Robert E. Lee & Associates, Inc.
Engineering | Environmental | Surveying | Ecological

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October 25, 2022

Mr. Tauren Beggs
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2984 Shawano Avenue
Green Bay, WI 54313-6727

RE: NR 716.14 Data Transmittal – Soil and Groundwater Sampling Results
Jagemann Plating Company, 1324 S. 26th Street Manitowoc, WI; BRRTS #02-36-555544

Dear Mr. Beggs:

On behalf of Jagemann Plating Company, Robert E. Lee & Associates, Inc. (REL) is providing the Wisconsin Department of Natural Resources (WDNR) the enclosed soil and groundwater analytical results for sampling conducted during June 2002 at Jagemann Plating Company, 1324 South 26th Street, Manitowoc, Wisconsin (the Site). Soil samples were collected from three soil borings (B26 through B28), which were completed on June 2, 2022, within the Site building to further define the extent of soil contamination. Select soil samples were laboratory analyzed for volatile organic compounds (VOCs), RCRA metals, and perfluoroalkyl and polyfluoroalkyl substances (PFAS).

After soil sampling was complete, the borings were converted to Temporary Wells TW26 through TW28, respectively, to further define the extent of groundwater contamination. The temporary wells were developed on June 6, 2022. On June 14, 2022, water level measurements were collected from Site wells and piezometers, using an electronic water level indicator. Between June 14 and 16, 2022, groundwater samples collected were from new Temporary Wells TW26 through TW28; existing Monitoring Wells MW-4, MW-5, MW-6, MW-7, MW-17, MW-18, and MW-19; Piezometers PZ-3, PZ-4, PZ-13, and PZ-16, along with the interior groundwater pit Sump (Sump 1). The groundwater samples were laboratory analyzed for a combination of VOCs, RCRA metals, and PFAS.

Additional groundwater samples were also collected by REL during this sampling event from Monitoring Wells MW-1, MW-14, and Temporary Well TW-20, as part of the ongoing groundwater remediation pilot study being performed at the Site by EnviroForensics, LLC. The groundwater samples were laboratory analyzed for VOCs, dissolved total chromium, and dissolved hexavalent chromium.

The vertical locations of the Temporary Wells TW20 through TW28 were surveyed during July 2022 to determine the ground surface and groundwater elevation.

The soil and groundwater samples were collected in accordance with WDNR guidance, the November 8, 2021, *Site Investigation Work Plan,* and the subsequent workplan submitted to the WDNR via electronic mail on May 24, 2022. The soil boring and monitoring well locations are shown in the two figures included in *Attachment* A. The groundwater analytical results are summarized in Tables A.1.a through A.1.c, soil analytical results are summarized in Tables A.2.a through A.2.c., and water level elevations are summarized in Table A.6 included in *Attachment* B. The soil laboratory analytical reports are included in *Attachment* C. Groundwater analytical reports are included in *Attachment D.*

We trust this information meets your needs. If you have any questions, please feel free to contact REL at (920) 662-9641.

Sincerely,

ROBERT E. LEE & ASSOCIATES, INC.

Nicole L. LaPlant
Project Manager/Geologist

Bruce D. Meissner, VP, PG
Environmental Compliance Manager

NLL/BDM/LAR

ENC.

CC/ENC: Mike Jagemann, Jagemann Plating Company

A

ATTACHMENT A

Tables

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-1									
			10/15/2010	6/15/2011	9/29/2011	7/31/2013	4/1/2014	12/30/2016	3/28/2019	6/20/2019	6/24/2021	6/16/2022
VOCs (ug/L)												
1,1,1,2-Tetrachloroethane	**70**	**7**	< 18.4	< 9.2	< 18.4	<16.5	<3.3	<4.8	<2.7	<2.7	<3.6	<3.6
1,1,1-Trichloroethane	**200**	**40**	< 18.0	< 9.0	< 18.0	<16.5	<3.3	<8.4	<2.4	<2.4	<3.0	<3.0
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 4.0	< 2.0	< 4.0	<22.5	<4.5	<5.2	<2.8	<2.8	<3.8	<3.8
1,1,2-Trichloroethane	**5**	**0.5**	< 8.4	< 4.2	< 8.4	<17	<3.4	<4.8	<5.5	<5.5	<3.4	<3.4
1,1-Dichloroethane	**850**	**85**	< 15.0	< 7.5	< 15.0	<15	<3	<11	3.7 J	3.9J	3.5 J	4.9 J
1,1-Dichloroethene	**7**	**0.7**	**13.8 J**	**14.6**	< 11.4	<20	**25.9**	<6.5	**17.5**	**16.1**	**20.1**	**24.8**
1,1-Dichloropropene	**NE**	**NE**	< 15.0	< 7.5	< 15.0	---	---	---	<5.4	<5.4	< 4.1	<4.1
1,2,3-Trichlorobenzene	**NE**	**NE**	< 14.8	< 7.4	< 14.8	<90	<18	<27	<6.3	<6.3	<10.2	<10.2
1,2,3-Trichloropropane	**60**	**12**	< 19.8	< 9.9	< 19.8	---	---	---	<5.9	<5.9	<5.6	<5.6
1,2,4-Trichlorobenzene	**70**	**14**	< 19.4	< 9.7	< 19.4	<49	<9.8	<17	<9.5	<9.5	<9.5	<9.5
1,2,4-Trimethylbenzene	**480***	**96***	< 19.4	< 9.7	< 19.4	<110	<22	<16	<8.4	<8.4	<4.5	<4.5
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 33.6	< 16.8	< 33.6	<44	<8.8	<14	<17.6	<17.6	<23.7	<23.7
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 11.2	< 5.6	< 11.2	<22	<4.4	<6.3	<8.3	<8.3	<3.1	<3.1
1,2-Dichlorobenzene	**600**	**60**	< 16.6	< 8.3	< 16.6	<18	<3.6	<4.6	<7.1	<7.1	<3.3	<3.3
1,2-Dichloroethane	**5**	**0.5**	< 7.2	< 3.6	< 7.2	<20.5	<4.1	<4.8	<2.8	<2.8	<2.9	<2.9
1,2-Dichloropropane	**5**	**0.5**	< 9.8	< 4.9	< 9.8	<16	<3.2	<4.3	<2.8	<2.8	<4.5	<4.5
1,3,5-Trimethylbenzene	**480***	**96***	< 16.6	< 8.3	< 16.6	<70	<14	<15	<8.7	<8.7	<3.6	<3.6
1,3-Dichlorobenzene	**600**	**120**	< 17.4	< 8.7	< 17.4	<14	<2.8	<5.2	<6.3	<6.3	<3.5	<3.5
1,3-Dichloropropane	**NE**	**NE**	< 12.2	< 6.1	< 12.2	<16.5	<3.3	<4.2	<8.3	<8.3	<3.0	<3.0
1,4-Dichlorobenzene	**75**	**15**	< 19.0	< 9.5	< 19.0	<15	<3	<4.9	<9.4	<9.4	<8.9	<8.9
2,2-Dichloropropane	**NE**	**NE**	< 12.4	< 6.2	< 12.4	<18	<3.6	<31	<22.7	<22.7	<41.8	<41.8
2-Chlorotoluene	**NE**	**NE**	< 17.0	< 8.5	< 17.0	<10.5	<2.1	<4	<9.3	<9.3	<8.9	<8.9
4-Chlorotoluene	**NE**	**NE**	< 14.8	< 7.4	< 14.8	<10.5	<2.1	<6.3	<7.6	<7.6	<8.9	<8.9
Benzene	**5**	**0.5**	< 8.2	< 4.1	< 8.2	<12	<2.4	<4.4	<2.5	<2.5	<3.0	<3.0
Bromobenzene	**NE**	**NE**	< 16.4	< 8.2	< 16.4	<16	<3.2	<4.8	<2.4	<2.4	<3.6	<3.6
Bromochloromethane	**NE**	**NE**	< 19.4	< 9.7	< 19.4	---	---	---	<3.6	<3.6	<3.6	<3.6
Bromodichloromethane	**0.6**	**0.06**	< 11.2	< 5.6	< 11.2	<18.5	<3.7	<4.6	<3.6	<3.6	<4.2	<4.2
Bromoform	**4.4**	**0.44**	< 18.8	< 9.4	< 18.8	<17.5	<3.5	<4.6	<39.7	<39.7	<38.0	<38.0
Bromomethane	**10**	**1**	< 18.2	< 9.1	< 18.2	---	---	---	<9.7	<9.7	<11.9	<11.9
Carbon Tetrachloride	**5**	**0.5**	< 9.8	< 4.9	< 9.8	<16.5	<3.3	<5.1	<1.7	<1.7	<3.7	<3.7
Chlorobenzene	**NE**	**NE**	< 8.2	< 4.1	< 8.2	<12	<2.4	<4.6	<7.1	<7.1	<8.6	<8.6
Chloroethane	**400**	**80**	< 19.4	< 9.7	< 19.4	<31.5	<6.3	<6.5	<13.4	<13.4	<13.8	<13.8
Chloroform	**6**	**0.6**	< 26.0	< 13.0	< 26.0	<14	<2.8	<4.3	<12.7	<12.7	<11.8	<11.8
Chloromethane	**30**	**3**	< 4.8	< 2.4	< 4.8	<40.5	<8.1	<19	<21.9	<21.9	<16.4	<16.4
Dibromochloromethane	**60**	**6**	< 16.2	< 8.1	< 16.2	<11	<2.2	<4.5	<26.0	<26.0	<26.4	<26.4
Dibromomethane	**NE**	**NE**	< 12.0	< 6.0	< 12.0	---	---	---	<9.4	<9.4	<9.9	<9.9
Dichlorodifluoromethane	**NE**	**NE**	< 19.8	< 9.9	< 19.8	<22	<4.4	<8.7	<5.0	<5.0	<4.6	<4.6
Diisopropyl ether	**NE**	**NE**	< 15.2	< 7.6	< 15.2	<11.5	<2.3	<4.4	<18.9	<18.9	<11.0	<11.0
Ethylbenzene	**700**	**140**	< 10.8	< 5.4	< 10.8	<27.5	<5.5	<7.1	<2.2	<2.2	<3.3	<3.3
Hexachloro-1,3-butadiene	**NE**	**NE**	< 13.4	< 6.7	< 13.4	<75	<15	<22	<11.8	<11.8	<27.4	<27.4
Isopropylbenzene	**NE**	**NE**	< 11.8	< 5.9	< 11.8	<15	<3	<8.2	<3.9	<3.9	<10.0	<10.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 12.2	< 6.1	< 12.2	<11.5	<2.3	<11	<12.5	<12.5	<11.3	<11.3
Methylene Chloride	**5**	**0.5**	< 8.6	< 4.3	< 8.6	<25	<5	<13	<5.8	<5.8	<3.2	<3.2
Naphthalene	**100**	**10**	< 17.8	< 8.9	< 17.8	<85	<17	<16	<11.8	<11.8	<11.3	<11.3
Styrene	**100**	**10**	< 17.2	< 8.6	< 17.2	---	---	---	<4.7	<4.7	<3.6	<3.6
Tetrachloroethene	**5**	**0.5**	< 9.0	< 4.5	< 9.0	<16.5	<3.3	<4.9	<3.3	<3.3	<4.1	<4.1
Toluene	**800**	**160**	< 13.4	< 6.7	< 13.4	<34.5	<6.9	<4.4	<1.7	<1.7	<2.9	<2.9
Trichloroethene	**5**	**0.5**	**1,930**	**1,600**	**1,440**	**540**	**1,330**	**390**	**703**	**895**	**946**	**902**
Trichlorofluoromethane	**3490**	**698**	< 15.8	< 7.9	< 15.8	<35.5	<7.1	<8.7	<2.1	<2.1	<4.2	<4.2
Vinyl chloride	**0.2**	**0.02**	**599**	**444**	**169**	**230**	**730**	**125**	**430**	**410**	**697**	**750**
cis-1,2-Dichloroethene	**70**	**7**	**554**	**425**	**206**	**200**	**490**	**148**	**252**	**316**	**400**	**442**
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 4.0	< 2.0	< 4.0	---	---	---	<36.3	<36.3	<3.6	<3.6
Xylenes	**2000**	**400**	<52.6	< 26.3	< 52.6	<66	<13.2	<31	<7.3	<7.3	<10.9	<10.5
n-Butylbenzene	**NE**	**NE**	<18.6	< 9.3	< 18.6	<17.5	<3.5	<10	<7.1	<7.1	<8.6	<8.6
n-Propylbenzene	**NE**	**NE**	< 16.2	< 8.1	< 16.2	<12.5	<2.5	<7.7	<8.1	<8.1	<3.5	<3.5
p-Isopropyltoluene	**NE**	**NE**	< 13.4	< 6.7	< 13.4	<15.5	<3.1	<11	<8.0	<8.0	<10.4	<10.4
sec-Butylbenzene	**NE**	**NE**	< 17.8	< 8.9	< 17.8	<16.5	<3.3	<12	<8.5	<8.5	<4.2	<4.2
tert-Butylbenzene	**NE**	**NE**	< 19.4	< 9.7	< 19.4	<18	<3.6	<11	<3.0	<3.0	<5.9	<5.9
trans-1,2-Dichloroethene	**100**	**20**	***28.6***	***22.9***	< 17.8	17.5 J	***39***	9 J	***23.6 J***	***24.6 J***	***33.5***	***41.6***
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 3.8	< 1.9	< 3.8	---	---	---	<43.7	<43.7	<34.6	<34.6

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-2								
			10/15/2010	6/15/2011	9/29/2011	7/31/2013	4/1/2014	12/30/2016	3/28/2019	6/20/2019	6/24/2021
VOCs (ug/L)											
1,1,1,2-Tetrachloroethane	**70**	**7**	< 0.92	< 0.92	< 0.92	<0.33	<0.33	<0.48	NS	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	< 0.90	< 0.90	< 0.90	<0.33	<0.33	<0.84	NS	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 0.20	< 0.20	< 0.20	<0.45	<0.45	<0.52	NS	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	< 0.42	< 0.42	< 0.42	<0.34	<0.34	<0.48	NS	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	< 0.75	< 0.75	< 0.75	<0.3	<0.3	<1.1	NS	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	***6.9***	**9.9**	***5.1***	***1.7***	***2.28***	<0.65	NS	***2.6***	0.97 J
1,1-Dichloropropene	**NE**	**NE**	< 0.75	< 0.75	< 0.75	---	---	---	NS	<0.54	< 0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	< 0.74	< 0.74	< 0.74	<1.8	<1.8	<2.7	NS	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	< 0.99	< 0.99	< 0.99	---	---	---	NS	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	< 0.97	< 0.97	< 0.97	<0.98	<0.98	<1.7	NS	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	< 0.97	< 0.97	< 0.97	<2.2	<2.2	<1.6	NS	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 1.7	< 1.7	< 1.7	<0.88	<0.88	<1.4	NS	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 0.56	< 0.56	< 0.56	<0.44	<0.44	<0.63	NS	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	< 0.83	< 0.83	< 0.83	<0.36	<0.36	<0.46	NS	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	< 0.36	< 0.36	< 0.36	<0.41	<0.41	<0.48	NS	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	< 0.49	< 0.49	< 0.49	<0.32	<0.32	<0.43	NS	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	< 0.83	< 0.83	< 0.83	<1.4	<1.4	<1.5	NS	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	< 0.87	< 0.87	< 0.87	<0.28	<0.28	<0.52	NS	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	< 0.61	< 0.61	< 0.61	<0.33	<0.33	<0.42	NS	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	< 0.95	< 0.95	< 0.95	<0.3	<0.3	<0.49	NS	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	< 0.62	< 0.62	< 0.62	<0.36	<0.36	<3.1	NS	<2.3	<4.2
2-Chlorotoluene	**NE**	**NE**	< 0.85	< 0.85	< 0.85	<0.21	<0.21	<0.4	NS	<0.93	<0.89
4-Chlorotoluene	**NE**	**NE**	< 0.74	< 0.74	< 0.74	<0.21	<0.21	<0.63	NS	<0.76	<0.89
Benzene	**5**	**0.5**	< 0.41	< 0.41	< 0.41	<0.24	<0.24	<0.44	NS	<0.25	<0.30
Bromobenzene	**NE**	**NE**	< 0.82	< 0.82	< 0.82	<0.32	<0.32	<0.48	NS	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	< 0.97	< 0.97	< 0.97	---	---	---	NS	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	< 0.56	< 0.56	< 0.56	<0.37	<0.37	<0.46	NS	<0.36	<0.42
Bromoform	**4.4**	**0.44**	< 0.94	< 0.94	< 0.94	<0.35	<0.35	<0.46	NS	<4.0	<3.8
Bromomethane	**10**	**1**	< 0.91	< 0.91	< 0.91	---	---	---	NS	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	< 0.49	< 0.49	< 0.49	<0.33	<0.33	<0.51	NS	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	< 0.41	< 0.41	< 0.41	<0.24	<0.24	<0.46	NS	<0.71	<0.86
Chloroethane	**400**	**80**	< 0.97	< 0.97	< 0.97	<0.63	<0.63	<0.65	NS	<1.3	<1.4
Chloroform	**6**	**0.6**	< 1.3	< 1.3	< 1.3	<0.28	<0.28	<0.43	NS	<1.3	<1.2
Chloromethane	**30**	**3**	< 0.24	< 0.24	< 0.24	<0.81	<0.81	<1.9	NS	<2.2	***9.8***
Dibromochloromethane	**60**	**6**	< 0.81	< 0.81	< 0.81	<0.22	<0.22	<0.45	NS	<2.6	<2.6
Dibromomethane	**NE**	**NE**	< 0.60	< 0.60	< 0.60	---	---	---	NS	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	10.5	17.2	21.0	13.2	13.5	1.53 J	NS	5.3	13.7
Diisopropyl ether	**NE**	**NE**	< 0.76	< 0.76	< 0.76	<0.23	<0.23	<0.44	NS	<1.9	<1.1
Ethylbenzene	**700**	**140**	< 0.54	< 0.54	< 0.54	<0.55	<0.55	<0.71	NS	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	< 0.67	< 0.67	< 0.67	<1.5	<1.5	<2.2	NS	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	< 0.59	< 0.59	< 0.59	<0.3	<0.3	<0.82	NS	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 0.61	< 0.61	< 0.61	<0.23	<0.23	<1.1	NS	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	< 0.43	< 0.43	< 0.43	<0.5	<0.5	<1.3	NS	<0.58	<0.32
Naphthalene	**100**	**10**	< 0.89	< 0.89	< 0.89	<1.7	<1.7	<1.1	NS	<1.2	<1.1
Styrene	**100**	**10**	< 0.86	< 0.86	< 0.86	---	---	---	NS	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	< 0.45	< 0.45	< 0.45	<0.33	<0.33	<0.49	NS	<0.33	<0.41
Toluene	**800**	**160**	< 0.67	< 0.67	< 0.67	<0.69	<0.69	<0.44	NS	<0.17	<0.29
Trichloroethene	**5**	**0.5**	**9**	**12.9**	**5.4**	***0.67 J***	***1***	***1.33 J***	NS	***1.9***	<0.32
Trichlorofluoromethane	**3490**	**698**	< 0.79	< 0.79	< 0.79	<0.71	<0.71	<0.87	NS	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	**38.5**	**78.6**	**53.8**	**69**	**36**	**4.9**	NS	**15.4**	**34.5**
cis-1,2-Dichloroethene	**70**	**7**	**114**	**92**	**72.5**	***42***	***30.9***	4.2	NS	***19.5***	***24.6***
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 0.20	< 0.20	< 0.20	---	---	---	NS	<3.6	<0.36
Xylenes	**2000**	**400**	< 2.63	< 2.63	< 2.63	<1.32	<1.32	<3.1	NS	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	< 0.93	< 0.93	< 0.93	<0.35	<0.35	<1	NS	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	< 0.81	< 0.81	< 0.81	<0.25	<0.25	<0.77	NS	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	< 0.67	< 0.67	< 0.67	<0.31	<0.31	<1.1	NS	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	< 0.89	< 0.89	< 0.89	<0.33	<0.33	<1.2	NS	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	< 0.97	< 0.97	< 0.97	<0.36	<0.36	<1.1	NS	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	3.5	1.9	1.7	0.41 J	<0.35	<0.54	NS	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 0.19	< 0.19	< 0.19	---	---	---	NS	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-3								
			10/15/2010	6/15/2011	9/29/2011	7/31/2013	4/1/2014	12/30/2016	3/28/2019	6/20/2019	6/24/2021
VOCs (ug/L)											
1,1,1,2-Tetrachloroethane	**70**	**7**	< 3.7	< 0.92	< 1.8	<0.33	<0.33	<0.48	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	< 3.6	< 0.90	< 1.8	<0.33	<0.33	<0.84	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 0.80	< 0.20	< 0.40	<0.45	<0.45	<0.52	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	< 1.7	< 0.42	< 0.84	<0.34	<0.34	<0.48	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	< 3.0	< 0.75	< 1.5	<0.3	<0.3	<1.1	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	***2.3 J***	***1.4***	***1.6 J***	***2.48***	***2.27***	***1.22 J***	***1.0***	***1.3***	***1.9***
1,1-Dichloropropene	**NE**	**NE**	< 3.0	< 0.75	< 1.5	---	---	---	<0.54	<0.54	< 0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	< 3.0	< 0.74	< 1.5	<1.8	<1.8	<2.7	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	< 4.0	< 0.99	< 2.0	---	---	---	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	< 3.9	< 0.97	< 1.9	<0.98	<0.98	<1.7	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	< 3.9	< 0.97	< 1.9	<2.2	<2.2	<1.6	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 6.7	< 1.7	< 3.4	<0.88	<0.88	<1.4	<1.8	<1.8	<0.31
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 2.2	< 0.56	< 1.1	<0.44	<0.44	<0.63	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	< 3.3	< 0.83	< 1.7	<0.36	<0.36	<0.46	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	< 1.4	< 0.36	< 0.72	<0.41	<0.41	<0.48	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	< 2.0	< 0.49	< 0.98	<0.32	<0.32	<0.43	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	< 3.3	< 0.83	< 1.7	<1.4	<1.4	<1.5	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	< 3.5	< 0.87	< 1.7	<0.28	<0.28	<0.52	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	< 2.4	< 0.61	< 1.2	<0.33	<0.33	<0.42	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	< 3.8	< 0.95	< 1.9	<0.3	<0.3	<0.49	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	< 2.5	< 0.62	< 1.2	<0.36	<0.36	<3.1	<2.3	<2.3	<4.2
2-Chlorotoluene	**NE**	**NE**	< 3.4	< 0.85	< 1.7	<0.21	<0.21	<0.4	<0.93	<0.93	<0.89
4-Chlorotoluene	**NE**	**NE**	< 3.0	< 0.74	< 1.5	<0.21	<0.21	<0.63	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	< 1.6	< 0.41	< 0.82	<0.24	<0.24	<0.44	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	< 3.3	< 0.82	< 1.6	<0.32	<0.32	<0.48	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	< 3.9	< 0.97	< 1.9	---	---	---	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	< 2.2	< 0.56	< 1.1	<0.37	<0.37	<0.46	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	< 3.8	< 0.94	< 1.9	<0.35	<0.35	<0.46	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	< 3.6	< 0.91	< 1.8	---	---	---	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	< 2.0	< 0.49	< 0.98	<0.33	<0.33	<0.51	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	< 1.6	< 0.41	< 0.82	<0.24	<0.24	<0.46	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	< 3.9	< 0.97	< 1.9	<0.63	<0.63	<0.65	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	< 5.2	< 1.3	< 2.6	<0.28	<0.28	<0.43	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	< 9.6	< 0.24	< 0.48	<0.81	<0.81	<1.9	<2.2	<2.2	<0.37
Dibromochloromethane	**60**	**6**	< 3.2	< 0.81	< 1.6	<0.22	<0.22	<0.45	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	< 2.4	< 0.60	< 1.2	---	---	---	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	8.5	8.6	14.9	10.7	14.2	9.9	5.3	5.8	7.0
Diisopropyl ether	**NE**	**NE**	< 3.0	< 0.76	< 1.5	<0.23	<0.23	<0.44	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	< 2.2	< 0.54	< 1.1	<0.55	<0.55	<0.71	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	< 2.7	< 0.67	< 1.3	<1.5	<1.5	<2.2	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	< 2.4	< 0.59	< 1.2	<0.3	<0.3	<0.82	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 2.4	< 0.61	< 1.2	<0.23	<0.23	<1.1	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	< 1.7	< 0.43	< 0.86	<0.5	<0.5	<1.3	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	< 3.6	< 0.89	< 1.8	<1.7	<1.7	<1.6	<1.2	<1.2	<1.1
Styrene	**100**	**10**	< 3.4	< 0.86	< 1.7	---	---	---	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	< 1.8	< 0.45	< 0.90	<0.33	<0.33	<0.49	***0.52 J***	***0.50J***	0.46 J
Toluene	**800**	**160**	< 2.7	< 0.67	< 1.3	<0.98	<0.69	<0.44	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	**66.9**	**59.2**	**97.1**	**38**	**60**	**75**	**36.9**	**56.1**	**67.3**
Trichlorofluoromethane	**3490**	**698**	< 3.2	< 0.79	< 1.6	<0.71	<0.71	<0.87	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	**42.1**	**12.9**	**13.4**	**44**	**21.5**	**3.5**	**0.49 J**	**1.6**	**3.6**
cis-1,2-Dichloroethene	**70**	**7**	**256**	**121**	**125**	**128**	**139**	**73**	***49***	***53.8***	**54.7**
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 0.80	< 0.20	< 0.40	---	---	---	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	< 10.5	< 2.63	< 5.3	<1.32	<1.32	<3.1	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	< 3.7	< 0.81	< 1.9	<0.35	<0.35	<1	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	< 3.2	< 0.83	< 1.6	<0.25	<0.25	<0.77	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	< 2.7	< 0.67	< 1.3	<0.31	<0.31	<1.1	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	< 3.6	< 0.89	< 1.8	<0.33	<0.33	<1.2	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	< 3.9	< 0.97	< 1.9	<0.36	<0.36	<1.1	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	15.9	5.8	8	5.3	7.2	3.2	1.6 J	1.7 J	1.2
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 0.76	< 0.19	< 0.38	---	---	---	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-4			
			6/15/2011	9/29/2011	7/31/2013	6/14/2022
VOCs (ug/L)						
1,1,1,2-Tetrachloroethane	**70**	**7**	< 0.92	< 0.92	<0.33	<0.36
1,1,1-Trichloroethane	**200**	**40**	< 0.90	< 0.90	<0.33	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 0.20	< 0.20	<0.45	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	< 0.42	< 0.42	<0.34	<0.34
1,1-Dichloroethane	**850**	**85**	< 0.75	< 0.75	<0.3	<0.30
1,1-Dichloroethene	**7**	**0.7**	< 0.57	< 0.57	<0.4	<0.58
1,1-Dichloropropene	**NE**	**NE**	< 0.75	< 0.75	---	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	< 0.74	< 0.74	<1.8	<1.0
1,2,3-Trichloropropane	**60**	**12**	< 0.99	< 0.99	---	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	< 0.97	< 0.97	<0.98	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	< 0.97	< 0.97	<2.2	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 1.7	< 1.7	<0.88	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 0.56	< 0.56	<0.44	<0.31
1,2-Dichlorobenzene	**600**	**60**	< 0.83	< 0.83	<0.36	<0.33
1,2-Dichloroethane	**5**	**0.5**	< 0.36	< 0.36	<0.41	<0.29
1,2-Dichloropropane	**5**	**0.5**	< 0.49	< 0.49	<0.32	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	< 0.83	< 0.83	<1.4	<0.36
1,3-Dichlorobenzene	**600**	**120**	< 0.87	< 0.87	<0.28	<0.35
1,3-Dichloropropane	**NE**	**NE**	< 0.61	< 0.61	<0.33	<0.30
1,4-Dichlorobenzene	**75**	**15**	< 0.95	< 0.95	<0.3	<0.89
2,2-Dichloropropane	**NE**	**NE**	< 0.62	< 0.62	<0.36	<4.2
2-Chlorotoluene	**NE**	**NE**	< 0.85	< 0.85	<0.21	<0.89
4-Chlorotoluene	**NE**	**NE**	< 0.74	< 0.74	<0.21	<0.89
Benzene	**5**	**0.5**	< 0.41	< 0.41	<0.24	<0.30
Bromobenzene	**NE**	**NE**	< 0.82	< 0.82	<0.32	<0.36
Bromochloromethane	**NE**	**NE**	< 0.97	< 0.97	---	<0.36
Bromodichloromethane	**0.6**	**0.06**	< 0.56	< 0.56	<0.37	<0.42
Bromoform	**4.4**	**0.44**	< 0.94	< 0.94	<0.35	<3.8
Bromomethane	**10**	**1**	< 0.91	< 0.91	---	<1.2
Carbon Tetrachloride	**5**	**0.5**	< 0.49	< 0.49	<0.33	<0.37
Chlorobenzene	**NE**	**NE**	< 0.41	< 0.41	<0.24	<0.86
Chloroethane	**400**	**80**	< 0.97	< 0.97	<0.63	<1.4
Chloroform	**6**	**0.6**	< 1.3	< 1.3	<0.28	<1.2
Chloromethane	**30**	**3**	< 0.24	< 0.24	<0.81	<1.6
Dibromochloromethane	**60**	**6**	< 0.81	< 0.81	<0.22	<2.6
Dibromomethane	**NE**	**NE**	< 0.60	< 0.60	---	<0.99
Dichlorodifluoromethane	**NE**	**NE**	< 0.99	< 0.99	<0.44	<0.46
Diisopropyl ether	**NE**	**NE**	< 0.76	< 0.76	<0.23	<1.1
Ethylbenzene	**700**	**140**	< 0.54	< 0.54	<0.55	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	< 0.67	< 0.67	<1.5	<2.7
Isopropylbenzene	**NE**	**NE**	< 0.59	< 0.59	<0.3	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 0.61	< 0.61	<0.23	<1.1
Methylene Chloride	**5**	**0.5**	< 0.43	< 0.43	<0.5	<0.32
Naphthalene	**100**	**10**	< 0.89	< 0.89	<1.7	<1.1
Styrene	**100**	**10**	< 0.86	< 0.86	---	<0.36
Tetrachloroethene	**5**	**0.5**	< 0.45	< 0.45	<0.33	<0.41
Toluene	**800**	**160**	< 0.67	< 0.67	<0.69	<0.29
Trichloroethene	**5**	**0.5**	< 0.48	< 0.48	<0.33	<0.32
Trichlorofluoromethane	**3490**	**698**	< 0.79	< 0.79	<0.71	<0.42
Vinyl chloride	**0.2**	**0.02**	< 0.18	< 0.18	<0.18	<0.17
cis-1,2-Dichloroethene	**70**	**7**	< 0.83	< 0.83	<0.38	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 0.20	< 0.20	---	<0.36
Xylenes	**2000**	**400**	< 2.63	< 2.63	<1.32	<1.05
n-Butylbenzene	**NE**	**NE**	< 0.93	< 0.93	<0.35	<0.86
n-Propylbenzene	**NE**	**NE**	< 0.81	< 0.81	<0.25	<0.35
p-Isopropyltoluene	**NE**	**NE**	< 0.67	< 0.67	<0.31	<1.0
sec-Butylbenzene	**NE**	**NE**	< 0.89	< 0.89	<0.33	<0.42
tert-Butylbenzene	**NE**	**NE**	< 0.97	< 0.97	<0.36	<0.59
trans-1,2-Dichloroethene	**100**	**20**	< 0.89	< 0.89	<0.35	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 0.19	< 0.19	---	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-5							
			6/15/2011	9/29/2011	7/31/2013	4/1/2014	12/29/2016	3/28/2019	6/19/2019	6/16/2022
VOCs (ug/L)										
1,1,1,2-Tetrachloroethane	**70**	**7**	< 0.92	< 0.92	<0.33	<0.33	<0.48	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	< 0.90	< 0.90	<0.33	<0.33	<0.84	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 0.20	< 0.20	<0.45	<0.45	<0.52	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	< 0.42	< 0.42	<0.34	<0.34	<0.48	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	< 0.75	< 0.75	<0.3	<0.3	<1.1	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	< 0.57	< 0.57	<0.4	<0.4	<0.65	<0.24	<0.24	<0.58
1,1-Dichloropropene	**NE**	**NE**	< 0.75	< 0.75	---	---	---	<0.54	<0.54	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	< 0.74	< 0.74	<1.8	<1.8	<2.7	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	< 0.99	< 0.99	---	---	---	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	< 0.97	< 0.97	<0.98	<0.98	<1.7	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	< 0.97	< 0.97	<2.2	<2.2	<1.6	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 1.7	< 1.7	<0.88	<0.88	<1.4	<1.8	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 0.56	< 0.56	<0.44	<0.44	<0.63	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	< 0.83	< 0.83	<0.36	<0.36	<0.46	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	< 0.36	< 0.36	<0.41	<0.41	<0.48	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	< 0.49	< 0.49	<0.32	<0.32	<0.43	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	< 0.83	< 0.83	<1.4	<1.4	<1.5	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	< 0.87	< 0.87	<0.28	<0.28	<0.52	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	< 0.61	< 0.61	<0.33	<0.33	<0.42	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	< 0.95	< 0.95	<0.3	<0.3	<0.49	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	< 0.62	< 0.62	<0.36	<0.36	<3.1	<2.3	<2.3	<4.2
2-Chlorotoluene	**NE**	**NE**	< 0.85	< 0.85	<0.21	<0.21	<0.4	<0.93	<0.93	<0.89
4-Chlorotoluene	**NE**	**NE**	< 0.74	< 0.74	<0.21	<0.21	<0.63	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	< 0.41	< 0.41	<0.24	<0.24	<0.44	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	< 0.82	< 0.82	<0.32	<0.32	<0.48	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	< 0.97	< 0.97	---	---	---	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	< 0.56	< 0.56	<0.37	<0.37	<0.46	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	< 0.94	< 0.94	<0.35	<0.35	<0.46	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	< 0.91	< 0.91	---	---	---	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	< 0.49	< 0.49	<0.33	<0.33	<0.51	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	< 0.41	< 0.41	<0.24	<0.24	<0.46	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	< 0.97	< 0.97	<0.63	<0.63	<0.65	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	< 1.3	< 1.3	<0.28	<0.28	<0.43	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	< 0.24	< 0.24	<0.81	<0.81	<1.9	<2.2	<2.2	<1.6
Dibromochloromethane	**60**	**6**	< 0.81	< 0.81	<0.22	<0.22	<0.45	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	< 0.60	< 0.60	---	---	---	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	< 0.99	< 0.99	<0.44	<0.44	<0.87	<0.50	<0.50	<0.46
Diisopropyl ether	**NE**	**NE**	< 0.76	< 0.76	<0.23	<0.23	<0.44	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	< 0.54	< 0.54	<0.55	<0.55	<0.71	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	< 0.67	< 0.67	<1.5	<1.5	<2.2	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	< 0.59	< 0.59	<0.3	<0.3	<0.82	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 0.61	< 0.61	<0.23	<0.23	<1.1	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	< 0.43	< 0.43	<0.5	<0.5	<1.3	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	< 0.89	< 0.89	<1.7	<1.7	<1.6	<1.2	<1.2	<1.1
Styrene	**100**	**10**	< 0.86	< 0.86	---	---	---	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	< 0.45	< 0.45	<0.33	<0.33	<0.49	<0.33	<0.33	<0.41
Toluene	**800**	**160**	< 0.67	< 0.67	<0.69	<0.69	<0.44	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	< 0.48	< 0.48	<0.33	<0.33	<0.47	<0.26	<0.26	<0.32
Trichlorofluoromethane	**3490**	**698**	< 0.79	< 0.79	<0.71	<0.71	<0.87	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	< 0.18	< 0.18	<0.18	<0.18	<0.17	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	**70**	**7**	< 0.83	< 0.83	<0.38	<0.38	<0.45	<0.27	<0.27	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 0.20	< 0.20	---	---	<0.45	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	< 2.63	< 2.63	<1.32	<1.32	<3.1	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	< 0.93	< 0.93	<0.35	<0.35	<1	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	< 0.81	< 0.81	<0.25	<0.25	<0.77	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	< 0.67	< 0.67	<0.31	<0.31	<1.1	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	< 0.89	< 0.89	<0.33	<0.33	<1.2	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	< 0.97	< 0.97	<0.36	<0.36	<1.1	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	< 0.89	< 0.89	<0.35	<0.35	<0.54	<1.1	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 0.19	< 0.19	---	---	---	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-6				
			6/15/2011	9/29/2011	7/31/2013	4/1/2014	6/14/2022
VOCs (ug/L)							
1,1,1,2-Tetrachloroethane	**70**	**7**	< 0.92	< 0.92	<0.33	<0.33	<0.36
1,1,1-Trichloroethane	**200**	**40**	< 0.90	< 0.90	<0.33	<0.33	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 0.20	< 0.20	<0.45	<0.45	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	< 0.42	< 0.42	<0.34	<0.34	<0.34
1,1-Dichloroethane	**850**	**85**	< 0.75	< 0.75	<0.3	<0.3	<0.30
1,1-Dichloroethene	**7**	**0.7**	< 0.57	< 0.57	<0.4	<0.4	<0.58
1,1-Dichloropropene	**NE**	**NE**	< 0.75	< 0.75	---	---	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	< 0.74	< 0.74	<1.8	<1.8	<1.0
1,2,3-Trichloropropane	**60**	**12**	< 0.99	< 0.99	---	---	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	< 0.97	< 0.97	<0.98	<0.98	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	< 0.97	< 0.97	<2.2	<2.2	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 1.7	< 1.7	<0.88	<0.88	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 0.56	< 0.56	<0.44	<0.44	<0.31
1,2-Dichlorobenzene	**600**	**60**	< 0.83	< 0.83	<0.36	<0.36	<0.33
1,2-Dichloroethane	**5**	**0.5**	< 0.36	< 0.36	<0.41	<0.41	<0.29
1,2-Dichloropropane	**5**	**0.5**	< 0.49	< 0.49	<0.32	<0.32	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	< 0.83	< 0.83	<1.4	<1.4	<0.36
1,3-Dichlorobenzene	**600**	**120**	< 0.87	< 0.87	<0.28	<0.28	<0.35
1,3-Dichloropropane	**NE**	**NE**	< 0.61	< 0.61	<0.33	<0.33	<0.30
1,4-Dichlorobenzene	**75**	**15**	< 0.95	< 0.95	<0.3	<0.3	<0.89
2,2-Dichloropropane	**NE**	**NE**	< 0.62	< 0.62	<0.36	<0.36	<4.2
2-Chlorotoluene	**NE**	**NE**	< 0.85	< 0.85	<0.21	<0.21	<0.89
4-Chlorotoluene	**NE**	**NE**	< 0.74	< 0.74	<0.21	<0.21	<0.89
Benzene	**5**	**0.5**	< 0.41	< 0.41	<0.24	<0.24	<0.30
Bromobenzene	**NE**	**NE**	< 0.82	< 0.82	<0.32	<0.32	<0.36
Bromochloromethane	**NE**	**NE**	< 0.97	< 0.97	---	---	<0.36
Bromodichloromethane	**0.6**	**0.06**	< 0.56	< 0.56	<0.37	<0.37	<0.42
Bromoform	**4.4**	**0.44**	< 0.94	< 0.94	<0.35	<0.35	<3.8
Bromomethane	**10**	**1**	< 0.91	< 0.91	---	---	<1.2
Carbon Tetrachloride	**5**	**0.5**	< 0.49	< 0.49	<0.33	<0.33	<0.37
Chlorobenzene	**NE**	**NE**	< 0.41	< 0.41	<0.24	<0.24	<0.86
Chloroethane	**400**	**80**	< 0.97	< 0.97	<0.63	<0.63	<1.4
Chloroform	**6**	**0.6**	< 1.3	< 1.3	<0.28	<0.28	<1.2
Chloromethane	**30**	**3**	< 0.24	< 0.24	<0.81	<0.81	<1.6
Dibromochloromethane	**60**	**6**	< 0.81	< 0.81	<0.22	<0.22	<2.6
Dibromomethane	**NE**	**NE**	< 0.60	< 0.60	---	---	<0.99
Dichlorodifluoromethane	**NE**	**NE**	< 0.99	< 0.99	<0.44	<0.44	<0.46
Diisopropyl ether	**NE**	**NE**	< 0.76	< 0.76	<0.23	<0.23	<1.1
Ethylbenzene	**700**	**140**	< 0.54	< 0.54	<0.55	<0.55	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	< 0.67	< 0.67	<1.5	<1.5	<2.7
Isopropylbenzene	**NE**	**NE**	< 0.59	< 0.59	<0.3	<0.3	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 0.61	< 0.61	<0.23	<0.23	<1.1
Methylene Chloride	**5**	**0.5**	0.62 J	< 0.43	<0.5	<0.5	<0.32
Naphthalene	**100**	**10**	< 0.89	< 0.89	<1.7	<1.7	<1.1
Styrene	**100**	**10**	< 0.86	< 0.86	---	---	<0.36
Tetrachloroethene	**5**	**0.5**	< 0.45	< 0.45	<0.33	<0.33	<0.41
Toluene	**800**	**160**	< 0.67	< 0.67	<0.69	<0.69	<0.29
Trichloroethene	**5**	**0.5**	< 0.48	< 0.48	<0.33	<0.33	<0.32
Trichlorofluoromethane	**3490**	**698**	< 0.79	< 0.79	<0.71	<0.71	<0.42
Vinyl chloride	**0.2**	**0.02**	< 0.18	< 0.18	<0.18	<0.18	<0.17
cis-1,2-Dichloroethene	**70**	**7**	< 0.83	< 0.83	<0.38	<0.38	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 0.20	< 0.20	---	---	<0.36
Xylenes	**2000**	**400**	< 2.63	< 2.63	<1.32	<1.32	<1.05
n-Butylbenzene	**NE**	**NE**	< 0.93	< 0.93	<0.35	<0.35	<0.86
n-Propylbenzene	**NE**	**NE**	< 0.81	< 0.81	<0.25	<0.25	<0.35
p-Isopropyltoluene	**NE**	**NE**	< 0.67	< 0.67	<0.31	<0.31	<1.0
sec-Butylbenzene	**NE**	**NE**	< 0.89	< 0.89	<0.33	<0.33	<0.42
tert-Butylbenzene	**NE**	**NE**	< 0.97	< 0.97	<0.36	<0.36	<0.59
trans-1,2-Dichloroethene	**100**	**20**	< 0.89	< 0.89	<0.35	<0.35	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 0.19	< 0.19	---	---	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-7					
			7/31/2013	4/1/2014	12/30/2016	3/28/2019	6/20/2019	6/14/2022
VOCs (ug/L)								
1,1,1,2-Tetrachloroethane	**70**	**7**	<0.33	<0.33	<0.48	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	<0.33	<0.33	<0.84	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<0.45	<0.45	<0.52	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	<0.34	<0.34	<0.48	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	<0.3	<0.3	<1.1	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	<0.4	<0.4	<0.65	<0.24	<0.24	<0.58
1,1-Dichloropropene	**NE**	**NE**	---	---	---	<0.54	<0.54	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	<1.8	<1.8	<2.7	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	---	---	---	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	<0.98	<0.98	<1.7	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	<2.2	<2.2	<1.6	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<0.88	<0.88	<1.4	<1.8	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<0.44	<0.44	<0.63	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	<0.36	<0.36	<0.46	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	<0.41	<0.41	<0.48	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	<0.32	<0.32	<0.43	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	<1.4	<1.4	<1.5	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	<0.28	<0.28	<0.52	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	<0.33	<0.33	<0.42	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	<0.3	<0.33	<0.49	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	<0.36	<0.36	<3.1	<2.3	<2.3	<4.2
2-Chlorotoluene	**NE**	**NE**	<0.21	<0.21	<0.4	<0.93	<0.93	<0.89
4-Chlorotoluene	**NE**	**NE**	<0.21	<0.21	<0.63	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	<0.24	<0.24	<0.44	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	<0.32	<0.32	<0.48	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	---	---	---	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	<0.37	<0.37	<0.46	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	<0.35	<0.35	<0.46	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	---	---	---	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	<0.33	<0.33	<0.51	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	<0.24	<0.24	<0.46	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	<0.63	<0.63	<0.65	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	<0.28	<0.28	<0.43	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	<0.81	<0.81	<1.9	<2.2	<2.2	<1.6
Dibromochloromethane	**60**	**6**	<0.22	<0.22	<0.45	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	---	---	---	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	1.06 J	1.46	1.74 J	1.9 J	0.76J	3.1 J
Diisopropyl ether	**NE**	**NE**	<0.23	<0.23	<0.44	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	<0.55	<0.55	<0.71	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	<1.5	<1.5	<2.2	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	<0.3	<0.3	<0.82	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<0.23	<0.23	<1.1	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	<0.5	<0.5	<1.3	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	<1.7	<1.7	<1.6	<1.2	<1.2	<1.1
Styrene	**100**	**10**	---	---	---	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	<0.33	<0.33	<0.49	<0.33	<0.33	<0.41
Toluene	**800**	**160**	<0.69	<0.69	<0.44	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	***0.81 J***	0.34 J	**5.8**	0.38 J	<0.26	0.83 J
Trichlorofluoromethane	**3490**	**698**	<0.71	<0.71	<0.87	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	<0.18	<0.18	<0.17	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	**70**	**7**	<0.38	<0.38	0.78 J	<0.27	<0.27	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	---	---	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	<1.32	<1.32	<3.1	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	<0.35	<0.35	<1	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	<0.25	<0.25	<0.77	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	<0.31	<0.31	<1.1	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	<0.33	<0.33	<1.2	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	<0.36	<0.36	<1.1	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	<0.35	<0.35	<0.54	<1.1	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	---	---	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-8					
			7/31/2013	4/1/2014	12/30/2016	3/28/2019	6/20/2019	6/24/2021
VOCs (ug/L)								
1,1,1,2-Tetrachloroethane	**70**	**7**	<16.5	<3.3	<4.8	<2.7	<1.1	<3.6
1,1,1-Trichloroethane	**200**	**40**	<16.5	<3.3	<8.4	<2.4	<0.98	<3.0
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<22.5	<4.5	<5.2	<2.8	<1.1	<3.8
1,1,2-Trichloroethane	**5**	**0.5**	<17	<3.4	<4.8	<5.5	<2.2	<3.4
1,1-Dichloroethane	**850**	**85**	<15	<3	<11	<2.7	<1.1	< 3.0
1,1-Dichloroethene	**7**	**0.7**	<20	***4.3 J***	***7.3 J***	***5.5 J***	***5.8***	<5.8
1,1-Dichloropropene	**NE**	**NE**	---	---	---	<5.4	<2.2	< 4.1
1,2,3-Trichlorobenzene	**NE**	**NE**	<90	<18	<27	<6.3	<2.5	<10.2
1,2,3-Trichloropropane	**60**	**12**	---	---	---	<5.9	<2.4	<5.6
1,2,4-Trichlorobenzene	**70**	**14**	<49	<9.8	<4.9	<9.5	<3.8	<9.5
1,2,4-Trimethylbenzene	**480***	**96***	<110	<22	<16	<8.4	<3.4	<4.5
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<44	<8.8	<14	<17.6	<7.1	<23.7
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<22	<4.4	<6.3	<8.3	<3.3	<3.1
1,2-Dichlorobenzene	**600**	**60**	<18	<3.6	<4.6	<7.1	<2.8	<3.3
1,2-Dichloroethane	**5**	**0.5**	<20.5	<4.1	<4.8	<2.8	<1.1	<2.9
1,2-Dichloropropane	**5**	**0.5**	<16	<3.2	<4.3	<2.8	<1.1	<4.5
1,3,5-Trimethylbenzene	**480***	**96***	<70	<14	<15	<8.7	<3.5	<3.6
1,3-Dichlorobenzene	**600**	**120**	<14	<2.8	<5.2	<6.3	<2.5	<3.5
1,3-Dichloropropane	**NE**	**NE**	<16.5	<3.3	<4.2	<8.3	<3.3	<3.0
1,4-Dichlorobenzene	**75**	**15**	<15	<3	<4.9	<9.4	<3.8	<8.9
2,2-Dichloropropane	**NE**	**NE**	<18	<3.6	<31	<22.7	<9.1	<41.8
2-Chlorotoluene	**NE**	**NE**	<10.5	<2.1	<4	<9.3	<3.7	<8.9
4-Chlorotoluene	**NE**	**NE**	<10.5	<2.1	<6.3	<7.6	<3.0	<8.9
Benzene	**5**	**0.5**	<12	<2.4	<4.4	<2.5	<0.99	<3.0
Bromobenzene	**NE**	**NE**	<16	<3.2	<4.8	<2.4	<0.96	<3.6
Bromochloromethane	**NE**	**NE**	---	---	---	<3.6	<1.4	<3.6
Bromodichloromethane	**0.6**	**0.06**	<18.5	<3.7	<4.6	<3.6	<1.5	<4.2
Bromoform	**4.4**	**0.44**	<17.5	<3.5	<4.6	<39.7	<15.9	<38.0
Bromomethane	**10**	**1**	---	---	---	<9.7	<3.9	<11.9
Carbon Tetrachloride	**5**	**0.5**	<16.5	<3.3	<5.1	<1.7	<0.66	<3.7
Chlorobenzene	**NE**	**NE**	<12	<2.4	<4.6	<7.1	<2.8	<8.6
Chloroethane	**400**	**80**	<31.5	<6.3	<6.5	<13.4	<5.4	<13.8
Chloroform	**6**	**0.6**	<14	<2.8	<4.3	<12.7	<5.1	<11.8
Chloromethane	**30**	**3**	<40.5	<8.1	<19	<21.9	<8.8	<16.4
Dibromochloromethane	**60**	**6**	<11	<2.2	<4.5	<26.0	<10.4	<26.4
Dibromomethane	**NE**	**NE**	---	---	---	<9.4	<3.7	<9.9
Dichlorodifluoromethane	**NE**	**NE**	<22	<4.4	<8.7	<5.0	<2.0	<4.6
Diisopropyl ether	**NE**	**NE**	<11.5	<2.3	<4.4	<18.9	<7.6	<11.0
Ethylbenzene	**700**	**140**	<27.5	<5.5	<7.1	<2.2	<0.87	<3.3
Hexachloro-1,3-butadiene	**NE**	**NE**	<75	<15	<22	<11.8	<4.7	<27.4
Isopropylbenzene	**NE**	**NE**	<15	<3	<8.2	<3.9	<1.6	<10.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<11.5	<2.3	<11	<12.5	<5.0	<11.3
Methylene Chloride	**5**	**0.5**	<25	<5	<13	<5.8	<2.3	<3.2
Naphthalene	**100**	**10**	<85	<17	<16	<11.8	<4.7	<11.3
Styrene	**100**	**10**	---	---	---	<4.7	<1.9	<3.6
Tetrachloroethene	**5**	**0.5**	<16.5	<3.3	<4.9	<3.3	<1.3	<4.1
Toluene	**800**	**160**	<34.5	<6.9	<4.4	<1.7	<0.69	<2.9
Trichloroethene	**5**	**0.5**	**166**	**209**	**153**	**57.7**	**73.4**	**61.2**
Trichlorofluoromethane	**3490**	**698**	<35.5	<7.1	<8.7	<2.1	<0.86	<4.2
Vinyl chloride	**0.2**	**0.02**	**37**	**43**	**60**	**56.1**	**63.4**	**111**
cis-1,2-Dichloroethene	**70**	**7**	**450**	**500**	**490**	**431**	**425**	**586**
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	---	---	<36.3	<14.5	<3.6
Xylenes	**2000**	**400**	<66.0	<13.2	<31	<7.3	<2.9	<10.9
n-Butylbenzene	**NE**	**NE**	<17.5	<3.5	<10	<7.1	<2.8	<8.6
n-Propylbenzene	**NE**	**NE**	<12.5	<2.5	<7.7	<8.1	<3.2	<3.5
p-Isopropyltoluene	**NE**	**NE**	<15.5	<3.1	<11	<8.0	<3.2	<10.4
sec-Butylbenzene	**NE**	**NE**	<16.5	<3.3	<12	<8.5	<3.4	<4.2
tert-Butylbenzene	**NE**	**NE**	<18	<3.6	<11	<3.0	<1.2	<5.9
trans-1,2-Dichloroethene	**100**	**20**	***46 J***	*44*	*49*	***78.4***	***49.2***	***59.3***
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	---	---	<43.7	<17.5	<34.6

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	TW-1		
			7/31/2013	9/26/2013	4/1/2014
VOCs (ug/L)					
1,1,1,2-Tetrachloroethane	**70**	**7**	<1650	< 330	<330
1,1,1-Trichloroethane	**200**	**40**	<1650	< 330	<330
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<2250	< 450	<450
1,1,2-Trichloroethane	**5**	**0.5**	<1700	< 340	<340
1,1-Dichloroethane	**850**	**85**	<1500	< 300	<300
1,1-Dichloroethene	**7**	**0.7**	<2000	< 400	<400
1,1-Dichloropropene	**NE**	**NE**	---	---	---
1,2,3-Trichlorobenzene	**NE**	**NE**	<9000	< 1800	<1800
1,2,3-Trichloropropane	**60**	**12**	---	---	---
1,2,4-Trichlorobenzene	**70**	**14**	<4900	< 980	<980
1,2,4-Trimethylbenzene	**480***	**96***	<11000	< 2200	<2200
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<4400	< 880	<880
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<2200	< 440	<440
1,2-Dichlorobenzene	**600**	**60**	<1800	< 360	<360
1,2-Dichloroethane	**5**	**0.5**	<2050	< 410	<410
1,2-Dichloropropane	**5**	**0.5**	<1600	< 320	<320
1,3,5-Trimethylbenzene	**480***	**96***	<7000	< 1400	<1400
1,3-Dichlorobenzene	**600**	**120**	<1400	< 280	<280
1,3-Dichloropropane	**NE**	**NE**	<1650	< 330	<330
1,4-Dichlorobenzene	**75**	**15**	<1500	< 300	<300
2,2-Dichloropropane	**NE**	**NE**	<1800	< 360	<360
2-Chlorotoluene	**NE**	**NE**	<1050	< 210	<210
4-Chlorotoluene	**NE**	**NE**	<1050	< 210	<210
Benzene	**5**	**0.5**	<1200	< 240	<240
Bromobenzene	**NE**	**NE**	<1600	< 320	<320
Bromochloromethane	**NE**	**NE**	---	---	---
Bromodichloromethane	**0.6**	**0.06**	<1850	< 370	<370
Bromoform	**4.4**	**0.44**	<1750	< 350	<350
Bromomethane	**10**	**1**	---	---	---
Carbon Tetrachloride	**5**	**0.5**	<1650	< 330	<330
Chlorobenzene	**NE**	**NE**	<1200	< 240	<240
Chloroethane	**400**	**80**	<3150	< 630	<630
Chloroform	**6**	**0.6**	<1400	< 280	<280
Chloromethane	**30**	**3**	<4050	< 810	<810
Dibromochloromethane	**60**	**6**	<1100	< 220	<220
Dibromomethane	**NE**	**NE**	---	---	---
Dichlorodifluoromethane	**NE**	**NE**	<2200	< 440	<440
Diisopropyl ether	**NE**	**NE**	<1150	< 230	<230
Ethylbenzene	**700**	**140**	<2750	< 550	<550
Hexachloro-1,3-butadiene	**NE**	**NE**	<7500	< 1500	<1500
Isopropylbenzene	**NE**	**NE**	<1500	< 300	<300
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<1150	< 230	<230
Methylene Chloride	**5**	**0.5**	<2500	< 500	<500
Naphthalene	**100**	**10**	<8500	< 1700	<1700
Styrene	**100**	**10**	---	---	---
Tetrachloroethene	**5**	**0.5**	<1650	< 330	<330
Toluene	**800**	**160**	<3450	< 690	<690
Trichloroethene	**5**	**0.5**	**34,000**	**117,000**	**11,000**
Trichlorofluoromethane	**3490**	**698**	<3550	< 710	<710
Vinyl chloride	**0.2**	**0.02**	**14,500**	**23,500**	**5,700**
cis-1,2-Dichloroethene	**70**	**7**	**89,000**	**119,000**	**17,600**
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	---	---
Xylenes	**2000**	**400**	<6600	< 1320	<1320
n-Butylbenzene	**NE**	**NE**	<1750	< 350	<350
n-Propylbenzene	**NE**	**NE**	<1250	< 250	<250
p-Isopropyltoluene	**NE**	**NE**	<1550	< 310	<310
sec-Butylbenzene	**NE**	**NE**	<1650	< 330	<330
tert-Butylbenzene	**NE**	**NE**	<1800	< 360	<360
trans-1,2-Dichloroethene	**100**	**20**	<1750	**2710**	<350
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	---	---

