:
PB:

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40264224

ALL SHADED AREAS are for LAB USE ONLY

Company: ERM

Billing Information:

Address: 7311 W Greenfield Ave Milwaukee WI 53214

Report To:

Email To:

Copy To:

Site Collection Info/Address:

Customer Project Name/Number: 0383990 - Thermofisher

State: WI County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone:
Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): Glenn Grahe, Glen Twork

Purchase Order #:
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature):

Turnaround Date Required: Standard

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal:
[ ] Dispose as appropriate [ ] Return
[ ] Archive: ___
[ ] Hold: ___

Rush:
[ ] Same Day [ ] Next Day
[ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day
(Expedite Charges Apply)

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

Analysis: ___

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ___

Lab Project Manager:

Analyses: 8260 VOCs; 1-4 Dioxane; PFAS

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: ___	
Sample pH Acceptable	Y N NA
pH Strips: ___	
Sulfide Present	Y N NA
Lead Acetate Strips: ___	

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	LAB USE ONLY: Lab Sample # / Comments:
	GW	Grab							6/23/23 SG
MW-7S-WG-20230622			06/22	1420					~~030~~ 031
MW-04-WG-20230622			06/22	1600					~~031~~ 032
MW-15I-WG-20230623			06/23	0905					~~032~~ 033
DMW-23S-WG-20230621			06/21	1410					033 Received, lab
									034 added to COC
									per PM 6/23/23 SG
									6/23/23 SG
DUP-01-WG-20230622			06/22	—					~~034~~ 035
DUP-02-WG-20230622			06/22	—					~~035~~ 036
DUP-03-WG-20230623			06/23						~~036~~ 037

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A

Packing Material Used: bubble wrap and bags

Lab Tracking #: 2891996

Radchem sample(s) screened (<500 cpm): Y N (NA)

Samples received via: FEDEX UPS (Client) Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 128
Cooler 1 Temp Upon Receipt: 0.5 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.5 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Glenn Grahe ERM	6/23/23 1037	Matt Vandenbroek Pace	06/23/2023 10:37

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 4 of: 4

Client Name: ERM

Sample Preservation Receipt Form

Project # 40264224

All containers needing preservation have been checked and noted below. ☐Yes ☐No ☑N/A

Lab Lot# of pH paper. Lab Std #ID of preservation (if pH adjusted). Initial when completed. Date/ Time.

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
001									2								6																2.5 / 5
002																	6											2						2.5 / 5
003																	6																2.5 / 5
004									2								6																2.5 / 5
005									2								6																2.5 / 5
006									2								6																2.5 / 5
007									2								6																2.5 / 5
008									2								6																2.5 / 5
009									2								6																2.5 / 5
010									2								6																2.5 / 5
011									2								5																2.5 / 5
012									2								6																2.5 / 5
013									2								6																2.5 / 5
014									2								6																2.5 / 5
015									2								6																2.5 / 5
016									2								6																2.5 / 5
017									2								6																2.5 / 5
018									2								6																2.5 / 5
019									2								6																2.5 / 5
020									2								3																2.5 / 5

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other

Headspace in VOA Vials (>6mm). ☑Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	
						GN 2	

Client Name: ERM

Sample Preservation Receipt Form

Project #: 40264224

Pace Lab #	Glass							Plastic						Vials						Jars				General				VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2							
021								2	2	6/23/1386							3																2.5 / 5
022								2	2								6																2.5 / 5
023								2	2								6																2.5 / 5
024								2	2								6																2.5 / 5
025	2							2	2								6																2.5 / 5
026								2	2								6																2.5 / 5
027								2	2								6																2.5 / 5
028								2	2								6																2.5 / 5
029	2																6	6/23/1386																2.5 / 5
030								2	2								6																2.5 / 5
031								2	2								6																2.5 / 5
032								2	2								6																2.5 / 5
033								2	2								6																2.5 / 5
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035								2	2								6																2.5 / 5
036								2	2								6																2.5 / 5
037								2	2								6																2.5 / 5
038																																	2.5 / 5
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043																																	2.5 / 5
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045																																	2.5 / 5
046																																	2.5 / 5
047																																	2.5 / 5
048																																	2.5 / 5

6/23/1386

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40264224

40264224

t Name: ERM

er: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☑ Client ☐ Pace Other.

king #:

stody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

stody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

cking Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

ermometer Used SR - 128 Type of Ice: (Wet) Blue Dry None ☐ Meltwater Only

ooler Temperature Uncorr: 0.5 /Corr: 0.5

emp Blank Present: ☐ yes ☐ no Biological Tissue is Frozen: ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice

Person examining contents:
Date: 6/23/23 Initials: SG
Labeled By Initials: ARJ

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No	MS/MSD: ☐Yes ☑No ☐N/A	8.
Correct Containers Used: Correct Type: (Pace Green Bay), Pace IR, Non-Pace	☑Yes ☐No	9.
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	~~☑Yes~~ ☑No ☐N/A 6/23/23 SG	12. 001 time "1620" 007 time "1100" on one bottle 6/23/23 SG
Trip Blank Present: Trip Blank Custody Seals Present Pace Trip Blank Lot # (if purchased): 503	☑Yes ☐No ☐N/A ☑Yes ☐No ☐N/A	13.

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:
Did not receive "MW-1392-WG-20230622" VOCs or PFAS 6/23/23 SG
all one vial received empty 6/23/23 SG

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

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