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	PZ-3					
			7/31/2013	4/1/2014	12/30/2016	3/28/2019	6/20/2019	6/16/2022
VOCs (ug/L)								
1,1,1,2-Tetrachloroethane	**70**	**7**	<0.33	<0.33	<0.48	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	<0.33	<0.33	<0.84	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<0.45	<0.45	<0.52	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	<0.34	<0.34	<0.48	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	<0.3	<0.3	<1.1	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	<0.4	<0.4	<0.65	<0.24	<0.24	<0.58
1,1-Dichloropropene	**NE**	**NE**	---	---	---	<0.54	<0.54	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	<1.8	<1.8	<2.7	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	---	---	---	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	<0.98	<0.98	<1.7	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	<2.2	<2.2	<1.6	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<0.88	<0.88	<1.4	<1.8	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<0.44	<0.44	<0.63	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	<0.36	<0.36	<0.46	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	<0.41	<0.41	<0.48	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	<0.32	<0.32	<0.43	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	<1.4	<1.4	<1.5	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	<0.28	<0.28	<0.52	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	<0.28	<0.33	<0.42	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	<0.3	<0.3	<0.49	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	<0.36	<0.36	<3.1	<2.3	<2.3	<4.2
2-Chlorotoluene	**NE**	**NE**	<0.21	<0.21	<0.4	<0.93	<0.93	<0.89
4-Chlorotoluene	**NE**	**NE**	<0.21	<0.21	<0.63	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	<0.24	<0.24	<0.44	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	<0.32	<0.32	<0.48	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	---	---	---	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	<0.37	<0.37	<0.46	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	<0.35	<0.35	<0.46	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	---	---	---	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	<0.33	<0.33	<0.51	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	<0.24	<0.24	<0.46	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	<0.63	<0.63	<0.65	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	<0.28	<0.28	<0.43	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	<0.81	<0.81	<1.9	<2.2	<2.2	<1.6
Dibromochloromethane	**60**	**6**	<0.22	<0.22	<0.45	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	---	---	---	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	<0.44	<0.44	<0.87	<0.50	<0.50	<0.46
Diisopropyl ether	**NE**	**NE**	<0.23	<0.23	<0.44	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	<0.55	<0.55	<0.71	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	<1.5	<1.5	<2.2	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	<0.3	<0.3	<0.82	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<0.23	<0.23	<1.1	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	<0.5	<0.5	<1.3	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	<1.7	<1.7	<1.6	<1.2	<1.2	<1.1
Styrene	**100**	**10**	---	---	---	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	<0.33	<0.33	<0.49	<0.33	<0.33	<0.41
Toluene	**800**	**160**	<0.69	<0.69	<0.44	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	***1.93***	***1.33***	***4.8***	0.49 J	0.51J	0.43 J
Trichlorofluoromethane	**3490**	**698**	<0.71	<0.71	<0.87	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	**0.53 J**	<0.18	<0.17	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	**70**	**7**	4.3	1.61	1.45	1.1	0.58J	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	---	---	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	<1.32	<1.32	<3.1	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	<0.35	<0.35	<1	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	<0.25	<0.25	<0.77	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	<0.31	<0.31	<1.1	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	<0.33	<0.33	<1.2	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	<0.36	<0.36	<1.1	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	<0.35	<0.35	<0.54	<1.1	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	---	---	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	PZ-4				
			6/15/2011	9/29/2011	7/31/2013	4/1/2014	6/14/2022
VOCs (ug/L)							
1,1,1,2-Tetrachloroethane	**70**	**7**	< 0.92	< 0.92	<0.33	<0.33	<0.36
1,1,1-Trichloroethane	**200**	**40**	< 0.90	< 0.90	<0.33	<0.33	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 0.20	< 0.20	<0.45	<0.45	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	< 0.42	< 0.42	<0.34	<0.34	<0.34
1,1-Dichloroethane	**850**	**85**	< 0.75	< 0.75	<0.3	<0.3	<0.30
1,1-Dichloroethene	**7**	**0.7**	< 0.57	< 0.57	<0.4	<0.4	<0.58
1,1-Dichloropropene	**NE**	**NE**	< 0.75	< 0.75	---	---	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	< 0.74	< 0.74	<1.8	<1.8	<1.0
1,2,3-Trichloropropane	**60**	**12**	< 0.99	< 0.99	---	---	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	< 0.97	< 0.97	<0.98	<0.98	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	< 0.97	< 0.97	<2.2	<2.2	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 1.7	< 1.7	<0.88	<0.88	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 0.56	< 0.56	<0.44	<0.44	<0.31
1,2-Dichlorobenzene	**600**	**60**	< 0.83	< 0.83	<0.36	<0.36	<0.33
1,2-Dichloroethane	**5**	**0.5**	< 0.36	< 0.36	<0.41	<0.41	<0.29
1,2-Dichloropropane	**5**	**0.5**	< 0.49	< 0.49	<0.32	<0.32	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	< 0.83	< 0.83	<1.4	<1.4	<0.36
1,3-Dichlorobenzene	**600**	**120**	< 0.87	< 0.87	<0.28	<0.28	<0.35
1,3-Dichloropropane	**NE**	**NE**	< 0.61	< 0.61	<0.33	<0.33	<0.30
1,4-Dichlorobenzene	**75**	**15**	< 0.95	< 0.95	<0.3	<0.3	<0.89
2,2-Dichloropropane	**NE**	**NE**	< 0.62	< 0.62	<0.36	<0.36	<4.2
2-Chlorotoluene	**NE**	**NE**	< 0.85	< 0.85	<0.21	<0.21	<0.89
4-Chlorotoluene	**NE**	**NE**	< 0.74	< 0.74	<0.21	<0.21	<0.89
Benzene	**5**	**0.5**	< 0.41	< 0.41	<0.24	<0.24	<0.30
Bromobenzene	**NE**	**NE**	< 0.82	< 0.82	<0.32	<0.32	<0.36
Bromochloromethane	**NE**	**NE**	< 0.97	< 0.97	---	---	<0.36
Bromodichloromethane	**0.6**	**0.06**	< 0.56	< 0.56	<0.37	<0.37	<0.42
Bromoform	**4.4**	**0.44**	< 0.94	< 0.94	<0.35	<0.35	<3.8
Bromomethane	**10**	**1**	< 0.91	< 0.91	---	---	<1.2
Carbon Tetrachloride	**5**	**0.5**	< 0.49	< 0.49	<0.33	<0.33	<0.37
Chlorobenzene	**NE**	**NE**	< 0.41	< 0.41	<0.24	<0.24	<0.86
Chloroethane	**400**	**80**	< 0.97	< 0.97	<0.63	<0.63	<1.4
Chloroform	**6**	**0.6**	< 1.3	< 1.3	<0.28	<0.28	<1.2
Chloromethane	**30**	**3**	< 0.24	< 0.24	<0.81	<0.81	<1.6
Dibromochloromethane	**60**	**6**	< 0.81	< 0.81	<0.22	<0.22	<2.6
Dibromomethane	**NE**	**NE**	< 0.60	< 0.60	---	---	<0.99
Dichlorodifluoromethane	**NE**	**NE**	< 0.99	< 0.99	<0.44	<0.44	<0.46
Diisopropyl ether	**NE**	**NE**	< 0.76	< 0.76	<0.23	<0.23	<1.1
Ethylbenzene	**700**	**140**	< 0.54	< 0.54	<0.55	<0.55	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	< 0.67	< 0.67	<1.5	<1.5	<2.7
Isopropylbenzene	**NE**	**NE**	< 0.59	< 0.59	<0.3	<0.3	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 0.61	< 0.61	<0.23	<0.23	<1.1
Methylene Chloride	**5**	**0.5**	< 0.43	< 0.43	<0.5	<0.5	<0.32
Naphthalene	**100**	**10**	< 0.89	< 0.89	<1.7	<1.7	<1.1
Styrene	**100**	**10**	< 0.86	< 0.86	---	---	<0.36
Tetrachloroethene	**5**	**0.5**	< 0.45	< 0.45	<0.33	<0.33	<0.41
Toluene	**800**	**160**	< 0.67	< 0.67	<0.69	<0.69	<0.29
Trichloroethene	**5**	**0.5**	< 0.48	< 0.48	<0.33	<0.33	<0.32
Trichlorofluoromethane	**3490**	**698**	< 0.79	< 0.79	<0.71	<0.71	<0.42
Vinyl chloride	**0.2**	**0.02**	< 0.18	< 0.18	<0.18	<0.18	<0.17
cis-1,2-Dichloroethene	**70**	**7**	< 0.83	< 0.83	<0.38	<0.38	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 0.20	< 0.20	---	---	<0.36
Xylenes	**2000**	**400**	< 2.63	< 2.63	<1.32	<1.32	<1.05
n-Butylbenzene	**NE**	**NE**	< 0.93	< 0.93	<0.35	<0.35	<0.86
n-Propylbenzene	**NE**	**NE**	< 0.81	< 0.81	<0.25	<0.25	<0.35
p-Isopropyltoluene	**NE**	**NE**	< 0.67	< 0.67	<0.31	<0.31	<1.0
sec-Butylbenzene	**NE**	**NE**	< 0.89	< 0.89	<0.33	<0.33	<0.42
tert-Butylbenzene	**NE**	**NE**	< 0.97	< 0.97	<0.36	<0.36	<0.59
trans-1,2-Dichloroethene	**100**	**20**	< 0.89	< 0.89	<0.35	<0.35	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 0.19	< 0.19	---	---	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	PZ-13			
			12/29/2016	3/28/2019	6/20/2019	6/16/2022
VOCs (ug/L)						
1,1,1,2-Tetrachloroethane	**70**	**7**	<0.48	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	<0.84	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<0.52	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	<0.48	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	<1.1	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	<0.65	<0.24	<0.24	<0.58
1,1-Dichloropropene	**NE**	**NE**	---	<0.54	<0.54	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	<2.7	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	---	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	<1.7	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	<1.6	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<1.4	<1.8	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<0.63	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	<0.46	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	<0.48	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	<0.43	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	<1.5	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	<0.52	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	<0.42	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	<0.49	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	<3.1	<2.3	<2.3	<0.30
2-Chlorotoluene	**NE**	**NE**	<0.4	<0.93	<0.93	<0.36
4-Chlorotoluene	**NE**	**NE**	<0.63	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	<0.44	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	<0.48	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	---	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	<0.46	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	<0.46	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	---	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	<0.51	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	<0.46	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	<0.65	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	<0.43	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	<1.9	<2.2	<2.2	<1.6
Dibromochloromethane	**60**	**6**	<0.45	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	---	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	<0.87	<0.50	<0.50	<0.46
Diisopropyl ether	**NE**	**NE**	<0.44	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	<0.71	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	<2.2	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	<0.82	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<1.1	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	<1.3	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	<1.6	<1.2	<1.2	<1.1
Styrene	**100**	**10**	---	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	<0.49	<0.33	<0.33	<0.41
Toluene	**800**	**160**	<0.44	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	<0.47	<0.26	<0.26	<0.32
Trichlorofluoromethane	**3490**	**698**	<0.87	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	<0.17	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	**70**	**7**	<0.45	<0.27	<0.27	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	<3.1	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	<1	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	<0.77	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	<1.1	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	<1.2	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	<1.1	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	<0.54	<1.1	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-14				
			12/30/2016	3/28/2019	6/20/2019	6/24/2021	6/16/2022
VOCs (ug/L)							
1,1,1,2-Tetrachloroethane	**70**	**7**	<96	<67.3	<67.3	<88.8	<88.8
1,1,1-Trichloroethane	**200**	**40**	<168	<61.2	<61.2	<75.6	<75.6
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<104	<68.8	<68.8	<94.5	<94.5
1,1,2-Trichloroethane	**5**	**0.5**	<96	<138	<138	<86.1	<86.1
1,1-Dichloroethane	**850**	**85**	<220	<68.1	<68.1	<73.9	<73.9
1,1-Dichloroethene	**7**	**0.7**	<130	**181 J**	**253**	**<146**	**150 J**
1,1-Dichloropropene	**NE**	**NE**	---	<135	<135	<103	<103
1,2,3-Trichlorobenzene	**NE**	**NE**	<540	<156	<156	<255	<255
1,2,3-Trichloropropane	**60**	**12**	---	<148	<148	<139	<139
1,2,4-Trichlorobenzene	**70**	**14**	<340	<238	<238	<238	<238
1,2,4-Trimethylbenzene	**480***	**96***	<320	<210	<210	<112	<112
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<280	<441	<441	<592	<592
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<126	<207	<207	<77.3	<77.3
1,2-Dichlorobenzene	**600**	**60**	<92	<176	<176	<81.5	<81.5
1,2-Dichloroethane	**5**	**0.5**	<96	<70.0	<70.0	<72.9	<72.9
1,2-Dichloropropane	**5**	**0.5**	<86	<70.7	<70.7	<112	<112
1,3,5-Trimethylbenzene	**480***	**96***	<300	<218	<218	<89.3	<89.3
1,3-Dichlorobenzene	**600**	**120**	<104	<157	<157	<87.8	<87.8
1,3-Dichloropropane	**NE**	**NE**	<84	<206	<206	<76.2	<76.2
1,4-Dichlorobenzene	**75**	**15**	<98	<236	<236	<223	<223
2,2-Dichloropropane	**NE**	**NE**	<620	<566	<566	<1040	<1040
2-Chlorotoluene	**NE**	**NE**	<80	<232	<232	<222	<222
4-Chlorotoluene	**NE**	**NE**	<126	<189	<189	<224	<224
Benzene	**5**	**0.5**	<88	<61.6	<61.6	<73.9	<73.9
Bromobenzene	**NE**	**NE**	<96	<60.3	<60.3	<90.2	<90.2
Bromochloromethane	**NE**	**NE**	---	<90.5	<90.5	<89.2	<89.4
Bromodichloromethane	**0.6**	**0.06**	<92	<90.9	<90.9	<104	<104
Bromoform	**4.4**	**0.44**	<92	<993	<993	<950	<950
Bromomethane	**10**	**1**	---	<243	<243	<298	<298
Carbon Tetrachloride	**5**	**0.5**	<102	<41.5	<41.5	<92.3	<92.3
Chlorobenzene	**NE**	**NE**	<92	<178	<178	<214	<214
Chloroethane	**400**	**80**	<130	<336	<336	<345	<345
Chloroform	**6**	**0.6**	<86	<318	<318	<296	<296
Chloromethane	**30**	**3**	<380	<547	<547	<409	<409
Dibromochloromethane	**60**	**6**	<90	<650	<650	<661	<661
Dibromomethane	**NE**	**NE**	---	<234	<234	<248	<248
Dichlorodifluoromethane	**NE**	**NE**	<174	<125	<125	<114	<114
Diisopropyl ether	**NE**	**NE**	<88	<472	<472	<275	<275
Ethylbenzene	**700**	**140**	<142	<54.5	<54.5	<81.3	<81.3
Hexachloro-1,3-butadiene	**NE**	**NE**	<440	<296	<296	<684	<684
Isopropylbenzene	**NE**	**NE**	<164	<98.2	<98.2	<250	<250
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<220	<311	<311	<282	<282
Methylene Chloride	**5**	**0.5**	<260	<145	<145	<79.9	<79.9
Naphthalene	**100**	**10**	<320	<294	<294	<282	<282
Styrene	**100**	**10**	---	<116	<116	<89.1	<89.1
Tetrachloroethene	**5**	**0.5**	<98	<81.6	<81.6	<102	<102
Toluene	**800**	**160**	<88	<43.0	<43.0	<72.0	<72.0
Trichloroethene	**5**	**0.5**	**36,000**	**12,800**	**15,000**	**16,200**	**28,100**
Trichlorofluoromethane	**3490**	**698**	<174	<53.7	<53.7	<105	<105
Vinyl chloride	**0.2**	**0.02**	**5,900**	**5,150**	**5,540**	**6,410**	**8,300**
cis-1,2-Dichloroethene	**70**	**7**	**31,400**	**14,000**	**16,500**	**17,600**	**32,200**
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	<907	<907	<89.5	<89.5
Xylenes	**2000**	**400**	<620	<181.5	<181.5	<261.9	<261.9
n-Butylbenzene	**NE**	**NE**	<200	<177	<177	<214	<214
n-Propylbenzene	**NE**	**NE**	<154	<203	<203	<86.9	<86.3
p-Isopropyltoluene	**NE**	**NE**	<220	<200	<200	<261	<261
sec-Butylbenzene	**NE**	**NE**	<200	<212	<212	<106	<106
tert-Butylbenzene	**NE**	**NE**	<240	<76.0	<76.0	<147	<147
trans-1,2-Dichloroethene	**100**	**20**	**870**	**669 J**	**824 J**	**861**	**2,530**
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	<1090	<1090	<866	<866

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-15			
			12/30/2016	3/28/2019	6/20/2019	6/24/2021
VOCs (ug/L)						
1,1,1,2-Tetrachloroethane	**70**	**7**	<4.8	<0.54	<0.54	<0.71
1,1,1-Trichloroethane	**200**	**40**	<8.4	<0.49	<0.49	<0.61
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<5.2	<0.55	<0.55	<0.76
1,1,2-Trichloroethane	**5**	**0.5**	<4.8	<1.1	<1.1	<0.69
1,1-Dichloroethane	**850**	**85**	<11	<0.55	<0.55	<0.59
1,1-Dichloroethene	**7**	**0.7**	**82**	**42.7**	**67.8**	**73**
1,1-Dichloropropene	**NE**	**NE**	---	<1.1	<1.1	<0.82
1,2,3-Trichlorobenzene	**NE**	**NE**	<27	<1.3	<1.3	<2.0
1,2,3-Trichloropropane	**60**	**12**	---	<1.2	<1.2	<1.1
1,2,4-Trichlorobenzene	**70**	**14**	<17	<1.9	<1.9	<1.9
1,2,4-Trimethylbenzene	**480***	**96***	<16	<1.7	<1.7	<0.90
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<14	<3.5	<3.5	<4.7
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<6.3	<1.7	<1.7	<0.62
1,2-Dichlorobenzene	**600**	**60**	<4.6	<1.4	<1.4	<0.65
1,2-Dichloroethane	**5**	**0.5**	<4.8	<0.56	<0.56	<0.58
1,2-Dichloropropane	**5**	**0.5**	<4.3	<0.57	<0.57	<0.90
1,3,5-Trimethylbenzene	**480***	**96***	<15	<1.7	<1.7	<0.71
1,3-Dichlorobenzene	**600**	**120**	<5.2	<1.3	<1.3	<0.70
1,3-Dichloropropane	**NE**	**NE**	<4.2	<1.7	<1.7	<0.61
1,4-Dichlorobenzene	**75**	**15**	<4.9	<1.9	<1.9	<1.8
2,2-Dichloropropane	**NE**	**NE**	<31	<4.5	<4.5	<8.4
2-Chlorotoluene	**NE**	**NE**	<4	<1.9	<1.9	<1.8
4-Chlorotoluene	**NE**	**NE**	<6.3	<1.5	<1.5	<1.8
Benzene	**5**	**0.5**	<4.4	<0.49	<0.49	<0.59
Bromobenzene	**NE**	**NE**	<4.8	<0.48	<0.48	<0.72
Bromochloromethane	**NE**	**NE**	---	<0.72	<0.72	<0.72
Bromodichloromethane	**0.6**	**0.06**	<4.6	<0.73	<0.73	<0.83
Bromoform	**4.4**	**0.44**	<4.6	<7.9	<7.9	<7.6
Bromomethane	**10**	**1**	---	<1.9	<1.9	<2.4
Carbon Tetrachloride	**5**	**0.5**	<5.1	<0.33	<0.33	<0.74
Chlorobenzene	**NE**	**NE**	<4.6	<1.4	<1.4	<1.7
Chloroethane	**400**	**80**	<6.5	<2.7	<2.7	<2.8
Chloroform	**6**	**0.6**	<4.5	<2.5	<2.5	<2.4
Chloromethane	**30**	**3**	<19	<4.4	<4.4	**16.3**
Dibromochloromethane	**60**	**6**	<4.5	<5.2	<5.2	<5.3
Dibromomethane	**NE**	**NE**	---	<1.9	<1.9	<2.0
Dichlorodifluoromethane	**NE**	**NE**	23.5 J	6.8 J	14.5	13.2
Diisopropyl ether	**NE**	**NE**	<4.4	<3.8	<3.8	<2.2
Ethylbenzene	**700**	**140**	<7.1	<0.44	<0.44	<0.65
Hexachloro-1,3-butadiene	**NE**	**NE**	<22	<2.4	<2.4	<5.5
Isopropylbenzene	**NE**	**NE**	<8.2	<0.79	<0.79	<2.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<11	<2.5	<2.5	<2.3
Methylene Chloride	**5**	**0.5**	<13	<1.2	<1.2	<0.64
Naphthalene	**100**	**10**	<16	<2.4	<2.4	<2.3
Styrene	**100**	**10**	---	<0.93	<0.93	<0.71
Tetrachloroethene	**5**	**0.5**	<4.9	<0.65	<0.65	<0.82
Toluene	**800**	**160**	<4.4	<0.34	<0.34	<0.58
Trichloroethene	**5**	**0.5**	**1,660**	**350**	**820**	**370**
Trichlorofluoromethane	**3490**	**698**	<8.7	<0.43	<0.43	<0.84
Vinyl chloride	**0.2**	**0.02**	**191**	**234**	**167**	**233**
cis-1,2-Dichloroethene	**70**	**7**	**390**	**176**	**190**	**162**
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	<7.3	<7.3	<0.72
Xylenes	**2000**	**400**	<31	<1.45	<1.45	<2.1
n-Butylbenzene	**NE**	**NE**	<10	<1.4	<1.4	<1.7
n-Propylbenzene	**NE**	**NE**	<7.7	<1.6	<1.6	<0.69
p-Isopropyltoluene	**NE**	**NE**	<11	<1.6	<1.6	<2.1
sec-Butylbenzene	**NE**	**NE**	<12	<1.7	<1.7	<0.85
tert-Butylbenzene	**NE**	**NE**	<11	<0.61	<0.61	<1.2
trans-1,2-Dichloroethene	**100**	**20**	<37	5.2 J	11.7	4.7
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	<8.7	<8.7	<6.9

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	PZ-16			
			12/29/2016	3/27/2019	6/19/2019	6/15/2022
VOCs (ug/L)						
1,1,1,2-Tetrachloroethane	**70**	**7**	<0.48	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	<0.84	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<0.52	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	<0.48	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	<1.1	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	<0.65	<0.24	<0.24	<0.58
1,1-Dichloropropene	**NE**	**NE**	---	<0.54	<0.54	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	<2.7	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	---	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	<2.7	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	<1.6	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<1.4	<1.8	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<0.63	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	<0.46	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	<0.48	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	<0.43	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	<1.5	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	<0.52	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	<0.42	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	<0.49	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	<3.1	<2.3	<2.3	<0.30
2-Chlorotoluene	**NE**	**NE**	<0.4	<0.93	<0.93	<0.36
4-Chlorotoluene	**NE**	**NE**	<0.63	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	<0.44	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	<0.48	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	---	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	<0.46	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	<0.46	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	---	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	<0.51	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	<0.46	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	<0.65	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	<0.43	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	<1.9	<2.2	<2.2	<1.6
Dibromochloromethane	**60**	**6**	<0.45	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	---	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	<0.87	<0.50	<0.50	<0.46
Diisopropyl ether	**NE**	**NE**	<0.44	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	<0.71	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	<2.2	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	<0.82	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<1.1	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	<1.3	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	<1.6	<1.2	<1.2	<1.1
Styrene	**100**	**10**	---	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	<0.49	<0.33	<0.33	<0.41
Toluene	**800**	**160**	<0.44	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	<0.47	<0.26	<0.26	<0.32
Trichlorofluoromethane	**3490**	**698**	<0.87	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	<0.17	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	**70**	**7**	<0.45	<0.27	<0.27	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	<3.1	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	<1	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	<0.77	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	<1.1	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	<1.2	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	<1.1	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	<0.54	<1.1	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-17			
			12/29/2016	3/27/2019	6/19/2019	6/15/2022
VOCs (ug/L)						
1,1,1,2-Tetrachloroethane	**70**	**7**	<0.48	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	<0.84	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<0.52	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	<0.48	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	<1.1	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	<0.65	<0.24	<0.24	<0.58
1,1-Dichloropropene	**NE**	**NE**	---	<0.54	<0.54	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	<2.7	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	---	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	<1.7	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	<1.6	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<1.4	<1.8	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<0.63	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	<0.46	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	<0.48	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	<0.43	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	<1.5	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	<0.52	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	<0.42	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	<0.49	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	<3.1	<2.3	<2.3	<0.30
2-Chlorotoluene	**NE**	**NE**	<0.4	<0.93	<0.93	<0.36
4-Chlorotoluene	**NE**	**NE**	<0.63	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	<0.44	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	<0.48	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	---	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	<0.46	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	<0.46	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	---	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	<0.51	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	<0.46	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	<0.65	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	<0.43	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	<1.9	<2.2	<2.2	<1.6
Dibromochloromethane	**60**	**6**	<0.45	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	---	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	<0.87	<0.50	<0.50	<0.46
Diisopropyl ether	**NE**	**NE**	<0.44	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	<0.71	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	<2.2	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	<0.82	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<1.1	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	<1.3	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	<1.6	<1.2	<1.2	<1.1
Styrene	**100**	**10**	---	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	<0.49	<0.33	<0.33	<0.41
Toluene	**800**	**160**	<0.44	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	<0.47	<0.26	<0.26	<0.32
Trichlorofluoromethane	**3490**	**698**	<0.87	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	<0.17	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	**70**	**7**	<0.45	<0.27	<0.27	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	---	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	<3.1	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	<1	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	<0.77	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	<1.1	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	<1.2	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	<1.1	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	<0.54	<1.1	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	---	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	SUMP-1 (Groundwater Pit)		
			10/15/2010	6/15/2011	6/14/2022
VOCs (ug/L)					
1,1,1,2-Tetrachloroethane	**70**	**7**	< 46.0	< 46.0	<0.36
1,1,1-Trichloroethane	**200**	**40**	< 45.0	< 45.0	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 10.0	< 10.0	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	< 21.0	< 21.0	<0.34
1,1-Dichloroethane	**850**	**85**	< 37.5	< 37.5	<0.30
1,1-Dichloroethene	**7**	**0.7**	< 28.5	***33.5 J***	<0.58
1,1-Dichloropropene	**NE**	**NE**	< 37.5	< 37.5	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	< 37.0	< 37.0	<1.0
1,2,3-Trichloropropane	**60**	**12**	< 49.5	< 49.5	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	< 48.5	< 48.5	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	< 48.5	< 48.5	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 84.0	< 84.0	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 28.0	< 28.0	<0.31
1,2-Dichlorobenzene	**600**	**60**	< 41.5	< 41.5	<0.33
1,2-Dichloroethane	**5**	**0.5**	< 18.0	< 18.0	<0.29
1,2-Dichloropropane	**5**	**0.5**	< 24.5	< 24.5	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	< 41.5	< 41.5	<0.36
1,3-Dichlorobenzene	**600**	**120**	< 43.5	< 43.5	<0.35
1,3-Dichloropropane	**NE**	**NE**	< 30.5	< 30.5	<0.30
1,4-Dichlorobenzene	**75**	**15**	< 47.5	< 47.5	<0.89
2,2-Dichloropropane	**NE**	**NE**	< 31.0	< 31.0	<4.2
2-Chlorotoluene	**NE**	**NE**	< 42.5	< 42.5	<0.89
4-Chlorotoluene	**NE**	**NE**	< 37.0	< 37.0	<0.89
Benzene	**5**	**0.5**	< 20.5	< 20.5	<0.30
Bromobenzene	**NE**	**NE**	< 41.0	< 41.0	<0.36
Bromochloromethane	**NE**	**NE**	< 48.5	< 48.5	<0.36
Bromodichloromethane	**0.6**	**0.06**	< 28.0	< 28.0	<0.42
Bromoform	**4.4**	**0.44**	< 47.0	< 47.0	<3.8
Bromomethane	**10**	**1**	< 45.5	< 45.5	<1.2
Carbon Tetrachloride	**5**	**0.5**	< 24.5	< 24.5	<0.37
Chlorobenzene	**NE**	**NE**	< 20.5	< 20.5	<0.86
Chloroethane	**400**	**80**	< 48.5	< 48.5	<1.4
Chloroform	**6**	**0.6**	< 65.0	< 65.0	<1.2
Chloromethane	**30**	**3**	< 12.0	< 12.0	<1.6
Dibromochloromethane	**60**	**6**	< 40.5	< 40.5	<2.6
Dibromomethane	**NE**	**NE**	< 30.0	< 30.0	<0.99
Dichlorodifluoromethane	**NE**	**NE**	< 49.5	< 49.5	<0.46
Diisopropyl ether	**NE**	**NE**	< 38.0	< 38.0	<1.1
Ethylbenzene	**700**	**140**	< 27.0	< 27.0	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	< 33.5	< 33.5	<2.7
Isopropylbenzene	**NE**	**NE**	< 29.5	< 29.5	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 30.5	< 30.5	<1.1
Methylene Chloride	**5**	**0.5**	< 21.5	< 21.5	<0.32
Naphthalene	**100**	**10**	< 44.5	< 44.5	<1.1
Styrene	**100**	**10**	< 43.0	< 43.0	<0.36
Tetrachloroethene	**5**	**0.5**	< 22.5	< 22.5	<0.41
Toluene	**800**	**160**	< 33.5	< 33.5	<0.29
Trichloroethene	**5**	**0.5**	**3,940**	**8,100**	**23.9**
Trichlorofluoromethane	**3490**	**698**	< 39.5	< 39.5	<0.42
Vinyl chloride	**0.2**	**0.02**	**1,990**	**2,950**	**2.5**
cis-1,2-Dichloroethene	**70**	**7**	**3,270**	**4,480**	***26.2***
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 10.0	< 10.0	<0.36
Xylenes	**2000**	**400**	<131.5	< 131.5	<1.05
n-Butylbenzene	**NE**	**NE**	< 46.5	< 46.5	<0.86
n-Propylbenzene	**NE**	**NE**	< 40.5	< 40.5	<0.35
p-Isopropyltoluene	**NE**	**NE**	< 33.5	< 33.5	<1.0
sec-Butylbenzene	**NE**	**NE**	< 44.5	< 44.5	<0.42
tert-Butylbenzene	**NE**	**NE**	< 48.5	< 48.5	<0.59
trans-1,2-Dichloroethene	**100**	**20**	**156**	**192**	0.88 J
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 9.5	< 9.5	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	SUMP-2 (Basement)	
			10/15/2010	6/15/2011
VOCs (ug/L)				
1,1,1,2-Tetrachloroethane	**70**	**7**	< 0.92	< 0.92
1,1,1-Trichloroethane	**200**	**40**	< 0.90	< 0.90
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	< 0.20	< 0.20
1,1,2-Trichloroethane	**5**	**0.5**	< 0.42	< 0.42
1,1-Dichloroethane	**850**	**85**	< 0.75	< 0.75
1,1-Dichloroethene	**7**	**0.7**	***0.73 J***	< 0.57
1,1-Dichloropropene	**NE**	**NE**	< 0.75	< 0.75
1,2,3-Trichlorobenzene	**NE**	**NE**	< 0.74	< 0.74
1,2,3-Trichloropropane	**60**	**12**	< 0.99	< 0.99
1,2,4-Trichlorobenzene	**70**	**14**	< 0.97	< 0.97
1,2,4-Trimethylbenzene	**480***	**96***	< 0.97	< 0.97
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	< 1.7	< 1.7
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	< 0.56	< 0.56
1,2-Dichlorobenzene	**600**	**60**	< 0.83	< 0.83
1,2-Dichloroethane	**5**	**0.5**	< 0.36	< 0.36
1,2-Dichloropropane	**5**	**0.5**	< 0.49	< 0.49
1,3,5-Trimethylbenzene	**480***	**96***	< 0.83	< 0.83
1,3-Dichlorobenzene	**600**	**120**	< 0.87	< 0.87
1,3-Dichloropropane	**NE**	**NE**	< 0.61	< 0.61
1,4-Dichlorobenzene	**75**	**15**	< 0.95	< 0.95
2,2-Dichloropropane	**NE**	**NE**	< 0.62	< 0.62
2-Chlorotoluene	**NE**	**NE**	< 0.85	< 0.85
4-Chlorotoluene	**NE**	**NE**	< 0.74	< 0.74
Benzene	**5**	**0.5**	< 0.41	< 0.41
Bromobenzene	**NE**	**NE**	< 0.82	< 0.82
Bromochloromethane	**NE**	**NE**	< 0.97	< 0.97
Bromodichloromethane	**0.6**	**0.06**	< 0.56	< 0.56
Bromoform	**4.4**	**0.44**	< 0.94	< 0.94
Bromomethane	**10**	**1**	< 0.91	< 0.91
Carbon Tetrachloride	**5**	**0.5**	< 0.49	< 0.49
Chlorobenzene	**NE**	**NE**	< 0.41	< 0.41
Chloroethane	**400**	**80**	< 0.97	< 0.97
Chloroform	**6**	**0.6**	< 1.3	< 1.3
Chloromethane	**30**	**3**	< 0.24	< 0.24
Dibromochloromethane	**60**	**6**	< 0.81	< 0.81
Dibromomethane	**NE**	**NE**	< 0.60	< 0.60
Dichlorodifluoromethane	**NE**	**NE**	1.8	< 0.99
Diisopropyl ether	**NE**	**NE**	< 0.76	< 0.76
Ethylbenzene	**700**	**140**	< 0.54	< 0.54
Hexachloro-1,3-butadiene	**NE**	**NE**	< 0.67	< 0.67
Isopropylbenzene	**NE**	**NE**	< 0.59	< 0.59
Methyl-tert-butyl ether (MTBE)	**60**	**12**	< 0.61	< 0.61
Methylene Chloride	**5**	**0.5**	< 0.43	< 0.43
Naphthalene	**100**	**10**	< 0.89	< 0.89
Styrene	**100**	**10**	< 0.86	< 0.86
Tetrachloroethene	**5**	**0.5**	< 0.45	< 0.45
Toluene	**800**	**160**	< 0.67	< 0.67
Trichloroethene	**5**	**0.5**	**84.7**	**72**
Trichlorofluoromethane	**3490**	**698**	< 0.79	< 0.79
Vinyl chloride	**0.2**	**0.02**	**0.66 J**	**0.31 J**
cis-1,2-Dichloroethene	**70**	**7**	**106**	***45.3***
cis-1,3-Dichloropropene	**0.4**	**0.04**	< 0.20	< 0.20
Xylenes	**2000**	**400**	< 2.63	< 2.63
n-Butylbenzene	**NE**	**NE**	< 0.93	< 0.93
n-Propylbenzene	**NE**	**NE**	< 0.81	< 0.81
p-Isopropyltoluene	**NE**	**NE**	< 0.67	< 0.67
sec-Butylbenzene	**NE**	**NE**	< 0.89	< 0.89
tert-Butylbenzene	**NE**	**NE**	< 0.97	< 0.97
trans-1,2-Dichloroethene	**100**	**20**	4.8	2
trans-1,3-Dichloropropene	**0.4**	**0.04**	< 0.19	< 0.19

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-18		
			3/28/2019	6/20/2019	6/15/2022
VOCs (ug/L)					
1,1,1,2-Tetrachloroethane	**70**	**7**	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	<0.24	<0.24	<0.58
1,1-Dichloropropene	**NE**	**NE**	<0.54	<0.54	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<1.8	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	<2.3	<2.3	<0.30
2-Chlorotoluene	**NE**	**NE**	<0.93	<0.93	<0.36
4-Chlorotoluene	**NE**	**NE**	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	<2.2	<2.2	<1.6
Dibromochloromethane	**60**	**6**	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	0.51 J	<0.50	0.51 J
Diisopropyl ether	**NE**	**NE**	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	<1.2	<1.2	<1.1
Styrene	**100**	**10**	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	<0.33	<0.33	<0.41
Toluene	**800**	**160**	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	<0.26	<0.26	<0.32
Trichlorofluoromethane	**3490**	**698**	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	**70**	**7**	<0.27	<0.27	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	<1.1	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	MW-19		
			3/28/2019	6/20/2019	6/16/2022
VOCs (ug/L)					
1,1,1,2-Tetrachloroethane	**70**	**7**	<0.27	<0.27	<0.36
1,1,1-Trichloroethane	**200**	**40**	<0.24	<0.24	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<0.28	<0.28	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	<0.55	<0.55	<0.34
1,1-Dichloroethane	**850**	**85**	<0.27	<0.27	<0.30
1,1-Dichloroethene	**7**	**0.7**	<0.24	<0.24	<0.58
1,1-Dichloropropene	**NE**	**NE**	<0.54	<0.54	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	<0.63	<0.63	<1.0
1,2,3-Trichloropropane	**60**	**12**	<0.59	<0.59	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	<0.84	<0.84	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<1.8	<1.8	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<0.83	<0.83	<0.31
1,2-Dichlorobenzene	**600**	**60**	<0.71	<0.71	<0.33
1,2-Dichloroethane	**5**	**0.5**	<0.28	<0.28	<0.29
1,2-Dichloropropane	**5**	**0.5**	<0.28	<0.28	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	<0.87	<0.87	<0.36
1,3-Dichlorobenzene	**600**	**120**	<0.63	<0.63	<0.35
1,3-Dichloropropane	**NE**	**NE**	<0.83	<0.83	<0.30
1,4-Dichlorobenzene	**75**	**15**	<0.94	<0.94	<0.89
2,2-Dichloropropane	**NE**	**NE**	<2.3	<2.3	<4.2
2-Chlorotoluene	**NE**	**NE**	<0.93	<0.93	<0.89
4-Chlorotoluene	**NE**	**NE**	<0.76	<0.76	<0.89
Benzene	**5**	**0.5**	<0.25	<0.25	<0.30
Bromobenzene	**NE**	**NE**	<0.24	<0.24	<0.36
Bromochloromethane	**NE**	**NE**	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	<0.36	<0.36	<0.42
Bromoform	**4.4**	**0.44**	<4.0	<4.0	<3.8
Bromomethane	**10**	**1**	<0.97	<0.97	<1.2
Carbon Tetrachloride	**5**	**0.5**	<0.17	<0.17	<0.37
Chlorobenzene	**NE**	**NE**	<0.71	<0.71	<0.86
Chloroethane	**400**	**80**	<1.3	<1.3	<1.4
Chloroform	**6**	**0.6**	<1.3	<1.3	<1.2
Chloromethane	**30**	**3**	<2.2	<2.2	<1.6
Dibromochloromethane	**60**	**6**	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	<0.94	<0.94	<0.99
Dichlorodifluoromethane	**NE**	**NE**	<0.50	<0.50	<0.46
Diisopropyl ether	**NE**	**NE**	<1.9	<1.9	<1.1
Ethylbenzene	**700**	**140**	<0.22	<0.22	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	<1.2	<1.2	<2.7
Isopropylbenzene	**NE**	**NE**	<0.39	<0.39	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<1.2	<1.2	<1.1
Methylene Chloride	**5**	**0.5**	<0.58	<0.58	<0.32
Naphthalene	**100**	**10**	<1.2	<1.2	<1.1
Styrene	**100**	**10**	<0.47	<0.47	<0.36
Tetrachloroethene	**5**	**0.5**	<0.33	<0.33	<0.41
Toluene	**800**	**160**	<0.17	<0.17	<0.29
Trichloroethene	**5**	**0.5**	<0.26	<0.26	<0.32
Trichlorofluoromethane	**3490**	**698**	<0.21	<0.21	<0.42
Vinyl chloride	**0.2**	**0.02**	<0.17	<0.17	<0.17
cis-1,2-Dichloroethene	**70**	**7**	<0.27	<0.27	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	<3.6	<3.6	<0.36
Xylenes	**2000**	**400**	<0.73	<0.73	<1.05
n-Butylbenzene	**NE**	**NE**	<0.71	<0.71	<0.86
n-Propylbenzene	**NE**	**NE**	<0.81	<0.81	<0.35
p-Isopropyltoluene	**NE**	**NE**	<0.80	<0.80	<1.0
sec-Butylbenzene	**NE**	**NE**	<0.85	<0.85	<0.42
tert-Butylbenzene	**NE**	**NE**	<0.30	<0.30	<0.59
trans-1,2-Dichloroethene	**100**	**20**	<1.1	<1.1	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	<4.4	<4.4	<3.5

Table A.1.a - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Parameter	NR 140 ES	NR 140 PAL	TW-20		TW-21	TW-22	TW-23	TW-24	TW-25	TW-26	TW-27	TW-28
			2/2/2022	6/16/2022	2/2/2022	2/2/2022	2/2/2022	2/2/2022	2/2/2022	6/15/2022	6/15/2022	6/15/2022
VOCs (ug/L)												
1,1,1,2-Tetrachloroethane	**70**	**7**	<222	<222	<3.6	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	<0.36
1,1,1-Trichloroethane	**200**	**40**	<189	<189	<3.0	<0.61	<0.61	<0.30	<0.30	<0.30	<0.30	<0.30
1,1,2,2-Tetrachloroethane	**0.2**	**0.02**	<236	<236	<3.8	<0.76	<0.76	<0.38	<0.38	<0.38	<0.38	<0.38
1,1,2-Trichloroethane	**5**	**0.5**	<215	<215	<3.4	<0.69	<0.69	<0.34	<0.34	<0.34	<0.34	<0.34
1,1-Dichloroethane	**850**	**85**	***542 J***	***406 J***	<3.0	0.94 J	<0.59	<0.30	<0.30	13.5	<0.30	<0.30
1,1-Dichloroethene	**7**	**0.7**	**867**	**687**	**14.8**	<1.2	**10.9**	**34.3**	<0.58	<0.58	<0.58	<0.58
1,1-Dichloropropene	**NE**	**NE**	<256	<256	<4.1	<0.82	<0.82	<0.41	<0.41	<0.41	<0.41	<0.41
1,2,3-Trichlorobenzene	**NE**	**NE**	<636	<636	<10.2	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichloropropane	**60**	**12**	<347	<347	<5.6	<1.1	<1.1	<0.56	<0.56	<0.56	<0.56	<0.56
1,2,4-Trichlorobenzene	**70**	**14**	<594	<594	<9.5	<1.9	<1.9	1.3 J	<0.95	<0.95	<0.95	<0.95
1,2,4-Trimethylbenzene	**480***	**96***	<280	<280	<4.5	<0.90	<0.90	<0.45	<0.45	<0.45	<0.45	<0.45
1,2-Dibromo-3-chloropropane	**0.2**	**0.02**	<1480	<1480	<23.7	<4.7	<4.7	<2.4	<2.4	<2.4	<2.4	<2.4
1,2-Dibromoethane (EDB)	**0.05**	**0.005**	<193	<193	<3.1	<0.62	<0.62	<0.31	<0.31	<0.31	<0.31	<0.31
1,2-Dichlorobenzene	**600**	**60**	<204	<204	<3.3	<0.65	<0.65	<0.33	<0.33	<0.33	<0.33	<0.33
1,2-Dichloroethane	**5**	**0.5**	<182	<182	<2.9	<0.58	<0.58	<0.29	<0.29	***1.8***	<0.29	<0.29
1,2-Dichloropropane	**5**	**0.5**	<280	<280	<4.5	<0.90	<0.90	<0.45	<0.45	<0.45	<0.45	<0.45
1,3,5-Trimethylbenzene	**480***	**96***	<223	<223	<3.6	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	<0.36
1,3-Dichlorobenzene	**600**	**120**	<219	<219	<3.5	<0.70	<0.70	<0.35	<0.35	<0.35	<0.35	<0.35
1,3-Dichloropropane	**NE**	**NE**	<190	<190	<3.0	<0.61	<0.61	<0.30	<0.30	<0.30	<0.30	<0.30
1,4-Dichlorobenzene	**75**	**15**	<558	<558	<8.9	<1.8	<1.8	<0.89	<0.89	<0.89	<0.89	<0.89
2,2-Dichloropropane	**NE**	**NE**	<2610	<2610	<41.8	<8.4	<8.4	<4.2	<4.2	<4.2	<4.2	<4.2
2-Chlorotoluene	**NE**	**NE**	<556	<556	<8.9	<1.8	<1.8	<0.89	<0.89	<0.89	<0.89	<0.89
4-Chlorotoluene	**NE**	**NE**	<559	<559	<8.9	<1.8	<1.8	<0.89	<0.89	<0.89	<0.89	<0.89
Benzene	**5**	**0.5**	<185	<185	<3.0	<0.59	<0.59	<0.30	<0.30	<0.30	<0.30	<0.30
Bromobenzene	**NE**	**NE**	<226	<226	<3.6	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.36
Bromochloromethane	**NE**	**NE**	<224	<224	<3.6	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.36
Bromodichloromethane	**0.6**	**0.06**	<260	<260	<4.2	<7.6	<0.83	<0.42	<0.42	<0.42	<0.42	<0.42
Bromoform	**4.4**	**0.44**	<2370	<2370	<38.0	<0.83	<7.6	<3.8	<3.8	<3.8	<3.8	<3.8
Bromomethane	**10**	**1**	<745	<745	<11.9	<2.4	<2.4	<1.2	<1.2	<1.2	<1.2	<1.2
Carbon Tetrachloride	**5**	**0.5**	<231	<231	<3.7	<0.74	<0.74	<0.37	<0.37	<0.37	<0.37	<0.37
Chlorobenzene	**NE**	**NE**	<535	<535	<8.6	<1.7	<1.7	<0.86	<0.86	<0.86	<0.86	<0.86
Chloroethane	**400**	**80**	<862	<862	<13.8	<2.8	<2.8	<1.4	<1.4	<1.4	<1.4	<1.4
Chloroform	**6**	**0.6**	<739	<739	<11.8	<2.4	<2.4	<1.2	<1.2	<1.2	<1.2	<1.2
Chloromethane	**30**	**3**	<1020	<1020	<16.4	<3.3	<3.3	<1.6	<1.6	<1.6	<1.6	<1.6
Dibromochloromethane	**60**	**6**	<1650	<1650	<26.4	<5.3	<5.3	<2.6	<2.6	<2.6	<2.6	<2.6
Dibromomethane	**NE**	**NE**	<619	<619	<9.9	<2.0	<2.0	<0.99	<0.99	<0.99	<0.99	<0.99
Dichlorodifluoromethane	**NE**	**NE**	<285	<285	<4.6	<0.91	19.6	135	22.6	121	<0.46	<0.46
Diisopropyl ether	**NE**	**NE**	<688	<688	<11.0	<2.2	<2.2	<1.1	<1.1	<1.1	<1.1	<1.1
Ethylbenzene	**700**	**140**	<203	<203	<3.3	<0.65	<0.65	<0.33	<0.33	<0.33	<0.33	<0.33
Hexachloro-1,3-butadiene	**NE**	**NE**	<1710	<1710	<27.4	<5.5	<5.5	<2.7	<2.7	<2.7	<2.7	<2.7
Isopropylbenzene	**NE**	**NE**	<625	<625	<10.0	<2.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl-tert-butyl ether (MTBE)	**60**	**12**	<706	<706	<11.3	<2.3	<2.3	<1.1	<1.1	<1.1	<1.1	<1.1
Methylene Chloride	**5**	**0.5**	<200	<200	<3.2	<0.64	<0.64	<0.32	<0.32	<0.32	<0.32	<0.32
Naphthalene	**100**	**10**	<706	<706	<11.3	<2.3	<2.3	<1.1	<1.1	<1.1	<1.1	<1.1
Styrene	**100**	**10**	<223	<233	<3.6	<0.71	<0.71	<0.36	<0.36	<0.36	<0.36	<0.36
Tetrachloroethene	**5**	**0.5**	<255	<255	<4.1	<0.82	<0.82	<0.41	<0.41	<0.41	<0.41	<0.41
Toluene	**800**	**160**	<180	<180	<2.9	<0.58	<0.58	<0.29	<0.29	<0.29	<0.29	<0.29
Trichloroethene	**5**	**0.5**	**78,300**	**69,200**	**345**	**8.1**	**109**	**125**	<0.32	**27.1**	<0.32	<0.32
Trichlorofluoromethane	**3490**	**698**	<262	<262	<4.2	<0.84	<0.84	<0.42	<0.42	<0.42	<0.42	<0.42
Vinyl chloride	**0.2**	**0.02**	**47,800**	**40,100**	**166**	**166**	**19.9**	**409**	<0.17	**47**	***0.27 J***	<0.17
cis-1,2-Dichloroethene	**70**	**7**	**183,000**	**160,000**	**842**	**126**	**163**	**84.1**	<0.47	***52.6***	<0.47	<0.47
cis-1,3-Dichloropropene	**0.4**	**0.04**	<234	<224	<3.6	<0.72	<0.72	<0.36	<0.36	<0.36	<0.36	<0.36
Xylenes	**2000**	**400**	<655	<655	<10.5	<2.1	<2.1	<1.05	<1.05	<1.05	<1.05	<1.05
n-Butylbenzene	**NE**	**NE**	<536	<536	<8.6	<1.7	<1.7	<0.86	<0.86	<0.86	<0.86	<0.86
n-Propylbenzene	**NE**	**NE**	<216	<216	<3.5	<0.69	<0.69	<0.35	<0.35	<0.35	<0.35	<0.35
p-Isopropyltoluene	**NE**	**NE**	<652	<652	<10.4	<2.1	<2.1	<1.0	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	**NE**	**NE**	<265	<265	<4.2	<0.85	<0.85	<0.42	<0.42	<0.42	<0.42	<0.42
tert-Butylbenzene	**NE**	**NE**	<366	<366	<5.9	<1.2	<1.2	<0.59	<0.59	<0.59	<0.59	<0.59
trans-1,2-Dichloroethene	**100**	**20**	**2,660**	**2,050**	**129**	9.9	1.3 J	4.2	<0.53	2	<0.53	<0.53
trans-1,3-Dichloropropene	**0.4**	**0.04**	<2160	<2160	<34.6	<6.9	<6.9	<3.5	<3.5	<3.5	<3.5	<3.5

Key:

VOC - Volatile Organic Compounds

J - Analyte detected between the laboratory Limit of Detection and tLimit of Quantitation

NE - Not established by Chapter NR 140 Wis. Adm. Code

µg/L - Micrograms per liter

--- - Not analyzed

5 - Exceeds Chapter NR 140 Enforcement Standard

0.5 - Exceeds Chapter NR 140 Preventive Action Limit

* - NR 140 ES and PAL values are for combined 1,2,4- and 1,3,5-Trimethylbenzene

Table A.1.b - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well ID	Date Sampled	Relevant and Significant Metals Analytical Results (µg/L)								
		Arsenic	Barium	Cadmium	Chromium	Hexavalent Chromium	Lead	Mercury	Selenium	Silver
NR 140 Preventive Action Limit (µg/l)		1	400	0.5	10	NE	1.5	0.2	10	10
NR 140 Enforcement Standard (µg/l)		10	2,000	5	100	NE	15	2	50	50
MW-1	10/15/10	***7.3 J***	***1,070***	***2.3 J***	1.1 J	<3.9	<1.7	<0.10	<2.0	<0.52
	06/15/11	***6.2 J***	316	***0.63 J***	1.4 J	---	***2.9 J***	<0.10	<1.9	<0.46
	09/29/11	***5.6 J***	397	0.23 J	<0.44	---	***2.4 J***	<0.10	<1.9	<0.46
	07/31/13	<0.6	233	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	04/01/14	***1.9***	201	<0.5	<2.6	---	<0.7	<0.04	1.6 J	<51.5
	12/30/16	<0.6	105	<0.3	7.4	---	<0.6	<11	<1.1	<1.9
	03/28/19	<10.8	109	<1.3	***33.7***	---	<12.8	<0.084	<24.7	<3.2
	06/20/19	***8.7 J***	128	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/16/22	---	---	---	3.3 J	<7.3	---	---	---	---
MW-2	10/15/10	***2.6 J***	***422***	<0.26	<0.50	<3.9	<1.7	<0.10	<2.0	<0.52
	06/15/11	***3.5 J***	285	0.33 J	<0.44	---	***3.1 J***	<0.10	4.1 J	<0.46
	09/29/11	***6.0 J***	2.76	0.17 J	<0.44	---	***2.54 J***	<0.10	<1.9	<0.46
	07/31/13	***2.7***	179	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	04/01/14	***1.5 J***	291	<0.5	<2.6	---	**12.2**	<0.04	<1	<51.5
	12/30/16	***1.1 J***	39.2	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/28/19	NS	NS	NS	NS	---	NS	NS	NS	NS
	06/20/19	***8.7 J***	88.2	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
MW-3	10/15/10	***3.2 J***	385	<0.26	<0.50	<3.9	***2.1 J***	<0.10	<2.0	<0.52
	06/15/11	***3.2 J***	156	0.19 J	4.2 J	---	<2.4	<0.10	<1.9	<0.46
	09/29/11	***4.6 J***	190	<0.13	<0.44	---	***2.1 J***	<0.10	<1.9	<0.46
	07/31/13	<0.6	161	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	04/01/14	***1.8 J***	105	<0.5	<2.6	---	<0.7	<0.04	<1	<51.5
	12/30/16	<0.6	101	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/28/19	***8.1 J***	86.2	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/20/19	**13.1 J**	93	<1.3	<2.5	---	<6.4	<0.084	***17.8J***	<3.2
MW-4	06/15/11	***2.9 J***	127	<0.13	<0.44	---	<2.4	<0.10	3.2 J	<0.46
	09/29/11	***4.4 J***	85.9	<0.13	<0.44	---	<1.5	<0.10	<1.9	<0.46
	07/31/13	<0.6	99.4	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	03/28/19	<5.4	---	---	---	---	---	---	---	---
	06/19/19	<8.3	---	---	---	---	---	---	---	---
	06/14/22	<8.3	59.1	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
TW-1	04/01/14	***1.3 J***	252	<0.5	<2.6	---	<0.7	<0.4	<1	<51.5
MW-5	06/15/11	***2.1 J***	157	0.24 J	<0.44	---	<2.4	<0.10	2.2 J	<0.46
	09/29/11	***4.7 J***	138	<0.13	<0.44	---	***2.5 J***	<0.10	<1.9	<0.46
	07/31/13	<0.6	137	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	04/01/14	<0.6	129	<0.5	<2.6	---	<0.7	<0.04	<1	<51.5
	12/29/16	<0.6	122	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/28/19	<5.4	125	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/19/19	***8.7 J***	128	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/16/22	<8.3	124	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
MW-6	06/15/11	***2.1 J***	181	0.28 J	<0.44	---	***2.9 J***	<0.10	5.3 J	<0.46
	09/29/11	***6.8 J***	178	0.13 J	<0.44	---	2.7 J	<0.10	<1.9	<0.46
	07/31/13	<0.6	162	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	04/01/14	<0.6	186	<0.5	<2.6	---	<0.7	<0.04	<1	<51.5
	06/14/22	<8.3	171	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
MW-7	07/31/13	<0.6	250	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	04/01/14	<0.6	193	<0.5	<2.6	---	<0.7	<0.04	<1	<51.5
	12/30/16	<0.6	190	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/28/19	***7.3 J***	191	<1.3	<2.5	---	***6.4 J***	<0.084	***14.0 J***	<3.2
	06/20/19	<5.4	190	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/14/22	<8.3	250	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
MW-8	07/31/13	<0.6	54.3	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	04/01/14	<0.6	45.4	<0.5	<2.6	---	<0.7	<0.04	<1	<51.5
	12/30/16	<0.6	27.8 J	<0.6	<1.4	---	<0.8	<0.11	<1.1	<3.8
	03/28/19	***9.3 J***	24.2	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/20/19	**18.0 J**	26.2	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
PZ-3	07/31/13	<0.6	47.3	<0.5	<2.6	---	<0.7	<0.04	<1	<10.3
	04/01/14	<0.6	29.5	<0.5	<2.6	---	<0.7	<0.04	<1	<51.5
	12/30/16	<0.6	26.9 J	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/28/19	<5.4	25.1	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/20/19	***5.9J***	24.6	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/16/22	<8.3	26.5	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2

Table A.1.b - Groundwater Analytical Results
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well ID	Date Sampled	Relevant and Significant Metals Analytical Results (µg/L)								
		Arsenic	Barium	Cadmium	Chromium	Hexavalent Chromium	Lead	Mercury	Selenium	Silver
NR 140 Preventive Action Limit (µg/l)		1	400	0.5	10	NE	1.5	0.2	10	10
NR 140 Enforcement Standard (µg/l)		10	2,000	5	100	NE	15	2	50	50
PZ-4	06/15/11	<2.0	37.8	<0.13	<0.44	---	<2.4	<0.10	2.5 J	<0.46
	09/29/11	***2.0 J***	32.1	<0.13	<0.44	---	<1.5	<0.10	<1.9	<0.46
	07/31/13	<0.6	34.9	<0.5	<2.6	---	0.8 J	<0.04	<1	***20.9 J***
	04/01/14	0.6 J	22.7	<0.5	<2.6	---	***10.7***	<0.04	<1	<51.5
	03/28/19	---	---	---	---	---	<6.4	---	---	---
	06/19/19	---	---	---	---	---	<5.9	---	---	---
	06/14/22	<8.3	23.2	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
SUMP-1	10/15/10	<133	125 J	**6,620**	**1,150,000**	1,290,000	<173	0.13 J	<200	<51.7
	06/15/11	<17.6	113	**1,970**	**358,000**	---	**15.7 J**	<0.10	<22.5	<6.9
	06/14/22	<8.3	36.5	**16.3**	**186**	---	<5.9	<0.066	<12.2	<3.2
SUMP-2	10/15/10	<1.3	101	**36.2**	**1,100**	1100	<1.7	<0.10	<2.0	<0.52
	06/15/11	<1.8	67	**8.2**	**520**	---	<1.3	<0.10	<2.2	<0.69
PZ-13	12/29/16	<0.6	24.7 J	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/28/19	<5.4	22.2	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/20/19	***5.81***	22.5	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/16/22	<8.3	22.4	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
MW-14	12/30/16	<0.6	372	***0.7 J***	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/28/19	<5.4	102	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/20/19	**20.9J**	172	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/16/22	---	---	---	<2.5	<18	---	---	---	---
MW-15	12/30/16	***1.9***	92.8	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/28/19	***8.2 J***	79.3	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/20/19	**23.0J**	107	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
PZ-16	12/29/16	***8.7***	52.7	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/27/19	***6.2 J***	42.5	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/19/19	***9.2 J***	41.8	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/15/22	<8.3	47.8	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
MW-17	12/29/16	0.8 J	109	<0.3	<0.7	---	<0.8	<0.11	<1.1	<1.9
	03/27/19	<5.4	108	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/19/19	***9.7 J***	62.8	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/15/22	<8.3	70	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
MW-18	03/28/19	**11.2 J**	102	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/20/19	***9.7 J***	97.3	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/15/22	<8.3	59.3	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
MW-19	03/28/19	<5.4	173	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/20/19	**16.0 J**	173	<1.3	<2.5	---	<6.4	<0.084	<12.3	<3.2
	06/16/22	<8.3	115	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
TW-20	02/02/22	<41.7	***1,960***	**181**	<12.7	---	<29.6	<0.066	<61.2	<16.0
	06/16/22	---	---	---	4.5 J	<73	---	---	---	---
TW-21	02/02/22	<8.3	98.5	<1.3	3.7 J	---	<5.9	<0.066	<12.2	<3.2
TW-22	02/02/22	<8.3	260	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
TW-23	02/02/22	<8.3	173	***1.7 J***	3.1 J	---	<5.9	<0.066	<12.2	<3.2
TW-24	02/02/22	<16.7	127	<2.7	***33.0***	---	<11.8	<0.066	<24.5	<6.4
TW-25	02/02/22	<83.4	67.8	<13.3	<25.5	---	<59.1	<0.066	<122	<32.0
TW-26	06/15/22	<41.7	187	<6.6	<12.7	---	<29.6	<0.066	<61.2	<16.0
TW-27	06/15/22	<8.3	***918***	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2
TW-28	06/15/22	<8.3	60.2	<1.3	<2.5	---	<5.9	<0.066	<12.2	<3.2

Key:

J	- Analyte detected between the Laboratory Limit of Detection and Laboratory Limit of Quantitation
NE	- Not established by Chapter NR 140 Wis. Adm. Code
µg/L	- Micrograms per liter
---	- Not analyzed
15	- Exceeds Chapter NR 140 Enforcement Standard
1.5	- Exceeds Chapter NR 140 Preventive Action Limit
NS	-No sample collected because water in the well was frozen on this date

Table A.1.c Groundwater Analytical Results
Jagemann Plating Co., Inc.
1324 S. 26th Street; Manitowoc, WI

Parameters	CAS Number	Cycle 10 &11 Recommended Ch. NR 140 ES	Cycle 10 & 11 Recommended Ch. NR 140 PAL	MW-1	MW-2	MW-3	PZ-3	MW-4	PZ-4	MW-5	MW-6	MW-7	MW-8	PZ-13	PZ-16	MW-14	MW-17	MW-18	MW-19	Sump 1
				12/09/21	12/08/21	12/08/21	12/08/21	6/14/22	6/14/22	12/08/21	6/14/22	6/14/22	12/09/21	12/08/21	6/15/22	12/09/21	6/15/22	6/15/22	12/08/21	6/14/22
Perfluoroalkyl & Polyfluoroalkyl Substances (PFAS) Results (ng/L)																				
Perfluoroalkyl Carboxylates/Carboxylic Acids (PFCA)																				
Perfluoro-n-butanoic acid (PFBA)	375-22-4	10,000	2,000	16	49	27	ND	12	ND	5.1	9.5	27	14	ND	10	25	19	15	4.6	11
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	---	---	11	23	49	ND	1.5 J	ND	ND	1.3 J	10	4.5	ND	9.7	18	4.7	9	2.6 J	12
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	150,000	30,000	16	5.7	20	ND	2.2	ND	ND	1.2 J	6.3	7.9	ND	3.5	52	2.8	6.5	1.9 J	10
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	---	---	6.7	5.1	7.3 J	ND	1.8 J	ND	0.57 J	0.58 J	3.2	5.9	ND	1.5 J	26	2.6	7.9	0.63 J	5.4
Perfluoro-n-octanoic acid (PFOA)	335-67-1	20*	2*	**20**	***12***	***17***	0.85 J	***3.9***	ND	***4.3***	***3***	***11***	***19***	ND	1.8 J	**97**	***4.5***	**26**	***2.9 J***	***11***
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	30	3	0.83 J	0.69 J	ND	ND	0.81 J	ND	ND	ND	ND	ND	ND	ND	0.70 J	***3.1***	ND	ND	1.8 J
Perfluoro-n-decanoic acid (PFDA)	335-76-2	300	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	1.3 J
Perfluoro-n-undecanoic acid (PFUnDA)	2058-94-8	3,000	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	10,000	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroalkyl Sulfonates/Sulfonic Acids (PFSA)																				
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	450,000	90,000	760	280	170	0.55 J	4.9	0.67 J	3.8	9.3	240 D	110	ND	27	180	230 D	28	6.9	130 D
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	---	---	48	5	11 J	ND	ND	ND	ND	ND	3	53	ND	ND	86	ND	9.2	0.62 J	4.9
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	40	4	**120**	***21***	**51**	ND	ND	ND	1.4 J	ND	15	**190**	ND	ND	**350**	1.5 J	**51**	0.95 J	18
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	---	---	20	4.4	14 J	ND	ND	ND	ND	ND	2.6	25	ND	ND	120	0.42 J	7.2	ND	7.4
Perfluorooctanesulfonicacid (PFOS)	1763-23-1	20*	2*	**1,100**	**300**	**1,000**	***9.2***	**32**	0.86 J	***5***	0.77 J	***88***	**650**	ND	***2.7***	**5,200**	**200 D**	**140**	ND	**860 D**
Perfluoro-1-nonesulfonic acid (PFNS)	68259-12-1	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1 J	ND	ND	ND	ND
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroalkane Sulfonamides/Sufonamidoacetic Acids, Sulfonamidoethanols (FASA)																				
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7 J	ND
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	20*	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluoro -1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	20*	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	20*	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorotelomer Substances (FTS)																				
1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	---	---	ND	17	19 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND	2.1	ND	1.7 J
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Replacement Chemicals																				
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	300	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,8-dioxa-3H-perfluorononanioc acid (DONA)	919005-14-4	3	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PFOA and PFOS		20*	2*	**1,120**	**312**	**1,017**	***10.05***	**35.9**	0.86	***9.3***	***3.77***	**99**	**669**	ND	***4.5***	**5,297**	**204.5**	**166**	***2.9 J***	**871**
Total EtFOSE, EtFOSA, and EtFOSAA		20*	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key/Notes:

WI DNR PFAS List - 33 Comounds laboratory analysis was completed using Modified USEPA Method 537

* = Wisconsin Department of Health Services recommends a combined standard for EtFOSE, EtFOSA, and EtFOSAA; and PFOS and PFOA.

ng/L = nanogram per liter

J = Results were below the calibration range

D = Results were taken from secondary dilutions of the sample extracts to bring results witin calibration range

I = Incorrect isotope ratios were obtained

Q = Surrogate failure

--- = No Recommendations by WDNR for a Ch. 140 PAL or ES standard

ND = Not Detected

Highlighted bold values exceed the current recommended Ch. NR 140 Enforcement Standards (ES) for individual and/or combined values

*Underlined Ibold talics v*alues exceed the current recommended Ch. NR 140 Preventive Action Limits (PAL) for individual and/or combined values

Table A.1.c Groundwater Analytical Results
Jagemann Plating Co., Inc.
1324 S. 26th Street; Manitowoc, WI

Parameters	CAS Number	Cycle 10 &11 Recommended Ch. NR 140 ES	Cycle 10 & 11 Recommended Ch. NR 140 PAL	TW-20	TW-21	TW-22	TW-23	TW-24	TW-25	TW-26	TW-27	TW-28	Trip Blank	FBR (Field Reagent Blank)		
				2/02/22	2/02/22	2/02/22	2/02/22	2/02/22	2/02/22	6/15/22	6/15/22	6/15/22	12/09/21	12/09/21	2/02/22	6/14/22
Perfluoroalkyl & Polyfluoroalkyl Substances (PFAS) Results (ng/L)																
Perfluoroalkyl Carboxylates/Carboxylic Acids (PFCA)																
Perfluoro-n-butanoic acid (PFBA)	375-22-4	10,000	2,000	ND	11 J	31	37	2.5 J	8.5	9.8	21	18	ND	ND	ND	ND
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	---	---	ND	ND	14	120	4.4	6.6	21.0	4.2	6.3	ND	ND	ND	ND
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	150,000	30,000	ND	ND	14	35	5.5	11	20	2.5	3.7	ND	ND	ND	ND
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	---	---	2.7 J	8.4 J	8.7	39	3.1 J	17	19	1.9 J	2.4	ND	ND	ND	ND
Perfluoro-n-octanoic acid (PFOA)	335-67-1	20*	2*	***10***	**53 J**	**31**	**24**	***15***	***14***	**71**	***9.8***	***13***	ND	ND	ND	ND
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	30	3	ND	ND	ND	***5.2***	2.9 J	ND	6.7	ND	ND	ND	ND	ND	ND
Perfluoro-n-decanoic acid (PFDA)	335-76-2	300	60	ND	ND	ND	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-undecanoic acid (PFUnDA)	2058-94-8	3,000	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	10,000	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroalkyl Sulfonates/Sulfonic Acids (PFSA)																
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	450,000	90,000	110	130	310	50	38	170	94	100	140	ND	ND	ND	ND
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	---	---	ND	32 J	20	6.6	6.5	11	7.6	5.2	4.2	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	40	4	***11***	**160**	**54**	**75**	***34***	***30***	***93***	***10***	***14***	ND	ND	ND	ND
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	---	---	1.0 J	78	5.1	52	30	1.2 J	38	1.1 J	1.2 J	ND	ND	ND	ND
Perfluorooctanesulfonicacid (PFOS)	1763-23-1	20*	2*	**57**	**3,800**	**95**	**7,500**	**3,500**	**57**	**210 D**	***19***	**25**	ND	ND	ND	ND
Perfluoro-1-nonesulfonic acid (PFNS)	68259-12-1	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroalkane Sulfonamides/Sufonamidoacetic Acids, Sulfonamidoethanols (FASA)																
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	20*	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluoro -1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	20*	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	20*	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorotelomer Substances (FTS)																
1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	---	---	2.0 J	ND	ND	41	16	8.2 J	34 I	ND	ND	ND	ND	ND	ND
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	---	---	ND	ND	ND	3.9 JQ	3.7 J	ND	5.5	ND	ND	ND	ND	ND	ND
Replacement Chemicals																
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	300	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,8-dioxa-3H-perfluorononanioc acid (DONA)	919005-14-4	3	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PFOA and PFOS		20*	2*	**67**	**3,853**	**126**	**7,524**	**3,515**	**71**	**281**	**28.8**	**38**	ND	ND	ND	ND
Total EtFOSE, EtFOSA, and EtFOSAA		20*	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key/Notes:

WI DNR PFAS List - 33 Comounds laboratory analysis was completed using Modified USEPA Method 537

* = Wisconsin Department of Health Services recommends a combined standard for EtFOSE, EtFOSA, and EtFOSAA; and PFOS and PFOA.

ng/L = nanogram per liter

J = Results were below the calibration range

D = Results were taken from secondary dilutions of the sample extracts to bring results witin calibration range

I = Incorrect isotope ratios were obtained

Q = Surrogate failure

--- = No Recommendations by WDNR for a Ch. 140 PAL or ES standard

ND = Not Detected

Highlighted bold values exceed the current recommended Ch. NR 140 Enforcement Standards (ES) for individual and/or combined values

Underlined Ibold talics v alues exceed the current recommended Ch. NR 140 Preventive Action Limits (PAL) for individual and/or combined values

Table A.2.a Soil Analytical Results Table
Jagemann Plating Co., Inc.
1324 S 26th Street, Manitowoc, WI

Sample ID & Depth (In Feet)	Date Sampled	VOC Laboratory Analytical Results (µg/kg)																													
		Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	tert-Butylbenzene	sec-Butylbenzene	n-Butylbenzene	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	2-Chlorotoluene	4-Chlorotoluene	1,2-Dibromo-3-chloropropane	Dibromochloromethane	1,2-Dibromoethane (EDB)	Dibromomethane	1,4-Dichlorobenzene	1,3-Dichlorobenzene	1,2-Dichlorobenzene	Dichlorodifluoromethane	1,2-Dichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,2-Dichloropropane	2,2-Dichloropropane
Industrial Direct Contact RCL		7,070	679,000	906,000	1,830	113,000	43,000	183,000	145,000	108,000	4,030	761,000	NE	1,980	669,000	907,000	253,000	92	38,900	NE	143,000	16,400	297,000	376,000	530,000	2,870	22,200	1,190,000	2,340,000	1,850,000	1,780	191,000
Non-Industrial Direct Contact RCL		1,600	342,000	216,000	418	25,400	9,600	183,000	145,000	108,000	916	370,000	NE	454	159,000	907,000	253,000	8	8,280	NE	34,000	3,740	297,000	376,000	126,000	652	5,060	320,000	156,000	1,560,000	406	191,000
Groundwater Pathway RCL		5.1	NE	NE	0.3	2.3	5.1	NE	NE	NE	3.9	NE	226.6	3.3	15.5	NE	NE	0.2	32	0.0282	NE	144	1,152.8	1,168	3,086.3	2.8	483.4	5	41.2	62.6	3.3	NE
B-1 (0 -4')	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	***387***	<25	<25	<25
B-2 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	<25	***7,590***	***794***	<25	<25
B-3 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
B-3 (6 - 8')*	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	***7,510***	***339***	<25	<25
B-4 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	***955***	45.2 J	<25	<25
B-4 (6 - 8')*	9/21/2010	<250	<250	<250	<250	<259	<250	<404	<250	<250	<250	<250	<250	<250	<250	<250	<250	<823	<250	<250	<250	<444	<250	<250	<250	<250	<250	<250	***31,600***	***592 J***	<250	<250
B-5 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	***137***	42.3 J	<25	<25
B-6 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	33.9 J	<25	<25	<25
B-7 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
B-8 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	***79.7***	<25	<25	<25
PZ-4 (2 - 4')	5/3/2011	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
MW-5 (2 - 4')	5/3/2011	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
MW-6 (2 - 4')	5/3/2011	<25	<25	<25	<25	<25.9	<25	<40.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<82.3	<25	<25	<25	<44.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
B-9 (2.5 - 4.5')	5/7/2013	<9.2	<13	---	<27	<30	---	<26	<41	<20	<25	<16	<42	<49	<181	<16	<14	<48	<14	<20	---	<38	<30	<33	<57	<19	<36	<21	<24	<29	<9.5	<21
B-10 (2.5 - 4.5')	5/7/2013	<9.2	<13	---	<27	<30	---	<26	<41	<20	<25	<16	<42	<49	<181	<16	<14	<48	<14	<20	---	<38	<30	<33	<57	<19	<36	<21	<24	<29	<9.5	<21
B-11 (2.5 - 4.5')	5/7/2013	<9.2	<13	---	<27	<30	---	<26	<41	<20	<25	<16	<42	<49	<181	<16	<14	<48	<14	<20	---	<38	<30	<33	<57	<19	<36	<21	40 J	<29	<9.5	<21
B-12 (2 - 4')*	6/5/2013	<9.2	<13	---	<27	<30	---	<26	<41	<20	<25	<16	<42	<49	<181	<16	<14	<48	<14	<20	---	<38	<30	<33	<57	<19	<36	<21	***400***	<29	<9.5	<21
B-13 (2.5 - 4.5')*	11/8/2016	<16	<39	---	<15	<23	---	2,720	1,340	<35	<21	<39	<45	<26	<250	<29	<32	<78	<31	<35	---	<39	<30	<30	<43	<25	<30	<29	<94	43 J	<25	<31
B-16 (2.5 - 4.5')*	11/8/2016	<16	<39	---	<15	<23	---	<86	<36	<35	<21	<390	<45	<26	<250	<29	<32	<78	<31	<35	---	<39	<30	<30	<43	<25	<30	<29	<21	<24	<25	<31
B-18 (2.5 - 4.5')*	8/15/2018	<30	<25	---	<29	<26	---	<40	<33	<26	<16	<13	<91	<35	<76	<15	<18	<58	<25	<23	---	<28	<37	<37	<48	<34	<38	<22	<32	<28	<35	<25
B-19 (5 - 7')*	8/15/2018	<30	<25	---	<29	<26	---	<40	<33	<26	<16	<13	<91	<35	<76	<15	<18	<58	<25	<23	---	<28	<37	<37	<48	<34	<38	<22	<32	<28	<35	<25
B-20 (0 - 4')	1/9/2022	<445	<729	<512	<445	<8,220	<2,620	<587	<456	<856	<411	<224	<788	<1,340	<710	<605	<710	<1,450	<6,390	<512	<553	<512	<512	<579	<803	<430	<478	<620	***41,600***	***649 J***	<445	<504
B-20 (6 - 8')*	1/9/2022	<215	<352	<247	<215	<3,970	<1,270	<284	<220	<414	<199	<108	<381	<647	<343	<293	<343	<701	<3,090	<247	<267	<247	<247	<280	<388	<208	***526 J***	***889 J***	***143,000***	***3,930***	<215	<244
B-21 (0 - 4')	1/9/2022	<15.1	<24.7	<17.4	<15.1	<279	<88.9	<19.9	<15.5	<29.0	<13.9	<7.6	<26.8	<45.4	<24.1	<20.5	<24.1	<49.2	<217	<17.4	<18.8	<17.4	<17.4	<19.7	<27.3	<14.6	<16.2	<21.1	***159***	17.0 J	<15.1	<17.1
B-21 (6 - 8')*	1/9/2022	<17.6	<28.9	<20.3	<17.6	<326	<104	<23.3	<18.1	<33.9	<16.3	<8.9	<31.3	<53.0	<28.2	<24.0	<28.2	<57.5	<253	<20.3	<21.9	<20.3	<20.3	<23.0	<31.9	<17.0	<19.0	***98.4***	***8,950***	***2,740***	<17.6	<20.0
B-22 (0 - 4')	1/9/2022	<19.0	<31.1	<21.8	<19.0	<351	<112	<25.0	<19.5	<36.5	<17.5	<9.6	<33.6	<57.1	<30.3	<25.8	<30.3	<61.9	<273	<21.8	<23.6	<21.8	<21.8	<24.7	<34.3	<18.3	<20.4	<26.5	<17.1	<17.2	<19.0	<21.5
B-22 (6 - 8')*	1/9/2022	<18.1	<29.6	<20.8	<18.1	<334	<106	<23.8	<18.5	<34.7	<16.7	<9.1	<32.0	<54.3	<28.8	<24.6	<28.8	<58.9	<259	<20.8	<22.5	<20.8	<20.8	<23.5	<32.6	<17.4	<19.4	<25.2	***247***	48.9 J	<18.1	<20.5
B-23 (0 - 4')	1/9/2022	<17.7	<29.0	<20.4	<17.7	<327	<104	<23.3	<18.1	<34.0	<16.4	<8.9	<31.4	<53.2	<28.2	<24.1	<28.2	<57.7	<254	<20.4	<22.0	<20.4	<20.4	<23.0	<32.0	<17.1	<19.0	<24.7	18.8 J	<16.1	<17.7	<20.1
B-23 (6 - 8')*	1/9/2022	<15.9	<26.0	<18.3	<15.9	<293	<93.4	<20.9	<16.3	<30.5	<14.7	<8.0	<28.1	<47.7	<25.3	<21.6	<25.3	<51.7	<228	<18.3	<19.7	<18.3	<18.3	<20.7	56.8 J	<15.3	<17.1	***32.9 J***	***444***	31.9 J	<15.9	<18.0
B-24 (0 - 4')	1/9/2022	<16.4	<26.9	<18.9	<16.4	<303	<96.6	<21.6	<16.8	<31.6	<15.2	<8.3	<29.1	<49.3	<26.2	<22.3	<26.2	<53.5	<235	<18.9	<20.4	<18.9	<18.9	<21.4	<29.6	<15.8	<17.6	<22.9	<14.7	<14.9	<16.4	<18.6
B-24 (6 - 8')*	1/9/2022	<377	<618	<434	<377	<6,980	<2,220	<498	<387	<726	<349	<190	<669	<1,140	<602	<514	<602	<1,230	<5,420	<434	<469	<434	<434	<491	<682	<365	<406	<526	***7,120***	***1,390 J***	<377	<428
B-25 (0 - 4')	1/9/2022	<15.8	<25.8	<18.1	<15.8	<291	<92.8	<20.8	<16.2	<30.3	<14.6	<7.9	<27.9	<47.4	<25.2	<21.5	<25.2	<51.4	<226	<20.5	<19.6	<18.1	<18.1	<20.5	<28.5	<15.2	<17.0	<22.0	<14.2	<14.3	<15.8	<17.9
B-25 (6 - 8')*	1/9/2022	<17.7	<29.0	<20.4	<17.7	<327	<104	<23.3	<18.1	<34.1	<16.4	<8.9	<31.4	<53.2	<28.3	<24.1	<28.3	<57.7	<254	<20.4	<22.0	<20.4	<20.4	<23.1	<32.0	<17.1	<19.0	<24.7	<15.9	<16.1	<17.7	<20.1
B-26 (0 - 4')	6/2/2022	<15.0	<24.6	<17.3	<15.0	<277	<88.4	<19.8	<15.4	<28.9	<13.9	<7.6	<26.6	<45.2	<24.0	<20.4	<24.0	<48.9	<216	<17.3	<18.7	<17.3	<17.3	<19.6	50.8 J	<14.5	<16.1	<20.9	<13.5	<13.6	<15.0	<17.0
B-26 (6 - 8')*	6/2/2022	<18.3	<29.9	<21.0	<18.3	<338	<108	<24.1	<18.7	<35.2	<16.9	<9.2	<32.4	<55.0	<29.2	<24.9	<29.2	<59.6	<262	<21.0	<22.7	<21.0	<21.0	<23.8	90.3	<17.7	<19.7	***37.8 J***	***153***	<16.6	<18.3	<20.7
B-27 (0 - 4')	6/2/2022	<16.4	<26.9	<18.9	<16.4	<304	<96.8	<21.7	<16.8	<31.6	<15.2	<8.3	<29.1	<49.4	<26.2	<22.4	<26.2	<53.6	<236	<18.9	<20.4	<18.9	<18.9	<21.4	<29.7	<15.9	<17.7	<22.9	<14.8	<14.9	<16.4	<18.6
B-27 (6 - 8')*	6/2/2022	<17.4	<28.5	<20.0	<17.4	<321	<102	<22.9	<17.8	<33.5	<16.1	<8.8	<30.8	<52.3	<27.8	<23.7	<27.8	<56.7	<250	<20.0	<21.6	<20.	<20.0	<22.6	<31.4	<16.8	<18.7	<24.3	<15.6	<15.8	<17.4	<19.7
B-28 (0 - 4')	6/2/2022	<14.0	<22.9	<16.1	<14.0	<258	<82.3	<18.4	<14.3	<26.9	<12.9	<7.0	<24.8	<42.1	<22.3	<19.0	<22.3	<45.6	<201	<16.1	<17.4	<16.1	<16.1	<18.2	<25.3	<13.5	<15.0	<19.5	<12.6	<12.7	<14.0	<15.9
B-28 (6 - 8')*	6/2/2022	<19.0	<31.2	<21.9	<19.0	<352	<112	<25.1	<19.5	<36.7	<17.6	<9.6	<33.8	<57.3	<30.4	<25.9	<30.4	<62.1	<274	<21.9	<23.7	<21.9	<21.9	<24.8	<34.4	<18.4	<20.5	<26.6	<17.1	<17.3	<19.0	<21.6

Key:

VOC -Volatile Organic Compound
J - Analyte detected between the Laboratory Limit of Detection and Laboratory Limit of Quantitation
NE - Not included on WDNR's RR Program RCL Spreadsheet (December 2018)
RCL - Residual Contaminant Level per Chapter NR 720 Wis. Adm. Code

µg/kg - Micrograms per kilogram
5.1 - Exceeds Groundwater Pathway RCL
1,600 - Exceeds Non-Industrial Direct Contact RCL
7,070 - Exceeds Industrial Direct Contact RCL

--- - Not analyzed
* - Soil sample collected below the observed historic low water table (i.e., saturated soil)

Table A.2.a Soil Analytical Results Table
Jagemann Plating Co., Inc.
1324 S 26th Street, Manitowoc, WI

Sample ID & Depth (In Feet)	Date Sampled	VOC Laboratory Analytical Results (µg/kg)																											
		1,3-Dichloropropane	1,1-Dichloropropene	cis- 1,3-Dichloropropene	trans- 1,3-Dichloropropene	Di-isopropyl ether	Ethylbenzene	Hexachloro-1,3-butadiene	Isopropylbenzene	p-Isopropyltoluene	Methyl-tert-butyl ether (MTBE)	Methylene Chloride	Naphthalene	n-Propylbenzene	Styrene	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene (PCE)	Toluene	1,2,4-Trichlorobenzene	1,2,3-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene (TCE)	Trichlorofluoromethane	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Xylenes (Total)
Industrial Direct Contact RCL		1,490,000	NE	1,210,000	1,510,000	2,260,000	35,400	7,190	NE	162,000	282,000	1,150,000	24,100	NE	867,000	3,600	12,300	145,000	818,000	113,000	934,000	640,000	7,010	8,410	1,230,000	109	219,000	182,000	2,080	260,000 (combined)
Non-Industrial Direct Contact RCL		1,490,000	NE	1,210,000	1,510,000	2,260,000	8,020	1,630	NE	162,000	63,800	61,800	5,520	NE	867,000	810	2,780	33,000	818,000	24,000	62,600	640,000	1,590	1,300	1,230,000	5	219,000	182,000	67	260,000 (combined)
Groundwater Pathway RCL		0.3	NE	0.3 (combined)		NE	1,570	NE	NE	NE	27	2.6	658.2	NE	220	0.2	53.4	4.5	1,107.2	408	NE	140.2	3.2	3.6	NE	51.9	1,378 (combined)		0.1	3,960 (combined)
B-1 (0 -4')	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	***1,470***	<25	<25	<25	<25	<25	<75
B-2 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	***2,290***	<25	<25	<25	<25	***828***	<75
B-3 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	***128***	<25	<25	<25	<25	***953***	<75
B-3 (6 - 8')*	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	***89.4***	<25	<25	<25	<25	***1,480***	<75
B-4 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	***5,550***	<25	<25	<25	<25	***212***	<75
B-4 (6 - 8')*	9/21/2010	<250	<250	<250	<250	<250	<250	<264	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	***527 J***	<250	<250	<250	<250	***1,140***	<750
B-5 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	***255***	<25	<25	<25	<25	***1,320***	<75
B-6 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	***278***	<25	<25	<25	<25	<25	<75
B-7 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<75
B-8 (0 - 4')	9/21/2010	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	***115***	<25	<25	<25	<25	<25	***1,380***	<25	<25	<25	<25	<25	<75
PZ-4 (2 - 4')	5/3/2011	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<75
MW-5 (2 - 4')	5/3/2011	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<75
MW-6 (2 - 4')	5/3/2011	<25	<25	<25	<25	<25	<25	<26.4	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<75
B-9 (2.5 - 4.5')	5/7/2013	<46	---	---	---	<11	<10	<95	<25	<31	<57	<30	<114	<24	---	<23	<12	<49	<20	<129	<79	<38	<23	<28	<86	---	<26	<26	<21	<99
B-10 (2.5 - 4.5')	5/7/2013	<46	---	---	---	<11	<10	<95	<25	<31	<57	<30	<114	<24	---	<23	<12	<49	<20	<129	<79	<38	<23	<28	<86	---	<26	<26	<21	<99
B-11 (2.5 - 4.5')	5/7/2013	<46	---	---	---	<11	<10	<95	<25	<31	<57	<30	<114	<24	---	<23	<12	<49	<20	<129	<79	<38	<23	***94***	<86	---	29 J	<26	<21	<99
B-12 (2 - 4')*	6/5/2013	<46	---	---	---	<11	<10	<95	<25	77 J	<57	<30	<114	<24	---	<23	<12	<49	29 J	<129	<79	<38	<23	***580***	<86	---	<26	<26	***190***	<99
B-13 (2.5 - 4.5')*	11/8/2016	<100	---	---	---	<12	46 J	<110	197	1,000	<220	<25	510	620	---	<29	<13	<54	<13	<120	<85	<40	<33	***105 J***	<60	---	***4,200***	***2,710***	***54***	241 J
B-16 (2.5 - 4.5')*	11/8/2016	<100	---	---	---	<12	<27	<110	<37	<56	<220	<25	<87	<35	---	<29	<13	<54	<31	<120	<85	<40	<33	<42	<60	---	<78	<89	<10	<99
B-18 (2.5 - 4.5')*	8/15/2018	---	---	<39	<22	<10	<35	<85	<34	<29	<150	<50	<94	<33	---	<28	<28	<32	<32	<66	<64	<30	<33	<41	<41	---	<25	<32	<19	<116
B-19 (5 - 7')*	8/15/2018	---	---	<39	<22	<10	<35	<85	<34	<29	<150	<50	<94	<33	---	<28	<28	<32	<32	<66	<64	<30	<33	<41	<41	---	<25	<32	<19	<116
B-20 (0 - 4')	1/9/2022	<407	<605	<1,230	<5,340	<463	<445	<3,710	<504	<568	<549	<519	<583	<448	<478	<676	<448	<725	<471	<1,540	<2,080	<478	<680	***109,000***	<542	<908	<557	<602	***7,360***	<1,348
B-20 (6 - 8')*	1/9/2022	<197	<293	<596	<2,580	<224	<215	<1,800	<244	<275	<265	<251	<282	<217	<231	<327	<217	<350	<228	<744	<1010	<231	<329	***50,000***	<262	<439	<269	<291	***21,300***	<652
B-21 (0 - 4')	1/9/2022	<13.8	<20.5	<41.8	<181	<15.7	<15.1	<126	<17.1	<19.3	<18.6	<17.6	<19.8	<15.2	<16.2	<23.0	<15.2	<24.6	<16.0	<52.2	<30.8	<16.2	<23.1	***164***	<18.4	<30.8	<18.9	<20.4	***228***	<45.8
B-21 (6 - 8')*	1/9/2022	<16.2	<24.0	<48.9	<212	<18.4	<17.6	<147	<20.00	<22.5	<21.8	<20.6	<23.1	<17.8	<19.0	<26.8	<17.8	<28.7	<18.7	<61.0	<82.5	<19.0	<27.0	***19,200***	<21.5	<36.0	<22.1	<23.9	***550***	<53.5
B-22 (0 - 4')	1/9/2022	<17.4	<25.8	<52.6	<228	<19.8	<19.0	<159	<21.5	<24.2	<23.4	<22.2	<24.9	<19.1	<20.4	<28.9	<19.1	<30.9	<20.1	<65.7	<88.8	<20.4	<29.0	<29.8	<23.1	<38.7	<23.8	<25.7	<16.1	<49.7
B-22 (6 - 8')*	1/9/2022	<16.5	<24.6	<50.1	<217	<18.8	<18.1	<151	<20.5	<23.1	<22.3	<21.1	<23.7	<18.2	<19.4	<27.5	<18.2	<29.4	<19.1	<62.5	<84.5	<19.4	<27.6	***253***	<22.0	<36.9	<22.6	<24.4	***274***	<54.8
B-23 (0 - 4')	1/9/2022	<16.2	<24.1	<49.1	<213	<18.4	<17.7	<148	<20.1	<22.6	<21.9	<20.7	<23.2	<17.8	<19.0	<26.9	<17.8	<28.8	<18.7	<61.3	<82.8	<19.0	<27.1	***35.3 J***	<21.6	<36.1	<22.2	<23.9	***59.1 J***	<53.7
B-23 (6 - 8')*	1/9/2022	<14.5	<21.6	<44.0	<191	<16.5	<15.9	<132	<18.0	<20.3	<19.6	<18.5	<20.8	<16.0	<17.1	<24.1	<16.0	<25.9	<16.8	<54.9	<74.2	<17.1	<24.3	***4,700***	<19.3	<32.4	<19.9	<21.5	***77.3***	<48.1
B-24 (0 - 4')	1/9/2022	<15.0	<22.3	<45.5	<197	<17.1	<16.4	<137	<18.6	<20.9	<20.3	<19.2	<21.5	<16.5	<17.6	<24.9	<16.5	<26.7	<17.4	<56.8	<76.7	<17.6	<25.1	<25.8	<20.0	<33.5	<20.5	<22.2	<13.9	<48.9
B-24 (6 - 8')*	1/9/2022	<346	<514	<1,050	<4,530	<393	<377	<3,150	<428	<482	<466	<441	<495	<381	<406	<574	<381	<615	<400	<1,310	<1,770	<406	<577	***199,000***	<460	<771	<472	<511	***762 J***	<1,145
B-25 (0 - 4')	1/9/2022	<14.4	<21.5	<43.7	<189	<16.4	<15.8	<132	<17.9	<20.1	<19.5	<18.4	<20.7	<15.9	<17.0	<24.0	<15.9	<25.7	<16.7	<54.6	<73.8	<17.0	<24.1	164	<19.2	<32.2	<19.7	<21.3	<13.4	<47.8
B-25 (6 - 8')*	1/9/2022	<16.2	<24.1	<49.1	<213	<18.4	<17.7	<148	<20.1	<22.6	<21.9	<20.7	<23.2	<17.8	<19.0	<26.9	<17.8	<28.9	<18.7	<61.3	<72.8	<61.3	<27.1	<27.8	<21.6	<36.1	<22.2	<23.9	<15.0	<53.7
B-26 (0 - 4')	6/2/2022	<13.7	<20.4	<41.6	<180	<15.6	<15.0	<125	<17.0	<19.2	<18.5	<17.5	<19.7	<15.1	<16.1	<22.8	<15.1	<24.5	<15.9	<52.0	<70.3	<16.1	<23.0	<23.6	<18.3	<30.7	<18.8	<20.3	<12.7	<45.5
B-26 (6 - 8')*	6/2/2022	<16.7	<24.9	<50.7	<220	<19.0	<18.3	<153	<20.7	<23.3	<22.6	<21.3	<24.0	<18.4	<19.7	<27.8	<18.4	<29.8	<19.4	<63.3	<85.5	<19.7	<28.0	***622***	<22.3	<37.3	<22.9	<24.7	***31.9 J***	<55.4
B-27 (0 - 4')	6/2/2022	<15.0	<22.4	<45.6	<197	<17.1	<16.4	<137	<18.6	<21.0	<20.3	<19.2	<21.5	<16.6	<17.7	<25.0	<16.6	<26.8	<17.4	<56.9	<76.9	<17.7	<25.1	<25.8	<20.0	<33.5	<20.6	<22.2	<13.9	<49.8
B-27 (6 - 8')*	6/2/2022	<15.9	<23.7	<48.2	<209	<18.1	<17.4	<145	<19.7	<22.2	<21.5	<20.3	<22.8	<17.5	<18.7	<26.4	<17.5	<28.3	<18.4	<60.2	<81.4	<18.7	<26.6	<27.3	<21.2	<35.5	<21.8	<23.5	<14.8	<52.7
B-28 (0 - 4')	6/2/2022	<12.8	<19.0	<38.8	<168	<14.6	<14.0	<117	<15.9	<17.9	<17.3	<16.3	<18.3	<14.1	<15.0	<21.3	<14.1	<22.8	<14.8	<48.4	<65.4	<15.0	<21.4	<22.0	<17.0	<28.5	<17.5	<18.9	<11.9	<42.4
B-28 (6 - 8')*	6/2/2022	<17.4	<25.9	<52.8	<229	<19.8	<19.0	<159	<21.6	<24.3	<23.5	<22.2	<25.0	<19.2	<20.5	<29.0	<19.2	<31.1	<20.2	<65.9	<89.2	<20.5	<29.1	<29.9	<23.2	<38.9	<23.9	<25.8	<16.2	<57.8

Key:

VOC -Volatile Organic Compound
J - Analyte detected between the Laboratory Limit of Detection and Laboratory Limit of Quantitation
NE - Not included on WDNR's RR Program RCL Spreadsheet (December 2018)
RCL - Residual Contaminant Level per Chapter NR 720 Wis. Adm. Code

µg/kg - Micrograms per kilogram
5.1 - Exceeds Groundwater Pathway RCL
1,600 - Exceeds Non-Industrial Direct Contact RCL
7,070 - Exceeds Industrial Direct Contact RCL

--- - Not analyzed
* - Soil sample collected below the observed historic low water table (i.e., saturated soil)

A.2.b Soil Analytical Results Table
Jagemann Plating Co., Inc.
1324 S 26th Street, Manitowoc, WI

Sample ID & Depth (In Feet)	Date Sampled	Metals Laboratory Analytical Results (mg/kg)								
		Arsenic	Barium	Cadmium	Chromium	Hexavalent Chromium	Lead	Mercury	Selenium	Silver
Industrial Direct Contact RCL		3	100,000	985	100,000	6.36	800	3.13	5,840	5,840
Non-Industrial Direct Contact RCL		0.677	15,300	71.1	100,000	---	400	3.13	391	391
Groundwater Pathway RCL		0.584	164.8	0.752	NE	0.301	27	0.208	0.52	0.8491
Background Threshold Value (BTV)		8	364	1	NE	---	52	NE	NE	NE
B-1 (0 - 4')	9/21/2010	***3.2*** B	83.4	0.45 J	29.2	<0.062	9.2	0.017	0.42 J	<0.054
B-2 (0 - 4')	9/21/2010	***2.1*** B	73.7	***1.1***	21.1	<0.033	10.6	0.027	0.65 J	0.076
B-3 (0 - 4')	9/21/2010	***2.8*** B	48.3	***3.9***	17.6	<0.028	8.2	0.019	0.28 J	<0.046
B-3 (6 - 8')*	9/21/2010	***4.3*** B	99.1	0.48 J	25.5	<0.049	7.4	0.021	0.39 J	<0.053
B-4 (0 - 4')	9/21/2010	***2.6*** B	53.3	0.39 J	49.9	<0.037	6.8	0.022	0.26 J	<0.050
B-4 (6 - 8')*	9/21/2010	***2.8*** B	102	0.55	27.5	<0.049	6.4	0.019	0.22 J	<0.048
B-5 (0 - 4')	9/21/2010	***3.1*** B	79.3	0.71	33.1	<0.062	15	0.04	0.37 J	<0.051
B-6 (0 - 4')	9/21/2010	***2.8*** B	35	***0.98***	20.6	<0.046	13.9	0.042	0.42 J	<0.047
B-7 (0 - 4')	9/21/2010	***2.2*** B	24.3	***0.86***	8.5	<0.048	8.5	0.014	0.42 J	0.044 J
B-8 (0 - 4')	9/21/2010	***5.4*** B	65	***1.3***	19.2	<0.040	23.8	0.047	0.85 J	0.060 J
PZ-4 (2 - 4')	5/3/2011	***4.6*** B	99.8	0.20 J	30.6	---	7.2	0.024	<0.18	0.11 J
MW-5 (2 -4')	5/3/2011	***2.4*** B	66.1	0.17 J	23	---	6.6	0.014	0.24 J	0.11 J
MW-6 (2 -4')	5/3/2011	***3.6*** B	74.4	0.33 J	21.4	---	20.4	0.043	0.46 J	0.090 J
B-9 (2.5 -4.5')	5/7/2013	***1.18 J*** B	60	<0.08	25.9	---	9.74	0.048	<0.7	<0.34
B-10 (2.5 -4.5')	5/7/2013	<0.72	63.3	<0.08	24.1	---	5.89	0.037	<0.7	<0.34
B-11 (2.5 -4.5')	5/7/2013	<0.72	54.4	<0.08	36.1	---	8.43	0.029	<0.7	<0.34
B-12 (2 -4')*	6/5/2013	***1.20 J*** B	54.8	***135***	22.6	---	10.8	0.0695	***1.78 J***	<0.34
B-13 (2.5 -4.5')*	11/8/2016	<0.67	84.3	***239***	324	---	***220***	0.0729	***1.07 J***	<0.44
B-16 (2.5 -4.5')*	11/8/2016	<0.67	74.6	<0.8	22.8	---	2.21	0.0265 J	<0.55	<0.44
B-18 (2.5 -4.5')*	8/15/2018	<0.33	89.9	0.706	31.6	---	7.86	0.040 J	***0.827 J***	<0.57
B-19 (5 -7')*	8/15/2018	***1.49 J*** B	90.2	***1.13***	37.4	---	9.27	<0.019	<0.52	<0.57
B-20 (0 - 4')	1/9/2022	<3.6	110	<0.33	40.7	---	9.6	0.045	<3.2	<0.76
B-20 (6 - 8')*	1/9/2022	***3.1*** B	110	0.34 J	35.2	---	9.1	0.027 J	<1.6	<0.37
B-21 (0 - 4')	1/9/2022	<1.6	13.7	***9.0***	17.0	---	4.3	0.034 J	<1.4	<0.33
B-21 (6 - 8')*	1/9/2022	***3.2*** B	75.6	0.29 J	29.3	---	8.4	0.026 J	<1.6	0.49 J
B-22 (0 - 4')	1/9/2022	***2.2 J*** B	101	***0.81*** B	44.7	---	13.1	0.049	<1.6	<0.39
B-22 (6 - 8')*	1/9/2022	***2.8 J*** B	103	0.26 J	34.3	---	8.3	0.038 J	<1.6	0.45 J
B-23 (0 - 4')	1/9/2022	<1.7	13.6	0.58 J	24.4	---	4.8	0.030 J	<1.5	<0.36
B-23 (6 - 8')*	1/9/2022	***2.4 J*** B	61	***0.78*** B	37.6	---	6.2	<0.011	<1.5	<0.36
B-24 (0 - 4')	1/9/2022	***2.9 J*** B	9.9	<0.16	8.4	---	2.1 J	<0.011	<1.6	<0.36
B-24 (6 - 8')*	1/9/2022	***4.8*** B	75.5	0.32 J	31.4	---	8.4	<0.013	<1.7	<0.39
B-25 (0 - 4')	1/9/2022	<7.9	49.5	<0.72	20.1	---	6.3 J	<0.011	<7.1	<1.7
B-25 (6 - 8')*	1/9/2022	***4.0*** B	99.7	0.37 J	40.9	---	8.9	0.016 J	<1.5	<0.36
B-26 (0 - 4')	6/2/2022	***2.3 J*** B	48.9	0.29 J	36.2	---	4.8	0.012 J	<1.5	<0.35
B-26 (6 - 8')*	6/2/2022	***4.1*** B	82.2	<0.17	23.7	---	6.6	<0.012	<1.7	<0.39
B-27 (0 - 4')	6/2/2022	***3.6*** B	91.2	0.49 J	27.1	---	11.3	0.033 J	<1.5	0.38 J
B-27 (6 - 8')*	6/2/2022	***5.4*** B	116.0	0.22 J	31.5	---	9.0	<0.012	<1.5	0.37 J
B-28 (0 - 4')	6/2/2022	***2.5 J*** B	29.8	0.39 J	9.0	---	23.3	<0.011	<1.4	<0.33
B-28 (6 - 8')*	6/2/2022	***2.0 J*** B	86.5	0.17 J	34.5	---	9.7	0.078	<1.6	<0.38

Key:

B	- Concentrations are below the BTV, thus are not considered an exceedance of the direct contact and/or groundwater pathway RCLs
J	- Analyte detected between the Laboratory Limit of Detection and Laboratory Limit of Quantitation
NE	- Not included on WDNR's RR Program RCL Spreadsheet (December 2018)
RCL	- Residual Contaminant Level per Chapter NR 720 Wis. Adm. Code
mg/kg	- Milligrams per kilogram
---	- Not Analyzed
*	- Soil sample collected below the observed historic low water table (i.e., saturated soil)
400	- Exceeds Non-Industrial Direct Contact RCL
800	- Exceeds Industrial Direct Contact RCL
27	- Exceeds Groundwater Pathway RCL

Table A.2.c Soil Analytical Results
Jagemann Plating Co., Inc.
1324 S 26th Street, Manitowoc, Wisconsin

Sample ID & Depth (In Feet)	CAS Number	Non-Industrial Direct Contact RCL	Industrial Direct Contact RCL	B-20 (0-4')	B-20 (6-8')*	B-21 (0-4')	B-21 (6-8')*	B-22 (0-4')	B-22 (6-8')*	B-23 (0-4')	B-23 (6-8')*	B-24 (0-4')	B-24 (6-8')*	B-25 (0-4')	B-25 (6-8')*	B-26 (0-4')	B-26 (6-8')*	B-27 (0-4')	B-27 (6-8')*	B-28 (0-4')	B-28 (6-8')*
Date				1/09/22	1/09/22	1/09/22	1/09/22	1/09/22	1/09/22	1/09/22	1/09/22	1/09/22	1/09/22	1/09/22	1/09/22	6/02/22	6/02/22	6/02/22	6/02/22	6/02/22	6/02/22
Perfluoroalkyl & Polyfluoroalkyl Substances (PFAS) Results (ug/kg)																					
Perfluoroalkyl Carboxylates/Carboxylic Acids (PFCA)																					
Perfluoro-n-butanoic acid (PFBA)	375-22-4	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-pentanoic acid (PFPeA)	2706-90-3	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-heptanoic acid (PFHpA)	375-85-9	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-octanoic acid (PFOA)	335-67-1	1,260	16,400	ND	ND	ND	**0.24 J**	**1.1 J**	ND	ND	ND	ND	**0.54 J**	ND	ND	**0.048 J**	**0.043 J**	**0.059 IJ**	**0.054 J**	ND	**0.044 J**
Perfluoro-n-nonanoic acid (PFNA)	375-95-1	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.035 J**	ND	ND	ND	ND	ND
Perfluoro-n-decanoic acid (PFDA)	335-76-2	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-undecanoic acid (PFUnDA)	2058-94-8	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-dodecanoic acid (PFDoA)	307-55-1	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-tridecanoic acid (PFTrDA)	72629-94-8	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-n-tetradecanoic acid (PFTeDA)	376-06-7	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroalkyl Sulfonates/Sulfonic Acids (PFSA)																					
Perfluoro-1-butanesulfonic acid (PFBS)	375-73-5	NE	NE	ND	ND	ND	ND	**0.15 J**	ND	ND	ND	ND	**0.17 J**	ND	ND	ND	ND	ND	**0.057 J**	ND	**0.098 I**
Perfluoro-1-pentanesulfonic acid (PFPeS)	2706-91-4	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.36 J**	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	NE	NE	ND	ND	ND	**1.2**	**1.1 J**	**0.19 J**	ND	ND	ND	**3.7**	ND	ND	**0.026 J**	**0.053 J**	ND	**0.038 J**	ND	**0.053 J**
Perfluoro-1-heptanesulfonic acid (PFHpS)	375-92-8	NE	NE	ND	ND	ND	ND	**0.63 J**	ND	ND	ND	ND	**0.79 J**	ND	ND	**0.034 J**	**0.034 J**	ND	ND	ND	ND
Perfluorooctanesulfonicacid (PFOS)	1763-23-1	1,260	16,400	**1.0 J**	ND	**2.9**	**1.3**	**42.0**	**7.0**	**40**	**24**	**5.3**	**42**	**3.4**	ND	**2.1**	ND	**0.087 J**	**0.14**	**0.48**	**0.54**
Perfluoro-1-nonesulfonic acid (PFNS)	68259-12-1	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-1-decanesulfonic acid (PFDS)	335-77-3	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic acid (PFDOS)	79780-39-5	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoroalkane Sulfonamides/Sufonamidoacetic Acids, Sulfonamidoethanols (FASA)																					
Perfluoro-1-octanesulfonamide (PFOSA)	754-91-6	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-methylperfluoro-1-octanesulfonamidoacetic acid (MeFOSAA)	2355-31-9	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluoro -1-octanesulfonamidoacetic acid (EtFOSAA)	2991-50-6	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-N-methylperfluoro-1-octanesulfonamido-ethanol (MeFOSE)	24448-09-7	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-N-ethylperfluoro-1-octanesulfonamido-ethanol (EtFOSE)	1691-99-2	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorotelomer Substances (FTS)																					
1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	NE	NE	ND	ND	ND	ND	ND	ND	ND	**0.67 J**	ND	ND	ND	ND	ND	**0.039 J**	ND	ND	ND	ND
1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.096**	**0.042 J**	ND	ND	ND	ND
Replacement Chemicals																					
Hexafluoropropylene oxide dimer acid (GenX)	13252-13-6	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,8-dioxa-3H-perfluorononanioc acid (ADONA)	919005-14-4	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key/Notes:

WI DNR PFAS List - 33 Comounds laboratory analysis was completed using Modified USEPA Method 537

ug/kg = micrograms per kilogram

RCL = Residual Contaminant Level per Chapter NR 720, Wis. Adm. Code

I = Interference Present; incorrect isotope ratios were obtained

J = Analyte detected between the Laboratory Method Detection Limit and Laboratory Limit of Quantitation (results below calibration range)

Highlighted valyue exceeds the Industrial Direct Contact RCL

Underlined Italics values exceeds Non-Industrial Direct Contact RCL

Bold indicates laboratory detections

NE = Not Included on WDNR's RR Program RCL Spreadsheet (December 2018)

ND = Not Detected

* = Soil sample collected below the historic low water table (i.e., saturated soil)

Table A.6 - Water Level Elevations
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well: MW-1
Screen Interval: 3-13 feet
Ground Surface Elevation: 638.61
Riser Pipe Elevation: 638.26

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
10/15/10	4.29	4.64	633.97
06/15/11	3.81	4.16	634.45
09/29/11	3.76	4.11	634.50
07/31/13	3.35	3.70	634.91
03/31/14	3.70	4.05	634.56
12/09/16	3.10	3.45	635.16
12/29/16	2.75	3.10	635.51
03/27/19	2.84	3.19	635.42
06/19/19	3.04	3.39	635.22
06/23/21	4.02	4.37	634.24
12/09/21	3.42	3.77	634.84
03/25/22	2.92	3.27	635.34
06/14/22	3.16	3.51	635.10

Well: MW-2
Screen Interval: 3-13 feet
Ground Surface Elevation: 637.88
Riser Pipe Elevation: 637.56

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
10/15/10	3.21	3.41	634.60
06/15/11	1.78	1.98	636.03
09/29/11	1.68	1.88	636.13
07/31/13	2.12	2.32	635.69
03/31/14	3.42	3.62	634.39
12/09/16	1.97	2.20	636.08
12/29/16	1.38	1.61	636.67
03/27/19	0.10	0.33	637.95
06/19/19	1.25	1.48	636.80
06/23/21	1.84	2.16	635.72
12/08/21	2.97	3.29	634.59
06/14/22	1.86	2.18	635.70

Note: Riser pipe was resurveyed in March 2019 and June 2021, the June 2021 elevations are listed above

Well: MW-3
Screen Interval: 3-13 feet
Ground Surface Elevation: 638.55
Riser Pipe Elevation: 638.11

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
10/15/10	4.74	5.18	633.37
06/15/11	3.77	4.21	634.34
09/29/11	3.72	4.16	634.39
07/31/13	3.72	4.16	634.39
03/31/14	3.97	4.41	634.14
12/09/16	3.22	3.66	634.89
12/29/16	3.07	3.51	635.04
03/27/19	3.18	3.62	634.93
06/19/19	3.76	4.20	634.35
06/23/21	4.51	4.95	633.60
12/08/21	4.09	4.53	634.02
06/14/22	3.76	4.20	634.35

Well: MW-4
Screen Interval: 3-13 feet
Ground Surface Elevation: 636.6
Riser Pipe Elevation: 636.11

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
06/15/11	2.42	2.91	633.69
09/29/11	1.56	2.05	634.55
07/31/13	2.91	3.40	633.20
03/31/14	Frozen	---	---
12/09/16	2.51	3.00	633.60
12/29/16	4.01	4.50	632.10
03/27/19	3.72	4.21	632.39
03/28/19	4.72	5.21	631.39
06/19/19	3.31	3.80	632.80
06/23/21	2.61	3.10	633.50
06/14/22	1.19	1.68	634.92

Table A.6 - Water Level Elevations
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well: MW-5
Screen Interval: 3-13 feet
Ground Surface Elevation: 636.28
Riser Pipe Elevation: 635.89

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
06/15/11	2.24	2.63	633.65
09/29/11	2.44	2.83	633.45
07/31/13	3.71	4.10	632.18
03/31/14	4.42	4.81	631.47
12/09/16	2.81	3.20	633.08
12/29/16	4.75	5.14	631.14
03/27/19	4.20	4.59	631.69
06/19/19	4.37	4.76	631.52
06/23/21	3.33	3.72	632.56
12/08/21	4.70	5.09	631.19
06/14/22	2.34	2.73	633.55

Well: MW-6
Screen Interval: 3-13 feet
Ground Surface Elevation: 637.85
Riser Pipe Elevation: 637.36

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
06/15/11	5.51	6.00	631.85
09/29/11	2.49	2.98	634.87
07/31/13	2.97	3.46	634.39
03/31/14	0.97	1.46	636.39
12/09/16	2.29	2.78	635.07
12/29/16	2.41	2.90	634.95
03/27/19	1.89	2.38	635.47
06/19/19	1.96	2.45	635.40
06/23/21	2.17	2.66	635.19
06/14/22	1.65	2.14	635.71

Well: MW-7
Screen Interval: 3.5-13.5 feet
Ground Surface Elevation: 639.06
Riser Pipe Elevation: 638.80

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
07/31/13	4.36	4.62	634.44
03/31/14	3.86	4.12	634.94
12/09/16	4.10	4.36	634.70
12/30/16	4.08	4.34	634.72
03/27/19	6.26	6.52	632.54
03/28/19	7.26	7.52	631.54
06/19/19	8.10	8.36	630.70
06/23/21	5.37	5.63	633.43
03/25/22	4.73	4.99	634.07
06/14/22	4.57	4.83	634.23

Well: MW-8
Screen Interval: 3.5-13.5 feet
Ground Surface Elevation: 638.56
Riser Pipe Elevation: 638.33

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
07/31/13	2.65	3.03	635.70
03/31/14	3.56	3.94	634.79
12/09/16	1.92	2.30	636.43
12/29/16	1.99	2.37	636.36
03/27/19	2.11	2.49	636.24
03/28/19	3.11	3.49	635.24
06/19/19	2.34	2.72	636.01
06/23/21	3.49	3.72	634.84
12/09/21	5.45	5.68	632.88
03/25/22	4.86	5.09	633.47
06/14/22	2.72	2.95	635.61

Note: Riser pipe was resurveyed in June 2021, the new elevations are listed above

Table A.6 - Water Level Elevations
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well: TW-1 (Abandoned)
Screen Interval: 3.5-8.5 feet
Ground Surface Elevation: 638.82
Riser Pipe Elevation: 638.61

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
07/31/13	1.87	2.08	636.74
03/31/14	1.42	1.63	637.19

Well: PZ-3
Screen Interval: 30-35 feet
Ground Surface Elevation: 638.47
Riser Pipe Elevation: 637.94

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
07/31/13	10.35	10.88	627.59
03/31/14	7.18	7.71	630.76
12/09/16	5.30	5.83	632.64
03/27/19	12.01	12.54	625.93
06/19/19	13.75	14.28	624.19
06/23/21	14.24	14.77	623.70
12/08/21	11.10	11.63	626.84
03/25/22	13.25	13.78	624.69
06/14/22	10.95	11.48	626.99

Well: PZ-4
Screen Interval: 30-35 feet
Ground Surface Elevation: 636.60
Riser Pipe Elevation: 636.20

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
06/15/11	20.78	21.18	615.42
09/29/11	4.71	5.11	631.49
07/31/13	4.96	5.36	631.24
03/31/14	3.75	4.15	632.45
12/09/16	4.09	4.49	632.11
12/29/16	4.20	4.60	632.00
03/27/19	4.54	4.94	631.66
06/19/19	10.70	11.10	625.50
06/23/21	5.36	5.76	630.84
06/14/22	5.07	5.47	631.13

Well: PZ-13
Screen Interval: 25-35 feet
Ground Surface Elevation: 638.28
Riser Pipe Elevation: 637.88

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
12/09/16	3.36	3.79	634.55
12/29/16	4.52	4.95	633.39
03/27/19	5.85	6.28	632.06
06/19/19	8.29	8.72	629.62
06/23/21	7.23	7.63	630.65
12/08/21	6.03	6.43	631.85
03/25/22	8.21	8.61	629.67
06/14/22	3.24	3.64	634.64

Note: Riser pipe was resurveyed in June 2021, the new elevations are listed above

Table A.6 - Water Level Elevations
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well: MW-14
Screen Interval: 3-13 feet
Ground Surface Elevation: 638.81
Riser Pipe Elevation: 638.50

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
12/09/16	2.87	3.23	635.49
12/29/16	2.49	2.85	635.87
03/27/19	2.32	2.68	636.04
06/19/19	2.66	3.02	635.70
06/23/21	2.21	2.57	636.15
12/09/21	2.92	3.28	635.44
06/14/22	2.15	2.51	636.21

Well: MW-15
Screen Interval: 3-13 feet
Ground Surface Elevation: 638.32
Riser Pipe Elevation: 637.51

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
12/09/16	0.99	1.58	636.79
12/29/16	0.07	0.66	637.71
03/27/19	0.00	0.59	637.78
06/19/19	0.21	0.80	637.57
06/23/21	1.06	1.87	636.45
06/14/22	Damaged - water over top of riser		

Note: Riser pipe was resurveyed in June 2021, the new elevations are listed above

Well: PZ-16
Screen Interval: 25-35 feet
Ground Surface Elevation: 638.15
Riser Pipe Elevation: 637.94

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
12/09/16	6.05	6.38	631.82
12/29/16	5.22	5.55	632.65
03/27/19	5.63	5.96	632.24
06/19/19	7.01	7.34	630.86
06/23/21	5.13	5.34	632.81
06/14/22	4.39	4.60	633.55

Note: Riser pipe was resurveyed in June 2021, the new elevations are listed above

Well: MW-17
Screen Interval: 3-13 feet
Ground Surface Elevation: 638.12
Riser Pipe Elevation: 637.83

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
12/09/16	1.40	1.92	636.28
12/29/16	0.80	1.32	636.88
03/27/19	0.80	1.32	636.88
06/19/19	0.82	1.34	636.86
06/23/21	1.20	1.49	636.63
06/14/22	0.49	0.78	637.34

Note: Riser pipe was resurveyed in June 2021, the new elevations are listed above

Table A.6 - Water Level Elevations
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well: MW-18
Screen Interval: 3.5-13.5 feet
Ground Surface Elevation: 638.96
Riser Pipe Elevation: 638.97

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
08/21/18*	2.03	2.22	636.81
03/27/19	1.49	1.68	637.35
06/19/19	1.45	1.64	637.39
06/23/21	2.46	2.45	636.51
03/25/22	1.56	1.55	637.41
06/14/22	1.57	1.56	637.40

Note: Riser pipe was resurveyed in June 2021, the new elevations are listed above

Well: MW-19
Screen Interval: 3.5-13.5 feet
Ground Surface Elevation: 638.08
Riser Pipe Elevation: 637.72

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
08/21/18*	2.31	2.64	635.48
03/27/19	Over top of riser		
06/19/19	Over top of riser		
06/23/21	1.15	1.51	636.57
12/08/21	1.23	1.59	636.49
06/14/22	Over top of riser		

Note: Riser pipe was resurveyed in June 2021, the new elevations are listed above

* - measurement collected prior to well development

Well: TW-20
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.71
Riser Pipe Elevation: 638.48

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
1/18/2022*	2.30	2.53	636.18
01/26/22	2.51	2.74	635.97
02/02/22	2.60	2.83	635.88
06/14/22	2.14	2.37	636.34

Well: TW-21
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.72
Riser Pipe Elevation: 638.49

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
01/18/22	2.60	2.83	635.89
01/26/22	3.00	3.23	635.49
02/02/22	3.25	3.48	635.24
06/14/22	1.83	2.06	636.66

Table A.6 - Water Level Elevations
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well: TW-22
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.87
Riser Pipe Elevation: 638.66

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
1/18/2022*	4.91	5.12	633.75
01/26/22	5.04	5.25	633.62
02/02/22	5.10	5.31	633.56
06/14/22	4.10	4.31	634.56

Well: TW-23
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.91
Riser Pipe Elevation: 638.69

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
1/18/2022*	2.98	3.20	635.71
01/26/22	3.02	3.24	635.67
02/02/22	3.32	3.54	635.37
06/14/22	2.32	2.54	636.37

Well: TW-24
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.88
Riser Pipe Elevation: 638.67

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
1/18/2022*	2.39	2.60	636.28
01/26/22	2.57	2.78	636.10
02/02/22	2.60	2.81	636.07
06/14/22	1.57	1.78	637.10

Well: TW-25
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.84
Riser Pipe Elevation: 638.58

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
1/18/2022*	2.48	2.74	636.10
01/26/22	2.77	3.03	635.81
02/02/22	2.99	3.25	635.59
06/14/22	1.31	1.57	637.27

Table A.6 - Water Level Elevations
Jagemann Plating Co., Inc
1324 S 26th Street, Manitowoc, WI

Well: TW-26
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.86
Riser Pipe Elevation: 638.55

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
6/7/2022*	2.12	2.43	636.43
06/14/22	1.83	2.14	636.72

Well: TW-27
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.88
Riser Pipe Elevation: 638.66

Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
6/7/2022*	9.83	10.05	628.83
06/14/22	8.36	8.58	630.30

Well: TW-28
Screen Interval: 2-12 feet
Ground Surface Elevation: 638.86
Riser Pipe Elevation: 638.63

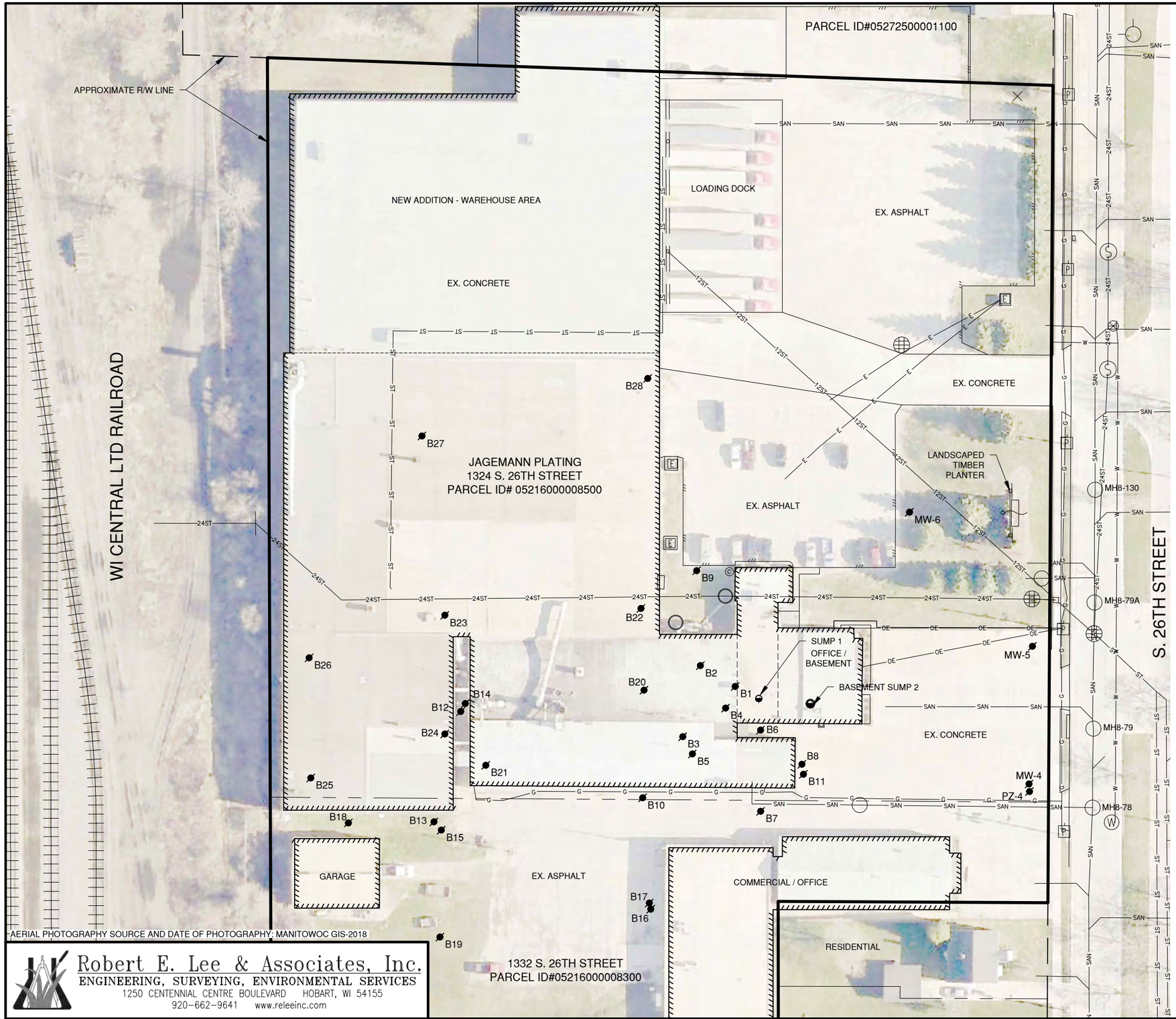
Measurement Date	Depth to Water		Groundwater Elevation
	Below Riser	Below Ground	
6/7/2022*	3.88	4.11	634.75
06/14/22	3.67	3.90	634.96

Key
* - measurement collected prior to well development

B

ATTACHMENT B

Figures



AERIAL PHOTOGRAPHY SOURCE AND DATE OF PHOTOGRAPHY: MANITOWOC GIS-2018

NORTH

0' 60' 120'

SCALE IN FEET

LEGEND

- B12 — SOIL BORING LOCATION
- SUMP
- EX. SANITARY MANHOLE
- EX. STORM SEWER MANHOLE
- EX. STORM SEWER CATCH BASIN
- EX. FIRE HYDRANT
- EX. WATER VALVE
- EX. WATER MANHOLE
- EX. ELECTRIC PEDESTAL
- EX. POWER POLE
- ST — EX. STORM SEWER
- SAN — EX. SANITARY SEWER
- W — EX. WATERMAIN
- G — EX. GAS LINE
- E — EX. ELECTRIC LINE
- T — EX. TELEPHONE LINE
- F — EX. FIBER OPTICS LINE
- PROPERTY LINE
- RIGHT OF WAY LINE
- SITE BOUNDARY LINE

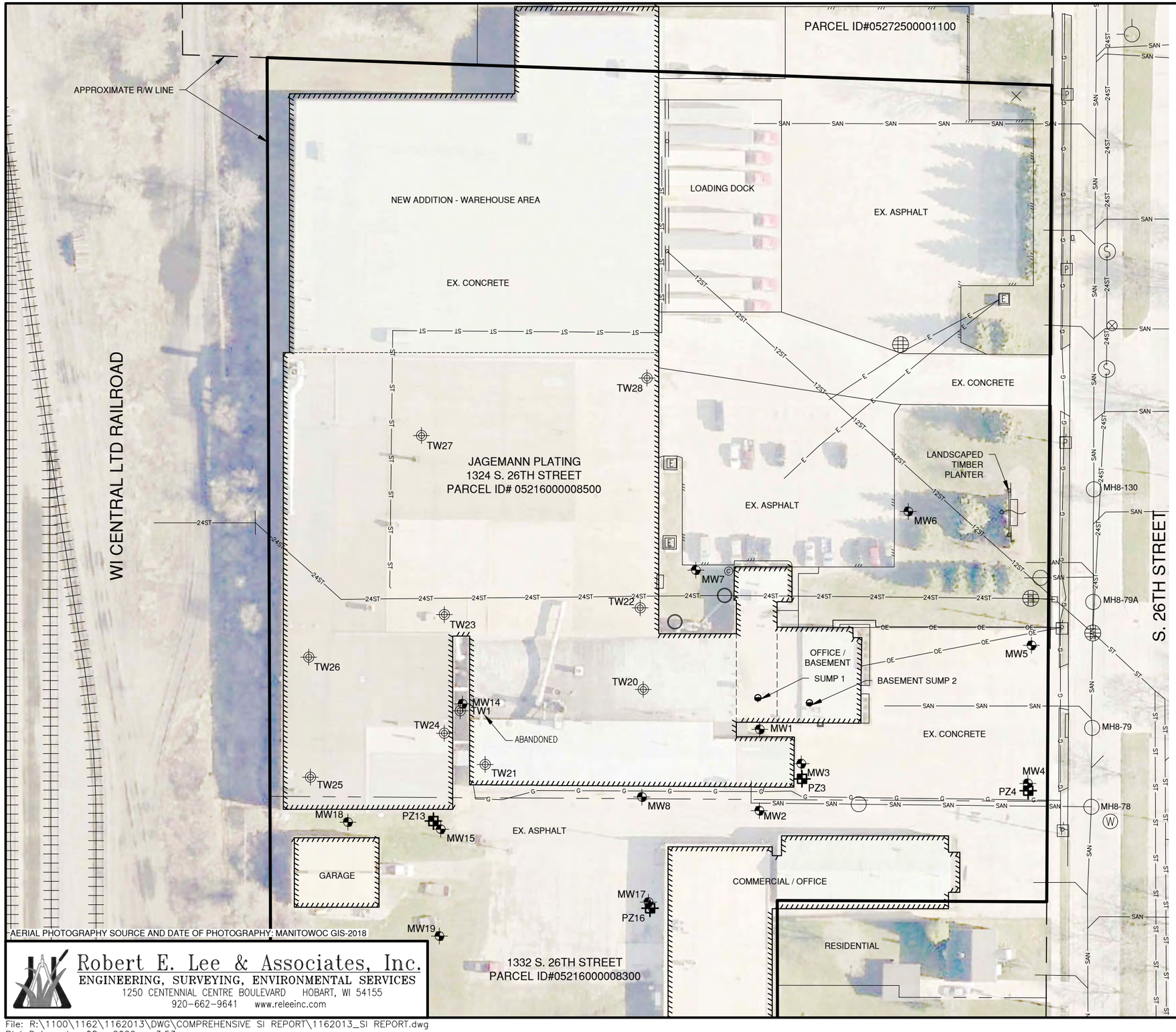
JAGEMANN PLATING COMPANY
1324 S. 26TH STREET
MANITOWOC, WI

SOIL BORING LOCATIONS

FIGURE 4

Robert E. Lee & Associates, Inc.
ENGINEERING, SURVEYING, ENVIRONMENTAL SERVICES
1250 CENTENNIAL CENTRE BOULEVARD HOBART, WI 54155
920-662-9641 www.releeinc.com

File: R:\1100\1162\1162013\DWG\COMPREHENSIVE SI REPORT\1162013_SI REPORT.dwg
Plot Date: Jun 08, 2022 - 3:55pm



NORTH

0' 60' 120'

SCALE IN FEET

LEGEND

- MW1 — MONITORING WELL LOCATION
- TW1 — TEMPORARY WELL LOCATION
- PZ1 — PIEZOMETER LOCATION
- SUMP
- EX. SANITARY MANHOLE
- EX. STORM SEWER MANHOLE
- EX. STORM SEWER CATCH BASIN
- EX. FIRE HYDRANT
- EX. WATER VALVE
- EX. WATER MANHOLE
- EX. ELECTRIC PEDESTAL
- EX. POWER POLE
- ST — EX. STORM SEWER
- SAN — EX. SANITARY SEWER
- W — EX. WATERMAIN
- G — EX. GAS LINE
- E — EX. ELECTRIC LINE
- T — EX. TELEPHONE LINE
- F — EX. FIBER OPTICS LINE
- PROPERTY LINE
- RIGHT OF WAY LINE
- SITE BOUNDARY LINE

Robert E. Lee & Associates, Inc.
ENGINEERING, SURVEYING, ENVIRONMENTAL SERVICES
1250 CENTENNIAL CENTRE BOULEVARD HOBART, WI 54155
920-662-9641 www.releeinc.com

JAGEMANN PLATING COMPANY
1324 S. 26TH STREET
MANITOWOC, WI

MONITORING WELL LOCATIONS

FIGURE 5

File: R:\1100\1162\1162013\DWG\COMPREHENSIVE SI REPORT\1162013_SI REPORT.dwg
Plot Date: Jun 08, 2022 - 3:53pm

C

ATTACHMENT C

Soil Laboratory Reports

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

June 29, 2022

Nicole Laplant
ROBERT E. LEE & ASSOCIATES, IN
1250 Centennial Centre Blvd
Oneida, WI 54155

RE: Project: 1162-013
Pace Project No.: 40245897

Dear Nicole Laplant:

Enclosed are the analytical results for sample(s) received by the laboratory on June 03, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

Sincerely,

Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Cody Applekamp, Robert E Lee & Associates, Inc.
Alan Gustafson, Robert E. Lee & Associates
Bruce Meissner, Robert E. Lee & Associates, Inc
Lori Rogers, Robert E Lee

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

CERTIFICATIONS

Project: 1162-013
Pace Project No.: 40245897

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 1162-013
Pace Project No.: 40245897

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40245897001	**B-26(0-4')**	Solid	06/02/22 11:45	06/03/22 09:35
40245897002	**B-26(6-8')**	Solid	06/02/22 12:20	06/03/22 09:35
40245897003	**B-27(0-4')**	Solid	06/02/22 11:00	06/03/22 09:35
40245897004	**B-27(6-8')**	Solid	06/02/22 11:20	06/03/22 09:35
40245897005	**B-28(0-4')**	Solid	06/02/22 10:00	06/03/22 09:35
40245897006	**B-28(6-8')**	Solid	06/02/22 10:30	06/03/22 09:35

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 1162-013
Pace Project No.: 40245897

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40245897001	**B-26(0-4')**	EPA 6010D	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MYH	1	PASI-G
40245897002	**B-26(6-8')**	EPA 6010D	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MYH	1	PASI-G
40245897003	**B-27(0-4')**	EPA 6010D	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MYH	1	PASI-G
40245897004	**B-27(6-8')**	EPA 6010D	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MYH	1	PASI-G
40245897005	**B-28(0-4')**	EPA 6010D	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MYH	1	PASI-G
40245897006	**B-28(6-8')**	EPA 6010D	TXW	7	PASI-G
		EPA 7471	AJT	1	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MYH	1	PASI-G

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: 1162-013
Pace Project No.: 40245897

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40245897001	**B-26(0-4')**					
EPA 6010D	Arsenic	2.3J	mg/kg	2.8	06/06/22 17:56	
EPA 6010D	Barium	48.9	mg/kg	0.57	06/06/22 17:56	M0
EPA 6010D	Cadmium	0.29J	mg/kg	0.57	06/06/22 17:56	
EPA 6010D	Chromium	36.2	mg/kg	1.1	06/06/22 17:56	
EPA 6010D	Lead	4.8	mg/kg	2.3	06/06/22 17:56	
EPA 7471	Mercury	0.012J	mg/kg	0.038	06/09/22 13:25	1q
EPA 8260	Dichlorodifluoromethane	50.8J	ug/kg	63.1	06/06/22 13:36	
ASTM D2974-87	Percent Moisture	11.6	%	0.10	06/07/22 14:28	
40245897002	**B-26(6-8')**					
EPA 6010D	Arsenic	4.1	mg/kg	3.2	06/06/22 18:06	
EPA 6010D	Barium	82.2	mg/kg	0.63	06/06/22 18:06	
EPA 6010D	Chromium	23.7	mg/kg	1.3	06/06/22 18:06	
EPA 6010D	Lead	6.6	mg/kg	2.5	06/06/22 18:06	
EPA 8260	Dichlorodifluoromethane	90.3	ug/kg	76.8	06/06/22 13:57	
EPA 8260	1,1-Dichloroethene	37.8J	ug/kg	76.8	06/06/22 13:57	
EPA 8260	cis-1,2-Dichloroethene	153	ug/kg	76.8	06/06/22 13:57	
EPA 8260	Trichloroethene	622	ug/kg	76.8	06/06/22 13:57	
EPA 8260	Vinyl chloride	31.9J	ug/kg	76.8	06/06/22 13:57	
ASTM D2974-87	Percent Moisture	21.1	%	0.10	06/07/22 14:28	
40245897003	**B-27(0-4')**					
EPA 6010D	Arsenic	3.6	mg/kg	2.9	06/06/22 18:11	
EPA 6010D	Barium	91.2	mg/kg	0.58	06/06/22 18:11	
EPA 6010D	Cadmium	0.49J	mg/kg	0.58	06/06/22 18:11	
EPA 6010D	Chromium	27.1	mg/kg	1.2	06/06/22 18:11	
EPA 6010D	Lead	11.3	mg/kg	2.3	06/06/22 18:11	
EPA 6010D	Silver	0.38J	mg/kg	1.2	06/06/22 18:11	
EPA 7471	Mercury	0.033J	mg/kg	0.039	06/09/22 13:30	1q
ASTM D2974-87	Percent Moisture	16.0	%	0.10	06/07/22 14:28	
40245897004	**B-27(6-8')**					
EPA 6010D	Arsenic	5.4	mg/kg	2.9	06/06/22 18:13	
EPA 6010D	Barium	116	mg/kg	0.58	06/06/22 18:13	
EPA 6010D	Cadmium	0.22J	mg/kg	0.58	06/06/22 18:13	
EPA 6010D	Chromium	31.5	mg/kg	1.2	06/06/22 18:13	
EPA 6010D	Lead	9.0	mg/kg	2.3	06/06/22 18:13	
EPA 6010D	Silver	0.37J	mg/kg	1.2	06/06/22 18:13	
ASTM D2974-87	Percent Moisture	18.7	%	0.10	06/07/22 14:29	
40245897005	**B-28(0-4')**					
EPA 6010D	Arsenic	2.5J	mg/kg	2.7	06/06/22 18:15	
EPA 6010D	Barium	29.8	mg/kg	0.54	06/06/22 18:15	
EPA 6010D	Cadmium	0.39J	mg/kg	0.54	06/06/22 18:15	
EPA 6010D	Chromium	9.0	mg/kg	1.1	06/06/22 18:15	
EPA 6010D	Lead	23.3	mg/kg	2.2	06/06/22 18:15	
ASTM D2974-87	Percent Moisture	8.0	%	0.10	06/07/22 14:29	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: 1162-013
Pace Project No.: 40245897

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40245897006	**B-28(6-8')**					
EPA 6010D	Arsenic	2.0J	mg/kg	3.1	06/06/22 18:23	
EPA 6010D	Barium	86.5	mg/kg	0.62	06/06/22 18:23	
EPA 6010D	Cadmium	0.17J	mg/kg	0.62	06/06/22 18:23	
EPA 6010D	Chromium	34.5	mg/kg	1.2	06/06/22 18:23	
EPA 6010D	Lead	9.7	mg/kg	2.5	06/06/22 18:23	
EPA 7471	Mercury	0.078	mg/kg	0.043	06/09/22 13:37	1q
ASTM D2974-87	Percent Moisture	23.1	%	0.10	06/07/22 14:29	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-26(0-4') **Lab ID: 40245897001** Collected: 06/02/22 11:45 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**2.3J**	mg/kg	2.8	1.7	1	06/06/22 07:29	06/06/22 17:56	7440-38-2	
Barium	**48.9**	mg/kg	0.57	0.17	1	06/06/22 07:29	06/06/22 17:56	7440-39-3	M0
Cadmium	**0.29J**	mg/kg	0.57	0.15	1	06/06/22 07:29	06/06/22 17:56	7440-43-9	
Chromium	**36.2**	mg/kg	1.1	0.31	1	06/06/22 07:29	06/06/22 17:56	7440-47-3	
Lead	**4.8**	mg/kg	2.3	0.68	1	06/06/22 07:29	06/06/22 17:56	7439-92-1	
Selenium	**<1.5**	mg/kg	4.5	1.5	1	06/06/22 07:29	06/06/22 17:56	7782-49-2	
Silver	**<0.35**	mg/kg	1.1	0.35	1	06/06/22 07:29	06/06/22 17:56	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.012J**	mg/kg	0.038	0.011	1	06/08/22 09:24	06/09/22 13:25	7439-97-6	1q
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<15.0**	ug/kg	25.2	15.0	1	06/06/22 08:45	06/06/22 13:36	71-43-2	
Bromobenzene	**<24.6**	ug/kg	63.1	24.6	1	06/06/22 08:45	06/06/22 13:36	108-86-1	
Bromochloromethane	**<17.3**	ug/kg	63.1	17.3	1	06/06/22 08:45	06/06/22 13:36	74-97-5	
Bromodichloromethane	**<15.0**	ug/kg	63.1	15.0	1	06/06/22 08:45	06/06/22 13:36	75-27-4	
Bromoform	**<277**	ug/kg	315	277	1	06/06/22 08:45	06/06/22 13:36	75-25-2	
Bromomethane	**<88.4**	ug/kg	315	88.4	1	06/06/22 08:45	06/06/22 13:36	74-83-9	
n-Butylbenzene	**<28.9**	ug/kg	63.1	28.9	1	06/06/22 08:45	06/06/22 13:36	104-51-8	
sec-Butylbenzene	**<15.4**	ug/kg	63.1	15.4	1	06/06/22 08:45	06/06/22 13:36	135-98-8	
tert-Butylbenzene	**<19.8**	ug/kg	63.1	19.8	1	06/06/22 08:45	06/06/22 13:36	98-06-6	
Carbon tetrachloride	**<13.9**	ug/kg	63.1	13.9	1	06/06/22 08:45	06/06/22 13:36	56-23-5	L1
Chlorobenzene	**<7.6**	ug/kg	63.1	7.6	1	06/06/22 08:45	06/06/22 13:36	108-90-7	
Chloroethane	**<26.6**	ug/kg	315	26.6	1	06/06/22 08:45	06/06/22 13:36	75-00-3	
Chloroform	**<45.2**	ug/kg	315	45.2	1	06/06/22 08:45	06/06/22 13:36	67-66-3	
Chloromethane	**<24.0**	ug/kg	63.1	24.0	1	06/06/22 08:45	06/06/22 13:36	74-87-3	
2-Chlorotoluene	**<20.4**	ug/kg	63.1	20.4	1	06/06/22 08:45	06/06/22 13:36	95-49-8	
4-Chlorotoluene	**<24.0**	ug/kg	63.1	24.0	1	06/06/22 08:45	06/06/22 13:36	106-43-4	
1,2-Dibromo-3-chloropropane	**<48.9**	ug/kg	315	48.9	1	06/06/22 08:45	06/06/22 13:36	96-12-8	
Dibromochloromethane	**<216**	ug/kg	315	216	1	06/06/22 08:45	06/06/22 13:36	124-48-1	
1,2-Dibromoethane (EDB)	**<17.3**	ug/kg	63.1	17.3	1	06/06/22 08:45	06/06/22 13:36	106-93-4	
Dibromomethane	**<18.7**	ug/kg	63.1	18.7	1	06/06/22 08:45	06/06/22 13:36	74-95-3	
1,2-Dichlorobenzene	**<19.6**	ug/kg	63.1	19.6	1	06/06/22 08:45	06/06/22 13:36	95-50-1	
1,3-Dichlorobenzene	**<17.3**	ug/kg	63.1	17.3	1	06/06/22 08:45	06/06/22 13:36	541-73-1	
1,4-Dichlorobenzene	**<17.3**	ug/kg	63.1	17.3	1	06/06/22 08:45	06/06/22 13:36	106-46-7	
Dichlorodifluoromethane	**50.8J**	ug/kg	63.1	27.1	1	06/06/22 08:45	06/06/22 13:36	75-71-8	
1,1-Dichloroethane	**<16.1**	ug/kg	63.1	16.1	1	06/06/22 08:45	06/06/22 13:36	75-34-3	
1,2-Dichloroethane	**<14.5**	ug/kg	63.1	14.5	1	06/06/22 08:45	06/06/22 13:36	107-06-2	
1,1-Dichloroethene	**<20.9**	ug/kg	63.1	20.9	1	06/06/22 08:45	06/06/22 13:36	75-35-4	
cis-1,2-Dichloroethene	**<13.5**	ug/kg	63.1	13.5	1	06/06/22 08:45	06/06/22 13:36	156-59-2	
trans-1,2-Dichloroethene	**<13.6**	ug/kg	63.1	13.6	1	06/06/22 08:45	06/06/22 13:36	156-60-5	
1,2-Dichloropropane	**<15.0**	ug/kg	63.1	15.0	1	06/06/22 08:45	06/06/22 13:36	78-87-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-26(0-4') **Lab ID: 40245897001** Collected: 06/02/22 11:45 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,3-Dichloropropane	**<13.7**	ug/kg	63.1	13.7	1	06/06/22 08:45	06/06/22 13:36	142-28-9	
2,2-Dichloropropane	**<17.0**	ug/kg	63.1	17.0	1	06/06/22 08:45	06/06/22 13:36	594-20-7	
1,1-Dichloropropene	**<20.4**	ug/kg	63.1	20.4	1	06/06/22 08:45	06/06/22 13:36	563-58-6	
cis-1,3-Dichloropropene	**<41.6**	ug/kg	315	41.6	1	06/06/22 08:45	06/06/22 13:36	10061-01-5	
trans-1,3-Dichloropropene	**<180**	ug/kg	315	180	1	06/06/22 08:45	06/06/22 13:36	10061-02-6	
Diisopropyl ether	**<15.6**	ug/kg	63.1	15.6	1	06/06/22 08:45	06/06/22 13:36	108-20-3	
Ethylbenzene	**<15.0**	ug/kg	63.1	15.0	1	06/06/22 08:45	06/06/22 13:36	100-41-4	
Hexachloro-1,3-butadiene	**<125**	ug/kg	315	125	1	06/06/22 08:45	06/06/22 13:36	87-68-3	
Isopropylbenzene (Cumene)	**<17.0**	ug/kg	63.1	17.0	1	06/06/22 08:45	06/06/22 13:36	98-82-8	
p-Isopropyltoluene	**<19.2**	ug/kg	63.1	19.2	1	06/06/22 08:45	06/06/22 13:36	99-87-6	
Methylene Chloride	**<17.5**	ug/kg	63.1	17.5	1	06/06/22 08:45	06/06/22 13:36	75-09-2	
Methyl-tert-butyl ether	**<18.5**	ug/kg	63.1	18.5	1	06/06/22 08:45	06/06/22 13:36	1634-04-4	
Naphthalene	**<19.7**	ug/kg	315	19.7	1	06/06/22 08:45	06/06/22 13:36	91-20-3	
n-Propylbenzene	**<15.1**	ug/kg	63.1	15.1	1	06/06/22 08:45	06/06/22 13:36	103-65-1	
Styrene	**<16.1**	ug/kg	63.1	16.1	1	06/06/22 08:45	06/06/22 13:36	100-42-5	
1,1,1,2-Tetrachloroethane	**<15.1**	ug/kg	63.1	15.1	1	06/06/22 08:45	06/06/22 13:36	630-20-6	
1,1,2,2-Tetrachloroethane	**<22.8**	ug/kg	63.1	22.8	1	06/06/22 08:45	06/06/22 13:36	79-34-5	
Tetrachloroethene	**<24.5**	ug/kg	63.1	24.5	1	06/06/22 08:45	06/06/22 13:36	127-18-4	
Toluene	**<15.9**	ug/kg	63.1	15.9	1	06/06/22 08:45	06/06/22 13:36	108-88-3	
1,2,3-Trichlorobenzene	**<70.3**	ug/kg	315	70.3	1	06/06/22 08:45	06/06/22 13:36	87-61-6	
1,2,4-Trichlorobenzene	**<52.0**	ug/kg	315	52.0	1	06/06/22 08:45	06/06/22 13:36	120-82-1	
1,1,1-Trichloroethane	**<16.1**	ug/kg	63.1	16.1	1	06/06/22 08:45	06/06/22 13:36	71-55-6	
1,1,2-Trichloroethane	**<23.0**	ug/kg	63.1	23.0	1	06/06/22 08:45	06/06/22 13:36	79-00-5	
Trichloroethene	**<23.6**	ug/kg	63.1	23.6	1	06/06/22 08:45	06/06/22 13:36	79-01-6	
Trichlorofluoromethane	**<18.3**	ug/kg	63.1	18.3	1	06/06/22 08:45	06/06/22 13:36	75-69-4	
1,2,3-Trichloropropane	**<30.7**	ug/kg	63.1	30.7	1	06/06/22 08:45	06/06/22 13:36	96-18-4	
1,2,4-Trimethylbenzene	**<18.8**	ug/kg	63.1	18.8	1	06/06/22 08:45	06/06/22 13:36	95-63-6	
1,3,5-Trimethylbenzene	**<20.3**	ug/kg	63.1	20.3	1	06/06/22 08:45	06/06/22 13:36	108-67-8	
Vinyl chloride	**<12.7**	ug/kg	63.1	12.7	1	06/06/22 08:45	06/06/22 13:36	75-01-4	
m&p-Xylene	**<26.6**	ug/kg	126	26.6	1	06/06/22 08:45	06/06/22 13:36	179601-23-1	
o-Xylene	**<18.9**	ug/kg	63.1	18.9	1	06/06/22 08:45	06/06/22 13:36	95-47-6	
Surrogates									
Toluene-d8 (S)	119	%	69-153		1	06/06/22 08:45	06/06/22 13:36	2037-26-5	
4-Bromofluorobenzene (S)	120	%	68-156		1	06/06/22 08:45	06/06/22 13:36	460-00-4	
1,2-Dichlorobenzene-d4 (S)	128	%	71-161		1	06/06/22 08:45	06/06/22 13:36	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**11.6**	%	0.10	0.10	1		06/07/22 14:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-26(6-8') **Lab ID: 40245897002** Collected: 06/02/22 12:20 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**4.1**	mg/kg	3.2	1.8	1	06/06/22 07:29	06/06/22 18:06	7440-38-2	
Barium	**82.2**	mg/kg	0.63	0.19	1	06/06/22 07:29	06/06/22 18:06	7440-39-3	
Cadmium	**<0.17**	mg/kg	0.63	0.17	1	06/06/22 07:29	06/06/22 18:06	7440-43-9	
Chromium	**23.7**	mg/kg	1.3	0.35	1	06/06/22 07:29	06/06/22 18:06	7440-47-3	
Lead	**6.6**	mg/kg	2.5	0.76	1	06/06/22 07:29	06/06/22 18:06	7439-92-1	
Selenium	**<1.7**	mg/kg	5.0	1.7	1	06/06/22 07:29	06/06/22 18:06	7782-49-2	
Silver	**<0.39**	mg/kg	1.3	0.39	1	06/06/22 07:29	06/06/22 18:06	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**<0.012**	mg/kg	0.042	0.012	1	06/08/22 09:24	06/09/22 13:27	7439-97-6	1q
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<18.3**	ug/kg	30.7	18.3	1	06/06/22 08:45	06/06/22 13:57	71-43-2	
Bromobenzene	**<29.9**	ug/kg	76.8	29.9	1	06/06/22 08:45	06/06/22 13:57	108-86-1	
Bromochloromethane	**<21.0**	ug/kg	76.8	21.0	1	06/06/22 08:45	06/06/22 13:57	74-97-5	
Bromodichloromethane	**<18.3**	ug/kg	76.8	18.3	1	06/06/22 08:45	06/06/22 13:57	75-27-4	
Bromoform	**<338**	ug/kg	384	338	1	06/06/22 08:45	06/06/22 13:57	75-25-2	
Bromomethane	**<108**	ug/kg	384	108	1	06/06/22 08:45	06/06/22 13:57	74-83-9	
n-Butylbenzene	**<35.2**	ug/kg	76.8	35.2	1	06/06/22 08:45	06/06/22 13:57	104-51-8	
sec-Butylbenzene	**<18.7**	ug/kg	76.8	18.7	1	06/06/22 08:45	06/06/22 13:57	135-98-8	
tert-Butylbenzene	**<24.1**	ug/kg	76.8	24.1	1	06/06/22 08:45	06/06/22 13:57	98-06-6	
Carbon tetrachloride	**<16.9**	ug/kg	76.8	16.9	1	06/06/22 08:45	06/06/22 13:57	56-23-5	L1
Chlorobenzene	**<9.2**	ug/kg	76.8	9.2	1	06/06/22 08:45	06/06/22 13:57	108-90-7	
Chloroethane	**<32.4**	ug/kg	384	32.4	1	06/06/22 08:45	06/06/22 13:57	75-00-3	
Chloroform	**<55.0**	ug/kg	384	55.0	1	06/06/22 08:45	06/06/22 13:57	67-66-3	
Chloromethane	**<29.2**	ug/kg	76.8	29.2	1	06/06/22 08:45	06/06/22 13:57	74-87-3	
2-Chlorotoluene	**<24.9**	ug/kg	76.8	24.9	1	06/06/22 08:45	06/06/22 13:57	95-49-8	
4-Chlorotoluene	**<29.2**	ug/kg	76.8	29.2	1	06/06/22 08:45	06/06/22 13:57	106-43-4	
1,2-Dibromo-3-chloropropane	**<59.6**	ug/kg	384	59.6	1	06/06/22 08:45	06/06/22 13:57	96-12-8	
Dibromochloromethane	**<262**	ug/kg	384	262	1	06/06/22 08:45	06/06/22 13:57	124-48-1	
1,2-Dibromoethane (EDB)	**<21.0**	ug/kg	76.8	21.0	1	06/06/22 08:45	06/06/22 13:57	106-93-4	
Dibromomethane	**<22.7**	ug/kg	76.8	22.7	1	06/06/22 08:45	06/06/22 13:57	74-95-3	
1,2-Dichlorobenzene	**<23.8**	ug/kg	76.8	23.8	1	06/06/22 08:45	06/06/22 13:57	95-50-1	
1,3-Dichlorobenzene	**<21.0**	ug/kg	76.8	21.0	1	06/06/22 08:45	06/06/22 13:57	541-73-1	
1,4-Dichlorobenzene	**<21.0**	ug/kg	76.8	21.0	1	06/06/22 08:45	06/06/22 13:57	106-46-7	
Dichlorodifluoromethane	**90.3**	ug/kg	76.8	33.0	1	06/06/22 08:45	06/06/22 13:57	75-71-8	
1,1-Dichloroethane	**<19.7**	ug/kg	76.8	19.7	1	06/06/22 08:45	06/06/22 13:57	75-34-3	
1,2-Dichloroethane	**<17.7**	ug/kg	76.8	17.7	1	06/06/22 08:45	06/06/22 13:57	107-06-2	
1,1-Dichloroethene	**37.8J**	ug/kg	76.8	25.5	1	06/06/22 08:45	06/06/22 13:57	75-35-4	
cis-1,2-Dichloroethene	**153**	ug/kg	76.8	16.4	1	06/06/22 08:45	06/06/22 13:57	156-59-2	
trans-1,2-Dichloroethene	**<16.6**	ug/kg	76.8	16.6	1	06/06/22 08:45	06/06/22 13:57	156-60-5	
1,2-Dichloropropane	**<18.3**	ug/kg	76.8	18.3	1	06/06/22 08:45	06/06/22 13:57	78-87-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-26(6-8') **Lab ID: 40245897002** Collected: 06/02/22 12:20 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,3-Dichloropropane	**<16.7**	ug/kg	76.8	16.7	1	06/06/22 08:45	06/06/22 13:57	142-28-9	
2,2-Dichloropropane	**<20.7**	ug/kg	76.8	20.7	1	06/06/22 08:45	06/06/22 13:57	594-20-7	
1,1-Dichloropropene	**<24.9**	ug/kg	76.8	24.9	1	06/06/22 08:45	06/06/22 13:57	563-58-6	
cis-1,3-Dichloropropene	**<50.7**	ug/kg	384	50.7	1	06/06/22 08:45	06/06/22 13:57	10061-01-5	
trans-1,3-Dichloropropene	**<220**	ug/kg	384	220	1	06/06/22 08:45	06/06/22 13:57	10061-02-6	
Diisopropyl ether	**<19.0**	ug/kg	76.8	19.0	1	06/06/22 08:45	06/06/22 13:57	108-20-3	
Ethylbenzene	**<18.3**	ug/kg	76.8	18.3	1	06/06/22 08:45	06/06/22 13:57	100-41-4	
Hexachloro-1,3-butadiene	**<153**	ug/kg	384	153	1	06/06/22 08:45	06/06/22 13:57	87-68-3	
Isopropylbenzene (Cumene)	**<20.7**	ug/kg	76.8	20.7	1	06/06/22 08:45	06/06/22 13:57	98-82-8	
p-Isopropyltoluene	**<23.3**	ug/kg	76.8	23.3	1	06/06/22 08:45	06/06/22 13:57	99-87-6	
Methylene Chloride	**<21.3**	ug/kg	76.8	21.3	1	06/06/22 08:45	06/06/22 13:57	75-09-2	
Methyl-tert-butyl ether	**<22.6**	ug/kg	76.8	22.6	1	06/06/22 08:45	06/06/22 13:57	1634-04-4	
Naphthalene	**<24.0**	ug/kg	384	24.0	1	06/06/22 08:45	06/06/22 13:57	91-20-3	
n-Propylbenzene	**<18.4**	ug/kg	76.8	18.4	1	06/06/22 08:45	06/06/22 13:57	103-65-1	
Styrene	**<19.7**	ug/kg	76.8	19.7	1	06/06/22 08:45	06/06/22 13:57	100-42-5	
1,1,1,2-Tetrachloroethane	**<18.4**	ug/kg	76.8	18.4	1	06/06/22 08:45	06/06/22 13:57	630-20-6	
1,1,2,2-Tetrachloroethane	**<27.8**	ug/kg	76.8	27.8	1	06/06/22 08:45	06/06/22 13:57	79-34-5	
Tetrachloroethene	**<29.8**	ug/kg	76.8	29.8	1	06/06/22 08:45	06/06/22 13:57	127-18-4	
Toluene	**<19.4**	ug/kg	76.8	19.4	1	06/06/22 08:45	06/06/22 13:57	108-88-3	
1,2,3-Trichlorobenzene	**<85.5**	ug/kg	384	85.5	1	06/06/22 08:45	06/06/22 13:57	87-61-6	
1,2,4-Trichlorobenzene	**<63.3**	ug/kg	384	63.3	1	06/06/22 08:45	06/06/22 13:57	120-82-1	
1,1,1-Trichloroethane	**<19.7**	ug/kg	76.8	19.7	1	06/06/22 08:45	06/06/22 13:57	71-55-6	
1,1,2-Trichloroethane	**<28.0**	ug/kg	76.8	28.0	1	06/06/22 08:45	06/06/22 13:57	79-00-5	
Trichloroethene	**622**	ug/kg	76.8	28.7	1	06/06/22 08:45	06/06/22 13:57	79-01-6	
Trichlorofluoromethane	**<22.3**	ug/kg	76.8	22.3	1	06/06/22 08:45	06/06/22 13:57	75-69-4	
1,2,3-Trichloropropane	**<37.3**	ug/kg	76.8	37.3	1	06/06/22 08:45	06/06/22 13:57	96-18-4	
1,2,4-Trimethylbenzene	**<22.9**	ug/kg	76.8	22.9	1	06/06/22 08:45	06/06/22 13:57	95-63-6	
1,3,5-Trimethylbenzene	**<24.7**	ug/kg	76.8	24.7	1	06/06/22 08:45	06/06/22 13:57	108-67-8	
Vinyl chloride	**31.9J**	ug/kg	76.8	15.5	1	06/06/22 08:45	06/06/22 13:57	75-01-4	
m&p-Xylene	**<32.4**	ug/kg	154	32.4	1	06/06/22 08:45	06/06/22 13:57	179601-23-1	
o-Xylene	**<23.0**	ug/kg	76.8	23.0	1	06/06/22 08:45	06/06/22 13:57	95-47-6	
Surrogates									
Toluene-d8 (S)	131	%	69-153		1	06/06/22 08:45	06/06/22 13:57	2037-26-5	
4-Bromofluorobenzene (S)	133	%	68-156		1	06/06/22 08:45	06/06/22 13:57	460-00-4	
1,2-Dichlorobenzene-d4 (S)	138	%	71-161		1	06/06/22 08:45	06/06/22 13:57	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**21.1**	%	0.10	0.10	1		06/07/22 14:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-27(0-4') **Lab ID: 40245897003** Collected: 06/02/22 11:00 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**3.6**	mg/kg	2.9	1.7	1	06/06/22 07:29	06/06/22 18:11	7440-38-2	
Barium	**91.2**	mg/kg	0.58	0.17	1	06/06/22 07:29	06/06/22 18:11	7440-39-3	
Cadmium	**0.49J**	mg/kg	0.58	0.15	1	06/06/22 07:29	06/06/22 18:11	7440-43-9	
Chromium	**27.1**	mg/kg	1.2	0.32	1	06/06/22 07:29	06/06/22 18:11	7440-47-3	
Lead	**11.3**	mg/kg	2.3	0.69	1	06/06/22 07:29	06/06/22 18:11	7439-92-1	
Selenium	**<1.5**	mg/kg	4.6	1.5	1	06/06/22 07:29	06/06/22 18:11	7782-49-2	
Silver	**0.38J**	mg/kg	1.2	0.35	1	06/06/22 07:29	06/06/22 18:11	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.033J**	mg/kg	0.039	0.011	1	06/08/22 09:24	06/09/22 13:30	7439-97-6	1q
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<16.4**	ug/kg	27.6	16.4	1	06/06/22 08:45	06/06/22 14:17	71-43-2	
Bromobenzene	**<26.9**	ug/kg	69.0	26.9	1	06/06/22 08:45	06/06/22 14:17	108-86-1	
Bromochloromethane	**<18.9**	ug/kg	69.0	18.9	1	06/06/22 08:45	06/06/22 14:17	74-97-5	
Bromodichloromethane	**<16.4**	ug/kg	69.0	16.4	1	06/06/22 08:45	06/06/22 14:17	75-27-4	
Bromoform	**<304**	ug/kg	345	304	1	06/06/22 08:45	06/06/22 14:17	75-25-2	
Bromomethane	**<96.8**	ug/kg	345	96.8	1	06/06/22 08:45	06/06/22 14:17	74-83-9	
n-Butylbenzene	**<31.6**	ug/kg	69.0	31.6	1	06/06/22 08:45	06/06/22 14:17	104-51-8	
sec-Butylbenzene	**<16.8**	ug/kg	69.0	16.8	1	06/06/22 08:45	06/06/22 14:17	135-98-8	
tert-Butylbenzene	**<21.7**	ug/kg	69.0	21.7	1	06/06/22 08:45	06/06/22 14:17	98-06-6	
Carbon tetrachloride	**<15.2**	ug/kg	69.0	15.2	1	06/06/22 08:45	06/06/22 14:17	56-23-5	L1
Chlorobenzene	**<8.3**	ug/kg	69.0	8.3	1	06/06/22 08:45	06/06/22 14:17	108-90-7	
Chloroethane	**<29.1**	ug/kg	345	29.1	1	06/06/22 08:45	06/06/22 14:17	75-00-3	
Chloroform	**<49.4**	ug/kg	345	49.4	1	06/06/22 08:45	06/06/22 14:17	67-66-3	
Chloromethane	**<26.2**	ug/kg	69.0	26.2	1	06/06/22 08:45	06/06/22 14:17	74-87-3	
2-Chlorotoluene	**<22.4**	ug/kg	69.0	22.4	1	06/06/22 08:45	06/06/22 14:17	95-49-8	
4-Chlorotoluene	**<26.2**	ug/kg	69.0	26.2	1	06/06/22 08:45	06/06/22 14:17	106-43-4	
1,2-Dibromo-3-chloropropane	**<53.6**	ug/kg	345	53.6	1	06/06/22 08:45	06/06/22 14:17	96-12-8	
Dibromochloromethane	**<236**	ug/kg	345	236	1	06/06/22 08:45	06/06/22 14:17	124-48-1	
1,2-Dibromoethane (EDB)	**<18.9**	ug/kg	69.0	18.9	1	06/06/22 08:45	06/06/22 14:17	106-93-4	
Dibromomethane	**<20.4**	ug/kg	69.0	20.4	1	06/06/22 08:45	06/06/22 14:17	74-95-3	
1,2-Dichlorobenzene	**<21.4**	ug/kg	69.0	21.4	1	06/06/22 08:45	06/06/22 14:17	95-50-1	
1,3-Dichlorobenzene	**<18.9**	ug/kg	69.0	18.9	1	06/06/22 08:45	06/06/22 14:17	541-73-1	
1,4-Dichlorobenzene	**<18.9**	ug/kg	69.0	18.9	1	06/06/22 08:45	06/06/22 14:17	106-46-7	
Dichlorodifluoromethane	**<29.7**	ug/kg	69.0	29.7	1	06/06/22 08:45	06/06/22 14:17	75-71-8	
1,1-Dichloroethane	**<17.7**	ug/kg	69.0	17.7	1	06/06/22 08:45	06/06/22 14:17	75-34-3	
1,2-Dichloroethane	**<15.9**	ug/kg	69.0	15.9	1	06/06/22 08:45	06/06/22 14:17	107-06-2	
1,1-Dichloroethene	**<22.9**	ug/kg	69.0	22.9	1	06/06/22 08:45	06/06/22 14:17	75-35-4	
cis-1,2-Dichloroethene	**<14.8**	ug/kg	69.0	14.8	1	06/06/22 08:45	06/06/22 14:17	156-59-2	
trans-1,2-Dichloroethene	**<14.9**	ug/kg	69.0	14.9	1	06/06/22 08:45	06/06/22 14:17	156-60-5	
1,2-Dichloropropane	**<16.4**	ug/kg	69.0	16.4	1	06/06/22 08:45	06/06/22 14:17	78-87-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-27(0-4') **Lab ID: 40245897003** Collected: 06/02/22 11:00 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,3-Dichloropropane	**<15.0**	ug/kg	69.0	15.0	1	06/06/22 08:45	06/06/22 14:17	142-28-9	
2,2-Dichloropropane	**<18.6**	ug/kg	69.0	18.6	1	06/06/22 08:45	06/06/22 14:17	594-20-7	
1,1-Dichloropropene	**<22.4**	ug/kg	69.0	22.4	1	06/06/22 08:45	06/06/22 14:17	563-58-6	
cis-1,3-Dichloropropene	**<45.6**	ug/kg	345	45.6	1	06/06/22 08:45	06/06/22 14:17	10061-01-5	
trans-1,3-Dichloropropene	**<197**	ug/kg	345	197	1	06/06/22 08:45	06/06/22 14:17	10061-02-6	
Diisopropyl ether	**<17.1**	ug/kg	69.0	17.1	1	06/06/22 08:45	06/06/22 14:17	108-20-3	
Ethylbenzene	**<16.4**	ug/kg	69.0	16.4	1	06/06/22 08:45	06/06/22 14:17	100-41-4	
Hexachloro-1,3-butadiene	**<137**	ug/kg	345	137	1	06/06/22 08:45	06/06/22 14:17	87-68-3	
Isopropylbenzene (Cumene)	**<18.6**	ug/kg	69.0	18.6	1	06/06/22 08:45	06/06/22 14:17	98-82-8	
p-Isopropyltoluene	**<21.0**	ug/kg	69.0	21.0	1	06/06/22 08:45	06/06/22 14:17	99-87-6	
Methylene Chloride	**<19.2**	ug/kg	69.0	19.2	1	06/06/22 08:45	06/06/22 14:17	75-09-2	
Methyl-tert-butyl ether	**<20.3**	ug/kg	69.0	20.3	1	06/06/22 08:45	06/06/22 14:17	1634-04-4	
Naphthalene	**<21.5**	ug/kg	345	21.5	1	06/06/22 08:45	06/06/22 14:17	91-20-3	
n-Propylbenzene	**<16.6**	ug/kg	69.0	16.6	1	06/06/22 08:45	06/06/22 14:17	103-65-1	
Styrene	**<17.7**	ug/kg	69.0	17.7	1	06/06/22 08:45	06/06/22 14:17	100-42-5	
1,1,1,2-Tetrachloroethane	**<16.6**	ug/kg	69.0	16.6	1	06/06/22 08:45	06/06/22 14:17	630-20-6	
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	69.0	25.0	1	06/06/22 08:45	06/06/22 14:17	79-34-5	
Tetrachloroethene	**<26.8**	ug/kg	69.0	26.8	1	06/06/22 08:45	06/06/22 14:17	127-18-4	
Toluene	**<17.4**	ug/kg	69.0	17.4	1	06/06/22 08:45	06/06/22 14:17	108-88-3	
1,2,3-Trichlorobenzene	**<76.9**	ug/kg	345	76.9	1	06/06/22 08:45	06/06/22 14:17	87-61-6	
1,2,4-Trichlorobenzene	**<56.9**	ug/kg	345	56.9	1	06/06/22 08:45	06/06/22 14:17	120-82-1	
1,1,1-Trichloroethane	**<17.7**	ug/kg	69.0	17.7	1	06/06/22 08:45	06/06/22 14:17	71-55-6	
1,1,2-Trichloroethane	**<25.1**	ug/kg	69.0	25.1	1	06/06/22 08:45	06/06/22 14:17	79-00-5	
Trichloroethene	**<25.8**	ug/kg	69.0	25.8	1	06/06/22 08:45	06/06/22 14:17	79-01-6	
Trichlorofluoromethane	**<20.0**	ug/kg	69.0	20.0	1	06/06/22 08:45	06/06/22 14:17	75-69-4	
1,2,3-Trichloropropane	**<33.5**	ug/kg	69.0	33.5	1	06/06/22 08:45	06/06/22 14:17	96-18-4	
1,2,4-Trimethylbenzene	**<20.6**	ug/kg	69.0	20.6	1	06/06/22 08:45	06/06/22 14:17	95-63-6	
1,3,5-Trimethylbenzene	**<22.2**	ug/kg	69.0	22.2	1	06/06/22 08:45	06/06/22 14:17	108-67-8	
Vinyl chloride	**<13.9**	ug/kg	69.0	13.9	1	06/06/22 08:45	06/06/22 14:17	75-01-4	
m&p-Xylene	**<29.1**	ug/kg	138	29.1	1	06/06/22 08:45	06/06/22 14:17	179601-23-1	
o-Xylene	**<20.7**	ug/kg	69.0	20.7	1	06/06/22 08:45	06/06/22 14:17	95-47-6	
Surrogates									
Toluene-d8 (S)	128	%	69-153		1	06/06/22 08:45	06/06/22 14:17	2037-26-5	
4-Bromofluorobenzene (S)	132	%	68-156		1	06/06/22 08:45	06/06/22 14:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	138	%	71-161		1	06/06/22 08:45	06/06/22 14:17	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**16.0**	%	0.10	0.10	1		06/07/22 14:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-27(6-8') **Lab ID: 40245897004** Collected: 06/02/22 11:20 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**5.4**	mg/kg	2.9	1.7	1	06/06/22 07:29	06/06/22 18:13	7440-38-2	
Barium	**116**	mg/kg	0.58	0.17	1	06/06/22 07:29	06/06/22 18:13	7440-39-3	
Cadmium	**0.22J**	mg/kg	0.58	0.15	1	06/06/22 07:29	06/06/22 18:13	7440-43-9	
Chromium	**31.5**	mg/kg	1.2	0.32	1	06/06/22 07:29	06/06/22 18:13	7440-47-3	
Lead	**9.0**	mg/kg	2.3	0.69	1	06/06/22 07:29	06/06/22 18:13	7439-92-1	
Selenium	**<1.5**	mg/kg	4.6	1.5	1	06/06/22 07:29	06/06/22 18:13	7782-49-2	
Silver	**0.37J**	mg/kg	1.2	0.36	1	06/06/22 07:29	06/06/22 18:13	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**<0.012**	mg/kg	0.040	0.012	1	06/08/22 09:24	06/09/22 13:32	7439-97-6	1q
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<17.4**	ug/kg	29.2	17.4	1	06/06/22 08:45	06/06/22 14:37	71-43-2	
Bromobenzene	**<28.5**	ug/kg	73.1	28.5	1	06/06/22 08:45	06/06/22 14:37	108-86-1	
Bromochloromethane	**<20.0**	ug/kg	73.1	20.0	1	06/06/22 08:45	06/06/22 14:37	74-97-5	
Bromodichloromethane	**<17.4**	ug/kg	73.1	17.4	1	06/06/22 08:45	06/06/22 14:37	75-27-4	
Bromoform	**<321**	ug/kg	365	321	1	06/06/22 08:45	06/06/22 14:37	75-25-2	
Bromomethane	**<102**	ug/kg	365	102	1	06/06/22 08:45	06/06/22 14:37	74-83-9	
n-Butylbenzene	**<33.5**	ug/kg	73.1	33.5	1	06/06/22 08:45	06/06/22 14:37	104-51-8	
sec-Butylbenzene	**<17.8**	ug/kg	73.1	17.8	1	06/06/22 08:45	06/06/22 14:37	135-98-8	
tert-Butylbenzene	**<22.9**	ug/kg	73.1	22.9	1	06/06/22 08:45	06/06/22 14:37	98-06-6	
Carbon tetrachloride	**<16.1**	ug/kg	73.1	16.1	1	06/06/22 08:45	06/06/22 14:37	56-23-5	L1
Chlorobenzene	**<8.8**	ug/kg	73.1	8.8	1	06/06/22 08:45	06/06/22 14:37	108-90-7	
Chloroethane	**<30.8**	ug/kg	365	30.8	1	06/06/22 08:45	06/06/22 14:37	75-00-3	
Chloroform	**<52.3**	ug/kg	365	52.3	1	06/06/22 08:45	06/06/22 14:37	67-66-3	
Chloromethane	**<27.8**	ug/kg	73.1	27.8	1	06/06/22 08:45	06/06/22 14:37	74-87-3	
2-Chlorotoluene	**<23.7**	ug/kg	73.1	23.7	1	06/06/22 08:45	06/06/22 14:37	95-49-8	
4-Chlorotoluene	**<27.8**	ug/kg	73.1	27.8	1	06/06/22 08:45	06/06/22 14:37	106-43-4	
1,2-Dibromo-3-chloropropane	**<56.7**	ug/kg	365	56.7	1	06/06/22 08:45	06/06/22 14:37	96-12-8	
Dibromochloromethane	**<250**	ug/kg	365	250	1	06/06/22 08:45	06/06/22 14:37	124-48-1	
1,2-Dibromoethane (EDB)	**<20.0**	ug/kg	73.1	20.0	1	06/06/22 08:45	06/06/22 14:37	106-93-4	
Dibromomethane	**<21.6**	ug/kg	73.1	21.6	1	06/06/22 08:45	06/06/22 14:37	74-95-3	
1,2-Dichlorobenzene	**<22.6**	ug/kg	73.1	22.6	1	06/06/22 08:45	06/06/22 14:37	95-50-1	
1,3-Dichlorobenzene	**<20.0**	ug/kg	73.1	20.0	1	06/06/22 08:45	06/06/22 14:37	541-73-1	
1,4-Dichlorobenzene	**<20.0**	ug/kg	73.1	20.0	1	06/06/22 08:45	06/06/22 14:37	106-46-7	
Dichlorodifluoromethane	**<31.4**	ug/kg	73.1	31.4	1	06/06/22 08:45	06/06/22 14:37	75-71-8	
1,1-Dichloroethane	**<18.7**	ug/kg	73.1	18.7	1	06/06/22 08:45	06/06/22 14:37	75-34-3	
1,2-Dichloroethane	**<16.8**	ug/kg	73.1	16.8	1	06/06/22 08:45	06/06/22 14:37	107-06-2	
1,1-Dichloroethene	**<24.3**	ug/kg	73.1	24.3	1	06/06/22 08:45	06/06/22 14:37	75-35-4	
cis-1,2-Dichloroethene	**<15.6**	ug/kg	73.1	15.6	1	06/06/22 08:45	06/06/22 14:37	156-59-2	
trans-1,2-Dichloroethene	**<15.8**	ug/kg	73.1	15.8	1	06/06/22 08:45	06/06/22 14:37	156-60-5	
1,2-Dichloropropane	**<17.4**	ug/kg	73.1	17.4	1	06/06/22 08:45	06/06/22 14:37	78-87-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-27(6-8') **Lab ID: 40245897004** Collected: 06/02/22 11:20 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,3-Dichloropropane	**<15.9**	ug/kg	73.1	15.9	1	06/06/22 08:45	06/06/22 14:37	142-28-9	
2,2-Dichloropropane	**<19.7**	ug/kg	73.1	19.7	1	06/06/22 08:45	06/06/22 14:37	594-20-7	
1,1-Dichloropropene	**<23.7**	ug/kg	73.1	23.7	1	06/06/22 08:45	06/06/22 14:37	563-58-6	
cis-1,3-Dichloropropene	**<48.2**	ug/kg	365	48.2	1	06/06/22 08:45	06/06/22 14:37	10061-01-5	
trans-1,3-Dichloropropene	**<209**	ug/kg	365	209	1	06/06/22 08:45	06/06/22 14:37	10061-02-6	
Diisopropyl ether	**<18.1**	ug/kg	73.1	18.1	1	06/06/22 08:45	06/06/22 14:37	108-20-3	
Ethylbenzene	**<17.4**	ug/kg	73.1	17.4	1	06/06/22 08:45	06/06/22 14:37	100-41-4	
Hexachloro-1,3-butadiene	**<145**	ug/kg	365	145	1	06/06/22 08:45	06/06/22 14:37	87-68-3	
Isopropylbenzene (Cumene)	**<19.7**	ug/kg	73.1	19.7	1	06/06/22 08:45	06/06/22 14:37	98-82-8	
p-Isopropyltoluene	**<22.2**	ug/kg	73.1	22.2	1	06/06/22 08:45	06/06/22 14:37	99-87-6	
Methylene Chloride	**<20.3**	ug/kg	73.1	20.3	1	06/06/22 08:45	06/06/22 14:37	75-09-2	
Methyl-tert-butyl ether	**<21.5**	ug/kg	73.1	21.5	1	06/06/22 08:45	06/06/22 14:37	1634-04-4	
Naphthalene	**<22.8**	ug/kg	365	22.8	1	06/06/22 08:45	06/06/22 14:37	91-20-3	
n-Propylbenzene	**<17.5**	ug/kg	73.1	17.5	1	06/06/22 08:45	06/06/22 14:37	103-65-1	
Styrene	**<18.7**	ug/kg	73.1	18.7	1	06/06/22 08:45	06/06/22 14:37	100-42-5	
1,1,1,2-Tetrachloroethane	**<17.5**	ug/kg	73.1	17.5	1	06/06/22 08:45	06/06/22 14:37	630-20-6	
1,1,2,2-Tetrachloroethane	**<26.4**	ug/kg	73.1	26.4	1	06/06/22 08:45	06/06/22 14:37	79-34-5	
Tetrachloroethene	**<28.3**	ug/kg	73.1	28.3	1	06/06/22 08:45	06/06/22 14:37	127-18-4	
Toluene	**<18.4**	ug/kg	73.1	18.4	1	06/06/22 08:45	06/06/22 14:37	108-88-3	
1,2,3-Trichlorobenzene	**<81.4**	ug/kg	365	81.4	1	06/06/22 08:45	06/06/22 14:37	87-61-6	
1,2,4-Trichlorobenzene	**<60.2**	ug/kg	365	60.2	1	06/06/22 08:45	06/06/22 14:37	120-82-1	
1,1,1-Trichloroethane	**<18.7**	ug/kg	73.1	18.7	1	06/06/22 08:45	06/06/22 14:37	71-55-6	
1,1,2-Trichloroethane	**<26.6**	ug/kg	73.1	26.6	1	06/06/22 08:45	06/06/22 14:37	79-00-5	
Trichloroethene	**<27.3**	ug/kg	73.1	27.3	1	06/06/22 08:45	06/06/22 14:37	79-01-6	
Trichlorofluoromethane	**<21.2**	ug/kg	73.1	21.2	1	06/06/22 08:45	06/06/22 14:37	75-69-4	
1,2,3-Trichloropropane	**<35.5**	ug/kg	73.1	35.5	1	06/06/22 08:45	06/06/22 14:37	96-18-4	
1,2,4-Trimethylbenzene	**<21.8**	ug/kg	73.1	21.8	1	06/06/22 08:45	06/06/22 14:37	95-63-6	
1,3,5-Trimethylbenzene	**<23.5**	ug/kg	73.1	23.5	1	06/06/22 08:45	06/06/22 14:37	108-67-8	
Vinyl chloride	**<14.8**	ug/kg	73.1	14.8	1	06/06/22 08:45	06/06/22 14:37	75-01-4	
m&p-Xylene	**<30.8**	ug/kg	146	30.8	1	06/06/22 08:45	06/06/22 14:37	179601-23-1	
o-Xylene	**<21.9**	ug/kg	73.1	21.9	1	06/06/22 08:45	06/06/22 14:37	95-47-6	
Surrogates									
Toluene-d8 (S)	116	%	69-153		1	06/06/22 08:45	06/06/22 14:37	2037-26-5	
4-Bromofluorobenzene (S)	128	%	68-156		1	06/06/22 08:45	06/06/22 14:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	134	%	71-161		1	06/06/22 08:45	06/06/22 14:37	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**18.7**	%	0.10	0.10	1		06/07/22 14:29		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-28(0-4') **Lab ID: 40245897005** Collected: 06/02/22 10:00 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**2.5J**	mg/kg	2.7	1.6	1	06/06/22 07:29	06/06/22 18:15	7440-38-2	
Barium	**29.8**	mg/kg	0.54	0.16	1	06/06/22 07:29	06/06/22 18:15	7440-39-3	
Cadmium	**0.39J**	mg/kg	0.54	0.14	1	06/06/22 07:29	06/06/22 18:15	7440-43-9	
Chromium	**9.0**	mg/kg	1.1	0.30	1	06/06/22 07:29	06/06/22 18:15	7440-47-3	
Lead	**23.3**	mg/kg	2.2	0.65	1	06/06/22 07:29	06/06/22 18:15	7439-92-1	
Selenium	**<1.4**	mg/kg	4.3	1.4	1	06/06/22 07:29	06/06/22 18:15	7782-49-2	
Silver	**<0.33**	mg/kg	1.1	0.33	1	06/06/22 07:29	06/06/22 18:15	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**<0.011**	mg/kg	0.037	0.011	1	06/08/22 09:24	06/09/22 13:34	7439-97-6	1q
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<14.0**	ug/kg	23.5	14.0	1	06/06/22 08:45	06/06/22 14:57	71-43-2	
Bromobenzene	**<22.9**	ug/kg	58.7	22.9	1	06/06/22 08:45	06/06/22 14:57	108-86-1	
Bromochloromethane	**<16.1**	ug/kg	58.7	16.1	1	06/06/22 08:45	06/06/22 14:57	74-97-5	
Bromodichloromethane	**<14.0**	ug/kg	58.7	14.0	1	06/06/22 08:45	06/06/22 14:57	75-27-4	
Bromoform	**<258**	ug/kg	294	258	1	06/06/22 08:45	06/06/22 14:57	75-25-2	
Bromomethane	**<82.3**	ug/kg	294	82.3	1	06/06/22 08:45	06/06/22 14:57	74-83-9	
n-Butylbenzene	**<26.9**	ug/kg	58.7	26.9	1	06/06/22 08:45	06/06/22 14:57	104-51-8	
sec-Butylbenzene	**<14.3**	ug/kg	58.7	14.3	1	06/06/22 08:45	06/06/22 14:57	135-98-8	
tert-Butylbenzene	**<18.4**	ug/kg	58.7	18.4	1	06/06/22 08:45	06/06/22 14:57	98-06-6	
Carbon tetrachloride	**<12.9**	ug/kg	58.7	12.9	1	06/06/22 08:45	06/06/22 14:57	56-23-5	L1
Chlorobenzene	**<7.0**	ug/kg	58.7	7.0	1	06/06/22 08:45	06/06/22 14:57	108-90-7	
Chloroethane	**<24.8**	ug/kg	294	24.8	1	06/06/22 08:45	06/06/22 14:57	75-00-3	
Chloroform	**<42.1**	ug/kg	294	42.1	1	06/06/22 08:45	06/06/22 14:57	67-66-3	
Chloromethane	**<22.3**	ug/kg	58.7	22.3	1	06/06/22 08:45	06/06/22 14:57	74-87-3	
2-Chlorotoluene	**<19.0**	ug/kg	58.7	19.0	1	06/06/22 08:45	06/06/22 14:57	95-49-8	
4-Chlorotoluene	**<22.3**	ug/kg	58.7	22.3	1	06/06/22 08:45	06/06/22 14:57	106-43-4	
1,2-Dibromo-3-chloropropane	**<45.6**	ug/kg	294	45.6	1	06/06/22 08:45	06/06/22 14:57	96-12-8	
Dibromochloromethane	**<201**	ug/kg	294	201	1	06/06/22 08:45	06/06/22 14:57	124-48-1	
1,2-Dibromoethane (EDB)	**<16.1**	ug/kg	58.7	16.1	1	06/06/22 08:45	06/06/22 14:57	106-93-4	
Dibromomethane	**<17.4**	ug/kg	58.7	17.4	1	06/06/22 08:45	06/06/22 14:57	74-95-3	
1,2-Dichlorobenzene	**<18.2**	ug/kg	58.7	18.2	1	06/06/22 08:45	06/06/22 14:57	95-50-1	
1,3-Dichlorobenzene	**<16.1**	ug/kg	58.7	16.1	1	06/06/22 08:45	06/06/22 14:57	541-73-1	
1,4-Dichlorobenzene	**<16.1**	ug/kg	58.7	16.1	1	06/06/22 08:45	06/06/22 14:57	106-46-7	
Dichlorodifluoromethane	**<25.3**	ug/kg	58.7	25.3	1	06/06/22 08:45	06/06/22 14:57	75-71-8	
1,1-Dichloroethane	**<15.0**	ug/kg	58.7	15.0	1	06/06/22 08:45	06/06/22 14:57	75-34-3	
1,2-Dichloroethane	**<13.5**	ug/kg	58.7	13.5	1	06/06/22 08:45	06/06/22 14:57	107-06-2	
1,1-Dichloroethene	**<19.5**	ug/kg	58.7	19.5	1	06/06/22 08:45	06/06/22 14:57	75-35-4	
cis-1,2-Dichloroethene	**<12.6**	ug/kg	58.7	12.6	1	06/06/22 08:45	06/06/22 14:57	156-59-2	
trans-1,2-Dichloroethene	**<12.7**	ug/kg	58.7	12.7	1	06/06/22 08:45	06/06/22 14:57	156-60-5	
1,2-Dichloropropane	**<14.0**	ug/kg	58.7	14.0	1	06/06/22 08:45	06/06/22 14:57	78-87-5	

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-28(0-4') **Lab ID: 40245897005** Collected: 06/02/22 10:00 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,3-Dichloropropane	**<12.8**	ug/kg	58.7	12.8	1	06/06/22 08:45	06/06/22 14:57	142-28-9	
2,2-Dichloropropane	**<15.9**	ug/kg	58.7	15.9	1	06/06/22 08:45	06/06/22 14:57	594-20-7	
1,1-Dichloropropene	**<19.0**	ug/kg	58.7	19.0	1	06/06/22 08:45	06/06/22 14:57	563-58-6	
cis-1,3-Dichloropropene	**<38.8**	ug/kg	294	38.8	1	06/06/22 08:45	06/06/22 14:57	10061-01-5	
trans-1,3-Dichloropropene	**<168**	ug/kg	294	168	1	06/06/22 08:45	06/06/22 14:57	10061-02-6	
Diisopropyl ether	**<14.6**	ug/kg	58.7	14.6	1	06/06/22 08:45	06/06/22 14:57	108-20-3	
Ethylbenzene	**<14.0**	ug/kg	58.7	14.0	1	06/06/22 08:45	06/06/22 14:57	100-41-4	
Hexachloro-1,3-butadiene	**<117**	ug/kg	294	117	1	06/06/22 08:45	06/06/22 14:57	87-68-3	
Isopropylbenzene (Cumene)	**<15.9**	ug/kg	58.7	15.9	1	06/06/22 08:45	06/06/22 14:57	98-82-8	
p-Isopropyltoluene	**<17.9**	ug/kg	58.7	17.9	1	06/06/22 08:45	06/06/22 14:57	99-87-6	
Methylene Chloride	**<16.3**	ug/kg	58.7	16.3	1	06/06/22 08:45	06/06/22 14:57	75-09-2	
Methyl-tert-butyl ether	**<17.3**	ug/kg	58.7	17.3	1	06/06/22 08:45	06/06/22 14:57	1634-04-4	
Naphthalene	**<18.3**	ug/kg	294	18.3	1	06/06/22 08:45	06/06/22 14:57	91-20-3	
n-Propylbenzene	**<14.1**	ug/kg	58.7	14.1	1	06/06/22 08:45	06/06/22 14:57	103-65-1	
Styrene	**<15.0**	ug/kg	58.7	15.0	1	06/06/22 08:45	06/06/22 14:57	100-42-5	
1,1,1,2-Tetrachloroethane	**<14.1**	ug/kg	58.7	14.1	1	06/06/22 08:45	06/06/22 14:57	630-20-6	
1,1,2,2-Tetrachloroethane	**<21.3**	ug/kg	58.7	21.3	1	06/06/22 08:45	06/06/22 14:57	79-34-5	
Tetrachloroethene	**<22.8**	ug/kg	58.7	22.8	1	06/06/22 08:45	06/06/22 14:57	127-18-4	
Toluene	**<14.8**	ug/kg	58.7	14.8	1	06/06/22 08:45	06/06/22 14:57	108-88-3	
1,2,3-Trichlorobenzene	**<65.4**	ug/kg	294	65.4	1	06/06/22 08:45	06/06/22 14:57	87-61-6	
1,2,4-Trichlorobenzene	**<48.4**	ug/kg	294	48.4	1	06/06/22 08:45	06/06/22 14:57	120-82-1	
1,1,1-Trichloroethane	**<15.0**	ug/kg	58.7	15.0	1	06/06/22 08:45	06/06/22 14:57	71-55-6	
1,1,2-Trichloroethane	**<21.4**	ug/kg	58.7	21.4	1	06/06/22 08:45	06/06/22 14:57	79-00-5	
Trichloroethene	**<22.0**	ug/kg	58.7	22.0	1	06/06/22 08:45	06/06/22 14:57	79-01-6	
Trichlorofluoromethane	**<17.0**	ug/kg	58.7	17.0	1	06/06/22 08:45	06/06/22 14:57	75-69-4	
1,2,3-Trichloropropane	**<28.5**	ug/kg	58.7	28.5	1	06/06/22 08:45	06/06/22 14:57	96-18-4	
1,2,4-Trimethylbenzene	**<17.5**	ug/kg	58.7	17.5	1	06/06/22 08:45	06/06/22 14:57	95-63-6	
1,3,5-Trimethylbenzene	**<18.9**	ug/kg	58.7	18.9	1	06/06/22 08:45	06/06/22 14:57	108-67-8	
Vinyl chloride	**<11.9**	ug/kg	58.7	11.9	1	06/06/22 08:45	06/06/22 14:57	75-01-4	
m&p-Xylene	**<24.8**	ug/kg	117	24.8	1	06/06/22 08:45	06/06/22 14:57	179601-23-1	
o-Xylene	**<17.6**	ug/kg	58.7	17.6	1	06/06/22 08:45	06/06/22 14:57	95-47-6	
Surrogates									
Toluene-d8 (S)	120	%	69-153		1	06/06/22 08:45	06/06/22 14:57	2037-26-5	
4-Bromofluorobenzene (S)	126	%	68-156		1	06/06/22 08:45	06/06/22 14:57	460-00-4	
1,2-Dichlorobenzene-d4 (S)	128	%	71-161		1	06/06/22 08:45	06/06/22 14:57	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**8.0**	%	0.10	0.10	1		06/07/22 14:29		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-28(6-8') **Lab ID: 40245897006** Collected: 06/02/22 10:30 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Arsenic	**2.0J**	mg/kg	3.1	1.8	1	06/06/22 07:29	06/06/22 18:23	7440-38-2	
Barium	**86.5**	mg/kg	0.62	0.19	1	06/06/22 07:29	06/06/22 18:23	7440-39-3	
Cadmium	**0.17J**	mg/kg	0.62	0.16	1	06/06/22 07:29	06/06/22 18:23	7440-43-9	
Chromium	**34.5**	mg/kg	1.2	0.34	1	06/06/22 07:29	06/06/22 18:23	7440-47-3	
Lead	**9.7**	mg/kg	2.5	0.74	1	06/06/22 07:29	06/06/22 18:23	7439-92-1	
Selenium	**<1.6**	mg/kg	5.0	1.6	1	06/06/22 07:29	06/06/22 18:23	7782-49-2	
Silver	**<0.38**	mg/kg	1.2	0.38	1	06/06/22 07:29	06/06/22 18:23	7440-22-4	
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471 Pace Analytical Services - Green Bay								
Mercury	**0.078**	mg/kg	0.043	0.012	1	06/08/22 09:24	06/09/22 13:37	7439-97-6	1q
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
Benzene	**<19.0**	ug/kg	32.0	19.0	1	06/06/22 08:45	06/06/22 15:17	71-43-2	
Bromobenzene	**<31.2**	ug/kg	80.0	31.2	1	06/06/22 08:45	06/06/22 15:17	108-86-1	
Bromochloromethane	**<21.9**	ug/kg	80.0	21.9	1	06/06/22 08:45	06/06/22 15:17	74-97-5	
Bromodichloromethane	**<19.0**	ug/kg	80.0	19.0	1	06/06/22 08:45	06/06/22 15:17	75-27-4	
Bromoform	**<352**	ug/kg	400	352	1	06/06/22 08:45	06/06/22 15:17	75-25-2	
Bromomethane	**<112**	ug/kg	400	112	1	06/06/22 08:45	06/06/22 15:17	74-83-9	
n-Butylbenzene	**<36.7**	ug/kg	80.0	36.7	1	06/06/22 08:45	06/06/22 15:17	104-51-8	
sec-Butylbenzene	**<19.5**	ug/kg	80.0	19.5	1	06/06/22 08:45	06/06/22 15:17	135-98-8	
tert-Butylbenzene	**<25.1**	ug/kg	80.0	25.1	1	06/06/22 08:45	06/06/22 15:17	98-06-6	
Carbon tetrachloride	**<17.6**	ug/kg	80.0	17.6	1	06/06/22 08:45	06/06/22 15:17	56-23-5	L1
Chlorobenzene	**<9.6**	ug/kg	80.0	9.6	1	06/06/22 08:45	06/06/22 15:17	108-90-7	
Chloroethane	**<33.8**	ug/kg	400	33.8	1	06/06/22 08:45	06/06/22 15:17	75-00-3	
Chloroform	**<57.3**	ug/kg	400	57.3	1	06/06/22 08:45	06/06/22 15:17	67-66-3	
Chloromethane	**<30.4**	ug/kg	80.0	30.4	1	06/06/22 08:45	06/06/22 15:17	74-87-3	
2-Chlorotoluene	**<25.9**	ug/kg	80.0	25.9	1	06/06/22 08:45	06/06/22 15:17	95-49-8	
4-Chlorotoluene	**<30.4**	ug/kg	80.0	30.4	1	06/06/22 08:45	06/06/22 15:17	106-43-4	
1,2-Dibromo-3-chloropropane	**<62.1**	ug/kg	400	62.1	1	06/06/22 08:45	06/06/22 15:17	96-12-8	
Dibromochloromethane	**<274**	ug/kg	400	274	1	06/06/22 08:45	06/06/22 15:17	124-48-1	
1,2-Dibromoethane (EDB)	**<21.9**	ug/kg	80.0	21.9	1	06/06/22 08:45	06/06/22 15:17	106-93-4	
Dibromomethane	**<23.7**	ug/kg	80.0	23.7	1	06/06/22 08:45	06/06/22 15:17	74-95-3	
1,2-Dichlorobenzene	**<24.8**	ug/kg	80.0	24.8	1	06/06/22 08:45	06/06/22 15:17	95-50-1	
1,3-Dichlorobenzene	**<21.9**	ug/kg	80.0	21.9	1	06/06/22 08:45	06/06/22 15:17	541-73-1	
1,4-Dichlorobenzene	**<21.9**	ug/kg	80.0	21.9	1	06/06/22 08:45	06/06/22 15:17	106-46-7	
Dichlorodifluoromethane	**<34.4**	ug/kg	80.0	34.4	1	06/06/22 08:45	06/06/22 15:17	75-71-8	
1,1-Dichloroethane	**<20.5**	ug/kg	80.0	20.5	1	06/06/22 08:45	06/06/22 15:17	75-34-3	
1,2-Dichloroethane	**<18.4**	ug/kg	80.0	18.4	1	06/06/22 08:45	06/06/22 15:17	107-06-2	
1,1-Dichloroethene	**<26.6**	ug/kg	80.0	26.6	1	06/06/22 08:45	06/06/22 15:17	75-35-4	
cis-1,2-Dichloroethene	**<17.1**	ug/kg	80.0	17.1	1	06/06/22 08:45	06/06/22 15:17	156-59-2	
trans-1,2-Dichloroethene	**<17.3**	ug/kg	80.0	17.3	1	06/06/22 08:45	06/06/22 15:17	156-60-5	
1,2-Dichloropropane	**<19.0**	ug/kg	80.0	19.0	1	06/06/22 08:45	06/06/22 15:17	78-87-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40245897

Sample: B-28(6-8') **Lab ID: 40245897006** Collected: 06/02/22 10:30 Received: 06/03/22 09:35 Matrix: Solid

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

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,3-Dichloropropane	**<17.4**	ug/kg	80.0	17.4	1	06/06/22 08:45	06/06/22 15:17	142-28-9	
2,2-Dichloropropane	**<21.6**	ug/kg	80.0	21.6	1	06/06/22 08:45	06/06/22 15:17	594-20-7	
1,1-Dichloropropene	**<25.9**	ug/kg	80.0	25.9	1	06/06/22 08:45	06/06/22 15:17	563-58-6	
cis-1,3-Dichloropropene	**<52.8**	ug/kg	400	52.8	1	06/06/22 08:45	06/06/22 15:17	10061-01-5	
trans-1,3-Dichloropropene	**<229**	ug/kg	400	229	1	06/06/22 08:45	06/06/22 15:17	10061-02-6	
Diisopropyl ether	**<19.8**	ug/kg	80.0	19.8	1	06/06/22 08:45	06/06/22 15:17	108-20-3	
Ethylbenzene	**<19.0**	ug/kg	80.0	19.0	1	06/06/22 08:45	06/06/22 15:17	100-41-4	
Hexachloro-1,3-butadiene	**<159**	ug/kg	400	159	1	06/06/22 08:45	06/06/22 15:17	87-68-3	
Isopropylbenzene (Cumene)	**<21.6**	ug/kg	80.0	21.6	1	06/06/22 08:45	06/06/22 15:17	98-82-8	
p-Isopropyltoluene	**<24.3**	ug/kg	80.0	24.3	1	06/06/22 08:45	06/06/22 15:17	99-87-6	
Methylene Chloride	**<22.2**	ug/kg	80.0	22.2	1	06/06/22 08:45	06/06/22 15:17	75-09-2	
Methyl-tert-butyl ether	**<23.5**	ug/kg	80.0	23.5	1	06/06/22 08:45	06/06/22 15:17	1634-04-4	
Naphthalene	**<25.0**	ug/kg	400	25.0	1	06/06/22 08:45	06/06/22 15:17	91-20-3	
n-Propylbenzene	**<19.2**	ug/kg	80.0	19.2	1	06/06/22 08:45	06/06/22 15:17	103-65-1	
Styrene	**<20.5**	ug/kg	80.0	20.5	1	06/06/22 08:45	06/06/22 15:17	100-42-5	
1,1,1,2-Tetrachloroethane	**<19.2**	ug/kg	80.0	19.2	1	06/06/22 08:45	06/06/22 15:17	630-20-6	
1,1,2,2-Tetrachloroethane	**<29.0**	ug/kg	80.0	29.0	1	06/06/22 08:45	06/06/22 15:17	79-34-5	
Tetrachloroethene	**<31.1**	ug/kg	80.0	31.1	1	06/06/22 08:45	06/06/22 15:17	127-18-4	
Toluene	**<20.2**	ug/kg	80.0	20.2	1	06/06/22 08:45	06/06/22 15:17	108-88-3	
1,2,3-Trichlorobenzene	**<89.2**	ug/kg	400	89.2	1	06/06/22 08:45	06/06/22 15:17	87-61-6	
1,2,4-Trichlorobenzene	**<65.9**	ug/kg	400	65.9	1	06/06/22 08:45	06/06/22 15:17	120-82-1	
1,1,1-Trichloroethane	**<20.5**	ug/kg	80.0	20.5	1	06/06/22 08:45	06/06/22 15:17	71-55-6	
1,1,2-Trichloroethane	**<29.1**	ug/kg	80.0	29.1	1	06/06/22 08:45	06/06/22 15:17	79-00-5	
Trichloroethene	**<29.9**	ug/kg	80.0	29.9	1	06/06/22 08:45	06/06/22 15:17	79-01-6	
Trichlorofluoromethane	**<23.2**	ug/kg	80.0	23.2	1	06/06/22 08:45	06/06/22 15:17	75-69-4	
1,2,3-Trichloropropane	**<38.9**	ug/kg	80.0	38.9	1	06/06/22 08:45	06/06/22 15:17	96-18-4	
1,2,4-Trimethylbenzene	**<23.9**	ug/kg	80.0	23.9	1	06/06/22 08:45	06/06/22 15:17	95-63-6	
1,3,5-Trimethylbenzene	**<25.8**	ug/kg	80.0	25.8	1	06/06/22 08:45	06/06/22 15:17	108-67-8	
Vinyl chloride	**<16.2**	ug/kg	80.0	16.2	1	06/06/22 08:45	06/06/22 15:17	75-01-4	
m&p-Xylene	**<33.8**	ug/kg	160	33.8	1	06/06/22 08:45	06/06/22 15:17	179601-23-1	
o-Xylene	**<24.0**	ug/kg	80.0	24.0	1	06/06/22 08:45	06/06/22 15:17	95-47-6	
Surrogates									
Toluene-d8 (S)	122	%	69-153		1	06/06/22 08:45	06/06/22 15:17	2037-26-5	
4-Bromofluorobenzene (S)	130	%	68-156		1	06/06/22 08:45	06/06/22 15:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	138	%	71-161		1	06/06/22 08:45	06/06/22 15:17	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**23.1**	%	0.10	0.10	1		06/07/22 14:29		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40245897

QC Batch: 417725 | Analysis Method: EPA 7471
QC Batch Method: EPA 7471 | Analysis Description: 7471 Mercury
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40245897001, 40245897002, 40245897003, 40245897004, 40245897005, 40245897006

METHOD BLANK: 2405268 Matrix: Solid
Associated Lab Samples: 40245897001, 40245897002, 40245897003, 40245897004, 40245897005, 40245897006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	<0.010	0.035	06/09/22 12:34	

LABORATORY CONTROL SAMPLE: 2405269

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.83	0.84	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2405270 2405271

Parameter	Units	40245847001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	<0.013	1	1	1.1	1.0	100	99	85-115	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40245897

QC Batch: 417469
QC Batch Method: EPA 3050B
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40245897001, 40245897002, 40245897003, 40245897004, 40245897005, 40245897006

METHOD BLANK: 2404223 Matrix: Solid
Associated Lab Samples: 40245897001, 40245897002, 40245897003, 40245897004, 40245897005, 40245897006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<1.5	2.5	06/06/22 17:46	
Barium	mg/kg	<0.15	0.50	06/06/22 17:46	
Cadmium	mg/kg	<0.13	0.50	06/06/22 17:46	
Chromium	mg/kg	<0.28	1.0	06/06/22 17:46	
Lead	mg/kg	<0.60	2.0	06/06/22 17:46	
Selenium	mg/kg	<1.3	4.0	06/06/22 17:46	
Silver	mg/kg	<0.31	1.0	06/06/22 17:46	

LABORATORY CONTROL SAMPLE: 2404224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	25	25.5	102	80-120	
Barium	mg/kg	25	25.8	103	80-120	
Cadmium	mg/kg	25	26.3	105	80-120	
Chromium	mg/kg	25	25.9	103	80-120	
Lead	mg/kg	25	26.6	107	80-120	
Selenium	mg/kg	25	26.6	106	80-120	
Silver	mg/kg	12.5	10.8	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2404225 2404226

Parameter	Units	40245897001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	2.3J	28	28.2	28.9	29.8	95	98	75-125	3	20	
Barium	mg/kg	48.9	28	28.2	116	115	239	235	75-125	1	20	M0
Cadmium	mg/kg	0.29J	28	28.2	29.3	29.8	103	105	75-125	2	20	
Chromium	mg/kg	36.2	28	28.2	62.2	63.8	92	98	75-125	3	20	
Lead	mg/kg	4.8	28	28.2	33.1	34.6	101	106	75-125	4	20	
Selenium	mg/kg	<1.5	28	28.2	26.5	27.1	94	96	75-125	2	20	
Silver	mg/kg	<0.35	14	14	12.6	12.8	88	90	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40245897

QC Batch: 417516
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Normal List
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40245897001, 40245897002, 40245897003, 40245897004, 40245897005, 40245897006

METHOD BLANK: 2404340 Matrix: Solid
Associated Lab Samples: 40245897001, 40245897002, 40245897003, 40245897004, 40245897005, 40245897006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<12.0	50.0	06/06/22 09:23	
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	06/06/22 09:23	
1,1,2,2-Tetrachloroethane	ug/kg	<18.1	50.0	06/06/22 09:23	
1,1,2-Trichloroethane	ug/kg	<18.2	50.0	06/06/22 09:23	
1,1-Dichloroethane	ug/kg	<12.8	50.0	06/06/22 09:23	
1,1-Dichloroethene	ug/kg	<16.6	50.0	06/06/22 09:23	
1,1-Dichloropropene	ug/kg	<16.2	50.0	06/06/22 09:23	
1,2,3-Trichlorobenzene	ug/kg	<55.7	250	06/06/22 09:23	
1,2,3-Trichloropropane	ug/kg	<24.3	50.0	06/06/22 09:23	
1,2,4-Trichlorobenzene	ug/kg	<41.2	250	06/06/22 09:23	
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	06/06/22 09:23	
1,2-Dibromo-3-chloropropane	ug/kg	<38.8	250	06/06/22 09:23	
1,2-Dibromoethane (EDB)	ug/kg	<13.7	50.0	06/06/22 09:23	
1,2-Dichlorobenzene	ug/kg	<15.5	50.0	06/06/22 09:23	
1,2-Dichloroethane	ug/kg	<11.5	50.0	06/06/22 09:23	
1,2-Dichloropropane	ug/kg	<11.9	50.0	06/06/22 09:23	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	06/06/22 09:23	
1,3-Dichlorobenzene	ug/kg	<13.7	50.0	06/06/22 09:23	
1,3-Dichloropropane	ug/kg	<10.9	50.0	06/06/22 09:23	
1,4-Dichlorobenzene	ug/kg	<13.7	50.0	06/06/22 09:23	
2,2-Dichloropropane	ug/kg	<13.5	50.0	06/06/22 09:23	
2-Chlorotoluene	ug/kg	<16.2	50.0	06/06/22 09:23	
4-Chlorotoluene	ug/kg	<19.0	50.0	06/06/22 09:23	
Benzene	ug/kg	<11.9	20.0	06/06/22 09:23	
Bromobenzene	ug/kg	<19.5	50.0	06/06/22 09:23	
Bromochloromethane	ug/kg	<13.7	50.0	06/06/22 09:23	
Bromodichloromethane	ug/kg	<11.9	50.0	06/06/22 09:23	
Bromoform	ug/kg	<220	250	06/06/22 09:23	
Bromomethane	ug/kg	<70.1	250	06/06/22 09:23	
Carbon tetrachloride	ug/kg	<11.0	50.0	06/06/22 09:23	
Chlorobenzene	ug/kg	<6.0	50.0	06/06/22 09:23	
Chloroethane	ug/kg	<21.1	250	06/06/22 09:23	
Chloroform	ug/kg	<35.8	250	06/06/22 09:23	
Chloromethane	ug/kg	<19.0	50.0	06/06/22 09:23	
cis-1,2-Dichloroethene	ug/kg	<10.7	50.0	06/06/22 09:23	
cis-1,3-Dichloropropene	ug/kg	<33.0	250	06/06/22 09:23	
Dibromochloromethane	ug/kg	<171	250	06/06/22 09:23	
Dibromomethane	ug/kg	<14.8	50.0	06/06/22 09:23	
Dichlorodifluoromethane	ug/kg	<21.5	50.0	06/06/22 09:23	
Diisopropyl ether	ug/kg	<12.4	50.0	06/06/22 09:23	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40245897

METHOD BLANK: 2404340 Matrix: Solid
Associated Lab Samples: 40245897001, 40245897002, 40245897003, 40245897004, 40245897005, 40245897006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<11.9	50.0	06/06/22 09:23	
Hexachloro-1,3-butadiene	ug/kg	<99.4	250	06/06/22 09:23	
Isopropylbenzene (Cumene)	ug/kg	<13.5	50.0	06/06/22 09:23	
m&p-Xylene	ug/kg	<21.1	100	06/06/22 09:23	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	06/06/22 09:23	
Methylene Chloride	ug/kg	<13.9	50.0	06/06/22 09:23	
n-Butylbenzene	ug/kg	<22.9	50.0	06/06/22 09:23	
n-Propylbenzene	ug/kg	<12.0	50.0	06/06/22 09:23	
Naphthalene	ug/kg	<15.6	250	06/06/22 09:23	
o-Xylene	ug/kg	<15.0	50.0	06/06/22 09:23	
p-Isopropyltoluene	ug/kg	<15.2	50.0	06/06/22 09:23	
sec-Butylbenzene	ug/kg	<12.2	50.0	06/06/22 09:23	
Styrene	ug/kg	<12.8	50.0	06/06/22 09:23	
tert-Butylbenzene	ug/kg	<15.7	50.0	06/06/22 09:23	
Tetrachloroethene	ug/kg	<19.4	50.0	06/06/22 09:23	
Toluene	ug/kg	<12.6	50.0	06/06/22 09:23	
trans-1,2-Dichloroethene	ug/kg	<10.8	50.0	06/06/22 09:23	
trans-1,3-Dichloropropene	ug/kg	<143	250	06/06/22 09:23	
Trichloroethene	ug/kg	<18.7	50.0	06/06/22 09:23	
Trichlorofluoromethane	ug/kg	<14.5	50.0	06/06/22 09:23	
Vinyl chloride	ug/kg	<10.1	50.0	06/06/22 09:23	
1,2-Dichlorobenzene-d4 (S)	%	117	71-161	06/06/22 09:23	
4-Bromofluorobenzene (S)	%	112	68-156	06/06/22 09:23	
Toluene-d8 (S)	%	109	69-153	06/06/22 09:23	

LABORATORY CONTROL SAMPLE: 2404341

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	3260	130	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2640	106	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2460	99	70-130	
1,1-Dichloroethane	ug/kg	2500	2490	100	70-130	
1,1-Dichloroethene	ug/kg	2500	2780	111	77-120	
1,2,4-Trichlorobenzene	ug/kg	2500	2780	111	67-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	3170	127	70-130	
1,2-Dibromoethane (EDB)	ug/kg	2500	2680	107	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2770	111	70-130	
1,2-Dichloroethane	ug/kg	2500	3040	122	70-130	
1,2-Dichloropropane	ug/kg	2500	2340	93	80-123	
1,3-Dichlorobenzene	ug/kg	2500	2720	109	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2690	108	70-130	
Benzene	ug/kg	2500	2530	101	70-130	
Bromodichloromethane	ug/kg	2500	2930	117	70-130	
Bromoform	ug/kg	2500	2910	116	60-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40245897

LABORATORY CONTROL SAMPLE: 2404341

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/kg	2500	2900	116	45-153	
Carbon tetrachloride	ug/kg	2500	3510	141	70-130	L1
Chlorobenzene	ug/kg	2500	2690	108	70-130	
Chloroethane	ug/kg	2500	2120	85	55-160	
Chloroform	ug/kg	2500	2900	116	80-120	
Chloromethane	ug/kg	2500	1870	75	47-130	
cis-1,2-Dichloroethene	ug/kg	2500	2690	107	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2790	111	70-130	
Dibromochloromethane	ug/kg	2500	3110	124	70-130	
Dichlorodifluoromethane	ug/kg	2500	1790	72	16-83	
Ethylbenzene	ug/kg	2500	2540	102	80-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2590	103	70-130	
m&p-Xylene	ug/kg	5000	5000	100	70-130	
Methyl-tert-butyl ether	ug/kg	2500	3090	124	65-130	
Methylene Chloride	ug/kg	2500	2690	108	70-130	
o-Xylene	ug/kg	2500	2570	103	70-130	
Styrene	ug/kg	2500	2640	105	70-130	
Tetrachloroethene	ug/kg	2500	2840	114	70-130	
Toluene	ug/kg	2500	2510	100	80-120	
trans-1,2-Dichloroethene	ug/kg	2500	2860	114	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2780	111	70-130	
Trichloroethene	ug/kg	2500	2780	111	70-130	
Trichlorofluoromethane	ug/kg	2500	2960	118	70-130	
Vinyl chloride	ug/kg	2500	2100	84	59-114	
1,2-Dichlorobenzene-d4 (S)	%			115	71-161	
4-Bromofluorobenzene (S)	%			109	68-156	
Toluene-d8 (S)	%			107	69-153	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2404342 2404343

Parameter	Units	40245783001 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/kg	<14.5	1050	1050	1450	1490	138	142	69-130	3	20	M1
1,1,2,2-Tetrachloroethane	ug/kg	<20.6	1050	1050	1170	1200	112	114	70-130	2	20	
1,1,2-Trichloroethane	ug/kg	<20.7	1050	1050	1100	1180	104	112	70-130	7	20	
1,1-Dichloroethane	ug/kg	<14.5	1050	1050	1080	1120	103	107	70-130	4	20	
1,1-Dichloroethene	ug/kg	<18.9	1050	1050	1130	1250	108	119	55-120	10	22	
1,2,4-Trichlorobenzene	ug/kg	<46.8	1050	1050	1400	1350	132	127	67-130	3	20	M1
1,2-Dibromo-3-chloropropane	ug/kg	<44.1	1050	1050	1380	1330	132	126	70-130	4	22	M1
1,2-Dibromoethane (EDB)	ug/kg	<15.6	1050	1050	1170	1220	111	116	70-130	4	20	
1,2-Dichlorobenzene	ug/kg	<17.6	1050	1050	1240	1250	119	119	70-130	0	20	
1,2-Dichloroethane	ug/kg	<13.1	1050	1050	1290	1350	123	129	70-130	5	20	
1,2-Dichloropropane	ug/kg	<13.5	1050	1050	968	1010	92	96	80-123	4	20	
1,3-Dichlorobenzene	ug/kg	<15.6	1050	1050	1240	1230	118	117	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40245897

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2404342 2404343

Parameter	Units	40245783001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/kg	<15.6	1050	1050	1200	1250	115	119	70-130	4	20	
Benzene	ug/kg	<13.5	1050	1050	1120	1140	107	109	70-130	2	20	
Bromodichloromethane	ug/kg	<13.5	1050	1050	1280	1310	122	125	70-130	2	20	
Bromoform	ug/kg	<250	1050	1050	1360	1380	130	132	60-130	1	20	M1
Bromomethane	ug/kg	<79.7	1050	1050	1270	1250	121	119	38-153	2	20	
Carbon tetrachloride	ug/kg	<12.5	1050	1050	1550	1560	147	149	62-130	1	20	M0
Chlorobenzene	ug/kg	<6.8	1050	1050	1170	1190	111	113	70-130	2	20	
Chloroethane	ug/kg	<24.0	1050	1050	971	1040	93	99	53-160	7	24	
Chloroform	ug/kg	<40.7	1050	1050	1250	1280	119	122	80-120	3	20	M1
Chloromethane	ug/kg	<21.6	1050	1050	828	818	79	78	10-130	1	20	
cis-1,2-Dichloroethene	ug/kg	<12.2	1050	1050	1160	1180	111	112	70-130	1	20	
cis-1,3-Dichloropropene	ug/kg	<37.5	1050	1050	1170	1220	112	117	70-130	4	20	
Dibromochloromethane	ug/kg	<194	1050	1050	1350	1370	128	130	70-130	2	20	
Dichlorodifluoromethane	ug/kg	<24.4	1050	1050	750	772	71	74	10-83	3	31	
Ethylbenzene	ug/kg	<13.5	1050	1050	1110	1130	105	107	80-120	2	20	
Isopropylbenzene (Cumene)	ug/kg	<15.3	1050	1050	1150	1180	109	111	70-130	2	20	
m&p-Xylene	ug/kg	43.6J	2090	2090	2270	2350	106	110	70-130	4	20	
Methyl-tert-butyl ether	ug/kg	<16.7	1050	1050	1430	1400	136	134	66-130	2	20	M1
Methylene Chloride	ug/kg	<15.8	1050	1050	1200	1200	115	114	70-130	1	20	
o-Xylene	ug/kg	24.1J	1050	1050	1130	1190	105	111	70-130	5	20	
Styrene	ug/kg	<14.5	1050	1050	1160	1150	110	110	70-130	0	20	
Tetrachloroethene	ug/kg	<22.1	1050	1050	1260	1270	120	121	69-130	0	20	
Toluene	ug/kg	35.4J	1050	1050	1140	1190	105	110	79-120	5	20	
trans-1,2-Dichloroethene	ug/kg	<12.3	1050	1050	1290	1300	123	124	70-130	1	20	
trans-1,3-Dichloropropene	ug/kg	<163	1050	1050	1170	1180	111	112	69-130	1	20	
Trichloroethene	ug/kg	<21.3	1050	1050	1250	1270	119	122	70-130	2	20	
Trichlorofluoromethane	ug/kg	<16.5	1050	1050	1300	1330	124	127	50-130	3	22	
Vinyl chloride	ug/kg	<11.5	1050	1050	925	925	88	88	26-114	0	20	
1,2-Dichlorobenzene-d4 (S)	%						114	123	71-161			
4-Bromofluorobenzene (S)	%						110	119	68-156			
Toluene-d8 (S)	%						107	116	69-153			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40245897

QC Batch: 417673
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40245897001, 40245897002, 40245897003, 40245897004, 40245897005, 40245897006

SAMPLE DUPLICATE: 2405038

Parameter	Units	40246030002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.8	5.5	4	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 1162-013
Pace Project No.: 40245897

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1q	Analyte was measured in the associated method blank at a concentration of -0.011mg/kg.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1162-013
Pace Project No.: 40245897

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40245897001	**B-26(0-4')**	EPA 3050B	417469	EPA 6010D	417550
40245897002	**B-26(6-8')**	EPA 3050B	417469	EPA 6010D	417550
40245897003	**B-27(0-4')**	EPA 3050B	417469	EPA 6010D	417550
40245897004	**B-27(6-8')**	EPA 3050B	417469	EPA 6010D	417550
40245897005	**B-28(0-4')**	EPA 3050B	417469	EPA 6010D	417550
40245897006	**B-28(6-8')**	EPA 3050B	417469	EPA 6010D	417550
40245897001	**B-26(0-4')**	EPA 7471	417725	EPA 7471	417787
40245897002	**B-26(6-8')**	EPA 7471	417725	EPA 7471	417787
40245897003	**B-27(0-4')**	EPA 7471	417725	EPA 7471	417787
40245897004	**B-27(6-8')**	EPA 7471	417725	EPA 7471	417787
40245897005	**B-28(0-4')**	EPA 7471	417725	EPA 7471	417787
40245897006	**B-28(6-8')**	EPA 7471	417725	EPA 7471	417787
40245897001	**B-26(0-4')**	EPA 5035/5030B	417516	EPA 8260	417517
40245897002	**B-26(6-8')**	EPA 5035/5030B	417516	EPA 8260	417517
40245897003	**B-27(0-4')**	EPA 5035/5030B	417516	EPA 8260	417517
40245897004	**B-27(6-8')**	EPA 5035/5030B	417516	EPA 8260	417517
40245897005	**B-28(0-4')**	EPA 5035/5030B	417516	EPA 8260	417517
40245897006	**B-28(6-8')**	EPA 5035/5030B	417516	EPA 8260	417517
40245897001	**B-26(0-4')**	ASTM D2974-87	417673		
40245897002	**B-26(6-8')**	ASTM D2974-87	417673		
40245897003	**B-27(0-4')**	ASTM D2974-87	417673		
40245897004	**B-27(6-8')**	ASTM D2974-87	417673		
40245897005	**B-28(0-4')**	ASTM D2974-87	417673		
40245897006	**B-28(6-8')**	ASTM D2974-87	417673		

40245897

Robert E. Lee & Associates, Inc.
Engineering | Surveying | Environmental | Ecological
1250 Centennial Centre Blvd. • Hobart, WI 54155 • 920-662-9641 • FAX 920-662-9141

To ensure the proper handling of samples, please see the back for instructions.

CHAIN OF CUSTODY RECORD

COC # **203232**

Client: 1162-013
Project Name:
Project Number: 1162-013 | BID #:

Environmental Program:
☐ LUST ☐ SDWA ☐ WPDES ☐ RCRA ☐ OTHER ____

Requested Turnaround Time
☒ Normal (10-15 DAYS) ☐ Rush
Date Needed: ____
Rushes accepted only w/prior notification

*Preservation Code
N = Nitric Acid (red) O = Sodium Hydroxide
H = Hydrochloric Acid U = Unpreserved (white)
M = Methanol S = Sulfuric Acid (green)

Sampler: Cody Appelkamp

Sample Type (Matrix)
DW = Drinking Water
GW = Groundwater
WW= Wastewater
Soil, Oil, Sludge, Air, Other:

Analyses Required:
(Note special detection limits or methods)

Sample Name	Date	Time		Comp	Grab	Sample Type	No. Of Containers	Filtered? (Y/N)	Preservation *(Code)	VOCs	RCRA Metals	PFAS	Laboratory Sample I.D.	Remarks:
B-26 (0-4')	6-2-2022	1145	A/P			Soil	3		M	X	X	X	001	
B-26 (6-8')		1200	A/P						U	X	X	X	002	
B-27 (0-4')		1100	A/P						U	X	X	X	003	
B-27 (6-8')		1120	A/P							X	X	X	004	
B-28 (0-4')		1000	A/P							X	X	X	005	
B-28 (6-8')		1030	A/P							X	X	X	006	
			A/P							MS/MSD			007 6/3/22 MP	
			A/P											
			A/P											
			A/P											
			A/P											
			A/P											

Report to: Nicole LaPlant
Company: **Robert E. Lee & Associates**
Address: **1250 Centennial Centre Blvd.**
Hobart, WI 54155
Telephone: **920-662-9641**

Invoice to: Nicole LaPlant
Company: **Robert E. Lee & Associates**
Address: **1250 Centennial Centre Blvd.**
Hobart, WI 54155
Telephone: **920-662-9641**

Relinquished By	Date	Time		Received By	Date	Time	
1) REL	6-3-22	0800	A/P	pace	6/3/22	0910	A/P
2) pace	6/3/22	0935	A/P	Maryke Bezuidenhout	6/3/22	0935	A/P
3)			A/P				A/P

Received by Lab ____ A = AM P = PM

Laboratory Receiving Notes
Temperature of Contents ____ °C
Custody Seal Intact ____
Sample Condition ____
Sample pH ____

Sample Preservation Receipt Form

Client Name: REL Project # 40245897

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

Initial when completed: Date/ Time:

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted):

Pace Lab #	Glass								Plastic					Vials						Jars				General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN							
001																																	2.5 / 5 / 10
002																																	2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
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014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☒No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	125 mL poly unpres.

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40245897

40245897

Client Name: REL

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 116 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 0 /Corr: 0.1

Temp Blank Present: ☒ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 6/3/22 Initials: MP
Labeled By Initials: MH

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

Chain of Custody Present:	☒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.
- 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:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S		
Trip Blank Present:	☐Yes ☒No ☐N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: Date/Time:

Comments/ Resolution:

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

Page 22 of 22

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, LLC.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Brian Basten
PACE Wisconsin
1241 Bellevue Street
Green Bay WI 54302

REPORT OF LABORATORY ANALYSIS FOR PFAAs

Report Information:

Pace Project #: 10611374
Sample Receipt Date: 06/04/2022
Client Project #: 40245897 Robert E Lee
Client Sub PO #: N/A
State Cert #: 999407970

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PFAA Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

June 29, 2022

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
June 29, 2022

Report of Laboratory Analysis

DISCUSSION

This report presents the results from the analyses performed on six samples submitted by a representative of Pace Wisconsin. The samples were analyzed for thirty-three perfluorinated compounds using Wisconsin DNR guidance. Reporting limits were set to MDL levels.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank was free of the target perfluorinated compounds at the reporting limits. This indicates that the sample processing procedures did not significantly contribute to the analyte content determined for the sample material.

A laboratory spike sample was also prepared with the sample batch using clean reference matrix that had been fortified with native standards. The recovery results were within the method limits. This spike indicates that extraction performed as expected. Matrix spikes were prepared with the sample batch using sample material from a separate project; results from that analysis will be provided upon request.

Diminished extracted internal standard (EIS) recovery ("R" flagged) were present in samples, however, the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard.

Selected samples have recoveries less than 1% for selected EIS. The results for these native compounds should be considered estimated.

The four injection internal standards (13C4 PFOA, 13C4 PFOS, 13C2_PFDA, and 13C2_PFHxA) pass for each analysis in the batch verifying that the instrument detector is working as expected.

Values were flagged "I" where incorrect isotope ratios were obtained. Results that were below the calibration range were flagged "J".

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Mississippi	MN00064
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.

REPORT OF LABORATORY ANALYSIS

Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
B-26(0-4')	40245897001	06/04/2022	Solid
B-26(6-8')	40245897002	06/04/2022	Solid
B-27(0-4')	40245897003	06/04/2022	Solid
B-27(6-8')	40245897004	06/04/2022	Solid
B-28(0-4')	40245897005	06/04/2022	Solid
B-28(6-8')	40245897006	06/04/2022	Solid

REPORT OF LABORATORY ANALYSIS

Internal Transfer Chain of Custody

[X] Samples Pre-Logged into eCOC.

State Of Origin: WI
Cert. Needed: [X] Yes [ ] No

Workorder: 40245897 Workorder Name: 1162-013

Owner Received Date: 6/3/2022 Results Requested By: 6/17/2022

Pace Analytical
www.pacelabs.com

WO#: 10611374
10611374

Report To	Subcontract To
Brian Basten Pace Analytical Green Bay 1241 Bellevue Street Suite 9 Green Bay, WI 54302 Phone (920)469-2436	Pace Analytical Minnesota 1700 Elm Street SE Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: PFAS WI 33	LAB USE ONLY
1	B-26(0-4')	PS	6/2/2022 11:45	40245897001	Solid	1	X	001
2	B-26(6-8')	PS	6/2/2022 12:20	40245897002	Solid	1	X	002
3	B-27(0-4')	PS	6/2/2022 11:00	40245897003	Solid	1	X	003
4	B-27(6-8')	PS	6/2/2022 11:20	40245897004	Solid	1	X	004
5	B-28(0-4')	PS	6/2/2022 10:00	40245897005	Solid	1	X	005
6	B-28(6-8')	PS	6/2/2022 10:30	40245897006	Solid	1	X	006

Transfers	Released By	Date/Time	Received By	Date/Time
1	Anthony Werdel	6/3/22 1700	[illegible]	6/4/22 1015
2				
3				

Comments

Cooler Temperature on Receipt 4.9 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

T2

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40245897001	B-26(0-4')	SW3535	33329	PFAS-36	Q220623C_02
40245897002	B-26(6-8')	SW3535	33329	PFAS-36	Q220623C_02
40245897003	B-27(0-4')	SW3535	33329	PFAS-36	Q220623C_02
40245897004	B-27(6-8')	SW3535	33329	PFAS-36	Q220627A_00
40245897005	B-28(0-4')	SW3535	33329	PFAS-36	Q220623C_02
40245897006	B-28(6-8')	SW3535	33329	PFAS-36	Q220623C_02

Pace Analytical Services, LLC
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Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interferencepresent

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

Appendix B

Sample Analysis Summary

Pace Analytical Services, LLC
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-26(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897001	Total Amount Extracted	5.11g
Lab File ID	Q220623C_028	Percent Moisture	11.5569%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:45	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Compound	Concentration (ug/Kg)	QL (ug/Kg)	RL (ug/Kg)	MDL (ug/Kg)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	0.09	0.02	0.02	1	375-22-4		06/24/2022 06:29
PFPeA	ND	0.09	0.02	0.02	1	2706-90-3		06/24/2022 06:29
HFPO-DA	ND	0.09	0.02	0.02	1	13252-13-6		06/24/2022 06:29
PFBS	ND	0.08	0.02	0.02	1	375-73-5		06/24/2022 06:29
PFHxA	ND	0.09	0.02	0.02	1	307-24-4		06/24/2022 06:29
4:2 FTS	ND	0.09	0.03	0.03	1	757124-72-4		06/24/2022 06:29
PFPeS	ND	0.09	0.01	0.01	1	2706-91-4		06/24/2022 06:29
PFHpA	ND	0.09	0.02	0.02	1	375-85-9		06/24/2022 06:29
DONA	ND	0.09	0.03	0.03	1	919005-14-4		06/24/2022 06:29
PFHxS	0.026 J	0.08	0.02	0.02	1	355-46-4		06/24/2022 06:29
PFOA	0.048 J	0.09	0.02	0.02	1	335-67-1		06/24/2022 06:29
6:2 FTS	ND	0.09	0.03	0.03	1	27619-97-2		06/24/2022 06:29
PFHpS	0.034 J	0.09	0.02	0.02	1	375-92-8		06/24/2022 06:29
PFNA	0.035 J	0.09	0.02	0.02	1	375-95-1		06/24/2022 06:29
PFOSAm	ND	0.09	0.02	0.02	1	754-91-6		06/24/2022 06:29
PFOS	2.1	0.09	0.02	0.02	1	1763-23-1		06/24/2022 06:29
MeFOSA	ND	0.09	0.02	0.02	1	31506-32-8		06/24/2022 06:29
PFDA	ND	0.09	0.02	0.02	1	335-76-2		06/24/2022 06:29
EtFOSAm	ND	0.09	0.02	0.02	1	4151-50-2		06/24/2022 06:29
8:2 FTS	0.096	0.09	0.02	0.02	1	39108-34-4		06/24/2022 06:29
9-Cl-PF3ON	ND	0.09	0.01	0.01	1	756426-58-1		06/24/2022 06:29
PFNS	ND	0.09	0.01	0.01	1	68259-12-1		06/24/2022 06:29
PFUnDA	ND	0.09	0.02	0.02	1	2058-94-8		06/24/2022 06:29
NMeFOSAA	ND	0.09	0.02	0.02	1	2355-31-9		06/24/2022 06:29
NEtFOSAA	ND	0.09	0.02	0.02	1	2991-50-6		06/24/2022 06:29
PFDS	ND	0.09	0.02	0.02	1	335-77-3		06/24/2022 06:29
PFDOA	ND	0.09	0.02	0.02	1	307-55-1		06/24/2022 06:29
MeFOSE	ND	0.09	0.02	0.02	1	24448-09-7		06/24/2022 06:29
EtFOSE	ND	0.09	0.02	0.02	1	1691-99-2		06/24/2022 06:29
11-Cl-PF3OUdS	ND	0.09	0.01	0.01	1	763051-92-9		06/24/2022 06:29
PFTrDA	ND	0.09	0.02	0.02	1	72629-94-8		06/24/2022 06:29
PFDoS	ND	0.09	0.02	0.02	1	79780-39-5		06/24/2022 06:29
PFTDA	ND	0.09	0.03	0.03	1	376-06-7		06/24/2022 06:29

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Phone: 612.607.1700
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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-26(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897001	Total Amount Extracted	5.11g
Lab File ID	Q220623C_028	Percent Moisture	11.5569%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:45	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	0.98	0.96	98	50-150		06/24/2022 06:29
13C4_PFOA	0.98	1.1	115	50-150		06/24/2022 06:29
13C2_PFDA	0.98	1.3	132	50-150		06/24/2022 06:29
13C4_PFOS	0.94	0.89	95	50-150		06/24/2022 06:29

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	0.98	0.80	81	25-150		06/24/2022 06:29
13C5_PFPeA	0.98	0.85	87	25-150		06/24/2022 06:29
13C3_PFBS	0.91	0.94	104	25-150		06/24/2022 06:29
13C2_4:2FTS	0.92	0.74	81	25-150		06/24/2022 06:29
13C5_PFHxA	0.98	0.79	81	25-150		06/24/2022 06:29
13C4_PFHpA	0.98	0.82	83	25-150		06/24/2022 06:29
13C3_PFHxS	0.93	0.77	83	25-150		06/24/2022 06:29
13C2_6:2FTS	0.93	0.81	87	25-150		06/24/2022 06:29
13C8_PFOA	0.98	0.79	81	25-150		06/24/2022 06:29
13C9_PFNA	0.98	0.69	70	25-150		06/24/2022 06:29
13C8_PFOS	0.94	0.74	79	25-150		06/24/2022 06:29
13C2_8:2FTS	0.94	0.63	67	25-150		06/24/2022 06:29
13C6_PFDA	0.98	0.84	86	25-150		06/24/2022 06:29
d3-MeFOSAA	0.98	0.67	68	25-150		06/24/2022 06:29
13C8_PFOSA	0.98	0.22	**22**	25-150	R	06/24/2022 06:29
d5-EtFOSAA	0.98	0.57	59	25-150		06/24/2022 06:29
13C7_PFUdA	0.98	0.77	79	25-150		06/24/2022 06:29
13C2_PFDoA	0.98	0.75	77	25-150		06/24/2022 06:29
13C2_PFTeDA	0.98	0.79	81	25-150		06/24/2022 06:29
13C3_HFPO-DA	0.98	0.86	88	25-150		06/24/2022 06:29
d7-N-MeFOSE	0.98	0.098	10	10-150		06/24/2022 06:29
d9-N-EtFOSE	0.98	0.13	13	10-150		06/24/2022 06:29
d3-N-MeFOSA	0.98	0.00045	**0**	10-150	R	06/24/2022 06:29
d5-N-EtFOSA	0.98	0.00070	**0**	10-150	R	06/24/2022 06:29

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-26(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897001	Total Amount Extracted	5.11g
Lab File ID	Q220623C_028	Percent Moisture	11.5569%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:45	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	6.19	6.16	1231		06/24/2022 06:29
13C4_PFOA	N/A	N/A	7.49	7.44	1471		06/24/2022 06:29
13C2_PFDA	N/A	N/A	8.77	8.74	1164		06/24/2022 06:29
13C4_PFOS	N/A	N/A	9.19	9.16	1298		06/24/2022 06:29

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.72	4.73	1731		06/24/2022 06:29
13C5_PFPeA	N/A	N/A	5.52	5.51	1835		06/24/2022 06:29
13C3_PFBS	N/A	N/A	6.42	6.41	1868		06/24/2022 06:29
13C2_4:2FTS	N/A	N/A	5.91	5.91	328		06/24/2022 06:29
13C5_PFHxA	N/A	N/A	6.19	6.17	1139		06/24/2022 06:29
13C4_PFHpA	N/A	N/A	6.84	6.80	994		06/24/2022 06:29
13C3_PFHxS	N/A	N/A	7.85	7.84	951		06/24/2022 06:29
13C2_6:2FTS	N/A	N/A	7.16	7.16	412		06/24/2022 06:29
13C8_PFOA	N/A	N/A	7.49	7.43	1579		06/24/2022 06:29
13C9_PFNA	N/A	N/A	8.13	8.13	1574		06/24/2022 06:29
13C8_PFOS	N/A	N/A	9.19	9.17	900		06/24/2022 06:29
13C2_8:2FTS	N/A	N/A	8.42	8.38	18527		06/24/2022 06:29
13C6_PFDA	N/A	N/A	8.78	8.75	1421		06/24/2022 06:29
d3-MeFOSAA	N/A	N/A	8.69	8.65	1571		06/24/2022 06:29
13C8_PFOSA	N/A	N/A	11.28	11.25	971	R	06/24/2022 06:29
d5-EtFOSAA	N/A	N/A	8.99	8.95	401		06/24/2022 06:29
13C7_PFUdA	N/A	N/A	9.43	9.40	1426		06/24/2022 06:29
13C2_PFDoA	N/A	N/A	10.07	10.05	747		06/24/2022 06:29
13C2_PFTeDA	N/A	N/A	11.34	11.30	903		06/24/2022 06:29
13C3_HFPO-DA	N/A	N/A	6.46	6.43	1224		06/24/2022 06:29
d7-N-MeFOSE	N/A	N/A	12.97	12.95	124		06/24/2022 06:29
d9-N-EtFOSE	N/A	N/A	13.45	13.43	213		06/24/2022 06:29
d3-N-MeFOSA	N/A	N/A	13.15	13.16	27	R	06/24/2022 06:29
d5-N-EtFOSA	N/A	N/A	13.60	13.60	21	R	06/24/2022 06:29

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-26(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897001	Total Amount Extracted	5.11g
Lab File ID	Q220623C_028	Percent Moisture	11.5569%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:45	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.75	4.77	ND		06/24/2022 06:29
PFPeA	N/A	N/A	5.53	5.54	ND		06/24/2022 06:29
HFPO-DA	0.00	0.33	0.00	6.44	ND		06/24/2022 06:29
PFBS	0.32	0.29	6.42	6.40	ND		06/24/2022 06:29
PFHxA	0.00	0.09	0.00	6.17	ND		06/24/2022 06:29
4:2 FTS	0.00	0.96	0.00	5.91	ND		06/24/2022 06:29
PFPeS	0.46	0.41	7.17	7.12	ND		06/24/2022 06:29
PFHpA	0.18	0.50	6.84	6.81	ND		06/24/2022 06:29
DONA	0.00	0.45	0.00	7.04	ND		06/24/2022 06:29
PFHxS	0.40	0.33	7.86	7.82	256	J	06/24/2022 06:29
PFOA	0.31	0.37	7.50	7.44	46	J	06/24/2022 06:29
6:2 FTS	2.40	1.10	7.16	7.12	ND		06/24/2022 06:29
PFHpS	0.51	0.43	8.54	8.51	112	J	06/24/2022 06:29
PFNA	0.19	0.22	8.14	8.10	106	J	06/24/2022 06:29
PFOSAm	N/A	N/A	11.29	11.26	ND		06/24/2022 06:29
PFOS	0.24	0.20	9.12	9.18	178		06/24/2022 06:29
MeFOSA	0.00	0.48	0.00	13.17	ND		06/24/2022 06:29
PFDA	0.00	0.16	0.00	8.75	ND		06/24/2022 06:29
EtFOSAm	0.00	0.39	0.00	13.62	ND		06/24/2022 06:29
8:2 FTS	1.00	1.80	8.42	8.38	3180		06/24/2022 06:29
9-Cl-PF3ON	0.00	0.04	0.00	9.66	ND		06/24/2022 06:29
PFNS	0.00	0.23	0.00	9.83	ND		06/24/2022 06:29
PFUnDA	0.00	0.19	0.00	9.40	ND		06/24/2022 06:29
NMeFOSAA	0.00	0.72	0.00	8.66	ND		06/24/2022 06:29
NEtFOSAA	0.00	0.48	0.00	8.96	ND		06/24/2022 06:29
PFDS	0.00	0.23	0.00	10.47	ND		06/24/2022 06:29
PFDOA	0.00	0.18	0.00	10.05	ND		06/24/2022 06:29
MeFOSE	N/A	N/A	0.00	13.01	ND		06/24/2022 06:29
EtFOSE	0.00	0.00	0.00	13.49	ND		06/24/2022 06:29
11-Cl-PF3OUdS	0.00	0.03	0.00	10.92	ND		06/24/2022 06:29
PFTrDA	0.00	0.20	0.00	10.69	ND		06/24/2022 06:29
PFDoS	0.00	0.25	0.00	11.64	ND		06/24/2022 06:29
PFTDA	0.00	0.15	0.00	11.30	ND		06/24/2022 06:29

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-26(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897002	Total Amount Extracted	5.31g
Lab File ID	Q220623C_029	Percent Moisture	21.1278%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 12:20	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Compound	Concentration (ug/Kg)	QL (ug/Kg)	RL (ug/Kg)	MDL (ug/Kg)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	0.09	0.02	0.02	1	375-22-4		06/24/2022 06:48
PFPeA	ND	0.09	0.02	0.02	1	2706-90-3		06/24/2022 06:48
HFPO-DA	ND	0.09	0.02	0.02	1	13252-13-6		06/24/2022 06:48
PFBS	ND	0.08	0.02	0.02	1	375-73-5		06/24/2022 06:48
PFHxA	ND	0.09	0.02	0.02	1	307-24-4		06/24/2022 06:48
4:2 FTS	ND	0.08	0.03	0.03	1	757124-72-4		06/24/2022 06:48
PFPeS	ND	0.08	0.01	0.01	1	2706-91-4		06/24/2022 06:48
PFHpA	ND	0.09	0.02	0.02	1	375-85-9		06/24/2022 06:48
DONA	ND	0.08	0.03	0.03	1	919005-14-4		06/24/2022 06:48
PFHxS	0.053 J	0.08	0.02	0.02	1	355-46-4		06/24/2022 06:48
PFOA	0.043 J	0.09	0.02	0.02	1	335-67-1		06/24/2022 06:48
6:2 FTS	0.039 J	0.09	0.03	0.03	1	27619-97-2		06/24/2022 06:48
PFHpS	0.034 J	0.09	0.02	0.02	1	375-92-8		06/24/2022 06:48
PFNA	ND	0.09	0.02	0.02	1	375-95-1		06/24/2022 06:48
PFOSAm	ND	0.09	0.02	0.02	1	754-91-6		06/24/2022 06:48
PFOS	2.0	0.08	0.02	0.02	1	1763-23-1		06/24/2022 06:48
MeFOSA	ND	0.09	0.02	0.02	1	31506-32-8		06/24/2022 06:48
PFDA	ND	0.09	0.02	0.02	1	335-76-2		06/24/2022 06:48
EtFOSAm	ND	0.09	0.02	0.02	1	4151-50-2		06/24/2022 06:48
8:2 FTS	0.042 J	0.09	0.02	0.02	1	39108-34-4		06/24/2022 06:48
9-Cl-PF3ON	ND	0.08	0.01	0.01	1	756426-58-1		06/24/2022 06:48
PFNS	ND	0.09	0.01	0.01	1	68259-12-1		06/24/2022 06:48
PFUnDA	ND	0.09	0.02	0.02	1	2058-94-8		06/24/2022 06:48
NMeFOSAA	ND	0.09	0.02	0.02	1	2355-31-9		06/24/2022 06:48
NEtFOSAA	ND	0.09	0.02	0.02	1	2991-50-6		06/24/2022 06:48
PFDS	ND	0.09	0.02	0.02	1	335-77-3		06/24/2022 06:48
PFDOA	ND	0.09	0.02	0.02	1	307-55-1		06/24/2022 06:48
MeFOSE	ND	0.09	0.02	0.02	1	24448-09-7		06/24/2022 06:48
EtFOSE	ND	0.09	0.02	0.02	1	1691-99-2		06/24/2022 06:48
11-Cl-PF3OUdS	ND	0.08	0.01	0.01	1	763051-92-9		06/24/2022 06:48
PFTrDA	ND	0.09	0.02	0.02	1	72629-94-8		06/24/2022 06:48
PFDoS	ND	0.09	0.02	0.02	1	79780-39-5		06/24/2022 06:48
PFTDA	ND	0.09	0.03	0.03	1	376-06-7		06/24/2022 06:48

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-26(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897002	Total Amount Extracted	5.31g
Lab File ID	Q220623C_029	Percent Moisture	21.1278%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 12:20	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	0.94	1.3	134	50-150		06/24/2022 06:48
13C4_PFOA	0.94	1.1	121	50-150		06/24/2022 06:48
13C2_PFDA	0.94	1.4	150	50-150		06/24/2022 06:48
13C4_PFOS	0.90	0.99	110	50-150		06/24/2022 06:48

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	0.94	1.0	107	25-150		06/24/2022 06:48
13C5_PFPeA	0.94	0.99	105	25-150		06/24/2022 06:48
13C3_PFBS	0.88	0.94	107	25-150		06/24/2022 06:48
13C2_4:2FTS	0.88	0.84	95	25-150		06/24/2022 06:48
13C5_PFHxA	0.94	0.89	94	25-150		06/24/2022 06:48
13C4_PFHpA	0.94	0.98	104	25-150		06/24/2022 06:48
13C3_PFHxS	0.89	0.83	93	25-150		06/24/2022 06:48
13C2_6:2FTS	0.89	0.91	101	25-150		06/24/2022 06:48
13C8_PFOA	0.94	0.82	87	25-150		06/24/2022 06:48
13C9_PFNA	0.94	0.81	86	25-150		06/24/2022 06:48
13C8_PFOS	0.90	0.88	98	25-150		06/24/2022 06:48
13C2_8:2FTS	0.90	0.61	68	25-150		06/24/2022 06:48
13C6_PFDA	0.94	0.89	95	25-150		06/24/2022 06:48
d3-MeFOSAA	0.94	0.93	98	25-150		06/24/2022 06:48
13C8_PFOSA	0.94	0.51	54	25-150		06/24/2022 06:48
d5-EtFOSAA	0.94	0.71	75	25-150		06/24/2022 06:48
13C7_PFUdA	0.94	0.85	90	25-150		06/24/2022 06:48
13C2_PFDoA	0.94	0.82	87	25-150		06/24/2022 06:48
13C2_PFTeDA	0.94	0.95	101	25-150		06/24/2022 06:48
13C3_HFPO-DA	0.94	0.96	102	25-150		06/24/2022 06:48
d7-N-MeFOSE	0.94	0.28	29	10-150		06/24/2022 06:48
d9-N-EtFOSE	0.94	0.28	30	10-150		06/24/2022 06:48
d3-N-MeFOSA	0.94	0.017	2	10-150	R	06/24/2022 06:48
d5-N-EtFOSA	0.94	0.019	2	10-150	R	06/24/2022 06:48

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-26(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897002	Total Amount Extracted	5.31g
Lab File ID	Q220623C_029	Percent Moisture	21.1278%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 12:20	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	6.19	6.16	1542		06/24/2022 06:48
13C4_PFOA	N/A	N/A	7.49	7.44	1799		06/24/2022 06:48
13C2_PFDA	N/A	N/A	8.78	8.74	1812		06/24/2022 06:48
13C4_PFOS	N/A	N/A	9.20	9.16	1027		06/24/2022 06:48

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.73	4.73	2104		06/24/2022 06:48
13C5_PFPeA	N/A	N/A	5.53	5.51	1770		06/24/2022 06:48
13C3_PFBS	N/A	N/A	6.42	6.41	902		06/24/2022 06:48
13C2_4:2FTS	N/A	N/A	5.92	5.91	396		06/24/2022 06:48
13C5_PFHxA	N/A	N/A	6.19	6.17	1632		06/24/2022 06:48
13C4_PFHpA	N/A	N/A	6.85	6.80	1137		06/24/2022 06:48
13C3_PFHxS	N/A	N/A	7.86	7.84	1250		06/24/2022 06:48
13C2_6:2FTS	N/A	N/A	7.16	7.16	876		06/24/2022 06:48
13C8_PFOA	N/A	N/A	7.49	7.43	1150		06/24/2022 06:48
13C9_PFNA	N/A	N/A	8.13	8.13	1660		06/24/2022 06:48
13C8_PFOS	N/A	N/A	9.20	9.17	847		06/24/2022 06:48
13C2_8:2FTS	N/A	N/A	8.42	8.38	32511		06/24/2022 06:48
13C6_PFDA	N/A	N/A	8.78	8.75	1334		06/24/2022 06:48
d3-MeFOSAA	N/A	N/A	8.69	8.65	1334		06/24/2022 06:48
13C8_PFOSA	N/A	N/A	11.29	11.25	897		06/24/2022 06:48
d5-EtFOSAA	N/A	N/A	9.00	8.95	575		06/24/2022 06:48
13C7_PFUdA	N/A	N/A	9.43	9.40	1363		06/24/2022 06:48
13C2_PFDoA	N/A	N/A	10.09	10.05	718		06/24/2022 06:48
13C2_PFTeDA	N/A	N/A	11.36	11.30	979		06/24/2022 06:48
13C3_HFPO-DA	N/A	N/A	6.46	6.43	1506		06/24/2022 06:48
d7-N-MeFOSE	N/A	N/A	12.98	12.95	342		06/24/2022 06:48
d9-N-EtFOSE	N/A	N/A	13.46	13.43	275		06/24/2022 06:48
d3-N-MeFOSA	N/A	N/A	13.18	13.16	1352	R	06/24/2022 06:48
d5-N-EtFOSA	N/A	N/A	13.63	13.60	183	R	06/24/2022 06:48

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-26(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897002	Total Amount Extracted	5.31g
Lab File ID	Q220623C_029	Percent Moisture	21.1278%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 12:20	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.77	4.77	ND		06/24/2022 06:48
PFPeA	N/A	N/A	5.54	5.54	ND		06/24/2022 06:48
HFPO-DA	0.00	0.33	0.00	6.44	ND		06/24/2022 06:48
PFBS	0.33	0.29	6.42	6.40	ND		06/24/2022 06:48
PFHxA	0.08	0.09	6.20	6.17	ND		06/24/2022 06:48
4:2 FTS	0.00	0.96	0.00	5.91	ND		06/24/2022 06:48
PFPeS	0.39	0.41	7.17	7.12	ND		06/24/2022 06:48
PFHpA	0.61	0.50	6.85	6.81	ND		06/24/2022 06:48
DONA	0.00	0.45	7.09	7.04	ND		06/24/2022 06:48
PFHxS	0.34	0.33	7.86	7.82	385	J	06/24/2022 06:48
PFOA	0.32	0.37	7.50	7.44	57	J	06/24/2022 06:48
6:2 FTS	1.50	1.10	7.16	7.12	35	J	06/24/2022 06:48
PFHpS	0.45	0.43	8.55	8.51	192	J	06/24/2022 06:48
PFNA	0.00	0.22	8.14	8.10	ND		06/24/2022 06:48
PFOSAm	N/A	N/A	11.31	11.26	ND		06/24/2022 06:48
PFOS	0.19	0.20	9.00	9.18	217		06/24/2022 06:48
MeFOSA	0.00	0.48	0.00	13.17	ND		06/24/2022 06:48
PFDA	0.00	0.16	0.00	8.75	ND		06/24/2022 06:48
EtFOSAm	0.00	0.39	0.00	13.62	ND		06/24/2022 06:48
8:2 FTS	1.30	1.80	8.42	8.38	4403	J	06/24/2022 06:48
9-Cl-PF3ON	0.00	0.04	0.00	9.66	ND		06/24/2022 06:48
PFNS	0.00	0.23	0.00	9.83	ND		06/24/2022 06:48
PFUnDA	0.00	0.19	0.00	9.40	ND		06/24/2022 06:48
NMeFOSAA	0.00	0.72	0.00	8.66	ND		06/24/2022 06:48
NEtFOSAA	0.00	0.48	0.00	8.96	ND		06/24/2022 06:48
PFDS	0.00	0.23	0.00	10.47	ND		06/24/2022 06:48
PFDOA	0.00	0.18	0.00	10.05	ND		06/24/2022 06:48
MeFOSE	N/A	N/A	13.00	13.01	ND		06/24/2022 06:48
EtFOSE	0.00	0.00	0.00	13.49	ND		06/24/2022 06:48
11-Cl-PF3OUdS	0.00	0.03	0.00	10.92	ND		06/24/2022 06:48
PFTrDA	0.00	0.20	0.00	10.69	ND		06/24/2022 06:48
PFDoS	0.00	0.25	0.00	11.64	ND		06/24/2022 06:48
PFTDA	0.00	0.15	10.96	11.30	ND		06/24/2022 06:48

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-27(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897003	Total Amount Extracted	5.18g
Lab File ID	Q220623C_030	Percent Moisture	15.9874%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:00	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Compound	Concentration (ug/Kg)	QL (ug/Kg)	RL (ug/Kg)	MDL (ug/Kg)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	0.09	0.02	0.02	1	375-22-4		06/24/2022 07:06
PFPeA	ND	0.09	0.02	0.02	1	2706-90-3		06/24/2022 07:06
HFPO-DA	ND	0.09	0.02	0.02	1	13252-13-6		06/24/2022 07:06
PFBS	ND	0.08	0.02	0.02	1	375-73-5		06/24/2022 07:06
PFHxA	ND	0.09	0.02	0.02	1	307-24-4		06/24/2022 07:06
4:2 FTS	ND	0.09	0.03	0.03	1	757124-72-4		06/24/2022 07:06
PFPeS	ND	0.09	0.01	0.01	1	2706-91-4		06/24/2022 07:06
PFHpA	ND	0.09	0.02	0.02	1	375-85-9		06/24/2022 07:06
DONA	ND	0.09	0.03	0.03	1	919005-14-4		06/24/2022 07:06
PFHxS	ND	0.08	0.02	0.02	1	355-46-4		06/24/2022 07:06
PFOA	0.059	0.09	0.02	0.02	1	335-67-1	IJ	06/24/2022 07:06
6:2 FTS	ND	0.09	0.03	0.03	1	27619-97-2		06/24/2022 07:06
PFHpS	ND	0.09	0.02	0.02	1	375-92-8		06/24/2022 07:06
PFNA	ND	0.09	0.02	0.02	1	375-95-1		06/24/2022 07:06
PFOSAm	ND	0.09	0.02	0.02	1	754-91-6		06/24/2022 07:06
PFOS	0.087	0.08	0.02	0.02	1	1763-23-1	J	06/24/2022 07:06
MeFOSA	ND	0.09	0.02	0.02	1	31506-32-8		06/24/2022 07:06
PFDA	ND	0.09	0.02	0.02	1	335-76-2		06/24/2022 07:06
EtFOSAm	ND	0.09	0.02	0.02	1	4151-50-2		06/24/2022 07:06
8:2 FTS	ND	0.09	0.02	0.02	1	39108-34-4		06/24/2022 07:06
9-Cl-PF3ON	ND	0.09	0.01	0.01	1	756426-58-1		06/24/2022 07:06
PFNS	ND	0.09	0.01	0.01	1	68259-12-1		06/24/2022 07:06
PFUnDA	ND	0.09	0.02	0.02	1	2058-94-8		06/24/2022 07:06
NMeFOSAA	ND	0.09	0.02	0.02	1	2355-31-9		06/24/2022 07:06
NEtFOSAA	ND	0.09	0.02	0.02	1	2991-50-6		06/24/2022 07:06
PFDS	ND	0.09	0.02	0.02	1	335-77-3		06/24/2022 07:06
PFDOA	ND	0.09	0.02	0.02	1	307-55-1		06/24/2022 07:06
MeFOSE	ND	0.09	0.02	0.02	1	24448-09-7		06/24/2022 07:06
EtFOSE	ND	0.09	0.02	0.02	1	1691-99-2		06/24/2022 07:06
11-Cl-PF3OUdS	ND	0.09	0.01	0.01	1	763051-92-9		06/24/2022 07:06
PFTrDA	ND	0.09	0.02	0.02	1	72629-94-8		06/24/2022 07:06
PFDoS	ND	0.09	0.02	0.02	1	79780-39-5		06/24/2022 07:06
PFTDA	ND	0.09	0.03	0.03	1	376-06-7		06/24/2022 07:06

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-27(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897003	Total Amount Extracted	5.18g
Lab File ID	Q220623C_030	Percent Moisture	15.9874%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:00	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	0.96	0.97	101	50-150		06/24/2022 07:06
13C4_PFOA	0.96	1.1	111	50-150		06/24/2022 07:06
13C2_PFDA	0.96	1.1	117	50-150		06/24/2022 07:06
13C4_PFOS	0.92	0.96	104	50-150		06/24/2022 07:06

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	0.96	0.81	84	25-150		06/24/2022 07:06
13C5_PFPeA	0.96	0.81	84	25-150		06/24/2022 07:06
13C3_PFBS	0.90	0.91	102	25-150		06/24/2022 07:06
13C2_4:2FTS	0.90	0.90	100	25-150		06/24/2022 07:06
13C5_PFHxA	0.96	0.75	77	25-150		06/24/2022 07:06
13C4_PFHpA	0.96	0.73	75	25-150		06/24/2022 07:06
13C3_PFHxS	0.91	0.76	83	25-150		06/24/2022 07:06
13C2_6:2FTS	0.92	1.1	122	25-150		06/24/2022 07:06
13C8_PFOA	0.96	0.77	80	25-150		06/24/2022 07:06
13C9_PFNA	0.96	0.73	76	25-150		06/24/2022 07:06
13C8_PFOS	0.92	0.75	81	25-150		06/24/2022 07:06
13C2_8:2FTS	0.92	0.67	72	25-150		06/24/2022 07:06
13C6_PFDA	0.96	0.68	71	25-150		06/24/2022 07:06
d3-MeFOSAA	0.96	0.78	81	25-150		06/24/2022 07:06
13C8_PFOSA	0.96	0.29	30	25-150		06/24/2022 07:06
d5-EtFOSAA	0.96	0.72	74	25-150		06/24/2022 07:06
13C7_PFUdA	0.96	0.82	85	25-150		06/24/2022 07:06
13C2_PFDoA	0.96	0.88	91	25-150		06/24/2022 07:06
13C2_PFTeDA	0.96	0.98	102	25-150		06/24/2022 07:06
13C3_HFPO-DA	0.96	0.81	84	25-150		06/24/2022 07:06
d7-N-MeFOSE	0.96	0.12	12	10-150		06/24/2022 07:06
d9-N-EtFOSE	0.96	0.15	15	10-150		06/24/2022 07:06
d3-N-MeFOSA	0.96	0.0051	1	10-150	R	06/24/2022 07:06
d5-N-EtFOSA	0.96	0.0063	1	10-150	R	06/24/2022 07:06

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-27(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897003	Total Amount Extracted	5.18g
Lab File ID	Q220623C_030	Percent Moisture	15.9874%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:00	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	6.19	6.16	1476		06/24/2022 07:06
13C4_PFOA	N/A	N/A	7.49	7.44	1740		06/24/2022 07:06
13C2_PFDA	N/A	N/A	8.77	8.74	2003		06/24/2022 07:06
13C4_PFOS	N/A	N/A	9.19	9.16	895		06/24/2022 07:06

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.72	4.73	1910		06/24/2022 07:06
13C5_PFPeA	N/A	N/A	5.52	5.51	1327		06/24/2022 07:06
13C3_PFBS	N/A	N/A	6.41	6.41	844		06/24/2022 07:06
13C2_4:2FTS	N/A	N/A	5.91	5.91	359		06/24/2022 07:06
13C5_PFHxA	N/A	N/A	6.19	6.17	1338		06/24/2022 07:06
13C4_PFHpA	N/A	N/A	6.84	6.80	1014		06/24/2022 07:06
13C3_PFHxS	N/A	N/A	7.85	7.84	1265		06/24/2022 07:06
13C2_6:2FTS	N/A	N/A	7.16	7.16	589		06/24/2022 07:06
13C8_PFOA	N/A	N/A	7.48	7.43	1336		06/24/2022 07:06
13C9_PFNA	N/A	N/A	8.13	8.13	1688		06/24/2022 07:06
13C8_PFOS	N/A	N/A	9.19	9.17	863		06/24/2022 07:06
13C2_8:2FTS	N/A	N/A	8.41	8.38	1073		06/24/2022 07:06
13C6_PFDA	N/A	N/A	8.77	8.75	1942		06/24/2022 07:06
d3-MeFOSAA	N/A	N/A	8.69	8.65	1839		06/24/2022 07:06
13C8_PFOSA	N/A	N/A	11.28	11.25	1063		06/24/2022 07:06
d5-EtFOSAA	N/A	N/A	8.99	8.95	652		06/24/2022 07:06
13C7_PFUdA	N/A	N/A	9.42	9.40	1748		06/24/2022 07:06
13C2_PFDoA	N/A	N/A	10.08	10.05	835		06/24/2022 07:06
13C2_PFTeDA	N/A	N/A	11.34	11.30	972		06/24/2022 07:06
13C3_HFPO-DA	N/A	N/A	6.46	6.43	964		06/24/2022 07:06
d7-N-MeFOSE	N/A	N/A	12.97	12.95	171		06/24/2022 07:06
d9-N-EtFOSE	N/A	N/A	13.45	13.43	225		06/24/2022 07:06
d3-N-MeFOSA	N/A	N/A	13.19	13.16	350	R	06/24/2022 07:06
d5-N-EtFOSA	N/A	N/A	13.62	13.60	143	R	06/24/2022 07:06

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-27(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897003	Total Amount Extracted	5.18g
Lab File ID	Q220623C_030	Percent Moisture	15.9874%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:00	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.78	4.77	ND		06/24/2022 07:06
PFPeA	N/A	N/A	5.53	5.54	ND		06/24/2022 07:06
HFPO-DA	2.20	0.33	6.72	6.44	ND		06/24/2022 07:06
PFBS	0.22	0.29	6.41	6.40	ND		06/24/2022 07:06
PFHxA	0.28	0.09	6.20	6.17	ND		06/24/2022 07:06
4:2 FTS	0.00	0.96	0.00	5.91	ND		06/24/2022 07:06
PFPeS	0.82	0.41	7.16	7.12	ND		06/24/2022 07:06
PFHpA	0.55	0.50	6.85	6.81	ND		06/24/2022 07:06
DONA	0.00	0.45	7.08	7.04	ND		06/24/2022 07:06
PFHxS	0.31	0.33	7.86	7.82	ND		06/24/2022 07:06
PFOA	0.17	0.37	7.49	7.44	37	IJ	06/24/2022 07:06
6:2 FTS	0.66	1.10	7.17	7.12	ND		06/24/2022 07:06
PFHpS	0.00	0.43	8.29	8.51	ND		06/24/2022 07:06
PFNA	0.00	0.22	0.00	8.10	ND		06/24/2022 07:06
PFOSAm	N/A	N/A	11.29	11.26	ND		06/24/2022 07:06
PFOS	0.18	0.20	8.94	9.18	109	J	06/24/2022 07:06
MeFOSA	0.00	0.48	0.00	13.17	ND		06/24/2022 07:06
PFDA	0.00	0.16	0.00	8.75	ND		06/24/2022 07:06
EtFOSAm	0.00	0.39	0.00	13.62	ND		06/24/2022 07:06
8:2 FTS	0.00	1.80	0.00	8.38	ND		06/24/2022 07:06
9-Cl-PF3ON	0.00	0.04	0.00	9.66	ND		06/24/2022 07:06
PFNS	0.00	0.23	0.00	9.83	ND		06/24/2022 07:06
PFUnDA	0.00	0.19	0.00	9.40	ND		06/24/2022 07:06
NMeFOSAA	0.00	0.72	0.00	8.66	ND		06/24/2022 07:06
NEtFOSAA	0.00	0.48	0.00	8.96	ND		06/24/2022 07:06
PFDS	0.00	0.23	0.00	10.47	ND		06/24/2022 07:06
PFDOA	0.00	0.18	0.00	10.05	ND		06/24/2022 07:06
MeFOSE	N/A	N/A	0.00	13.01	ND		06/24/2022 07:06
EtFOSE	0.00	0.00	0.00	13.49	ND		06/24/2022 07:06
11-Cl-PF3OUdS	0.00	0.03	0.00	10.92	ND		06/24/2022 07:06
PFTrDA	0.00	0.20	0.00	10.69	ND		06/24/2022 07:06
PFDoS	0.00	0.25	0.00	11.64	ND		06/24/2022 07:06
PFTDA	0.00	0.15	0.00	11.30	ND		06/24/2022 07:06

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-27(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897004	Total Amount Extracted	5.08g
Lab File ID	Q220627A_019	Percent Moisture	18.7339%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:20	CCal File	Q220627A_008
Received	06/04/2022 10:15	Ending CCal File	Q220627A_020
		Blank File	Q220623C_015

Compound	Concentration (ug/Kg)	QL (ug/Kg)	RL (ug/Kg)	MDL (ug/Kg)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	0.09	0.02	0.02	1	375-22-4		06/27/2022 14:07
PFPeA	ND	0.09	0.02	0.02	1	2706-90-3		06/27/2022 14:07
HFPO-DA	ND	0.09	0.02	0.02	1	13252-13-6		06/27/2022 14:07
PFBS	0.057 J	0.08	0.02	0.02	1	375-73-5		06/27/2022 14:07
PFHxA	ND	0.09	0.03	0.03	1	307-24-4		06/27/2022 14:07
4:2 FTS	ND	0.09	0.03	0.03	1	757124-72-4		06/27/2022 14:07
PFPeS	ND	0.09	0.01	0.01	1	2706-91-4		06/27/2022 14:07
PFHpA	ND	0.09	0.02	0.02	1	375-85-9		06/27/2022 14:07
DONA	ND	0.09	0.03	0.03	1	919005-14-4		06/27/2022 14:07
PFHxS	0.038 J	0.09	0.02	0.02	1	355-46-4		06/27/2022 14:07
PFOA	0.054 J	0.09	0.02	0.02	1	335-67-1		06/27/2022 14:07
6:2 FTS	ND	0.09	0.03	0.03	1	27619-97-2		06/27/2022 14:07
PFHpS	ND	0.09	0.02	0.02	1	375-92-8		06/27/2022 14:07
PFNA	ND	0.09	0.02	0.02	1	375-95-1		06/27/2022 14:07
PFOSAm	ND	0.09	0.02	0.02	1	754-91-6		06/27/2022 14:07
PFOS	0.14	0.09	0.02	0.02	1	1763-23-1		06/27/2022 14:07
MeFOSA	ND	0.09	0.02	0.02	1	31506-32-8		06/27/2022 14:07
PFDA	ND	0.09	0.02	0.02	1	335-76-2		06/27/2022 14:07
EtFOSAm	ND	0.09	0.02	0.02	1	4151-50-2		06/27/2022 14:07
8:2 FTS	ND	0.09	0.02	0.02	1	39108-34-4		06/27/2022 14:07
9-Cl-PF3ON	ND	0.09	0.01	0.01	1	756426-58-1		06/27/2022 14:07
PFNS	ND	0.09	0.01	0.01	1	68259-12-1		06/27/2022 14:07
PFUnDA	ND	0.09	0.02	0.02	1	2058-94-8		06/27/2022 14:07
NMeFOSAA	ND	0.09	0.02	0.02	1	2355-31-9		06/27/2022 14:07
NEtFOSAA	ND	0.09	0.02	0.02	1	2991-50-6		06/27/2022 14:07
PFDS	ND	0.09	0.02	0.02	1	335-77-3		06/27/2022 14:07
PFDOA	ND	0.09	0.02	0.02	1	307-55-1		06/27/2022 14:07
MeFOSE	ND	0.09	0.02	0.02	1	24448-09-7		06/27/2022 14:07
EtFOSE	ND	0.09	0.02	0.02	1	1691-99-2		06/27/2022 14:07
11-Cl-PF3OUdS	ND	0.09	0.01	0.01	1	763051-92-9		06/27/2022 14:07
PFTrDA	ND	0.09	0.02	0.02	1	72629-94-8		06/27/2022 14:07
PFDoS	ND	0.09	0.02	0.02	1	79780-39-5		06/27/2022 14:07
PFTDA	ND	0.09	0.03	0.03	1	376-06-7		06/27/2022 14:07

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-27(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897004	Total Amount Extracted	5.08g
Lab File ID	Q220627A_019	Percent Moisture	18.7339%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:20	CCal File	Q220627A_008
Received	06/04/2022 10:15	Ending CCal File	Q220627A_020
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	0.99	1.2	117	50-150		06/27/2022 14:07
13C4_PFOA	0.99	1.1	112	50-150		06/27/2022 14:07
13C2_PFDA	0.99	1.1	108	50-150		06/27/2022 14:07
13C4_PFOS	0.94	1.1	114	50-150		06/27/2022 14:07

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	0.99	0.65	66	50-150		06/27/2022 14:07
13C5_PFPeA	0.99	0.73	74	50-150		06/27/2022 14:07
13C3_PFBS	0.92	0.76	83	50-150		06/27/2022 14:07
13C2_4:2FTS	0.92	0.59	64	50-150		06/27/2022 14:07
13C5_PFHxA	0.99	0.75	76	50-150		06/27/2022 14:07
13C4_PFHpA	0.99	0.73	74	50-150		06/27/2022 14:07
13C3_PFHxS	0.93	0.67	72	50-150		06/27/2022 14:07
13C2_6:2FTS	0.93	0.72	77	50-150		06/27/2022 14:07
13C8_PFOA	0.99	0.68	69	50-150		06/27/2022 14:07
13C9_PFNA	0.99	0.75	76	50-150		06/27/2022 14:07
13C8_PFOS	0.94	0.75	79	50-150		06/27/2022 14:07
13C2_8:2FTS	0.94	0.67	71	50-150		06/27/2022 14:07
13C6_PFDA	0.99	0.74	76	50-150		06/27/2022 14:07
d3-MeFOSAA	0.99	0.49	50	50-150		06/27/2022 14:07
13C8_PFOSA	0.99	0.18	**19**	50-150	R	06/27/2022 14:07
d5-EtFOSAA	0.99	0.58	59	50-150		06/27/2022 14:07
13C7_PFUdA	0.99	0.71	72	50-150		06/27/2022 14:07
13C2_PFDoA	0.99	0.64	65	50-150		06/27/2022 14:07
13C2_PFTeDA	0.99	0.60	61	50-150		06/27/2022 14:07
13C3_HFPO-DA	0.99	0.66	67	50-150		06/27/2022 14:07
d7-N-MeFOSE	0.99	0.053	**5**	10-150	R	06/27/2022 14:07
d9-N-EtFOSE	0.99	0.058	**6**	10-150	R	06/27/2022 14:07
d3-N-MeFOSA	0.99	0.0057	**1**	10-150	R	06/27/2022 14:07
d5-N-EtFOSA	0.99	0.0040	**0**	10-150	R	06/27/2022 14:07

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-27(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897004	Total Amount Extracted	5.08g
Lab File ID	Q220627A_019	Percent Moisture	18.7339%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:20	CCal File	Q220627A_008
Received	06/04/2022 10:15	Ending CCal File	Q220627A_020
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	6.20	6.16	1362		06/27/2022 14:07
13C4_PFOA	N/A	N/A	7.51	7.50	1669		06/27/2022 14:07
13C2_PFDA	N/A	N/A	8.81	8.74	2451		06/27/2022 14:07
13C4_PFOS	N/A	N/A	9.23	9.23	1117		06/27/2022 14:07

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.73	4.73	2530		06/27/2022 14:07
13C5_PFPeA	N/A	N/A	5.53	5.53	1588		06/27/2022 14:07
13C3_PFBS	N/A	N/A	6.43	6.39	795		06/27/2022 14:07
13C2_4:2FTS	N/A	N/A	5.93	5.90	350		06/27/2022 14:07
13C5_PFHxA	N/A	N/A	6.21	6.17	1562		06/27/2022 14:07
13C4_PFHpA	N/A	N/A	6.86	6.83	1321		06/27/2022 14:07
13C3_PFHxS	N/A	N/A	7.88	7.89	1124		06/27/2022 14:07
13C2_6:2FTS	N/A	N/A	7.18	7.15	528		06/27/2022 14:07
13C8_PFOA	N/A	N/A	7.51	7.52	1380		06/27/2022 14:07
13C9_PFNA	N/A	N/A	8.16	8.12	1354		06/27/2022 14:07
13C8_PFOS	N/A	N/A	9.23	9.17	777		06/27/2022 14:07
13C2_8:2FTS	N/A	N/A	8.44	8.38	941		06/27/2022 14:07
13C6_PFDA	N/A	N/A	8.81	8.75	1455		06/27/2022 14:07
d3-MeFOSAA	N/A	N/A	8.72	8.65	1056		06/27/2022 14:07
13C8_PFOSA	N/A	N/A	11.31	11.25	960	R	06/27/2022 14:07
d5-EtFOSAA	N/A	N/A	9.02	8.95	434		06/27/2022 14:07
13C7_PFUdA	N/A	N/A	9.46	9.40	1671		06/27/2022 14:07
13C2_PFDoA	N/A	N/A	10.12	10.05	707		06/27/2022 14:07
13C2_PFTeDA	N/A	N/A	11.39	11.30	811		06/27/2022 14:07
13C3_HFPO-DA	N/A	N/A	6.48	6.43	55		06/27/2022 14:07
d7-N-MeFOSE	N/A	N/A	13.00	12.95	77	R	06/27/2022 14:07
d9-N-EtFOSE	N/A	N/A	13.48	13.43	136	R	06/27/2022 14:07
d3-N-MeFOSA	N/A	N/A	13.21	13.16	11377	R	06/27/2022 14:07
d5-N-EtFOSA	N/A	N/A	13.64	13.64	138	R	06/27/2022 14:07

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-27(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897004	Total Amount Extracted	5.08g
Lab File ID	Q220627A_019	Percent Moisture	18.7339%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 11:20	CCal File	Q220627A_008
Received	06/04/2022 10:15	Ending CCal File	Q220627A_020
		Blank File	Q220623C_015

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.76	4.77	ND		06/27/2022 14:07
PFPeA	N/A	N/A	5.54	5.54	ND		06/27/2022 14:07
HFPO-DA	0.00	0.47	0.00	6.44	ND		06/27/2022 14:07
PFBS	0.34	0.47	6.43	6.40	221	J	06/27/2022 14:07
PFHxA	0.00	0.07	0.00	6.17	ND		06/27/2022 14:07
4:2 FTS	0.00	1.00	0.00	5.91	ND		06/27/2022 14:07
PFPeS	0.43	0.51	7.18	7.18	ND		06/27/2022 14:07
PFHpA	0.24	0.52	6.87	6.81	ND		06/27/2022 14:07
DONA	0.00	0.59	0.00	7.04	ND		06/27/2022 14:07
PFHxS	0.43	0.34	7.88	7.82	186	J	06/27/2022 14:07
PFOA	0.26	0.32	7.51	7.44	49	J	06/27/2022 14:07
6:2 FTS	0.00	0.96	0.00	7.12	ND		06/27/2022 14:07
PFHpS	0.40	0.31	8.57	8.51	ND		06/27/2022 14:07
PFNA	0.00	0.26	0.00	8.10	ND		06/27/2022 14:07
PFOSAm	N/A	N/A	11.31	11.26	ND		06/27/2022 14:07
PFOS	0.17	0.28	9.24	9.18	114		06/27/2022 14:07
MeFOSA	0.00	0.50	0.00	13.17	ND		06/27/2022 14:07
PFDA	0.00	0.16	0.00	8.83	ND		06/27/2022 14:07
EtFOSAm	0.00	0.43	0.00	13.62	ND		06/27/2022 14:07
8:2 FTS	0.00	1.40	0.00	8.38	ND		06/27/2022 14:07
9-Cl-PF3ON	0.00	0.04	0.00	9.66	ND		06/27/2022 14:07
PFNS	0.00	0.20	0.00	9.83	ND		06/27/2022 14:07
PFUnDA	0.00	0.14	0.00	9.40	ND		06/27/2022 14:07
NMeFOSAA	0.00	0.58	0.00	8.66	ND		06/27/2022 14:07
NEtFOSAA	0.00	0.54	0.00	8.96	ND		06/27/2022 14:07
PFDS	0.00	0.28	0.00	10.47	ND		06/27/2022 14:07
PFDOA	0.00	0.18	0.00	10.05	ND		06/27/2022 14:07
MeFOSE	N/A	N/A	0.00	13.04	ND		06/27/2022 14:07
EtFOSE	0.00	0.00	0.00	13.40	ND		06/27/2022 14:07
11-Cl-PF3OUdS	0.00	0.02	0.00	10.92	ND		06/27/2022 14:07
PFTrDA	0.00	0.20	0.00	10.69	ND		06/27/2022 14:07
PFDoS	0.00	0.22	0.00	11.64	ND		06/27/2022 14:07
PFTDA	0.00	0.18	0.00	11.30	ND		06/27/2022 14:07

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-28(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897005	Total Amount Extracted	5.04g
Lab File ID	Q220623C_032	Percent Moisture	8.0286%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 10:00	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Compound	Concentration (ug/Kg)	QL (ug/Kg)	RL (ug/Kg)	MDL (ug/Kg)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	0.09	0.02	0.02	1	375-22-4		06/24/2022 07:44
PFPeA	ND	0.09	0.02	0.02	1	2706-90-3		06/24/2022 07:44
HFPO-DA	ND	0.09	0.02	0.02	1	13252-13-6		06/24/2022 07:44
PFBS	ND	0.08	0.02	0.02	1	375-73-5		06/24/2022 07:44
PFHxA	ND	0.09	0.03	0.03	1	307-24-4		06/24/2022 07:44
4:2 FTS	ND	0.09	0.03	0.03	1	757124-72-4		06/24/2022 07:44
PFPeS	ND	0.09	0.01	0.01	1	2706-91-4		06/24/2022 07:44
PFHpA	ND	0.09	0.02	0.02	1	375-85-9		06/24/2022 07:44
DONA	ND	0.09	0.03	0.03	1	919005-14-4		06/24/2022 07:44
PFHxS	ND	0.09	0.02	0.02	1	355-46-4		06/24/2022 07:44
PFOA	ND	0.09	0.02	0.02	1	335-67-1		06/24/2022 07:44
6:2 FTS	ND	0.09	0.03	0.03	1	27619-97-2		06/24/2022 07:44
PFHpS	ND	0.09	0.02	0.02	1	375-92-8		06/24/2022 07:44
PFNA	ND	0.09	0.02	0.02	1	375-95-1		06/24/2022 07:44
PFOSAm	ND	0.09	0.02	0.02	1	754-91-6		06/24/2022 07:44
PFOS	0.48	0.09	0.02	0.02	1	1763-23-1		06/24/2022 07:44
MeFOSA	ND	0.09	0.02	0.02	1	31506-32-8		06/24/2022 07:44
PFDA	ND	0.09	0.02	0.02	1	335-76-2		06/24/2022 07:44
EtFOSAm	ND	0.09	0.02	0.02	1	4151-50-2		06/24/2022 07:44
8:2 FTS	ND	0.09	0.02	0.02	1	39108-34-4		06/24/2022 07:44
9-Cl-PF3ON	ND	0.09	0.01	0.01	1	756426-58-1		06/24/2022 07:44
PFNS	ND	0.09	0.01	0.01	1	68259-12-1		06/24/2022 07:44
PFUnDA	ND	0.09	0.02	0.02	1	2058-94-8		06/24/2022 07:44
NMeFOSAA	ND	0.09	0.02	0.02	1	2355-31-9		06/24/2022 07:44
NEtFOSAA	ND	0.09	0.02	0.02	1	2991-50-6		06/24/2022 07:44
PFDS	ND	0.09	0.02	0.02	1	335-77-3		06/24/2022 07:44
PFDOA	ND	0.09	0.02	0.02	1	307-55-1		06/24/2022 07:44
MeFOSE	ND	0.09	0.02	0.02	1	24448-09-7		06/24/2022 07:44
EtFOSE	ND	0.09	0.02	0.02	1	1691-99-2		06/24/2022 07:44
11-Cl-PF3OUdS	ND	0.09	0.01	0.01	1	763051-92-9		06/24/2022 07:44
PFTrDA	ND	0.09	0.02	0.02	1	72629-94-8		06/24/2022 07:44
PFDoS	ND	0.09	0.03	0.03	1	79780-39-5		06/24/2022 07:44
PFTDA	ND	0.09	0.03	0.03	1	376-06-7		06/24/2022 07:44

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-28(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897005	Total Amount Extracted	5.04g
Lab File ID	Q220623C_032	Percent Moisture	8.0286%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 10:00	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	0.99	1.2	124	50-150		06/24/2022 07:44
13C4_PFOA	0.99	1.3	127	50-150		06/24/2022 07:44
13C2_PFDA	0.99	1.5	148	50-150		06/24/2022 07:44
13C4_PFOS	0.95	1.2	123	50-150		06/24/2022 07:44

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	0.99	1.00	101	25-150		06/24/2022 07:44
13C5_PFPeA	0.99	1.1	108	25-150		06/24/2022 07:44
13C3_PFBS	0.92	1.3	146	25-150		06/24/2022 07:44
13C2_4:2FTS	0.93	1.1	118	25-150		06/24/2022 07:44
13C5_PFHxA	0.99	1.0	102	25-150		06/24/2022 07:44
13C4_PFHpA	0.99	1.0	104	25-150		06/24/2022 07:44
13C3_PFHxS	0.94	1.1	112	25-150		06/24/2022 07:44
13C2_6:2FTS	0.94	1.1	118	25-150		06/24/2022 07:44
13C8_PFOA	0.99	0.98	98	25-150		06/24/2022 07:44
13C9_PFNA	0.99	0.98	99	25-150		06/24/2022 07:44
13C8_PFOS	0.95	1.1	112	25-150		06/24/2022 07:44
13C2_8:2FTS	0.95	0.94	99	25-150		06/24/2022 07:44
13C6_PFDA	0.99	1.0	105	25-150		06/24/2022 07:44
d3-MeFOSAA	0.99	1.4	137	25-150		06/24/2022 07:44
13C8_PFOSA	0.99	0.82	83	25-150		06/24/2022 07:44
d5-EtFOSAA	0.99	1.2	121	25-150		06/24/2022 07:44
13C7_PFUdA	0.99	1.0	103	25-150		06/24/2022 07:44
13C2_PFDoA	0.99	1.3	129	25-150		06/24/2022 07:44
13C2_PFTeDA	0.99	1.4	141	25-150		06/24/2022 07:44
13C3_HFPO-DA	0.99	1.0	103	25-150		06/24/2022 07:44
d7-N-MeFOSE	0.99	0.57	57	10-150		06/24/2022 07:44
d9-N-EtFOSE	0.99	0.58	59	10-150		06/24/2022 07:44
d3-N-MeFOSA	0.99	0.11	11	10-150		06/24/2022 07:44
d5-N-EtFOSA	0.99	0.16	16	10-150		06/24/2022 07:44

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-28(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897005	Total Amount Extracted	5.04g
Lab File ID	Q220623C_032	Percent Moisture	8.0286%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 10:00	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	6.19	6.16	1318		06/24/2022 07:44
13C4_PFOA	N/A	N/A	7.49	7.44	1314		06/24/2022 07:44
13C2_PFDA	N/A	N/A	8.78	8.74	1093		06/24/2022 07:44
13C4_PFOS	N/A	N/A	9.21	9.16	377		06/24/2022 07:44

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.72	4.73	2659		06/24/2022 07:44
13C5_PFPeA	N/A	N/A	5.53	5.51	1356		06/24/2022 07:44
13C3_PFBS	N/A	N/A	6.41	6.41	461		06/24/2022 07:44
13C2_4:2FTS	N/A	N/A	5.91	5.91	410		06/24/2022 07:44
13C5_PFHxA	N/A	N/A	6.19	6.17	1206		06/24/2022 07:44
13C4_PFHpA	N/A	N/A	6.85	6.80	1120		06/24/2022 07:44
13C3_PFHxS	N/A	N/A	7.86	7.84	881		06/24/2022 07:44
13C2_6:2FTS	N/A	N/A	7.16	7.16	364		06/24/2022 07:44
13C8_PFOA	N/A	N/A	7.49	7.43	1655		06/24/2022 07:44
13C9_PFNA	N/A	N/A	8.14	8.13	1474		06/24/2022 07:44
13C8_PFOS	N/A	N/A	9.21	9.17	545		06/24/2022 07:44
13C2_8:2FTS	N/A	N/A	8.42	8.38	557		06/24/2022 07:44
13C6_PFDA	N/A	N/A	8.78	8.75	1179		06/24/2022 07:44
d3-MeFOSAA	N/A	N/A	8.70	8.65	8817		06/24/2022 07:44
13C8_PFOSA	N/A	N/A	11.30	11.25	1086		06/24/2022 07:44
d5-EtFOSAA	N/A	N/A	9.00	8.95	266		06/24/2022 07:44
13C7_PFUdA	N/A	N/A	9.44	9.40	1799		06/24/2022 07:44
13C2_PFDoA	N/A	N/A	10.10	10.05	748		06/24/2022 07:44
13C2_PFTeDA	N/A	N/A	11.36	11.30	1176		06/24/2022 07:44
13C3_HFPO-DA	N/A	N/A	6.46	6.43	1256		06/24/2022 07:44
d7-N-MeFOSE	N/A	N/A	12.98	12.95	239		06/24/2022 07:44
d9-N-EtFOSE	N/A	N/A	13.46	13.43	264		06/24/2022 07:44
d3-N-MeFOSA	N/A	N/A	13.18	13.16	230		06/24/2022 07:44
d5-N-EtFOSA	N/A	N/A	13.63	13.60	420		06/24/2022 07:44

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-28(0-4')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897005	Total Amount Extracted	5.04g
Lab File ID	Q220623C_032	Percent Moisture	8.0286%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 10:00	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.92	4.77	ND		06/24/2022 07:44
PFPeA	N/A	N/A	5.53	5.54	ND		06/24/2022 07:44
HFPO-DA	0.00	0.33	0.00	6.44	ND		06/24/2022 07:44
PFBS	0.32	0.29	6.42	6.40	ND		06/24/2022 07:44
PFHxA	0.21	0.09	6.20	6.17	ND		06/24/2022 07:44
4:2 FTS	0.00	0.96	0.00	5.91	ND		06/24/2022 07:44
PFPeS	0.67	0.41	7.16	7.12	ND		06/24/2022 07:44
PFHpA	0.30	0.50	6.83	6.81	ND		06/24/2022 07:44
DONA	0.00	0.45	7.09	7.04	ND		06/24/2022 07:44
PFHxS	0.27	0.33	7.86	7.82	ND		06/24/2022 07:44
PFOA	0.25	0.37	7.50	7.44	ND		06/24/2022 07:44
6:2 FTS	0.00	1.10	0.00	7.12	ND		06/24/2022 07:44
PFHpS	0.36	0.43	8.56	8.51	ND		06/24/2022 07:44
PFNA	0.00	0.22	8.15	8.10	ND		06/24/2022 07:44
PFOSAm	N/A	N/A	11.32	11.26	ND		06/24/2022 07:44
PFOS	0.22	0.20	9.22	9.18	173		06/24/2022 07:44
MeFOSA	0.00	0.48	13.58	13.17	ND		06/24/2022 07:44
PFDA	0.00	0.16	0.00	8.75	ND		06/24/2022 07:44
EtFOSAm	0.00	0.39	0.00	13.62	ND		06/24/2022 07:44
8:2 FTS	0.00	1.80	0.00	8.38	ND		06/24/2022 07:44
9-Cl-PF3ON	0.00	0.04	0.00	9.66	ND		06/24/2022 07:44
PFNS	0.00	0.23	9.86	9.83	ND		06/24/2022 07:44
PFUnDA	0.00	0.19	0.00	9.40	ND		06/24/2022 07:44
NMeFOSAA	0.00	0.72	0.00	8.66	ND		06/24/2022 07:44
NEtFOSAA	0.00	0.48	0.00	8.96	ND		06/24/2022 07:44
PFDS	0.00	0.23	10.53	10.47	ND		06/24/2022 07:44
PFDOA	0.00	0.18	0.00	10.05	ND		06/24/2022 07:44
MeFOSE	N/A	N/A	13.40	13.01	ND		06/24/2022 07:44
EtFOSE	0.00	0.00	0.00	13.49	ND		06/24/2022 07:44
11-Cl-PF3OUdS	0.00	0.03	0.00	10.92	ND		06/24/2022 07:44
PFTrDA	0.00	0.20	0.00	10.69	ND		06/24/2022 07:44
PFDoS	0.00	0.25	0.00	11.64	ND		06/24/2022 07:44
PFTDA	0.00	0.15	11.36	11.30	ND		06/24/2022 07:44

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-28(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897006	Total Amount Extracted	5.19g
Lab File ID	Q220623C_033	Percent Moisture	23.0973%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 10:30	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Compound	Concentration (ug/Kg)	QL (ug/Kg)	RL (ug/Kg)	MDL (ug/Kg)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	0.09	0.02	0.02	1	375-22-4		06/24/2022 08:02
PFPeA	ND	0.09	0.02	0.02	1	2706-90-3		06/24/2022 08:02
HFPO-DA	ND	0.09	0.02	0.02	1	13252-13-6		06/24/2022 08:02
PFBS	0.098	I	0.08	0.02	0.02	1	375-73-5	06/24/2022 08:02
PFHxA	ND	0.09	0.02	0.02	1	307-24-4		06/24/2022 08:02
4:2 FTS	ND	0.09	0.03	0.03	1	757124-72-4		06/24/2022 08:02
PFPeS	ND	0.09	0.01	0.01	1	2706-91-4		06/24/2022 08:02
PFHpA	ND	0.09	0.02	0.02	1	375-85-9		06/24/2022 08:02
DONA	ND	0.09	0.03	0.03	1	919005-14-4		06/24/2022 08:02
PFHxS	0.053	J	0.08	0.02	0.02	1	355-46-4	06/24/2022 08:02
PFOA	0.044	J	0.09	0.02	0.02	1	335-67-1	06/24/2022 08:02
6:2 FTS	ND	0.09	0.03	0.03	1	27619-97-2		06/24/2022 08:02
PFHpS	ND	0.09	0.02	0.02	1	375-92-8		06/24/2022 08:02
PFNA	ND	0.09	0.02	0.02	1	375-95-1		06/24/2022 08:02
PFOSAm	ND	0.09	0.02	0.02	1	754-91-6		06/24/2022 08:02
PFOS	0.54	0.08	0.02	0.02	1	1763-23-1		06/24/2022 08:02
MeFOSA	ND	0.09	0.02	0.02	1	31506-32-8		06/24/2022 08:02
PFDA	ND	0.09	0.02	0.02	1	335-76-2		06/24/2022 08:02
EtFOSAm	ND	0.09	0.02	0.02	1	4151-50-2		06/24/2022 08:02
8:2 FTS	ND	0.09	0.02	0.02	1	39108-34-4		06/24/2022 08:02
9-Cl-PF3ON	ND	0.09	0.01	0.01	1	756426-58-1		06/24/2022 08:02
PFNS	ND	0.09	0.01	0.01	1	68259-12-1		06/24/2022 08:02
PFUnDA	ND	0.09	0.02	0.02	1	2058-94-8		06/24/2022 08:02
NMeFOSAA	ND	0.09	0.02	0.02	1	2355-31-9		06/24/2022 08:02
NEtFOSAA	ND	0.09	0.02	0.02	1	2991-50-6		06/24/2022 08:02
PFDS	ND	0.09	0.02	0.02	1	335-77-3		06/24/2022 08:02
PFDOA	ND	0.09	0.02	0.02	1	307-55-1		06/24/2022 08:02
MeFOSE	ND	0.09	0.02	0.02	1	24448-09-7		06/24/2022 08:02
EtFOSE	ND	0.09	0.02	0.02	1	1691-99-2		06/24/2022 08:02
11-Cl-PF3OUdS	ND	0.09	0.01	0.01	1	763051-92-9		06/24/2022 08:02
PFTrDA	ND	0.09	0.02	0.02	1	72629-94-8		06/24/2022 08:02
PFDoS	ND	0.09	0.02	0.02	1	79780-39-5		06/24/2022 08:02
PFTDA	ND	0.09	0.03	0.03	1	376-06-7		06/24/2022 08:02

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-28(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897006	Total Amount Extracted	5.19g
Lab File ID	Q220623C_033	Percent Moisture	23.0973%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 10:30	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	0.96	1.0	105	50-150		06/24/2022 08:02
13C4_PFOA	0.96	1.2	122	50-150		06/24/2022 08:02
13C2_PFDA	0.96	1.2	122	50-150		06/24/2022 08:02
13C4_PFOS	0.92	0.97	105	50-150		06/24/2022 08:02

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	0.96	0.87	90	50-150		06/24/2022 08:02
13C5_PFPeA	0.96	0.90	94	50-150		06/24/2022 08:02
13C3_PFBS	0.90	0.99	110	50-150		06/24/2022 08:02
13C2_4:2FTS	0.90	1.1	119	50-150		06/24/2022 08:02
13C5_PFHxA	0.96	0.77	80	50-150		06/24/2022 08:02
13C4_PFHpA	0.96	0.91	94	50-150		06/24/2022 08:02
13C3_PFHxS	0.91	0.83	91	50-150		06/24/2022 08:02
13C2_6:2FTS	0.91	1.1	119	50-150		06/24/2022 08:02
13C8_PFOA	0.96	0.84	87	50-150		06/24/2022 08:02
13C9_PFNA	0.96	0.82	85	50-150		06/24/2022 08:02
13C8_PFOS	0.92	0.83	90	50-150		06/24/2022 08:02
13C2_8:2FTS	0.92	1.0	109	50-150		06/24/2022 08:02
13C6_PFDA	0.96	0.75	78	50-150		06/24/2022 08:02
d3-MeFOSAA	0.96	1.0	106	50-150		06/24/2022 08:02
13C8_PFOSA	0.96	0.54	56	50-150		06/24/2022 08:02
d5-EtFOSAA	0.96	1.0	109	50-150		06/24/2022 08:02
13C7_PFUdA	0.96	0.90	93	50-150		06/24/2022 08:02
13C2_PFDoA	0.96	1.0	105	50-150		06/24/2022 08:02
13C2_PFTeDA	0.96	0.99	103	50-150		06/24/2022 08:02
13C3_HFPO-DA	0.96	0.92	96	50-150		06/24/2022 08:02
d7-N-MeFOSE	0.96	0.17	17	10-150		06/24/2022 08:02
d9-N-EtFOSE	0.96	0.20	21	10-150		06/24/2022 08:02
d3-N-MeFOSA	0.96	0.012	1	10-150	R	06/24/2022 08:02
d5-N-EtFOSA	0.96	0.015	2	10-150	R	06/24/2022 08:02

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-28(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897006	Total Amount Extracted	5.19g
Lab File ID	Q220623C_033	Percent Moisture	23.0973%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 10:30	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	6.19	6.16	1112		06/24/2022 08:02
13C4_PFOA	N/A	N/A	7.49	7.44	1216		06/24/2022 08:02
13C2_PFDA	N/A	N/A	8.78	8.74	1313		06/24/2022 08:02
13C4_PFOS	N/A	N/A	9.20	9.16	886		06/24/2022 08:02

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.72	4.73	2286		06/24/2022 08:02
13C5_PFPeA	N/A	N/A	5.52	5.51	1246		06/24/2022 08:02
13C3_PFBS	N/A	N/A	6.42	6.41	1113		06/24/2022 08:02
13C2_4:2FTS	N/A	N/A	5.92	5.91	393		06/24/2022 08:02
13C5_PFHxA	N/A	N/A	6.20	6.17	1129		06/24/2022 08:02
13C4_PFHpA	N/A	N/A	6.85	6.80	1130		06/24/2022 08:02
13C3_PFHxS	N/A	N/A	7.86	7.84	1193		06/24/2022 08:02
13C2_6:2FTS	N/A	N/A	7.17	7.16	319		06/24/2022 08:02
13C8_PFOA	N/A	N/A	7.49	7.43	1731		06/24/2022 08:02
13C9_PFNA	N/A	N/A	8.14	8.13	1207		06/24/2022 08:02
13C8_PFOS	N/A	N/A	9.21	9.17	587		06/24/2022 08:02
13C2_8:2FTS	N/A	N/A	8.42	8.38	973		06/24/2022 08:02
13C6_PFDA	N/A	N/A	8.78	8.75	2220		06/24/2022 08:02
d3-MeFOSAA	N/A	N/A	8.70	8.65	249588		06/24/2022 08:02
13C8_PFOSA	N/A	N/A	11.30	11.25	1026		06/24/2022 08:02
d5-EtFOSAA	N/A	N/A	9.00	8.95	668		06/24/2022 08:02
13C7_PFUdA	N/A	N/A	9.44	9.40	1785		06/24/2022 08:02
13C2_PFDoA	N/A	N/A	10.09	10.05	607		06/24/2022 08:02
13C2_PFTeDA	N/A	N/A	11.36	11.30	1371		06/24/2022 08:02
13C3_HFPO-DA	N/A	N/A	6.47	6.43	1098		06/24/2022 08:02
d7-N-MeFOSE	N/A	N/A	12.98	12.95	122		06/24/2022 08:02
d9-N-EtFOSE	N/A	N/A	13.46	13.43	160		06/24/2022 08:02
d3-N-MeFOSA	N/A	N/A	13.18	13.16	114	R	06/24/2022 08:02
d5-N-EtFOSA	N/A	N/A	13.63	13.60	152	R	06/24/2022 08:02

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	B-28(6-8')	Extraction Date	06/20/2022 18:18
Lab Sample ID	40245897006	Total Amount Extracted	5.19g
Lab File ID	Q220623C_033	Percent Moisture	23.0973%
Matrix	Solid	Ical ID	220623A01
Collected	06/02/2022 10:30	CCal File	Q220623C_026
Received	06/04/2022 10:15	Ending CCal File	Q220623C_035
		Blank File	Q220623C_015

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.73	4.77	ND		06/24/2022 08:02
PFPeA	N/A	N/A	5.53	5.54	ND		06/24/2022 08:02
HFPO-DA	0.00	0.33	0.00	6.44	ND		06/24/2022 08:02
PFBS	0.46	0.29	6.42	6.40	268	I	06/24/2022 08:02
PFHxA	0.12	0.09	6.20	6.17	ND		06/24/2022 08:02
4:2 FTS	0.00	0.96	0.00	5.91	ND		06/24/2022 08:02
PFPeS	7.10	0.41	7.09	7.12	ND		06/24/2022 08:02
PFHpA	0.36	0.50	6.86	6.81	ND		06/24/2022 08:02
DONA	0.84	0.45	7.10	7.04	ND		06/24/2022 08:02
PFHxS	0.39	0.33	7.87	7.82	237	J	06/24/2022 08:02
PFOA	0.30	0.37	7.50	7.44	68	J	06/24/2022 08:02
6:2 FTS	0.00	1.10	0.00	7.12	ND		06/24/2022 08:02
PFHpS	0.39	0.43	8.55	8.51	ND		06/24/2022 08:02
PFNA	0.00	0.22	8.15	8.10	ND		06/24/2022 08:02
PFOSAm	N/A	N/A	11.30	11.26	ND		06/24/2022 08:02
PFOS	0.13	0.20	8.96	9.18	197		06/24/2022 08:02
MeFOSA	0.00	0.48	0.00	13.17	ND		06/24/2022 08:02
PFDA	0.00	0.16	8.79	8.75	ND		06/24/2022 08:02
EtFOSAm	0.00	0.39	0.00	13.62	ND		06/24/2022 08:02
8:2 FTS	0.00	1.80	0.00	8.38	ND		06/24/2022 08:02
9-Cl-PF3ON	0.00	0.04	0.00	9.66	ND		06/24/2022 08:02
PFNS	0.00	0.23	0.00	9.83	ND		06/24/2022 08:02
PFUnDA	0.00	0.19	0.00	9.40	ND		06/24/2022 08:02
NMeFOSAA	0.00	0.72	0.00	8.66	ND		06/24/2022 08:02
NEtFOSAA	0.00	0.48	0.00	8.96	ND		06/24/2022 08:02
PFDS	0.00	0.23	0.00	10.47	ND		06/24/2022 08:02
PFDOA	0.00	0.18	0.00	10.05	ND		06/24/2022 08:02
MeFOSE	N/A	N/A	13.02	13.01	ND		06/24/2022 08:02
EtFOSE	0.00	0.00	0.00	13.49	ND		06/24/2022 08:02
11-Cl-PF3OUdS	0.00	0.03	0.00	10.92	ND		06/24/2022 08:02
PFTrDA	0.00	0.20	0.00	10.69	ND		06/24/2022 08:02
PFDoS	0.52	0.25	11.62	11.64	ND		06/24/2022 08:02
PFTDA	0.00	0.15	0.00	11.30	ND		06/24/2022 08:02

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKJO	Extraction Date	06/20/2022 18:18
Lab Sample ID	BLANK-99542	Total Amount Extracted	5.00g
Lab File ID	Q220623C_015	Percent Moisture	100%
Matrix	Soil	Ical ID	220623A01
Collected	06/17/2022 09:48	CCal File	Q220623B_030
Received	06/17/2022 09:48	Ending CCal File	Q220623C_017
		Blank File	

Compound	Concentration (ug/Kg)	QL (ug/Kg)	RL (ug/Kg)	MDL (ug/Kg)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	0.10	0.02	0.02	1	375-22-4		06/24/2022 02:28
PFPeA	ND	0.10	0.02	0.02	1	2706-90-3		06/24/2022 02:28
HFPO-DA	ND	0.10	0.03	0.03	1	13252-13-6		06/24/2022 02:28
PFBS	ND	0.08	0.02	0.02	1	375-73-5		06/24/2022 02:28
PFHxA	ND	0.10	0.03	0.03	1	307-24-4		06/24/2022 02:28
4:2 FTS	ND	0.09	0.03	0.03	1	757124-72-4		06/24/2022 02:28
PFPeS	ND	0.09	0.01	0.01	1	2706-91-4		06/24/2022 02:28
PFHpA	ND	0.10	0.02	0.02	1	375-85-9		06/24/2022 02:28
DONA	ND	0.09	0.03	0.03	1	919005-14-4		06/24/2022 02:28
PFHxS	ND	0.09	0.02	0.02	1	355-46-4		06/24/2022 02:28
PFOA	ND	0.10	0.02	0.02	1	335-67-1		06/24/2022 02:28
6:2 FTS	ND	0.09	0.03	0.03	1	27619-97-2		06/24/2022 02:28
PFHpS	ND	0.09	0.02	0.02	1	375-92-8		06/24/2022 02:28
PFNA	ND	0.10	0.02	0.02	1	375-95-1		06/24/2022 02:28
PFOSAm	ND	0.10	0.02	0.02	1	754-91-6		06/24/2022 02:28
PFOS	ND	0.09	0.02	0.02	1	1763-23-1		06/24/2022 02:28
MeFOSA	ND	0.10	0.02	0.02	1	31506-32-8		06/24/2022 02:28
PFDA	ND	0.10	0.02	0.02	1	335-76-2		06/24/2022 02:28
EtFOSAm	ND	0.10	0.02	0.02	1	4151-50-2		06/24/2022 02:28
8:2 FTS	ND	0.09	0.02	0.02	1	39108-34-4		06/24/2022 02:28
9-Cl-PF3ON	ND	0.09	0.01	0.01	1	756426-58-1		06/24/2022 02:28
PFNS	ND	0.09	0.01	0.01	1	68259-12-1		06/24/2022 02:28
PFUnDA	ND	0.10	0.02	0.02	1	2058-94-8		06/24/2022 02:28
NMeFOSAA	ND	0.10	0.02	0.02	1	2355-31-9		06/24/2022 02:28
NEtFOSAA	ND	0.10	0.02	0.02	1	2991-50-6		06/24/2022 02:28
PFDS	ND	0.09	0.02	0.02	1	335-77-3		06/24/2022 02:28
PFDOA	ND	0.10	0.02	0.02	1	307-55-1		06/24/2022 02:28
MeFOSE	ND	0.10	0.02	0.02	1	24448-09-7		06/24/2022 02:28
EtFOSE	ND	0.10	0.02	0.02	1	1691-99-2		06/24/2022 02:28
11-Cl-PF3OUdS	ND	0.09	0.01	0.01	1	763051-92-9		06/24/2022 02:28
PFTrDA	ND	0.10	0.02	0.02	1	72629-94-8		06/24/2022 02:28
PFDoS	ND	0.09	0.03	0.03	1	79780-39-5		06/24/2022 02:28
PFTDA	ND	0.10	0.03	0.03	1	376-06-7		06/24/2022 02:28

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKJO	Extraction Date	06/20/2022 18:18
Lab Sample ID	BLANK-99542	Total Amount Extracted	5.00g
Lab File ID	Q220623C_015	Percent Moisture	100%
Matrix	Soil	Ical ID	220623A01
Collected	06/17/2022 09:48	CCal File	Q220623B_030
Received	06/17/2022 09:48	Ending CCal File	Q220623C_017
		Blank File	

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	1.0	1.0	101	50-150		06/24/2022 02:28
13C4_PFOA	1.0	1.0	104	50-150		06/24/2022 02:28
13C2_PFDA	1.0	1.0	103	50-150		06/24/2022 02:28
13C4_PFOS	0.96	1.1	114	50-150		06/24/2022 02:28

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	1.0	0.85	85	50-150		06/24/2022 02:28
13C5_PFPeA	1.0	0.92	92	50-150		06/24/2022 02:28
13C3_PFBS	0.93	0.80	86	50-150		06/24/2022 02:28
13C2_4:2FTS	0.94	0.93	99	50-150		06/24/2022 02:28
13C5_PFHxA	1.0	0.92	92	50-150		06/24/2022 02:28
13C4_PFHpA	1.0	0.86	86	50-150		06/24/2022 02:28
13C3_PFHxS	0.95	0.84	89	50-150		06/24/2022 02:28
13C2_6:2FTS	0.95	0.65	68	50-150		06/24/2022 02:28
13C8_PFOA	1.0	0.85	85	50-150		06/24/2022 02:28
13C9_PFNA	1.0	0.88	88	50-150		06/24/2022 02:28
13C8_PFOS	0.96	0.81	85	50-150		06/24/2022 02:28
13C2_8:2FTS	0.96	0.83	87	50-150		06/24/2022 02:28
13C6_PFDA	1.0	0.83	83	50-150		06/24/2022 02:28
d3-MeFOSAA	1.0	0.81	81	50-150		06/24/2022 02:28
13C8_PFOSA	1.0	0.83	83	50-150		06/24/2022 02:28
d5-EtFOSAA	1.0	0.70	70	50-150		06/24/2022 02:28
13C7_PFUdA	1.0	0.95	95	50-150		06/24/2022 02:28
13C2_PFDoA	1.0	0.88	88	50-150		06/24/2022 02:28
13C2_PFTeDA	1.0	0.95	95	50-150		06/24/2022 02:28
13C3_HFPO-DA	1.0	0.95	95	50-150		06/24/2022 02:28
d7-N-MeFOSE	1.0	0.77	77	10-150		06/24/2022 02:28
d9-N-EtFOSE	1.0	0.66	66	10-150		06/24/2022 02:28
d3-N-MeFOSA	1.0	0.36	36	10-150		06/24/2022 02:28
d5-N-EtFOSA	1.0	0.35	35	10-150		06/24/2022 02:28

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKJO	Extraction Date	06/20/2022 18:18
Lab Sample ID	BLANK-99542	Total Amount Extracted	5.00g
Lab File ID	Q220623C_015	Percent Moisture	100%
Matrix	Soil	Ical ID	220623A01
Collected	06/17/2022 09:48	CCal File	Q220623B_030
Received	06/17/2022 09:48	Ending CCal File	Q220623C_017
		Blank File	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	6.18	6.16	1417		06/24/2022 02:28
13C4_PFOA	N/A	N/A	7.48	7.44	1361		06/24/2022 02:28
13C2_PFDA	N/A	N/A	8.77	8.74	1038		06/24/2022 02:28
13C4_PFOS	N/A	N/A	9.19	9.16	1033		06/24/2022 02:28

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.73	4.73	2130		06/24/2022 02:28
13C5_PFPeA	N/A	N/A	5.52	5.51	1261		06/24/2022 02:28
13C3_PFBS	N/A	N/A	6.40	6.41	1951		06/24/2022 02:28
13C2_4:2FTS	N/A	N/A	5.90	5.91	534		06/24/2022 02:28
13C5_PFHxA	N/A	N/A	6.18	6.17	1213		06/24/2022 02:28
13C4_PFHpA	N/A	N/A	6.83	6.80	921		06/24/2022 02:28
13C3_PFHxS	N/A	N/A	7.84	7.84	1431		06/24/2022 02:28
13C2_6:2FTS	N/A	N/A	7.15	7.16	826		06/24/2022 02:28
13C8_PFOA	N/A	N/A	7.48	7.43	1388		06/24/2022 02:28
13C9_PFNA	N/A	N/A	8.12	8.13	1751		06/24/2022 02:28
13C8_PFOS	N/A	N/A	9.19	9.17	1096		06/24/2022 02:28
13C2_8:2FTS	N/A	N/A	8.41	8.38	551		06/24/2022 02:28
13C6_PFDA	N/A	N/A	8.78	8.75	2862		06/24/2022 02:28
d3-MeFOSAA	N/A	N/A	8.69	8.65	8109		06/24/2022 02:28
13C8_PFOSA	N/A	N/A	11.27	11.25	822		06/24/2022 02:28
d5-EtFOSAA	N/A	N/A	8.98	8.95	555		06/24/2022 02:28
13C7_PFUdA	N/A	N/A	9.42	9.40	1737		06/24/2022 02:28
13C2_PFDoA	N/A	N/A	10.07	10.05	810		06/24/2022 02:28
13C2_PFTeDA	N/A	N/A	11.33	11.30	1019		06/24/2022 02:28
13C3_HFPO-DA	N/A	N/A	6.45	6.43	2127		06/24/2022 02:28
d7-N-MeFOSE	N/A	N/A	12.96	12.95	452		06/24/2022 02:28
d9-N-EtFOSE	N/A	N/A	13.43	13.43	371		06/24/2022 02:28
d3-N-MeFOSA	N/A	N/A	13.15	13.16	412		06/24/2022 02:28
d5-N-EtFOSA	N/A	N/A	13.60	13.60	771		06/24/2022 02:28

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
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www.pacelabs.com

Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKJO	Extraction Date	06/20/2022 18:18
Lab Sample ID	BLANK-99542	Total Amount Extracted	5.00g
Lab File ID	Q220623C_015	Percent Moisture	100%
Matrix	Soil	Ical ID	220623A01
Collected	06/17/2022 09:48	CCal File	Q220623B_030
Received	06/17/2022 09:48	Ending CCal File	Q220623C_017
		Blank File	

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.78	4.77	ND		06/24/2022 02:28
PFPeA	N/A	N/A	5.52	5.54	ND		06/24/2022 02:28
HFPO-DA	0.00	0.45	0.00	6.44	ND		06/24/2022 02:28
PFBS	0.00	0.35	0.00	6.40	ND		06/24/2022 02:28
PFHxA	0.00	0.09	0.00	6.17	ND		06/24/2022 02:28
4:2 FTS	0.00	1.00	0.00	5.91	ND		06/24/2022 02:28
PFPeS	0.00	0.42	0.00	7.12	ND		06/24/2022 02:28
PFHpA	0.00	0.48	0.00	6.81	ND		06/24/2022 02:28
DONA	0.00	0.48	0.00	7.04	ND		06/24/2022 02:28
PFHxS	0.00	0.35	0.00	7.82	ND		06/24/2022 02:28
PFOA	0.34	0.34	7.48	7.44	ND		06/24/2022 02:28
6:2 FTS	0.00	1.30	0.00	7.12	ND		06/24/2022 02:28
PFHpS	0.00	0.30	0.00	8.51	ND		06/24/2022 02:28
PFNA	0.00	0.23	0.00	8.10	ND		06/24/2022 02:28
PFOSAm	N/A	N/A	11.27	11.26	ND		06/24/2022 02:28
PFOS	0.00	0.24	0.00	9.18	ND		06/24/2022 02:28
MeFOSA	0.00	0.56	0.00	13.17	ND		06/24/2022 02:28
PFDA	0.00	0.18	0.00	8.75	ND		06/24/2022 02:28
EtFOSAm	0.00	0.46	0.00	13.62	ND		06/24/2022 02:28
8:2 FTS	0.00	1.60	0.00	8.38	ND		06/24/2022 02:28
9-Cl-PF3ON	0.00	0.04	0.00	9.66	ND		06/24/2022 02:28
PFNS	0.00	0.24	0.00	9.83	ND		06/24/2022 02:28
PFUnDA	0.00	0.20	0.00	9.40	ND		06/24/2022 02:28
NMeFOSAA	0.00	1.10	0.00	8.66	ND		06/24/2022 02:28
NEtFOSAA	0.00	0.43	0.00	8.96	ND		06/24/2022 02:28
PFDS	0.00	0.26	0.00	10.47	ND		06/24/2022 02:28
PFDOA	0.00	0.19	0.00	10.05	ND		06/24/2022 02:28
MeFOSE	N/A	N/A	0.00	13.01	ND		06/24/2022 02:28
EtFOSE	0.00	0.00	0.00	13.49	ND		06/24/2022 02:28
11-Cl-PF3OUdS	0.00	0.02	0.00	10.92	ND		06/24/2022 02:28
PFTrDA	0.00	0.18	0.00	10.69	ND		06/24/2022 02:28
PFDoS	0.00	0.22	0.00	11.64	ND		06/24/2022 02:28
PFTDA	0.00	0.15	0.00	11.30	ND		06/24/2022 02:28

REPORT OF LABORATORY ANALYSIS

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-99543	Instrument ID	10LCMS01
Run File Name	Q220623C_016	Column ID	118AB10133
Analyzed	06/24/2022 02:46	Ical ID	220623A01
Injected By	NH	Level	L

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	1.0	1.3	130	50-150	
13C4_PFOA	1.0	1.1	108	50-150	
13C2_PFDA	1.0	1.2	122	50-150	
13C4_PFOS	0.96	1.2	130	50-150	

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	1.0	0.94	94	50-150	
13C5_PFPeA	1.0	1.1	106	50-150	
13C3_PFBS	0.93	0.87	93	50-150	
13C2_4:2FTS	0.94	0.91	98	50-150	
13C5_PFHxA	1.0	1.1	114	50-150	
13C4_PFHpA	1.0	0.86	86	50-150	
13C3_PFHxS	0.95	0.84	89	50-150	
13C2_6:2FTS	0.95	0.72	76	50-150	
13C8_PFOA	1.0	0.81	81	50-150	
13C9_PFNA	1.0	0.99	99	50-150	
13C8_PFOS	0.96	0.75	78	50-150	
13C2_8:2FTS	0.96	0.81	84	50-150	
13C6_PFDA	1.0	0.91	91	50-150	
d3-MeFOSAA	1.0	0.84	84	50-150	
13C8_PFOSA	1.0	0.80	80	50-150	
d5-EtFOSAA	1.0	0.87	87	50-150	
13C7_PFUdA	1.0	0.98	98	50-150	
13C2_PFDoA	1.0	0.85	85	50-150	
13C2_PFTeDA	1.0	0.91	91	50-150	
13C3_HFPO-DA	1.0	1.1	113	50-150	
d7-N-MeFOSE	1.0	0.89	89	10-150	
d9-N-EtFOSE	1.0	0.86	86	10-150	
d3-N-MeFOSA	1.0	0.89	89	10-150	
d5-N-EtFOSA	1.0	0.89	89	10-150	

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-99543	Instrument ID	10LCMS01
Run File Name	Q220623C_016	Column ID	118AB10133
Analyzed	06/24/2022 02:46	Ical ID	220623A01
Injected By	NH	Level	L

Native Analytes

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	CAS No.
PFBA	0.20	0.21	107	71-135		375-22-4
PFPeA	0.20	0.20	100	69-132		2706-90-3
HFPO-DA	0.20	0.18	88	70-140		13252-13-6
PFBS	0.18	0.18	102	72-128		375-73-5
PFHxA	0.20	0.19	97	70-132		307-24-4
4:2 FTS	0.19	0.16	84	62-145		757124-72-4
PFPeS	0.19	0.16	84	73-123		2706-91-4
PFHpA	0.20	0.23	115	71-131		375-85-9
DONA	0.19	0.19	99	70-140		919005-14-4
PFHxS	0.18	0.18	97	67-130		355-46-4
PFOA	0.20	0.22	112	69-133		335-67-1
6:2 FTS	0.19	0.20	105	64-140		27619-97-2
PFHpS	0.19	0.23	119	70-132		375-92-8
PFNA	0.20	0.19	94	72-129		375-95-1
PFOSAm	0.20	0.20	101	67-137		754-91-6
PFOS	0.18	0.19	104	68-136		1763-23-1
MeFOSA	0.20	0.18	88	70-140		31506-32-8
PFDA	0.20	0.18	92	69-133		335-76-2
EtFOSAm	0.20	0.20	98	70-140		4151-50-2
8:2 FTS	0.19	0.18	94	65-137		39108-34-4
9-Cl-PF3ON	0.19	0.23	122	70-140		756426-58-1
PFNS	0.19	0.21	107	69-125		68259-12-1
PFUnDA	0.20	0.18	89	64-136		2058-94-8
NMeFOSAA	0.20	0.25	126	63-144		2355-31-9
NEtFOSAA	0.20	0.19	93	61-139		2991-50-6
PFDS	0.19	0.21	111	59-134		335-77-3
PFDOA	0.20	0.20	99	69-135		307-55-1
MeFOSE	0.20	0.21	107	70-140		24448-09-7
EtFOSE	0.20	0.20	98	70-140		1691-99-2
11-Cl-PF3OUdS	0.19	0.22	117	70-140	I	763051-92-9
PFTrDA	0.20	0.22	109	66-139		72629-94-8
PFDoS	0.19	0.20	105	70-140		79780-39-5
PFTDA	0.20	0.21	103	69-133		376-06-7

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-99543	Instrument ID	10LCMS01
Run File Name	Q220623C_016	Column ID	118AB10133
Analyzed	06/24/2022 02:46	Ical ID	220623A01
Injected By	NH	Level	L

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
13C2_PFHxA	N/A	N/A	6.18	6.16	1171	
13C4_PFOA	N/A	N/A	7.48	7.44	1468	
13C2_PFDA	N/A	N/A	8.78	8.74	1406	
13C4_PFOS	N/A	N/A	9.19	9.16	2216	

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
13C4_PFBA	N/A	N/A	4.72	4.73	1975	
13C5_PFPeA	N/A	N/A	5.52	5.51	1610	
13C3_PFBS	N/A	N/A	6.40	6.41	2530	
13C2_4:2FTS	N/A	N/A	5.90	5.91	719	
13C5_PFHxA	N/A	N/A	6.18	6.17	1149	
13C4_PFHpA	N/A	N/A	6.83	6.80	935	
13C3_PFHxS	N/A	N/A	7.85	7.84	1287	
13C2_6:2FTS	N/A	N/A	7.15	7.16	19308	
13C8_PFOA	N/A	N/A	7.48	7.43	1628	
13C9_PFNA	N/A	N/A	8.13	8.13	1719	
13C8_PFOS	N/A	N/A	9.19	9.17	1010	
13C2_8:2FTS	N/A	N/A	8.41	8.38	2647148	
13C6_PFDA	N/A	N/A	8.77	8.75	2181	
d3-MeFOSAA	N/A	N/A	8.69	8.65	5922	
13C8_PFOSA	N/A	N/A	11.28	11.25	1322	
d5-EtFOSAA	N/A	N/A	8.99	8.95	1280	
13C7_PFUdA	N/A	N/A	9.42	9.40	3888	
13C2_PFDoA	N/A	N/A	10.07	10.05	759	
13C2_PFTeDA	N/A	N/A	11.34	11.30	909	
13C3_HFPO-DA	N/A	N/A	6.45	6.43	1439	
d7-N-MeFOSE	N/A	N/A	12.97	12.95	341	
d9-N-EtFOSE	N/A	N/A	13.45	13.43	471	
d3-N-MeFOSA	N/A	N/A	13.17	13.16	474	
d5-N-EtFOSA	N/A	N/A	13.62	13.60	687	

REPORT OF LABORATORY ANALYSIS

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-99543	Instrument ID	10LCMS01
Run File Name	Q220623C_016	Column ID	118AB10133
Analyzed	06/24/2022 02:46	Ical ID	220623A01
Injected By	NH	Level	L

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
PFBA	N/A	N/A	4.73	4.77	188	
PFPeA	N/A	N/A	5.52	5.54	398	
HFPO-DA	0.41	0.45	6.47	6.44	475	
PFBS	0.37	0.35	6.41	6.40	694	
PFHxA	0.07	0.09	6.19	6.17	202	
4:2 FTS	1.10	1.00	5.91	5.91	9645	
PFPeS	0.48	0.42	7.15	7.12	682	
PFHpA	0.37	0.48	6.84	6.81	40	
DONA	0.43	0.48	7.08	7.04	939	
PFHxS	0.36	0.35	7.85	7.82	765	
PFOA	0.31	0.34	7.49	7.44	209	
6:2 FTS	1.10	1.30	7.15	7.12	35	
PFHpS	0.35	0.30	8.54	8.51	1455	
PFNA	0.28	0.23	8.14	8.10	346	
PFOSAm	N/A	N/A	11.29	11.26	963	
PFOS	0.21	0.24	9.21	9.18	205	
MeFOSA	0.56	0.56	13.20	13.17	425	
PFDA	0.15	0.18	8.79	8.75	172	
EtFOSAm	0.44	0.46	13.65	13.62	665	
8:2 FTS	1.80	1.60	8.42	8.38	737	
9-Cl-PF3ON	0.03	0.04	9.67	9.66	878	
PFNS	0.26	0.24	9.85	9.83	1445	
PFUnDA	0.15	0.20	9.43	9.40	269	
NMeFOSAA	0.60	1.10	8.70	8.66	142	
NEtFOSAA	0.54	0.43	9.00	8.96	122	
PFDS	0.26	0.26	10.50	10.47	998	
PFDOA	0.19	0.19	10.08	10.05	288	
MeFOSE	N/A	N/A	13.01	13.01	348	
EtFOSE	0.00	0.00	13.49	13.49	331	
11-Cl-PF3OUdS	0.03	0.02	10.96	10.92	593	I
PFTrDA	0.16	0.18	10.72	10.69	334	
PFDoS	0.24	0.22	11.70	11.64	1232	
PFTDA	0.15	0.15	11.34	11.30	237	

REPORT OF LABORATORY ANALYSIS

D

ATTACHMENT D

Groundwater Laboratory Reports

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

June 27, 2022

Nicole Laplant
ROBERT E. LEE & ASSOCIATES, IN
1250 Centennial Centre Blvd
Oneida, WI 54155

RE: Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Dear Nicole Laplant:

Enclosed are the analytical results for sample(s) received by the laboratory on June 17, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

Sincerely,

Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Bruce Meissner, Robert E. Lee & Associates, Inc
Lori Rogers, Robert E Lee

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40246740001	**MW-1**	Water	06/16/22 15:15	06/17/22 08:45
40246740002	**MW-14**	Water	06/16/22 16:20	06/17/22 08:45
40246740003	**TW-20**	Water	06/16/22 17:00	06/17/22 08:45
40246740004	**TRIP BLANK**	Water	06/16/22 17:20	06/17/22 08:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40246740001	**MW-1**	EPA 6010D	TXW	1
		EPA 8260	LAP	64
		SM 3500-Cr B	HNT	1
40246740002	**MW-14**	EPA 6010D	TXW	1
		EPA 8260	LAP	64
		SM 3500-Cr B	HNT	1
40246740003	**TW-20**	EPA 6010D	TXW	1
		EPA 8260	LAP	64
		SM 3500-Cr B	HNT	1
40246740004	**TRIP BLANK**	EPA 8260	LAP	64

PASI-G = Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40246740001	**MW-1**					
EPA 6010D	Chromium, Dissolved	3.3J	ug/L	10.0	06/23/22 16:24	
EPA 8260	1,1-Dichloroethane	4.9J	ug/L	10.0	06/21/22 17:14	
EPA 8260	1,1-Dichloroethene	24.8	ug/L	10.0	06/21/22 17:14	
EPA 8260	Trichloroethene	902	ug/L	10.0	06/21/22 17:14	
EPA 8260	Vinyl chloride	750	ug/L	10.0	06/21/22 17:14	
EPA 8260	cis-1,2-Dichloroethene	442	ug/L	10.0	06/21/22 17:14	
EPA 8260	trans-1,2-Dichloroethene	41.6	ug/L	10.0	06/21/22 17:14	
40246740002	**MW-14**					
EPA 8260	1,1-Dichloroethene	150J	ug/L	250	06/21/22 16:54	
EPA 8260	Trichloroethene	28100	ug/L	250	06/21/22 16:54	
EPA 8260	Vinyl chloride	8300	ug/L	250	06/21/22 16:54	
EPA 8260	cis-1,2-Dichloroethene	32200	ug/L	250	06/21/22 16:54	
EPA 8260	trans-1,2-Dichloroethene	2530	ug/L	250	06/21/22 16:54	
40246740003	**TW-20**					
EPA 6010D	Chromium, Dissolved	4.5J	ug/L	10.0	06/23/22 16:28	
EPA 8260	1,1-Dichloroethane	406J	ug/L	625	06/21/22 16:34	
EPA 8260	1,1-Dichloroethene	687	ug/L	625	06/21/22 16:34	
EPA 8260	Trichloroethene	69200	ug/L	625	06/21/22 16:34	
EPA 8260	Vinyl chloride	40100	ug/L	625	06/21/22 16:34	
EPA 8260	cis-1,2-Dichloroethene	160000	ug/L	625	06/21/22 16:34	
EPA 8260	trans-1,2-Dichloroethene	2050	ug/L	625	06/21/22 16:34	

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ANALYTICAL RESULTS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Sample: MW-1 **Lab ID: 40246740001** Collected: 06/16/22 15:15 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	**3.3J**	ug/L	10.0	2.5	1	06/23/22 05:57	06/23/22 16:24	7440-47-3	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<3.6**	ug/L	10.0	3.6	10		06/21/22 17:14	630-20-6	
1,1,1-Trichloroethane	**<3.0**	ug/L	10.0	3.0	10		06/21/22 17:14	71-55-6	
1,1,2,2-Tetrachloroethane	**<3.8**	ug/L	10.0	3.8	10		06/21/22 17:14	79-34-5	
1,1,2-Trichloroethane	**<3.4**	ug/L	50.0	3.4	10		06/21/22 17:14	79-00-5	
1,1-Dichloroethane	**4.9J**	ug/L	10.0	3.0	10		06/21/22 17:14	75-34-3	
1,1-Dichloroethene	**24.8**	ug/L	10.0	5.8	10		06/21/22 17:14	75-35-4	
1,1-Dichloropropene	**<4.1**	ug/L	10.0	4.1	10		06/21/22 17:14	563-58-6	
1,2,3-Trichlorobenzene	**<10.2**	ug/L	50.0	10.2	10		06/21/22 17:14	87-61-6	
1,2,3-Trichloropropane	**<5.6**	ug/L	50.0	5.6	10		06/21/22 17:14	96-18-4	
1,2,4-Trichlorobenzene	**<9.5**	ug/L	50.0	9.5	10		06/21/22 17:14	120-82-1	
1,2,4-Trimethylbenzene	**<4.5**	ug/L	10.0	4.5	10		06/21/22 17:14	95-63-6	
1,2-Dibromo-3-chloropropane	**<23.7**	ug/L	50.0	23.7	10		06/21/22 17:14	96-12-8	
1,2-Dibromoethane (EDB)	**<3.1**	ug/L	10.0	3.1	10		06/21/22 17:14	106-93-4	
1,2-Dichlorobenzene	**<3.3**	ug/L	10.0	3.3	10		06/21/22 17:14	95-50-1	
1,2-Dichloroethane	**<2.9**	ug/L	10.0	2.9	10		06/21/22 17:14	107-06-2	
1,2-Dichloropropane	**<4.5**	ug/L	10.0	4.5	10		06/21/22 17:14	78-87-5	
1,3,5-Trimethylbenzene	**<3.6**	ug/L	10.0	3.6	10		06/21/22 17:14	108-67-8	
1,3-Dichlorobenzene	**<3.5**	ug/L	10.0	3.5	10		06/21/22 17:14	541-73-1	
1,3-Dichloropropane	**<3.0**	ug/L	10.0	3.0	10		06/21/22 17:14	142-28-9	
1,4-Dichlorobenzene	**<8.9**	ug/L	10.0	8.9	10		06/21/22 17:14	106-46-7	
2,2-Dichloropropane	**<41.8**	ug/L	50.0	41.8	10		06/21/22 17:14	594-20-7	
2-Chlorotoluene	**<8.9**	ug/L	50.0	8.9	10		06/21/22 17:14	95-49-8	
4-Chlorotoluene	**<8.9**	ug/L	50.0	8.9	10		06/21/22 17:14	106-43-4	
Benzene	**<3.0**	ug/L	10.0	3.0	10		06/21/22 17:14	71-43-2	
Bromobenzene	**<3.6**	ug/L	10.0	3.6	10		06/21/22 17:14	108-86-1	
Bromochloromethane	**<3.6**	ug/L	50.0	3.6	10		06/21/22 17:14	74-97-5	
Bromodichloromethane	**<4.2**	ug/L	10.0	4.2	10		06/21/22 17:14	75-27-4	
Bromoform	**<38.0**	ug/L	50.0	38.0	10		06/21/22 17:14	75-25-2	
Bromomethane	**<11.9**	ug/L	50.0	11.9	10		06/21/22 17:14	74-83-9	
Carbon tetrachloride	**<3.7**	ug/L	10.0	3.7	10		06/21/22 17:14	56-23-5	
Chlorobenzene	**<8.6**	ug/L	10.0	8.6	10		06/21/22 17:14	108-90-7	
Chloroethane	**<13.8**	ug/L	50.0	13.8	10		06/21/22 17:14	75-00-3	
Chloroform	**<11.8**	ug/L	50.0	11.8	10		06/21/22 17:14	67-66-3	
Chloromethane	**<16.4**	ug/L	50.0	16.4	10		06/21/22 17:14	74-87-3	
Dibromochloromethane	**<26.4**	ug/L	50.0	26.4	10		06/21/22 17:14	124-48-1	
Dibromomethane	**<9.9**	ug/L	50.0	9.9	10		06/21/22 17:14	74-95-3	
Dichlorodifluoromethane	**<4.6**	ug/L	50.0	4.6	10		06/21/22 17:14	75-71-8	
Diisopropyl ether	**<11.0**	ug/L	50.0	11.0	10		06/21/22 17:14	108-20-3	
Ethylbenzene	**<3.3**	ug/L	10.0	3.3	10		06/21/22 17:14	100-41-4	
Hexachloro-1,3-butadiene	**<27.4**	ug/L	50.0	27.4	10		06/21/22 17:14	87-68-3	
Isopropylbenzene (Cumene)	**<10.0**	ug/L	50.0	10.0	10		06/21/22 17:14	98-82-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Sample: MW-1 **Lab ID: 40246740001** Collected: 06/16/22 15:15 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Methyl-tert-butyl ether	**<11.3**	ug/L	50.0	11.3	10		06/21/22 17:14	1634-04-4	
Methylene Chloride	**<3.2**	ug/L	50.0	3.2	10		06/21/22 17:14	75-09-2	
Naphthalene	**<11.3**	ug/L	50.0	11.3	10		06/21/22 17:14	91-20-3	
Styrene	**<3.6**	ug/L	10.0	3.6	10		06/21/22 17:14	100-42-5	
Tetrachloroethene	**<4.1**	ug/L	10.0	4.1	10		06/21/22 17:14	127-18-4	
Toluene	**<2.9**	ug/L	10.0	2.9	10		06/21/22 17:14	108-88-3	
Trichloroethene	**902**	ug/L	10.0	3.2	10		06/21/22 17:14	79-01-6	
Trichlorofluoromethane	**<4.2**	ug/L	10.0	4.2	10		06/21/22 17:14	75-69-4	
Vinyl chloride	**750**	ug/L	10.0	1.7	10		06/21/22 17:14	75-01-4	
cis-1,2-Dichloroethene	**442**	ug/L	10.0	4.7	10		06/21/22 17:14	156-59-2	
cis-1,3-Dichloropropene	**<3.6**	ug/L	10.0	3.6	10		06/21/22 17:14	10061-01-5	
m&p-Xylene	**<7.0**	ug/L	20.0	7.0	10		06/21/22 17:14	179601-23-1	
n-Butylbenzene	**<8.6**	ug/L	10.0	8.6	10		06/21/22 17:14	104-51-8	
n-Propylbenzene	**<3.5**	ug/L	10.0	3.5	10		06/21/22 17:14	103-65-1	
o-Xylene	**<3.5**	ug/L	10.0	3.5	10		06/21/22 17:14	95-47-6	
p-Isopropyltoluene	**<10.4**	ug/L	50.0	10.4	10		06/21/22 17:14	99-87-6	
sec-Butylbenzene	**<4.2**	ug/L	10.0	4.2	10		06/21/22 17:14	135-98-8	
tert-Butylbenzene	**<5.9**	ug/L	10.0	5.9	10		06/21/22 17:14	98-06-6	
trans-1,2-Dichloroethene	**41.6**	ug/L	10.0	5.3	10		06/21/22 17:14	156-60-5	
trans-1,3-Dichloropropene	**<34.6**	ug/L	50.0	34.6	10		06/21/22 17:14	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		10		06/21/22 17:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		10		06/21/22 17:14	2199-69-1	
Toluene-d8 (S)	100	%	70-130		10		06/21/22 17:14	2037-26-5	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B								
	Pace Analytical Services - Green Bay								
Chromium, Hexavalent	**<0.0073**	mg/L	0.024	0.0073	1		06/21/22 13:35		

Sample: MW-14 **Lab ID: 40246740002** Collected: 06/16/22 16:20 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Green Bay								
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/23/22 05:57	06/23/22 16:26	7440-47-3	
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<88.8**	ug/L	250	88.8	250		06/21/22 16:54	630-20-6	
1,1,1-Trichloroethane	**<75.6**	ug/L	250	75.6	250		06/21/22 16:54	71-55-6	
1,1,2,2-Tetrachloroethane	**<94.5**	ug/L	250	94.5	250		06/21/22 16:54	79-34-5	
1,1,2-Trichloroethane	**<86.1**	ug/L	1250	86.1	250		06/21/22 16:54	79-00-5	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Sample: MW-14 **Lab ID: 40246740002** Collected: 06/16/22 16:20 Received: 06/17/22 08:45 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-Dichloroethane	**<73.9**	ug/L	250	73.9	250		06/21/22 16:54	75-34-3	
1,1-Dichloroethene	**150J**	ug/L	250	146	250		06/21/22 16:54	75-35-4	
1,1-Dichloropropene	**<103**	ug/L	250	103	250		06/21/22 16:54	563-58-6	
1,2,3-Trichlorobenzene	**<255**	ug/L	1250	255	250		06/21/22 16:54	87-61-6	
1,2,3-Trichloropropane	**<139**	ug/L	1250	139	250		06/21/22 16:54	96-18-4	
1,2,4-Trichlorobenzene	**<238**	ug/L	1250	238	250		06/21/22 16:54	120-82-1	
1,2,4-Trimethylbenzene	**<112**	ug/L	250	112	250		06/21/22 16:54	95-63-6	
1,2-Dibromo-3-chloropropane	**<592**	ug/L	1250	592	250		06/21/22 16:54	96-12-8	
1,2-Dibromoethane (EDB)	**<77.3**	ug/L	250	77.3	250		06/21/22 16:54	106-93-4	
1,2-Dichlorobenzene	**<81.5**	ug/L	250	81.5	250		06/21/22 16:54	95-50-1	
1,2-Dichloroethane	**<72.9**	ug/L	250	72.9	250		06/21/22 16:54	107-06-2	
1,2-Dichloropropane	**<112**	ug/L	250	112	250		06/21/22 16:54	78-87-5	
1,3,5-Trimethylbenzene	**<89.3**	ug/L	250	89.3	250		06/21/22 16:54	108-67-8	
1,3-Dichlorobenzene	**<87.8**	ug/L	250	87.8	250		06/21/22 16:54	541-73-1	
1,3-Dichloropropane	**<76.2**	ug/L	250	76.2	250		06/21/22 16:54	142-28-9	
1,4-Dichlorobenzene	**<223**	ug/L	250	223	250		06/21/22 16:54	106-46-7	
2,2-Dichloropropane	**<1040**	ug/L	1250	1040	250		06/21/22 16:54	594-20-7	
2-Chlorotoluene	**<222**	ug/L	1250	222	250		06/21/22 16:54	95-49-8	
4-Chlorotoluene	**<224**	ug/L	1250	224	250		06/21/22 16:54	106-43-4	
Benzene	**<73.9**	ug/L	250	73.9	250		06/21/22 16:54	71-43-2	
Bromobenzene	**<90.2**	ug/L	250	90.2	250		06/21/22 16:54	108-86-1	
Bromochloromethane	**<89.4**	ug/L	1250	89.4	250		06/21/22 16:54	74-97-5	
Bromodichloromethane	**<104**	ug/L	250	104	250		06/21/22 16:54	75-27-4	
Bromoform	**<950**	ug/L	1250	950	250		06/21/22 16:54	75-25-2	
Bromomethane	**<298**	ug/L	1250	298	250		06/21/22 16:54	74-83-9	
Carbon tetrachloride	**<92.3**	ug/L	250	92.3	250		06/21/22 16:54	56-23-5	
Chlorobenzene	**<214**	ug/L	250	214	250		06/21/22 16:54	108-90-7	
Chloroethane	**<345**	ug/L	1250	345	250		06/21/22 16:54	75-00-3	
Chloroform	**<296**	ug/L	1250	296	250		06/21/22 16:54	67-66-3	
Chloromethane	**<409**	ug/L	1250	409	250		06/21/22 16:54	74-87-3	
Dibromochloromethane	**<661**	ug/L	1250	661	250		06/21/22 16:54	124-48-1	
Dibromomethane	**<248**	ug/L	1250	248	250		06/21/22 16:54	74-95-3	
Dichlorodifluoromethane	**<114**	ug/L	1250	114	250		06/21/22 16:54	75-71-8	
Diisopropyl ether	**<275**	ug/L	1250	275	250		06/21/22 16:54	108-20-3	
Ethylbenzene	**<81.3**	ug/L	250	81.3	250		06/21/22 16:54	100-41-4	
Hexachloro-1,3-butadiene	**<684**	ug/L	1250	684	250		06/21/22 16:54	87-68-3	
Isopropylbenzene (Cumene)	**<250**	ug/L	1250	250	250		06/21/22 16:54	98-82-8	
Methyl-tert-butyl ether	**<282**	ug/L	1250	282	250		06/21/22 16:54	1634-04-4	
Methylene Chloride	**<79.9**	ug/L	1250	79.9	250		06/21/22 16:54	75-09-2	
Naphthalene	**<282**	ug/L	1250	282	250		06/21/22 16:54	91-20-3	
Styrene	**<89.1**	ug/L	250	89.1	250		06/21/22 16:54	100-42-5	
Tetrachloroethene	**<102**	ug/L	250	102	250		06/21/22 16:54	127-18-4	
Toluene	**<72.0**	ug/L	250	72.0	250		06/21/22 16:54	108-88-3	
Trichloroethene	**28100**	ug/L	250	79.9	250		06/21/22 16:54	79-01-6	
Trichlorofluoromethane	**<105**	ug/L	250	105	250		06/21/22 16:54	75-69-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Sample: MW-14 **Lab ID: 40246740002** Collected: 06/16/22 16:20 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Vinyl chloride	**8300**	ug/L	250	43.6	250		06/21/22 16:54	75-01-4	
cis-1,2-Dichloroethene	**32200**	ug/L	250	118	250		06/21/22 16:54	156-59-2	
cis-1,3-Dichloropropene	**<89.5**	ug/L	250	89.5	250		06/21/22 16:54	10061-01-5	
m&p-Xylene	**<175**	ug/L	500	175	250		06/21/22 16:54	179601-23-1	
n-Butylbenzene	**<214**	ug/L	250	214	250		06/21/22 16:54	104-51-8	
n-Propylbenzene	**<86.3**	ug/L	250	86.3	250		06/21/22 16:54	103-65-1	
o-Xylene	**<86.9**	ug/L	250	86.9	250		06/21/22 16:54	95-47-6	
p-Isopropyltoluene	**<261**	ug/L	1250	261	250		06/21/22 16:54	99-87-6	
sec-Butylbenzene	**<106**	ug/L	250	106	250		06/21/22 16:54	135-98-8	
tert-Butylbenzene	**<147**	ug/L	250	147	250		06/21/22 16:54	98-06-6	
trans-1,2-Dichloroethene	**2530**	ug/L	250	132	250		06/21/22 16:54	156-60-5	
trans-1,3-Dichloropropene	**<866**	ug/L	1250	866	250		06/21/22 16:54	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		250		06/21/22 16:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	96	%	70-130		250		06/21/22 16:54	2199-69-1	
Toluene-d8 (S)	101	%	70-130		250		06/21/22 16:54	2037-26-5	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	**<0.018**	mg/L	0.061	0.018	2.5		06/21/22 13:36		D3

Sample: TW-20 **Lab ID: 40246740003** Collected: 06/16/22 17:00 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Chromium, Dissolved	**4.5J**	ug/L	10.0	2.5	1	06/23/22 05:57	06/23/22 16:28	7440-47-3	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<222**	ug/L	625	222	625		06/21/22 16:34	630-20-6	
1,1,1-Trichloroethane	**<189**	ug/L	625	189	625		06/21/22 16:34	71-55-6	
1,1,2,2-Tetrachloroethane	**<236**	ug/L	625	236	625		06/21/22 16:34	79-34-5	
1,1,2-Trichloroethane	**<215**	ug/L	3120	215	625		06/21/22 16:34	79-00-5	
1,1-Dichloroethane	**406J**	ug/L	625	185	625		06/21/22 16:34	75-34-3	
1,1-Dichloroethene	**687**	ug/L	625	364	625		06/21/22 16:34	75-35-4	
1,1-Dichloropropene	**<256**	ug/L	625	256	625		06/21/22 16:34	563-58-6	
1,2,3-Trichlorobenzene	**<636**	ug/L	3120	636	625		06/21/22 16:34	87-61-6	
1,2,3-Trichloropropane	**<347**	ug/L	3120	347	625		06/21/22 16:34	96-18-4	
1,2,4-Trichlorobenzene	**<594**	ug/L	3120	594	625		06/21/22 16:34	120-82-1	
1,2,4-Trimethylbenzene	**<280**	ug/L	625	280	625		06/21/22 16:34	95-63-6	
1,2-Dibromo-3-chloropropane	**<1480**	ug/L	3120	1480	625		06/21/22 16:34	96-12-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Sample: TW-20 **Lab ID: 40246740003** Collected: 06/16/22 17:00 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,2-Dibromoethane (EDB)	**<193**	ug/L	625	193	625		06/21/22 16:34	106-93-4	
1,2-Dichlorobenzene	**<204**	ug/L	625	204	625		06/21/22 16:34	95-50-1	
1,2-Dichloroethane	**<182**	ug/L	625	182	625		06/21/22 16:34	107-06-2	
1,2-Dichloropropane	**<280**	ug/L	625	280	625		06/21/22 16:34	78-87-5	
1,3,5-Trimethylbenzene	**<223**	ug/L	625	223	625		06/21/22 16:34	108-67-8	
1,3-Dichlorobenzene	**<219**	ug/L	625	219	625		06/21/22 16:34	541-73-1	
1,3-Dichloropropane	**<190**	ug/L	625	190	625		06/21/22 16:34	142-28-9	
1,4-Dichlorobenzene	**<558**	ug/L	625	558	625		06/21/22 16:34	106-46-7	
2,2-Dichloropropane	**<2610**	ug/L	3120	2610	625		06/21/22 16:34	594-20-7	
2-Chlorotoluene	**<556**	ug/L	3120	556	625		06/21/22 16:34	95-49-8	
4-Chlorotoluene	**<559**	ug/L	3120	559	625		06/21/22 16:34	106-43-4	
Benzene	**<185**	ug/L	625	185	625		06/21/22 16:34	71-43-2	
Bromobenzene	**<226**	ug/L	625	226	625		06/21/22 16:34	108-86-1	
Bromochloromethane	**<224**	ug/L	3120	224	625		06/21/22 16:34	74-97-5	
Bromodichloromethane	**<260**	ug/L	625	260	625		06/21/22 16:34	75-27-4	
Bromoform	**<2370**	ug/L	3120	2370	625		06/21/22 16:34	75-25-2	
Bromomethane	**<745**	ug/L	3120	745	625		06/21/22 16:34	74-83-9	
Carbon tetrachloride	**<231**	ug/L	625	231	625		06/21/22 16:34	56-23-5	
Chlorobenzene	**<535**	ug/L	625	535	625		06/21/22 16:34	108-90-7	
Chloroethane	**<862**	ug/L	3120	862	625		06/21/22 16:34	75-00-3	
Chloroform	**<739**	ug/L	3120	739	625		06/21/22 16:34	67-66-3	
Chloromethane	**<1020**	ug/L	3120	1020	625		06/21/22 16:34	74-87-3	
Dibromochloromethane	**<1650**	ug/L	3120	1650	625		06/21/22 16:34	124-48-1	
Dibromomethane	**<619**	ug/L	3120	619	625		06/21/22 16:34	74-95-3	
Dichlorodifluoromethane	**<285**	ug/L	3120	285	625		06/21/22 16:34	75-71-8	
Diisopropyl ether	**<688**	ug/L	3120	688	625		06/21/22 16:34	108-20-3	
Ethylbenzene	**<203**	ug/L	625	203	625		06/21/22 16:34	100-41-4	
Hexachloro-1,3-butadiene	**<1710**	ug/L	3120	1710	625		06/21/22 16:34	87-68-3	
Isopropylbenzene (Cumene)	**<625**	ug/L	3120	625	625		06/21/22 16:34	98-82-8	
Methyl-tert-butyl ether	**<706**	ug/L	3120	706	625		06/21/22 16:34	1634-04-4	
Methylene Chloride	**<200**	ug/L	3120	200	625		06/21/22 16:34	75-09-2	
Naphthalene	**<706**	ug/L	3120	706	625		06/21/22 16:34	91-20-3	
Styrene	**<223**	ug/L	625	223	625		06/21/22 16:34	100-42-5	
Tetrachloroethene	**<255**	ug/L	625	255	625		06/21/22 16:34	127-18-4	
Toluene	**<180**	ug/L	625	180	625		06/21/22 16:34	108-88-3	
Trichloroethene	**69200**	ug/L	625	200	625		06/21/22 16:34	79-01-6	
Trichlorofluoromethane	**<262**	ug/L	625	262	625		06/21/22 16:34	75-69-4	
Vinyl chloride	**40100**	ug/L	625	109	625		06/21/22 16:34	75-01-4	
cis-1,2-Dichloroethene	**160000**	ug/L	625	295	625		06/21/22 16:34	156-59-2	
cis-1,3-Dichloropropene	**<224**	ug/L	625	224	625		06/21/22 16:34	10061-01-5	
m&p-Xylene	**<438**	ug/L	1250	438	625		06/21/22 16:34	179601-23-1	
n-Butylbenzene	**<536**	ug/L	625	536	625		06/21/22 16:34	104-51-8	
n-Propylbenzene	**<216**	ug/L	625	216	625		06/21/22 16:34	103-65-1	
o-Xylene	**<217**	ug/L	625	217	625		06/21/22 16:34	95-47-6	
p-Isopropyltoluene	**<652**	ug/L	3120	652	625		06/21/22 16:34	99-87-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Sample: TW-20 **Lab ID: 40246740003** Collected: 06/16/22 17:00 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
sec-Butylbenzene	**<265**	ug/L	625	265	625		06/21/22 16:34	135-98-8	
tert-Butylbenzene	**<366**	ug/L	625	366	625		06/21/22 16:34	98-06-6	
trans-1,2-Dichloroethene	**2050**	ug/L	625	330	625		06/21/22 16:34	156-60-5	
trans-1,3-Dichloropropene	**<2160**	ug/L	3120	2160	625		06/21/22 16:34	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		625		06/21/22 16:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	95	%	70-130		625		06/21/22 16:34	2199-69-1	
Toluene-d8 (S)	98	%	70-130		625		06/21/22 16:34	2037-26-5	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B Pace Analytical Services - Green Bay								
Chromium, Hexavalent	**<0.073**	mg/L	0.24	0.073	10		06/21/22 13:36		D3

Sample: TRIP BLANK **Lab ID: 40246740004** Collected: 06/16/22 17:20 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/21/22 11:41	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 11:41	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/21/22 11:41	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/21/22 11:41	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 11:41	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/21/22 11:41	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 11:41	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 11:41	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/21/22 11:41	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/21/22 11:41	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/21/22 11:41	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/21/22 11:41	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/21/22 11:41	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 11:41	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/21/22 11:41	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/21/22 11:41	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 11:41	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 11:41	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 11:41	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/21/22 11:41	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/21/22 11:41	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 11:41	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 11:41	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/21/22 11:41	71-43-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Sample: TRIP BLANK **Lab ID: 40246740004** Collected: 06/16/22 17:20 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 11:41	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/21/22 11:41	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 11:41	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/21/22 11:41	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/21/22 11:41	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/21/22 11:41	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 11:41	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/21/22 11:41	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/21/22 11:41	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/21/22 11:41	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/21/22 11:41	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/21/22 11:41	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/21/22 11:41	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 11:41	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 11:41	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/21/22 11:41	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/21/22 11:41	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 11:41	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/21/22 11:41	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/21/22 11:41	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 11:41	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 11:41	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/21/22 11:41	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/21/22 11:41	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 11:41	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/21/22 11:41	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/21/22 11:41	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 11:41	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/21/22 11:41	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 11:41	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 11:41	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 11:41	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 11:41	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/21/22 11:41	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/21/22 11:41	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/21/22 11:41	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/21/22 11:41	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		06/21/22 11:41	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		06/21/22 11:41	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		06/21/22 11:41	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

QC Batch: 419169
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246740001, 40246740002, 40246740003

METHOD BLANK: 2413835 Matrix: Water
Associated Lab Samples: 40246740001, 40246740002, 40246740003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Dissolved	ug/L	<2.5	10.0	06/23/22 15:44	

LABORATORY CONTROL SAMPLE: 2413836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Dissolved	ug/L	250	255	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2413837 2413838

Parameter	Units	40246743001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Dissolved	ug/L	<2.5	250	250	250	258	100	103	75-125	3	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

QC Batch: 418738
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246740001, 40246740002, 40246740003, 40246740004

METHOD BLANK: 2411724 Matrix: Water
Associated Lab Samples: 40246740001, 40246740002, 40246740003, 40246740004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	1.0	06/21/22 07:58	
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/21/22 07:58	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	1.0	06/21/22 07:58	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	06/21/22 07:58	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/21/22 07:58	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/21/22 07:58	
1,1-Dichloropropene	ug/L	<0.41	1.0	06/21/22 07:58	
1,2,3-Trichlorobenzene	ug/L	<1.0	5.0	06/21/22 07:58	
1,2,3-Trichloropropane	ug/L	<0.56	5.0	06/21/22 07:58	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	06/21/22 07:58	
1,2,4-Trimethylbenzene	ug/L	<0.45	1.0	06/21/22 07:58	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	5.0	06/21/22 07:58	
1,2-Dibromoethane (EDB)	ug/L	<0.31	1.0	06/21/22 07:58	
1,2-Dichlorobenzene	ug/L	<0.33	1.0	06/21/22 07:58	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/21/22 07:58	
1,2-Dichloropropane	ug/L	<0.45	1.0	06/21/22 07:58	
1,3,5-Trimethylbenzene	ug/L	<0.36	1.0	06/21/22 07:58	
1,3-Dichlorobenzene	ug/L	<0.35	1.0	06/21/22 07:58	
1,3-Dichloropropane	ug/L	<0.30	1.0	06/21/22 07:58	
1,4-Dichlorobenzene	ug/L	<0.89	1.0	06/21/22 07:58	
2,2-Dichloropropane	ug/L	<4.2	5.0	06/21/22 07:58	
2-Chlorotoluene	ug/L	<0.89	5.0	06/21/22 07:58	
4-Chlorotoluene	ug/L	<0.89	5.0	06/21/22 07:58	
Benzene	ug/L	<0.30	1.0	06/21/22 07:58	
Bromobenzene	ug/L	<0.36	1.0	06/21/22 07:58	
Bromochloromethane	ug/L	<0.36	5.0	06/21/22 07:58	
Bromodichloromethane	ug/L	<0.42	1.0	06/21/22 07:58	
Bromoform	ug/L	<3.8	5.0	06/21/22 07:58	
Bromomethane	ug/L	<1.2	5.0	06/21/22 07:58	
Carbon tetrachloride	ug/L	<0.37	1.0	06/21/22 07:58	
Chlorobenzene	ug/L	<0.86	1.0	06/21/22 07:58	
Chloroethane	ug/L	<1.4	5.0	06/21/22 07:58	
Chloroform	ug/L	<1.2	5.0	06/21/22 07:58	
Chloromethane	ug/L	<1.6	5.0	06/21/22 07:58	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/21/22 07:58	
cis-1,3-Dichloropropene	ug/L	<0.36	1.0	06/21/22 07:58	
Dibromochloromethane	ug/L	<2.6	5.0	06/21/22 07:58	
Dibromomethane	ug/L	<0.99	5.0	06/21/22 07:58	
Dichlorodifluoromethane	ug/L	<0.46	5.0	06/21/22 07:58	
Diisopropyl ether	ug/L	<1.1	5.0	06/21/22 07:58	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

METHOD BLANK: 2411724 Matrix: Water
Associated Lab Samples: 40246740001, 40246740002, 40246740003, 40246740004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.33	1.0	06/21/22 07:58	
Hexachloro-1,3-butadiene	ug/L	<2.7	5.0	06/21/22 07:58	
Isopropylbenzene (Cumene)	ug/L	<1.0	5.0	06/21/22 07:58	
m&p-Xylene	ug/L	<0.70	2.0	06/21/22 07:58	
Methyl-tert-butyl ether	ug/L	<1.1	5.0	06/21/22 07:58	
Methylene Chloride	ug/L	<0.32	5.0	06/21/22 07:58	
n-Butylbenzene	ug/L	<0.86	1.0	06/21/22 07:58	
n-Propylbenzene	ug/L	<0.35	1.0	06/21/22 07:58	
Naphthalene	ug/L	<1.1	5.0	06/21/22 07:58	
o-Xylene	ug/L	<0.35	1.0	06/21/22 07:58	
p-Isopropyltoluene	ug/L	<1.0	5.0	06/21/22 07:58	
sec-Butylbenzene	ug/L	<0.42	1.0	06/21/22 07:58	
Styrene	ug/L	<0.36	1.0	06/21/22 07:58	
tert-Butylbenzene	ug/L	<0.59	1.0	06/21/22 07:58	
Tetrachloroethene	ug/L	<0.41	1.0	06/21/22 07:58	
Toluene	ug/L	<0.29	1.0	06/21/22 07:58	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/21/22 07:58	
trans-1,3-Dichloropropene	ug/L	<3.5	5.0	06/21/22 07:58	
Trichloroethene	ug/L	<0.32	1.0	06/21/22 07:58	
Trichlorofluoromethane	ug/L	<0.42	1.0	06/21/22 07:58	
Vinyl chloride	ug/L	<0.17	1.0	06/21/22 07:58	
1,2-Dichlorobenzene-d4 (S)	%	96	70-130	06/21/22 07:58	
4-Bromofluorobenzene (S)	%	99	70-130	06/21/22 07:58	
Toluene-d8 (S)	%	101	70-130	06/21/22 07:58	

LABORATORY CONTROL SAMPLE: 2411725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.9	116	70-134	
1,1,2,2-Tetrachloroethane	ug/L	50	48.1	96	69-130	
1,1,2-Trichloroethane	ug/L	50	47.9	96	70-130	
1,1-Dichloroethane	ug/L	50	48.9	98	70-130	
1,1-Dichloroethene	ug/L	50	50.9	102	74-131	
1,2,4-Trichlorobenzene	ug/L	50	49.2	98	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	45.6	91	64-137	
1,2-Dibromoethane (EDB)	ug/L	50	49.0	98	70-130	
1,2-Dichlorobenzene	ug/L	50	49.7	99	70-130	
1,2-Dichloroethane	ug/L	50	50.8	102	70-137	
1,2-Dichloropropane	ug/L	50	45.3	91	80-121	
1,3-Dichlorobenzene	ug/L	50	53.6	107	70-130	
1,4-Dichlorobenzene	ug/L	50	50.7	101	70-130	
Benzene	ug/L	50	48.2	96	70-130	
Bromodichloromethane	ug/L	50	50.3	101	70-130	
Bromoform	ug/L	50	55.3	111	70-130	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

LABORATORY CONTROL SAMPLE: 2411725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/L	50	32.7	65	21-147	
Carbon tetrachloride	ug/L	50	59.9	120	80-146	
Chlorobenzene	ug/L	50	52.4	105	70-130	
Chloroethane	ug/L	50	41.0	82	52-165	
Chloroform	ug/L	50	53.9	108	80-123	
Chloromethane	ug/L	50	32.5	65	51-122	
cis-1,2-Dichloroethene	ug/L	50	48.6	97	70-130	
cis-1,3-Dichloropropene	ug/L	50	51.1	102	70-130	
Dibromochloromethane	ug/L	50	53.8	108	70-130	
Dichlorodifluoromethane	ug/L	50	23.6	47	25-121	
Ethylbenzene	ug/L	50	52.4	105	80-120	
Isopropylbenzene (Cumene)	ug/L	50	53.1	106	70-130	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	52.2	104	70-130	
Methylene Chloride	ug/L	50	51.3	103	70-130	
o-Xylene	ug/L	50	50.2	100	70-130	
Styrene	ug/L	50	50.4	101	70-130	
Tetrachloroethene	ug/L	50	55.0	110	70-130	
Toluene	ug/L	50	49.9	100	80-120	
trans-1,2-Dichloroethene	ug/L	50	53.3	107	70-130	
trans-1,3-Dichloropropene	ug/L	50	50.4	101	70-130	
Trichloroethene	ug/L	50	52.6	105	70-130	
Trichlorofluoromethane	ug/L	50	52.5	105	65-160	
Vinyl chloride	ug/L	50	36.1	72	63-134	
1,2-Dichlorobenzene-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2412553 2412554

Parameter	Units	40246723002 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	55.9	57.7	112	115	70-134	3	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	50	50	46.2	48.3	92	97	61-135	5	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	46.5	49.9	93	100	70-130	7	20	
1,1-Dichloroethane	ug/L	<0.30	50	50	47.5	49.6	95	99	70-130	4	20	
1,1-Dichloroethene	ug/L	<0.58	50	50	49.0	50.9	98	102	71-130	4	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	47.3	50.1	95	100	68-131	6	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	50	50	44.2	48.0	88	96	51-141	8	20	
1,2-Dibromoethane (EDB)	ug/L	<0.31	50	50	46.4	50.1	93	100	70-130	8	20	
1,2-Dichlorobenzene	ug/L	<0.33	50	50	47.8	51.6	96	103	70-130	8	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	50.0	52.3	100	105	70-137	4	20	
1,2-Dichloropropane	ug/L	<0.45	50	50	44.1	46.8	88	94	80-121	6	20	
1,3-Dichlorobenzene	ug/L	<0.35	50	50	50.5	54.4	101	109	70-130	7	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2412553 2412554

Parameter	Units	40246723002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	<0.89	50	50	48.7	52.6	97	105	70-130	8	20	
Benzene	ug/L	<0.30	50	50	46.6	48.6	93	97	70-130	4	20	
Bromodichloromethane	ug/L	<0.42	50	50	49.3	51.5	99	103	70-130	4	20	
Bromoform	ug/L	<3.8	50	50	51.4	55.7	103	111	70-133	8	20	
Bromomethane	ug/L	<1.2	50	50	35.3	39.3	71	79	21-149	11	22	
Carbon tetrachloride	ug/L	<0.37	50	50	57.5	59.3	115	119	80-146	3	20	
Chlorobenzene	ug/L	<0.86	50	50	49.2	53.2	98	106	70-130	8	20	
Chloroethane	ug/L	<1.4	50	50	41.2	41.1	82	82	52-165	0	20	
Chloroform	ug/L	<1.2	50	50	53.0	55.2	106	110	80-123	4	20	
Chloromethane	ug/L	<1.6	50	50	31.3	32.1	63	64	42-125	2	20	
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	47.9	50.3	96	101	70-130	5	20	
cis-1,3-Dichloropropene	ug/L	<0.36	50	50	49.6	51.8	99	104	70-130	4	20	
Dibromochloromethane	ug/L	<2.6	50	50	51.1	53.9	102	108	70-130	5	20	
Dichlorodifluoromethane	ug/L	<0.46	50	50	21.7	22.8	43	46	25-121	5	20	
Ethylbenzene	ug/L	<0.33	50	50	49.3	52.2	99	104	80-121	6	20	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	50.2	53.1	100	106	70-130	6	20	
m&p-Xylene	ug/L	<0.70	100	100	97.0	103	97	103	70-130	6	20	
Methyl-tert-butyl ether	ug/L	<1.1	50	50	50.4	53.5	101	107	70-130	6	20	
Methylene Chloride	ug/L	<0.32	50	50	50.2	52.6	100	105	70-130	5	20	
o-Xylene	ug/L	<0.35	50	50	49.0	51.8	98	104	70-130	6	20	
Styrene	ug/L	<0.36	50	50	47.7	52.0	95	104	70-132	9	20	
Tetrachloroethene	ug/L	<0.41	50	50	52.6	54.8	105	110	70-130	4	20	
Toluene	ug/L	<0.29	50	50	47.6	50.3	95	101	80-120	5	20	
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	52.9	55.4	106	111	70-130	5	20	
trans-1,3-Dichloropropene	ug/L	<3.5	50	50	48.1	51.7	96	103	70-130	7	20	
Trichloroethene	ug/L	<0.32	50	50	50.2	52.8	100	106	70-130	5	20	
Trichlorofluoromethane	ug/L	<0.42	50	50	50.0	52.0	100	104	65-160	4	20	
Vinyl chloride	ug/L	<0.17	50	50	34.6	36.0	69	72	60-137	4	20	
1,2-Dichlorobenzene-d4 (S)	%						99	100	70-130			
4-Bromofluorobenzene (S)	%						99	98	70-130			
Toluene-d8 (S)	%						99	101	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

QC Batch: 418917
QC Batch Method: SM 3500-Cr B
Analysis Method: SM 3500-Cr B
Analysis Description: Chromium, Hexavalent by 3500
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246740001, 40246740002, 40246740003

METHOD BLANK: 2412352 Matrix: Water
Associated Lab Samples: 40246740001, 40246740002, 40246740003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0073	0.024	06/21/22 13:25	

LABORATORY CONTROL SAMPLE: 2412353

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.30	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2412383 2412384

Parameter	Units	40246467001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium, Hexavalent	mg/L	<0.0073	0.3	0.3	0.039	0.038	13	12	90-110	2	20	M0

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1162-013 JAGEMANN PLATING
Pace Project No.: 40246740

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40246740001	**MW-1**	EPA 3010A	419169	EPA 6010D	419248
40246740002	**MW-14**	EPA 3010A	419169	EPA 6010D	419248
40246740003	**TW-20**	EPA 3010A	419169	EPA 6010D	419248
40246740001	**MW-1**	EPA 8260	418738		
40246740002	**MW-14**	EPA 8260	418738		
40246740003	**TW-20**	EPA 8260	418738		
40246740004	**TRIP BLANK**	EPA 8260	418738		
40246740001	**MW-1**	SM 3500-Cr B	418917		
40246740002	**MW-14**	SM 3500-Cr B	418917		
40246740003	**TW-20**	SM 3500-Cr B	418917		

40246740

Pace

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Page : 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	ROBERT E. LEE & ASSOCIATES, INC.	Report To:	Cody Applekamp	Attention:	Jaci Erdmann
Address:	1250 Centennial Centre Blvd	Copy To:	Nicole LaPlant	Company Name:	Robert E. Lee + Associates.
Oneida, WI 54155				Address:	
Email:	capplekamp@releeinc.com	Purchase Order #:		Pace Quote:	
Phone:	906-396-8289 Fax:	Project Name:	Jagemann Plating	Pace Project Manager:	brian.basten@pacelabs.com,
Requested Due Date:		Project #:	1162-013	Pace Profile #:	

Regulatory Agency	
State / Location	WI

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	Hexavalent Chromium	Total Chromium	Trip BLANK	Residual Chlorine (Y/N)	
	MATRIX: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS																	Requested Analysis Filtered (Y/N)	N	Y	Y	N		
1	MW-1	WT	G	—	—	6-16	1515		5	X		X	X						X	X	X			001
2	MW-14	WT	G	—	—	6-16	1620		5	X		X	X						X	X	X			002
3	TW-20	WT	G	—	—	6-16	1700		5	X		X	X						X	X	X			003
4	TRIP BLANK	WT	G	—	—	6-16	1720		2				X									X		004
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Lori Rogers 6/17	8:28			06/17/22	08:27
		08:45		Tanya Pace	06/17/22	0845

SAMPLE CONDITIONS			
1	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jonah DeBruyne

SIGNATURE of SAMPLER: Jonah DeBruyne DATE Signed: 06-17-22

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Sample Preservation Receipt Form

Client Name: REL Project # L102L6740

All containers needing preservation have been checked and noted below: ☑Yes ☐No ☐N/A Initial when completed: TP Date/ Time:

Lab Lot# of pH paper: 10023112 Lab Std #ID of preservation (if pH adjusted):

	Glass								Plastic					Vials						Jars				General							
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001										1		1					3													X		2.5 / 5 / 10
002										1		1					3													X		2.5 / 5 / 10
003										1		1					3													X		2.5 / 5 / 10
004																	2															2.5 / 5 / 10
005																																2.5 / 5 / 10
006																																2.5 / 5 / 10
007																																2.5 / 5 / 10
008																																2.5 / 5 / 10
009																																2.5 / 5 / 10
010																																2.5 / 5 / 10
011																																2.5 / 5 / 10
012																																2.5 / 5 / 10
013																																2.5 / 5 / 10
014																																2.5 / 5 / 10
015																																2.5 / 5 / 10
016																																2.5 / 5 / 10
017																																2.5 / 5 / 10
018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																																2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☑No ☐N/A *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40246740

40246740

Client Name: REL

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

Tracking #:

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

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

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

Thermometer Used SR - 110 **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 1 /Corr: 1

Person examining contents:
Date: 6/17/22 /Initials: TP

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Labeled By Initials: MH

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

Chain of Custody Present:	☑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.
- 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:		8.
For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
Trip Blank Present:	☑Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 483		

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

Person Contacted: Date/Time:

Comments/ Resolution:

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

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

June 30, 2022

Nicole Laplant
ROBERT E. LEE & ASSOCIATES, IN
1250 Centennial Centre Blvd
Oneida, WI 54155

RE: Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Dear Nicole Laplant:

Enclosed are the analytical results for sample(s) received by the laboratory on June 17, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

Sincerely,

Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Cody Applekamp, Robert E Lee & Associates, Inc.
Alan Gustafson, Robert E. Lee & Associates
Bruce Meissner, Robert E. Lee & Associates, Inc
Lori Rogers, Robert E Lee

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

CERTIFICATIONS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40246743001	**MW5**	Water	06/16/22 10:40	06/17/22 08:45
40246743002	**PZ-3**	Water	06/16/22 11:40	06/17/22 08:45
40246743003	**MW19**	Water	06/16/22 13:05	06/17/22 08:45
40246743004	**PZ-13**	Water	06/16/22 14:10	06/17/22 08:45
40246743005	**TRIP BLANK**	Water	06/16/22 17:15	06/17/22 08:45

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40246743001	**MW5**	EPA 6010D	TXW	7
		EPA 7470	AJT	1
		EPA 8260	LAP	64
40246743002	**PZ-3**	EPA 6010D	TXW	7
		EPA 7470	AJT	1
		EPA 8260	LAP	64
40246743003	**MW19**	EPA 6010D	TXW	7
		EPA 7470	AJT	1
		EPA 8260	LAP	64
40246743004	**PZ-13**	EPA 6010D	TXW	7
		EPA 7470	AJT	1
		EPA 8260	LAP	64
40246743005	**TRIP BLANK**	EPA 8260	LAP	64

PASI-G = Pace Analytical Services - Green Bay

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

SUMMARY OF DETECTION

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40246743001	**MW5**					
EPA 6010D	Barium, Dissolved	124	ug/L	5.0	06/23/22 15:48	
40246743002	**PZ-3**					
EPA 6010D	Barium, Dissolved	26.5	ug/L	5.0	06/23/22 15:57	
EPA 8260	Trichloroethene	0.43J	ug/L	1.0	06/21/22 13:38	
40246743003	**MW19**					
EPA 6010D	Barium, Dissolved	115	ug/L	5.0	06/23/22 16:02	
40246743004	**PZ-13**					
EPA 6010D	Barium, Dissolved	22.4	ug/L	5.0	06/23/22 16:05	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: MW5 **Lab ID: 40246743001** Collected: 06/16/22 10:40 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/23/22 05:57	06/23/22 15:48	7440-38-2	
Barium, Dissolved	**124**	ug/L	5.0	1.5	1	06/23/22 05:57	06/23/22 15:48	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/23/22 05:57	06/23/22 15:48	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/23/22 05:57	06/23/22 15:48	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/23/22 05:57	06/23/22 15:48	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/23/22 05:57	06/23/22 15:48	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/23/22 05:57	06/23/22 15:48	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	06/29/22 10:00	06/30/22 09:09	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:59	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 12:59	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/21/22 12:59	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/21/22 12:59	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 12:59	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/21/22 12:59	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 12:59	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 12:59	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/21/22 12:59	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/21/22 12:59	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/21/22 12:59	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/21/22 12:59	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/21/22 12:59	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 12:59	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/21/22 12:59	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/21/22 12:59	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:59	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 12:59	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 12:59	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/21/22 12:59	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/21/22 12:59	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 12:59	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 12:59	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/21/22 12:59	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:59	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/21/22 12:59	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 12:59	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/21/22 12:59	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/21/22 12:59	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/21/22 12:59	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 12:59	108-90-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: MW5 **Lab ID: 40246743001** Collected: 06/16/22 10:40 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/21/22 12:59	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/21/22 12:59	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/21/22 12:59	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/21/22 12:59	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/21/22 12:59	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/21/22 12:59	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 12:59	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 12:59	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/21/22 12:59	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/21/22 12:59	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 12:59	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/21/22 12:59	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/21/22 12:59	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:59	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 12:59	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/21/22 12:59	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/21/22 12:59	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 12:59	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/21/22 12:59	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/21/22 12:59	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:59	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/21/22 12:59	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 12:59	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 12:59	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 12:59	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 12:59	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/21/22 12:59	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/21/22 12:59	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/21/22 12:59	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/21/22 12:59	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		06/21/22 12:59	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	70-130		1		06/21/22 12:59	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		06/21/22 12:59	2037-26-5	

Sample: PZ-3 **Lab ID: 40246743002** Collected: 06/16/22 11:40 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/23/22 05:57	06/23/22 15:57	7440-38-2	
Barium, Dissolved	**26.5**	ug/L	5.0	1.5	1	06/23/22 05:57	06/23/22 15:57	7440-39-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: PZ-3 **Lab ID: 40246743002** Collected: 06/16/22 11:40 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/23/22 05:57	06/23/22 15:57	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/23/22 05:57	06/23/22 15:57	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/23/22 05:57	06/23/22 15:57	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/23/22 05:57	06/23/22 15:57	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/23/22 05:57	06/23/22 15:57	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	06/29/22 10:00	06/30/22 09:11	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:38	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 13:38	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/21/22 13:38	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/21/22 13:38	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 13:38	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/21/22 13:38	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 13:38	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 13:38	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/21/22 13:38	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/21/22 13:38	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/21/22 13:38	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/21/22 13:38	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/21/22 13:38	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 13:38	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/21/22 13:38	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/21/22 13:38	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:38	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 13:38	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 13:38	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/21/22 13:38	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/21/22 13:38	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 13:38	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 13:38	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/21/22 13:38	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:38	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/21/22 13:38	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 13:38	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/21/22 13:38	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/21/22 13:38	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/21/22 13:38	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 13:38	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/21/22 13:38	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/21/22 13:38	67-66-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: PZ-3 **Lab ID: 40246743002** Collected: 06/16/22 11:40 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/21/22 13:38	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/21/22 13:38	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/21/22 13:38	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/21/22 13:38	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 13:38	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 13:38	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/21/22 13:38	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/21/22 13:38	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 13:38	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/21/22 13:38	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/21/22 13:38	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:38	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 13:38	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/21/22 13:38	108-88-3	
Trichloroethene	**0.43J**	ug/L	1.0	0.32	1		06/21/22 13:38	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 13:38	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/21/22 13:38	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/21/22 13:38	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:38	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/21/22 13:38	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 13:38	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 13:38	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 13:38	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 13:38	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/21/22 13:38	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/21/22 13:38	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/21/22 13:38	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/21/22 13:38	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		06/21/22 13:38	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	70-130		1		06/21/22 13:38	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		06/21/22 13:38	2037-26-5	

Sample: MW19 **Lab ID: 40246743003** Collected: 06/16/22 13:05 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/23/22 05:57	06/23/22 16:02	7440-38-2	
Barium, Dissolved	**115**	ug/L	5.0	1.5	1	06/23/22 05:57	06/23/22 16:02	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/23/22 05:57	06/23/22 16:02	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/23/22 05:57	06/23/22 16:02	7440-47-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: MW19 **Lab ID: 40246743003** Collected: 06/16/22 13:05 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/23/22 05:57	06/23/22 16:02	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/23/22 05:57	06/23/22 16:02	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/23/22 05:57	06/23/22 16:02	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	06/29/22 10:00	06/30/22 09:14	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:57	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 13:57	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/21/22 13:57	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/21/22 13:57	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 13:57	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/21/22 13:57	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 13:57	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 13:57	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/21/22 13:57	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/21/22 13:57	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/21/22 13:57	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/21/22 13:57	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/21/22 13:57	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 13:57	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/21/22 13:57	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/21/22 13:57	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:57	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 13:57	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 13:57	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/21/22 13:57	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/21/22 13:57	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 13:57	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 13:57	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/21/22 13:57	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:57	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/21/22 13:57	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 13:57	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/21/22 13:57	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/21/22 13:57	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/21/22 13:57	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 13:57	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/21/22 13:57	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/21/22 13:57	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/21/22 13:57	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/21/22 13:57	124-48-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: MW19 **Lab ID: 40246743003** Collected: 06/16/22 13:05 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/21/22 13:57	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/21/22 13:57	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 13:57	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 13:57	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/21/22 13:57	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/21/22 13:57	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 13:57	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/21/22 13:57	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/21/22 13:57	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:57	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 13:57	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/21/22 13:57	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/21/22 13:57	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 13:57	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/21/22 13:57	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/21/22 13:57	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 13:57	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/21/22 13:57	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 13:57	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 13:57	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 13:57	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 13:57	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/21/22 13:57	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/21/22 13:57	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/21/22 13:57	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/21/22 13:57	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		06/21/22 13:57	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		06/21/22 13:57	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		06/21/22 13:57	2037-26-5	

Sample: PZ-13 **Lab ID: 40246743004** Collected: 06/16/22 14:10 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/23/22 05:57	06/23/22 16:05	7440-38-2	
Barium, Dissolved	**22.4**	ug/L	5.0	1.5	1	06/23/22 05:57	06/23/22 16:05	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/23/22 05:57	06/23/22 16:05	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/23/22 05:57	06/23/22 16:05	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/23/22 05:57	06/23/22 16:05	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/23/22 05:57	06/23/22 16:05	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: PZ-13 **Lab ID: 40246743004** Collected: 06/16/22 14:10 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/23/22 05:57	06/23/22 16:05	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	06/29/22 10:00	06/30/22 09:16	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/21/22 14:17	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 14:17	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/21/22 14:17	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/21/22 14:17	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 14:17	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/21/22 14:17	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 14:17	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 14:17	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/21/22 14:17	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/21/22 14:17	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/21/22 14:17	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/21/22 14:17	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/21/22 14:17	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 14:17	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/21/22 14:17	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/21/22 14:17	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 14:17	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 14:17	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 14:17	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/21/22 14:17	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/21/22 14:17	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 14:17	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 14:17	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/21/22 14:17	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 14:17	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/21/22 14:17	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 14:17	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/21/22 14:17	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/21/22 14:17	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/21/22 14:17	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 14:17	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/21/22 14:17	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/21/22 14:17	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/21/22 14:17	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/21/22 14:17	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/21/22 14:17	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/21/22 14:17	75-71-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: PZ-13 **Lab ID: 40246743004** Collected: 06/16/22 14:10 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 14:17	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 14:17	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/21/22 14:17	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/21/22 14:17	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 14:17	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/21/22 14:17	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/21/22 14:17	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 14:17	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 14:17	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/21/22 14:17	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/21/22 14:17	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 14:17	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/21/22 14:17	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/21/22 14:17	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 14:17	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/21/22 14:17	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 14:17	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 14:17	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 14:17	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 14:17	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/21/22 14:17	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/21/22 14:17	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/21/22 14:17	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/21/22 14:17	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		06/21/22 14:17	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	70-130		1		06/21/22 14:17	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		06/21/22 14:17	2037-26-5	

Sample: TRIP BLANK **Lab ID: 40246743005** Collected: 06/16/22 17:15 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:00	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 12:00	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/21/22 12:00	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/21/22 12:00	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 12:00	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/21/22 12:00	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 12:00	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 12:00	87-61-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: TRIP BLANK **Lab ID: 40246743005** Collected: 06/16/22 17:15 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/21/22 12:00	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/21/22 12:00	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/21/22 12:00	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/21/22 12:00	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/21/22 12:00	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 12:00	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/21/22 12:00	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/21/22 12:00	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:00	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 12:00	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/21/22 12:00	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/21/22 12:00	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/21/22 12:00	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 12:00	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/21/22 12:00	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/21/22 12:00	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:00	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/21/22 12:00	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 12:00	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/21/22 12:00	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/21/22 12:00	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/21/22 12:00	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 12:00	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/21/22 12:00	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/21/22 12:00	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/21/22 12:00	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/21/22 12:00	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/21/22 12:00	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/21/22 12:00	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 12:00	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/21/22 12:00	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/21/22 12:00	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/21/22 12:00	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/21/22 12:00	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/21/22 12:00	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/21/22 12:00	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:00	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/21/22 12:00	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/21/22 12:00	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/21/22 12:00	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/21/22 12:00	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/21/22 12:00	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/21/22 12:00	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/21/22 12:00	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/21/22 12:00	179601-23-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Sample: TRIP BLANK **Lab ID: 40246743005** Collected: 06/16/22 17:15 Received: 06/17/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/21/22 12:00	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 12:00	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/21/22 12:00	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/21/22 12:00	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/21/22 12:00	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/21/22 12:00	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/21/22 12:00	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/21/22 12:00	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		06/21/22 12:00	460-00-4	
1,2-Dichlorobenzene-d4 (S)	98	%	70-130		1		06/21/22 12:00	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		06/21/22 12:00	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

QC Batch: 419674
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury Dissolved
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246743001, 40246743002, 40246743003, 40246743004

METHOD BLANK: 2416826 Matrix: Water
Associated Lab Samples: 40246743001, 40246743002, 40246743003, 40246743004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	<0.066	0.20	06/30/22 08:48	

LABORATORY CONTROL SAMPLE: 2416827

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.8	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2416828 2416829

Parameter	Units	40247056001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	<0.066	5	5	4.9	4.7	97	94	85-115	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

QC Batch: 419169
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246743001, 40246743002, 40246743003, 40246743004

METHOD BLANK: 2413835 Matrix: Water
Associated Lab Samples: 40246743001, 40246743002, 40246743003, 40246743004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<8.3	25.0	06/23/22 15:44	
Barium, Dissolved	ug/L	<1.5	5.0	06/23/22 15:44	
Cadmium, Dissolved	ug/L	<1.3	5.0	06/23/22 15:44	
Chromium, Dissolved	ug/L	<2.5	10.0	06/23/22 15:44	
Lead, Dissolved	ug/L	<5.9	20.0	06/23/22 15:44	
Selenium, Dissolved	ug/L	<12.2	40.0	06/23/22 15:44	
Silver, Dissolved	ug/L	<3.2	10.0	06/23/22 15:44	

LABORATORY CONTROL SAMPLE: 2413836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	250	239	96	80-120	
Barium, Dissolved	ug/L	250	255	102	80-120	
Cadmium, Dissolved	ug/L	250	249	99	80-120	
Chromium, Dissolved	ug/L	250	255	102	80-120	
Lead, Dissolved	ug/L	250	258	103	80-120	
Selenium, Dissolved	ug/L	250	256	102	80-120	
Silver, Dissolved	ug/L	125	130	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2413837 2413838

Parameter	Units	40246743001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic, Dissolved	ug/L	<8.3	250	250	243	243	96	96	75-125	0	20	
Barium, Dissolved	ug/L	124	250	250	370	382	99	103	75-125	3	20	
Cadmium, Dissolved	ug/L	<1.3	250	250	248	256	99	102	75-125	3	20	
Chromium, Dissolved	ug/L	<2.5	250	250	250	258	100	103	75-125	3	20	
Lead, Dissolved	ug/L	<5.9	250	250	254	266	101	105	75-125	5	20	
Selenium, Dissolved	ug/L	<12.2	250	250	248	258	99	103	75-125	4	20	
Silver, Dissolved	ug/L	<3.2	125	125	128	133	101	104	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

QC Batch: 418738
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246743001, 40246743002, 40246743003, 40246743004, 40246743005

METHOD BLANK: 2411724 Matrix: Water
Associated Lab Samples: 40246743001, 40246743002, 40246743003, 40246743004, 40246743005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	1.0	06/21/22 07:58	
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/21/22 07:58	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	1.0	06/21/22 07:58	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	06/21/22 07:58	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/21/22 07:58	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/21/22 07:58	
1,1-Dichloropropene	ug/L	<0.41	1.0	06/21/22 07:58	
1,2,3-Trichlorobenzene	ug/L	<1.0	5.0	06/21/22 07:58	
1,2,3-Trichloropropane	ug/L	<0.56	5.0	06/21/22 07:58	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	06/21/22 07:58	
1,2,4-Trimethylbenzene	ug/L	<0.45	1.0	06/21/22 07:58	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	5.0	06/21/22 07:58	
1,2-Dibromoethane (EDB)	ug/L	<0.31	1.0	06/21/22 07:58	
1,2-Dichlorobenzene	ug/L	<0.33	1.0	06/21/22 07:58	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/21/22 07:58	
1,2-Dichloropropane	ug/L	<0.45	1.0	06/21/22 07:58	
1,3,5-Trimethylbenzene	ug/L	<0.36	1.0	06/21/22 07:58	
1,3-Dichlorobenzene	ug/L	<0.35	1.0	06/21/22 07:58	
1,3-Dichloropropane	ug/L	<0.30	1.0	06/21/22 07:58	
1,4-Dichlorobenzene	ug/L	<0.89	1.0	06/21/22 07:58	
2,2-Dichloropropane	ug/L	<4.2	5.0	06/21/22 07:58	
2-Chlorotoluene	ug/L	<0.89	5.0	06/21/22 07:58	
4-Chlorotoluene	ug/L	<0.89	5.0	06/21/22 07:58	
Benzene	ug/L	<0.30	1.0	06/21/22 07:58	
Bromobenzene	ug/L	<0.36	1.0	06/21/22 07:58	
Bromochloromethane	ug/L	<0.36	5.0	06/21/22 07:58	
Bromodichloromethane	ug/L	<0.42	1.0	06/21/22 07:58	
Bromoform	ug/L	<3.8	5.0	06/21/22 07:58	
Bromomethane	ug/L	<1.2	5.0	06/21/22 07:58	
Carbon tetrachloride	ug/L	<0.37	1.0	06/21/22 07:58	
Chlorobenzene	ug/L	<0.86	1.0	06/21/22 07:58	
Chloroethane	ug/L	<1.4	5.0	06/21/22 07:58	
Chloroform	ug/L	<1.2	5.0	06/21/22 07:58	
Chloromethane	ug/L	<1.6	5.0	06/21/22 07:58	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/21/22 07:58	
cis-1,3-Dichloropropene	ug/L	<0.36	1.0	06/21/22 07:58	
Dibromochloromethane	ug/L	<2.6	5.0	06/21/22 07:58	
Dibromomethane	ug/L	<0.99	5.0	06/21/22 07:58	
Dichlorodifluoromethane	ug/L	<0.46	5.0	06/21/22 07:58	
Diisopropyl ether	ug/L	<1.1	5.0	06/21/22 07:58	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

METHOD BLANK: 2411724 Matrix: Water
Associated Lab Samples: 40246743001, 40246743002, 40246743003, 40246743004, 40246743005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.33	1.0	06/21/22 07:58	
Hexachloro-1,3-butadiene	ug/L	<2.7	5.0	06/21/22 07:58	
Isopropylbenzene (Cumene)	ug/L	<1.0	5.0	06/21/22 07:58	
m&p-Xylene	ug/L	<0.70	2.0	06/21/22 07:58	
Methyl-tert-butyl ether	ug/L	<1.1	5.0	06/21/22 07:58	
Methylene Chloride	ug/L	<0.32	5.0	06/21/22 07:58	
n-Butylbenzene	ug/L	<0.86	1.0	06/21/22 07:58	
n-Propylbenzene	ug/L	<0.35	1.0	06/21/22 07:58	
Naphthalene	ug/L	<1.1	5.0	06/21/22 07:58	
o-Xylene	ug/L	<0.35	1.0	06/21/22 07:58	
p-Isopropyltoluene	ug/L	<1.0	5.0	06/21/22 07:58	
sec-Butylbenzene	ug/L	<0.42	1.0	06/21/22 07:58	
Styrene	ug/L	<0.36	1.0	06/21/22 07:58	
tert-Butylbenzene	ug/L	<0.59	1.0	06/21/22 07:58	
Tetrachloroethene	ug/L	<0.41	1.0	06/21/22 07:58	
Toluene	ug/L	<0.29	1.0	06/21/22 07:58	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/21/22 07:58	
trans-1,3-Dichloropropene	ug/L	<3.5	5.0	06/21/22 07:58	
Trichloroethene	ug/L	<0.32	1.0	06/21/22 07:58	
Trichlorofluoromethane	ug/L	<0.42	1.0	06/21/22 07:58	
Vinyl chloride	ug/L	<0.17	1.0	06/21/22 07:58	
1,2-Dichlorobenzene-d4 (S)	%	96	70-130	06/21/22 07:58	
4-Bromofluorobenzene (S)	%	99	70-130	06/21/22 07:58	
Toluene-d8 (S)	%	101	70-130	06/21/22 07:58	

LABORATORY CONTROL SAMPLE: 2411725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	57.9	116	70-134	
1,1,2,2-Tetrachloroethane	ug/L	50	48.1	96	69-130	
1,1,2-Trichloroethane	ug/L	50	47.9	96	70-130	
1,1-Dichloroethane	ug/L	50	48.9	98	70-130	
1,1-Dichloroethene	ug/L	50	50.9	102	74-131	
1,2,4-Trichlorobenzene	ug/L	50	49.2	98	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	45.6	91	64-137	
1,2-Dibromoethane (EDB)	ug/L	50	49.0	98	70-130	
1,2-Dichlorobenzene	ug/L	50	49.7	99	70-130	
1,2-Dichloroethane	ug/L	50	50.8	102	70-137	
1,2-Dichloropropane	ug/L	50	45.3	91	80-121	
1,3-Dichlorobenzene	ug/L	50	53.6	107	70-130	
1,4-Dichlorobenzene	ug/L	50	50.7	101	70-130	
Benzene	ug/L	50	48.2	96	70-130	
Bromodichloromethane	ug/L	50	50.3	101	70-130	
Bromoform	ug/L	50	55.3	111	70-130	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

LABORATORY CONTROL SAMPLE: 2411725

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/L	50	32.7	65	21-147	
Carbon tetrachloride	ug/L	50	59.9	120	80-146	
Chlorobenzene	ug/L	50	52.4	105	70-130	
Chloroethane	ug/L	50	41.0	82	52-165	
Chloroform	ug/L	50	53.9	108	80-123	
Chloromethane	ug/L	50	32.5	65	51-122	
cis-1,2-Dichloroethene	ug/L	50	48.6	97	70-130	
cis-1,3-Dichloropropene	ug/L	50	51.1	102	70-130	
Dibromochloromethane	ug/L	50	53.8	108	70-130	
Dichlorodifluoromethane	ug/L	50	23.6	47	25-121	
Ethylbenzene	ug/L	50	52.4	105	80-120	
Isopropylbenzene (Cumene)	ug/L	50	53.1	106	70-130	
m&p-Xylene	ug/L	100	101	101	70-130	
Methyl-tert-butyl ether	ug/L	50	52.2	104	70-130	
Methylene Chloride	ug/L	50	51.3	103	70-130	
o-Xylene	ug/L	50	50.2	100	70-130	
Styrene	ug/L	50	50.4	101	70-130	
Tetrachloroethene	ug/L	50	55.0	110	70-130	
Toluene	ug/L	50	49.9	100	80-120	
trans-1,2-Dichloroethene	ug/L	50	53.3	107	70-130	
trans-1,3-Dichloropropene	ug/L	50	50.4	101	70-130	
Trichloroethene	ug/L	50	52.6	105	70-130	
Trichlorofluoromethane	ug/L	50	52.5	105	65-160	
Vinyl chloride	ug/L	50	36.1	72	63-134	
1,2-Dichlorobenzene-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			97	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2412553 2412554

Parameter	Units	40246723002 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	55.9	57.7	112	115	70-134	3	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	50	50	46.2	48.3	92	97	61-135	5	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	46.5	49.9	93	100	70-130	7	20	
1,1-Dichloroethane	ug/L	<0.30	50	50	47.5	49.6	95	99	70-130	4	20	
1,1-Dichloroethene	ug/L	<0.58	50	50	49.0	50.9	98	102	71-130	4	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	47.3	50.1	95	100	68-131	6	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	50	50	44.2	48.0	88	96	51-141	8	20	
1,2-Dibromoethane (EDB)	ug/L	<0.31	50	50	46.4	50.1	93	100	70-130	8	20	
1,2-Dichlorobenzene	ug/L	<0.33	50	50	47.8	51.6	96	103	70-130	8	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	50.0	52.3	100	105	70-137	4	20	
1,2-Dichloropropane	ug/L	<0.45	50	50	44.1	46.8	88	94	80-121	6	20	
1,3-Dichlorobenzene	ug/L	<0.35	50	50	50.5	54.4	101	109	70-130	7	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2412553 2412554

Parameter	Units	40246723002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	<0.89	50	50	48.7	52.6	97	105	70-130	8	20	
Benzene	ug/L	<0.30	50	50	46.6	48.6	93	97	70-130	4	20	
Bromodichloromethane	ug/L	<0.42	50	50	49.3	51.5	99	103	70-130	4	20	
Bromoform	ug/L	<3.8	50	50	51.4	55.7	103	111	70-133	8	20	
Bromomethane	ug/L	<1.2	50	50	35.3	39.3	71	79	21-149	11	22	
Carbon tetrachloride	ug/L	<0.37	50	50	57.5	59.3	115	119	80-146	3	20	
Chlorobenzene	ug/L	<0.86	50	50	49.2	53.2	98	106	70-130	8	20	
Chloroethane	ug/L	<1.4	50	50	41.2	41.1	82	82	52-165	0	20	
Chloroform	ug/L	<1.2	50	50	53.0	55.2	106	110	80-123	4	20	
Chloromethane	ug/L	<1.6	50	50	31.3	32.1	63	64	42-125	2	20	
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	47.9	50.3	96	101	70-130	5	20	
cis-1,3-Dichloropropene	ug/L	<0.36	50	50	49.6	51.8	99	104	70-130	4	20	
Dibromochloromethane	ug/L	<2.6	50	50	51.1	53.9	102	108	70-130	5	20	
Dichlorodifluoromethane	ug/L	<0.46	50	50	21.7	22.8	43	46	25-121	5	20	
Ethylbenzene	ug/L	<0.33	50	50	49.3	52.2	99	104	80-121	6	20	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	50.2	53.1	100	106	70-130	6	20	
m&p-Xylene	ug/L	<0.70	100	100	97.0	103	97	103	70-130	6	20	
Methyl-tert-butyl ether	ug/L	<1.1	50	50	50.4	53.5	101	107	70-130	6	20	
Methylene Chloride	ug/L	<0.32	50	50	50.2	52.6	100	105	70-130	5	20	
o-Xylene	ug/L	<0.35	50	50	49.0	51.8	98	104	70-130	6	20	
Styrene	ug/L	<0.36	50	50	47.7	52.0	95	104	70-132	9	20	
Tetrachloroethene	ug/L	<0.41	50	50	52.6	54.8	105	110	70-130	4	20	
Toluene	ug/L	<0.29	50	50	47.6	50.3	95	101	80-120	5	20	
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	52.9	55.4	106	111	70-130	5	20	
trans-1,3-Dichloropropene	ug/L	<3.5	50	50	48.1	51.7	96	103	70-130	7	20	
Trichloroethene	ug/L	<0.32	50	50	50.2	52.8	100	106	70-130	5	20	
Trichlorofluoromethane	ug/L	<0.42	50	50	50.0	52.0	100	104	65-160	4	20	
Vinyl chloride	ug/L	<0.17	50	50	34.6	36.0	69	72	60-137	4	20	
1,2-Dichlorobenzene-d4 (S)	%						99	100	70-130			
4-Bromofluorobenzene (S)	%						99	98	70-130			
Toluene-d8 (S)	%						99	101	70-130			

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1162-013 1324 S. 26TH ST.
Pace Project No.: 40246743

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40246743001	**MW5**	EPA 3010A	419169	EPA 6010D	419248
40246743002	**PZ-3**	EPA 3010A	419169	EPA 6010D	419248
40246743003	**MW19**	EPA 3010A	419169	EPA 6010D	419248
40246743004	**PZ-13**	EPA 3010A	419169	EPA 6010D	419248
40246743001	**MW5**	EPA 7470	419674	EPA 7470	419721
40246743002	**PZ-3**	EPA 7470	419674	EPA 7470	419721
40246743003	**MW19**	EPA 7470	419674	EPA 7470	419721
40246743004	**PZ-13**	EPA 7470	419674	EPA 7470	419721
40246743001	**MW5**	EPA 8260	418738		
40246743002	**PZ-3**	EPA 8260	418738		
40246743003	**MW19**	EPA 8260	418738		
40246743004	**PZ-13**	EPA 8260	418738		
40246743005	**TRIP BLANK**	EPA 8260	418738		

40246743

Robert E. Lee & Associates, Inc.
Engineering | Surveying | Environmental | Ecological
1250 Centennial Centre Blvd. • Hobart, WI 54155 • 920-662-9641 • FAX 920-662-9141

To ensure the proper handling of samples, please see the back for instructions.

CHAIN OF CUSTODY RECORD

COC # **203253**

Client:
Project Name: 1324 S. 26th St., Manitowoc
Project Number: 1162-013 BID #:

Environmental Program: ☐ LUST ☐ SDWA ☐ WPDES ☐ RCRA ☐ OTHER ____

Requested Turnaround Time: ☒ Normal (10-15 DAYS) ☐ Rush
Date Needed: ____
Rushes accepted only w/prior notification

*Preservation Code
N = Nitric Acid (red); O = Sodium Hydroxide
H = Hydrochloric Acid; U = Unpreserved (white)
M = Methanol; S = Sulfuric Acid (green)

Sampler: Jonah Oettinger

Sample Type (Matrix): DW = Drinking Water, GW = Groundwater, WW = Wastewater, Soil, Oil, Sludge, Air, Other:

Analyses Required: (Note special detection limits or methods)

Filtered? (Y/N): VOCs – N; RCRA Metals – Y
Preservation *(Code): VOCs – H; RCRA Metals – N

Sample Name	Date	Time	A/P	Comp	Grab	Sample Type (Matrix)	No. Of Containers	VOCs	RCRA Metals	Laboratory Sample I.D.	Remarks
MW5	6-16-22	1040	A		X	GW	4	X	X	001	
P2-3	↓	1140	A		X	↓	4	X	X	002	
MW19		1305	P		X		4	X	X	003	
P2-13		1410	P		X		4	X	X	004	
Trip Blank	↓	1715	P		X	↓	2	X		005	

Report to: Nicole LaPlant
Company: Robert E. Lee & Associates
Address: 1250 Centennial Centre Blvd.
Hobart, WI 54155
Telephone: 920-662-9641

Invoice to: Jaci Erdmann
Company: Robert E. Lee & Associates
Address: 1250 Centennial Centre Blvd.
Hobart, WI 54155
Telephone: 920-662-9641

	Relinquished By	Date	Time	Received By	Date	Time
1)	Lori Rogers	6/17	8:28 A/P	[signature]	06/17/22	8:27 A/P
2)	[signature]	06/17/22	08:45 A/P	Tanya Bologna	6/17/22	0845 A/P
3)			A/P			A/P

Received by Lab ____
A = AM P = PM

Laboratory Receiving Notes
Temperature of Contents 1 °C
Custody Seal Intact ____
Sample Condition ____
Sample pH ____

Sample Preservation Receipt Form

Client Name: REL Project # 410246743

All containers needing preservation have been checked and noted below: ☑Yes ☐No ☐N/A Initial when completed: JP Date/ Time:

Lab Lot# of pH paper: 10031112 Lab Std #ID of preservation (if pH adjusted):

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	Vials: VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																	3														X		2.5 / 5 / 10
002																	3														X		2.5 / 5 / 10
003																	3														X		2.5 / 5 / 10
004																	3														X		2.5 / 5 / 10
005																	2																2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																																	2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																	JP																2.5 / 5 / 10
014																	10/17/22																2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☑No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40246743

40246743

Client Name: REL

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

Tracking #:

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

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

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

Thermometer Used SR - 110 **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 1 /Corr: 1

Person examining contents: Date: 10/7/22 Initials: TP

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Labeled By Initials: mlt

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

Chain of Custody Present:	☑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.
- 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:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
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	12.
Trip Blank Present:	☑Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 483		

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

Person Contacted: Date/Time:

Comments/ Resolution:

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

Page 2 of 2

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

August 04, 2022

Nicole Laplant
ROBERT E. LEE & ASSOCIATES, IN
1250 Centennial Centre Blvd
Oneida, WI 54155

RE: Project: 1162-013
Pace Project No.: 40246647

Dear Nicole Laplant:

Enclosed are the analytical results for sample(s) received by the laboratory on June 16, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

Sincerely,

Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Cody Applekamp, Robert E Lee & Associates, Inc.
Alan Gustafson, Robert E. Lee & Associates
Bruce Meissner, Robert E. Lee & Associates, Inc
Lori Rogers, Robert E Lee

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

CERTIFICATIONS

Project: 1162-013
Pace Project No.: 40246647

Pace Analytical Services Green Bay
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky UST Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
New York Certification #: 12064
North Dakota Certification #: R-150
Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-16-00157
Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: 1162-013
Pace Project No.: 40246647

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40246647001	**MW7**	Water	06/14/22 11:15	06/16/22 08:45
40246647002	**MW6**	Water	06/14/22 12:55	06/16/22 08:45
40246647003	**SUMP 1**	Water	06/14/22 14:30	06/16/22 08:45
40246647004	**MW4**	Water	06/14/22 16:00	06/16/22 08:45
40246647005	**PZ-4**	Water	06/14/22 17:00	06/16/22 08:45
40246647006	**PFAS BLANK**	Water	06/14/22 18:00	06/16/22 08:45
40246647007	**MW-17**	Water	06/15/22 10:40	06/16/22 08:45
40246647008	**PZ-16**	Water	06/15/22 11:45	06/16/22 08:45
40246647009	**MW18**	Water	06/15/22 12:55	06/16/22 08:45
40246647010	**TW26**	Water	06/15/22 16:25	06/16/22 08:45
40246647011	**TW27**	Water	06/15/22 15:20	06/16/22 08:45
40246647012	**TW28**	Water	06/15/22 14:45	06/16/22 08:45

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

SAMPLE ANALYTE COUNT

Project: 1162-013
Pace Project No.: 40246647

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40246647001	**MW7**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647002	**MW6**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647003	**SUMP 1**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647004	**MW4**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647005	**PZ-4**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647007	**MW-17**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647008	**PZ-16**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647009	**MW18**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647010	**TW26**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647011	**TW27**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G
40246647012	**TW28**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	64	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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

SUMMARY OF DETECTION

Project: 1162-013
Pace Project No.: 40246647

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40246647001	**MW7**					
EPA 6010D	Barium, Dissolved	250	ug/L	5.0	06/21/22 10:47	
EPA 8260	Dichlorodifluoromethane	3.1J	ug/L	5.0	06/23/22 13:49	
EPA 8260	Trichloroethene	0.83J	ug/L	1.0	06/23/22 13:49	
40246647002	**MW6**					
EPA 6010D	Barium, Dissolved	171	ug/L	5.0	06/21/22 10:56	
40246647003	**SUMP 1**					
EPA 6010D	Barium, Dissolved	36.5	ug/L	5.0	06/21/22 11:01	
EPA 6010D	Cadmium, Dissolved	16.3	ug/L	5.0	06/21/22 11:01	
EPA 6010D	Chromium, Dissolved	186	ug/L	10.0	06/21/22 11:01	
EPA 8260	Trichloroethene	23.9	ug/L	1.0	06/23/22 16:33	
EPA 8260	Vinyl chloride	2.5	ug/L	1.0	06/23/22 16:33	
EPA 8260	cis-1,2-Dichloroethene	26.2	ug/L	1.0	06/23/22 16:33	
EPA 8260	trans-1,2-Dichloroethene	0.88J	ug/L	1.0	06/23/22 16:33	
40246647004	**MW4**					
EPA 6010D	Barium, Dissolved	59.1	ug/L	5.0	06/21/22 11:04	
40246647005	**PZ-4**					
EPA 6010D	Barium, Dissolved	23.2	ug/L	5.0	06/21/22 11:11	
40246647007	**MW-17**					
EPA 6010D	Barium, Dissolved	70.0	ug/L	5.0	06/21/22 11:13	
40246647008	**PZ-16**					
EPA 6010D	Barium, Dissolved	47.8	ug/L	5.0	06/21/22 11:16	
40246647009	**MW18**					
EPA 6010D	Barium, Dissolved	59.3	ug/L	5.0	06/21/22 11:18	
EPA 8260	Dichlorodifluoromethane	0.51J	ug/L	5.0	06/23/22 14:10	
40246647010	**TW26**					
EPA 6010D	Barium, Dissolved	187	ug/L	25.0	06/21/22 11:20	
EPA 8260	1,1-Dichloroethane	1.8	ug/L	1.0	06/23/22 15:31	
EPA 8260	1,1-Dichloroethene	13.5	ug/L	1.0	06/23/22 15:31	
EPA 8260	Dichlorodifluoromethane	121	ug/L	5.0	06/23/22 15:31	
EPA 8260	Trichloroethene	27.1	ug/L	1.0	06/23/22 15:31	
EPA 8260	Vinyl chloride	47.0	ug/L	1.0	06/23/22 15:31	
EPA 8260	cis-1,2-Dichloroethene	52.6	ug/L	1.0	06/23/22 15:31	
EPA 8260	trans-1,2-Dichloroethene	2.0	ug/L	1.0	06/23/22 15:31	
40246647011	**TW27**					
EPA 6010D	Barium, Dissolved	918	ug/L	5.0	06/21/22 11:23	
EPA 8260	Vinyl chloride	0.27J	ug/L	1.0	06/23/22 15:52	1q
40246647012	**TW28**					
EPA 6010D	Barium, Dissolved	60.2	ug/L	5.0	06/21/22 11:25	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW7 **Lab ID: 40246647001** Collected: 06/14/22 11:15 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 10:47	7440-38-2	
Barium, Dissolved	**250**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 10:47	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 10:47	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 10:47	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 10:47	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 10:47	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 10:47	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:39	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/23/22 13:49	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 13:49	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/23/22 13:49	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/23/22 13:49	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 13:49	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/23/22 13:49	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 13:49	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 13:49	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/23/22 13:49	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/23/22 13:49	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/23/22 13:49	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/23/22 13:49	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/23/22 13:49	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 13:49	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/23/22 13:49	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/23/22 13:49	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 13:49	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 13:49	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 13:49	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/23/22 13:49	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/23/22 13:49	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 13:49	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 13:49	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/23/22 13:49	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 13:49	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/23/22 13:49	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 13:49	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/23/22 13:49	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/23/22 13:49	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/23/22 13:49	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 13:49	108-90-7	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW7 **Lab ID: 40246647001** Collected: 06/14/22 11:15 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/23/22 13:49	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/23/22 13:49	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/23/22 13:49	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/23/22 13:49	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/23/22 13:49	74-95-3	
Dichlorodifluoromethane	**3.1J**	ug/L	5.0	0.46	1		06/23/22 13:49	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 13:49	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 13:49	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/23/22 13:49	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/23/22 13:49	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 13:49	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/23/22 13:49	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/23/22 13:49	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 13:49	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 13:49	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/23/22 13:49	108-88-3	
Trichloroethene	**0.83J**	ug/L	1.0	0.32	1		06/23/22 13:49	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 13:49	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/23/22 13:49	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/23/22 13:49	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 13:49	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/23/22 13:49	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 13:49	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 13:49	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 13:49	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 13:49	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/23/22 13:49	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/23/22 13:49	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/23/22 13:49	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/23/22 13:49	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		06/23/22 13:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		06/23/22 13:49	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		06/23/22 13:49	2037-26-5	

Sample: MW6 **Lab ID: 40246647002** Collected: 06/14/22 12:55 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 10:56	7440-38-2	
Barium, Dissolved	**171**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 10:56	7440-39-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW6 **Lab ID: 40246647002** Collected: 06/14/22 12:55 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 10:56	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 10:56	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 10:56	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 10:56	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 10:56	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:41	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:14	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:14	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/20/22 15:14	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/20/22 15:14	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:14	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/20/22 15:14	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 15:14	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:14	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/20/22 15:14	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/20/22 15:14	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/20/22 15:14	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/20/22 15:14	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/20/22 15:14	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 15:14	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/20/22 15:14	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/20/22 15:14	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:14	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:14	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:14	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/20/22 15:14	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/20/22 15:14	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 15:14	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 15:14	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:14	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:14	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/20/22 15:14	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:14	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/20/22 15:14	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/20/22 15:14	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/20/22 15:14	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 15:14	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/20/22 15:14	75-00-3	R1
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/20/22 15:14	67-66-3	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW6 **Lab ID: 40246647002** Collected: 06/14/22 12:55 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/20/22 15:14	74-87-3	L1
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/20/22 15:14	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/20/22 15:14	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/20/22 15:14	75-71-8	L1
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:14	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 15:14	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/20/22 15:14	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:14	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:14	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/20/22 15:14	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:14	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:14	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 15:14	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/20/22 15:14	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/20/22 15:14	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:14	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/20/22 15:14	75-01-4	L1
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/20/22 15:14	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:14	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/20/22 15:14	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 15:14	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:14	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:14	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:14	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:14	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/20/22 15:14	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/20/22 15:14	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/20/22 15:14	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	108	%	70-130		1		06/20/22 15:14	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		1		06/20/22 15:14	2199-69-1	
Toluene-d8 (S)	101	%	70-130		1		06/20/22 15:14	2037-26-5	

Sample: SUMP 1 **Lab ID: 40246647003** Collected: 06/14/22 14:30 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 11:01	7440-38-2	
Barium, Dissolved	**36.5**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 11:01	7440-39-3	
Cadmium, Dissolved	**16.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 11:01	7440-43-9	
Chromium, Dissolved	**186**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 11:01	7440-47-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: SUMP 1 **Lab ID: 40246647003** Collected: 06/14/22 14:30 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 11:01	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 11:01	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 11:01	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:43	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:33	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 16:33	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/23/22 16:33	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/23/22 16:33	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 16:33	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/23/22 16:33	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 16:33	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 16:33	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/23/22 16:33	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/23/22 16:33	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/23/22 16:33	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/23/22 16:33	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/23/22 16:33	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 16:33	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/23/22 16:33	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/23/22 16:33	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:33	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 16:33	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 16:33	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/23/22 16:33	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/23/22 16:33	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 16:33	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 16:33	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/23/22 16:33	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:33	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/23/22 16:33	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 16:33	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/23/22 16:33	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/23/22 16:33	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/23/22 16:33	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 16:33	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/23/22 16:33	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/23/22 16:33	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/23/22 16:33	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/23/22 16:33	124-48-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: SUMP 1 **Lab ID: 40246647003** Collected: 06/14/22 14:30 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/23/22 16:33	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/23/22 16:33	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 16:33	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 16:33	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/23/22 16:33	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/23/22 16:33	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 16:33	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/23/22 16:33	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/23/22 16:33	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:33	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 16:33	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/23/22 16:33	108-88-3	
Trichloroethene	**23.9**	ug/L	1.0	0.32	1		06/23/22 16:33	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 16:33	75-69-4	
Vinyl chloride	**2.5**	ug/L	1.0	0.17	1		06/23/22 16:33	75-01-4	
cis-1,2-Dichloroethene	**26.2**	ug/L	1.0	0.47	1		06/23/22 16:33	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:33	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/23/22 16:33	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 16:33	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 16:33	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 16:33	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 16:33	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/23/22 16:33	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/23/22 16:33	98-06-6	
trans-1,2-Dichloroethene	**0.88J**	ug/L	1.0	0.53	1		06/23/22 16:33	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/23/22 16:33	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		06/23/22 16:33	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		06/23/22 16:33	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/23/22 16:33	2037-26-5	

Sample: MW4 **Lab ID: 40246647004** Collected: 06/14/22 16:00 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 11:04	7440-38-2	
Barium, Dissolved	**59.1**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 11:04	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 11:04	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 11:04	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 11:04	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 11:04	7782-49-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW4 **Lab ID: 40246647004** Collected: 06/14/22 16:00 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 11:04	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:46	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:34	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:34	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/20/22 15:34	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/20/22 15:34	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:34	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/20/22 15:34	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 15:34	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:34	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/20/22 15:34	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/20/22 15:34	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/20/22 15:34	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/20/22 15:34	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/20/22 15:34	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 15:34	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/20/22 15:34	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/20/22 15:34	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:34	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:34	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:34	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/20/22 15:34	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/20/22 15:34	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 15:34	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 15:34	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:34	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:34	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/20/22 15:34	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:34	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/20/22 15:34	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/20/22 15:34	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/20/22 15:34	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 15:34	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/20/22 15:34	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/20/22 15:34	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/20/22 15:34	74-87-3	L1
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/20/22 15:34	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/20/22 15:34	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/20/22 15:34	75-71-8	L1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW4 **Lab ID: 40246647004** Collected: 06/14/22 16:00 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:34	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 15:34	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/20/22 15:34	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:34	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:34	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/20/22 15:34	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:34	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:34	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 15:34	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/20/22 15:34	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/20/22 15:34	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:34	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/20/22 15:34	75-01-4	L1
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/20/22 15:34	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:34	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/20/22 15:34	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 15:34	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:34	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:34	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:34	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:34	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/20/22 15:34	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/20/22 15:34	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/20/22 15:34	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/20/22 15:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		06/20/22 15:34	2199-69-1	
Toluene-d8 (S)	100	%	70-130		1		06/20/22 15:34	2037-26-5	

Sample: PZ-4 **Lab ID: 40246647005** Collected: 06/14/22 17:00 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 11:11	7440-38-2	
Barium, Dissolved	**23.2**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 11:11	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 11:11	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 11:11	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 11:11	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 11:11	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 11:11	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: PZ-4 **Lab ID: 40246647005** Collected: 06/14/22 17:00 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:48	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:54	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:54	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/20/22 15:54	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/20/22 15:54	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:54	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/20/22 15:54	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 15:54	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:54	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/20/22 15:54	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/20/22 15:54	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/20/22 15:54	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/20/22 15:54	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/20/22 15:54	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 15:54	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/20/22 15:54	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/20/22 15:54	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:54	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:54	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:54	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/20/22 15:54	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/20/22 15:54	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 15:54	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 15:54	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/20/22 15:54	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:54	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/20/22 15:54	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:54	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/20/22 15:54	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/20/22 15:54	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/20/22 15:54	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 15:54	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/20/22 15:54	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/20/22 15:54	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/20/22 15:54	74-87-3	L1
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/20/22 15:54	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/20/22 15:54	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/20/22 15:54	75-71-8	L1
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:54	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 15:54	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/20/22 15:54	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:54	98-82-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: PZ-4 **Lab ID: 40246647005** Collected: 06/14/22 17:00 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:54	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/20/22 15:54	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/20/22 15:54	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:54	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 15:54	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/20/22 15:54	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/20/22 15:54	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:54	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/20/22 15:54	75-01-4	L1
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/20/22 15:54	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 15:54	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/20/22 15:54	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 15:54	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:54	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 15:54	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 15:54	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/20/22 15:54	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/20/22 15:54	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/20/22 15:54	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/20/22 15:54	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	105	%	70-130		1		06/20/22 15:54	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		1		06/20/22 15:54	2199-69-1	
Toluene-d8 (S)	103	%	70-130		1		06/20/22 15:54	2037-26-5	

Sample: MW-17 **Lab ID: 40246647007** Collected: 06/15/22 10:40 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 11:13	7440-38-2	
Barium, Dissolved	**70.0**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 11:13	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 11:13	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 11:13	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 11:13	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 11:13	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 11:13	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:50	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW-17 **Lab ID: 40246647007** Collected: 06/15/22 10:40 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/20/22 17:44	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 17:44	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/20/22 17:44	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/20/22 17:44	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 17:44	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/20/22 17:44	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 17:44	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 17:44	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/20/22 17:44	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/20/22 17:44	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/20/22 17:44	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/20/22 17:44	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/20/22 17:44	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 17:44	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/20/22 17:44	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/20/22 17:44	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 17:44	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 17:44	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 17:44	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/20/22 17:44	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/20/22 17:44	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 17:44	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 17:44	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/20/22 17:44	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 17:44	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/20/22 17:44	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 17:44	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/20/22 17:44	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/20/22 17:44	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/20/22 17:44	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 17:44	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/20/22 17:44	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/20/22 17:44	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/20/22 17:44	74-87-3	L1
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/20/22 17:44	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/20/22 17:44	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/20/22 17:44	75-71-8	L1
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 17:44	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 17:44	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/20/22 17:44	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/20/22 17:44	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 17:44	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/20/22 17:44	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/20/22 17:44	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 17:44	100-42-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW-17 **Lab ID: 40246647007** Collected: 06/15/22 10:40 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 17:44	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/20/22 17:44	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/20/22 17:44	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 17:44	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/20/22 17:44	75-01-4	L1
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/20/22 17:44	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 17:44	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/20/22 17:44	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 17:44	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 17:44	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 17:44	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 17:44	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/20/22 17:44	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/20/22 17:44	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/20/22 17:44	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/20/22 17:44	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	103	%	70-130		1		06/20/22 17:44	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		1		06/20/22 17:44	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		06/20/22 17:44	2037-26-5	

Sample: PZ-16 **Lab ID: 40246647008** Collected: 06/15/22 11:45 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 11:16	7440-38-2	
Barium, Dissolved	**47.8**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 11:16	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 11:16	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 11:16	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 11:16	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 11:16	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 11:16	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:53	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/20/22 18:04	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 18:04	71-55-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: PZ-16 **Lab ID: 40246647008** Collected: 06/15/22 11:45 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/20/22 18:04	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/20/22 18:04	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 18:04	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/20/22 18:04	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 18:04	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 18:04	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/20/22 18:04	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/20/22 18:04	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/20/22 18:04	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/20/22 18:04	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/20/22 18:04	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 18:04	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/20/22 18:04	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/20/22 18:04	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 18:04	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 18:04	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/20/22 18:04	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/20/22 18:04	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/20/22 18:04	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 18:04	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/20/22 18:04	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/20/22 18:04	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 18:04	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/20/22 18:04	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 18:04	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/20/22 18:04	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/20/22 18:04	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/20/22 18:04	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 18:04	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/20/22 18:04	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/20/22 18:04	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/20/22 18:04	74-87-3	L1
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/20/22 18:04	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/20/22 18:04	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/20/22 18:04	75-71-8	L1
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 18:04	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/20/22 18:04	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/20/22 18:04	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/20/22 18:04	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/20/22 18:04	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/20/22 18:04	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/20/22 18:04	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 18:04	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/20/22 18:04	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/20/22 18:04	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: PZ-16 **Lab ID: 40246647008** Collected: 06/15/22 11:45 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/20/22 18:04	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/20/22 18:04	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/20/22 18:04	75-01-4	L1
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/20/22 18:04	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/20/22 18:04	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/20/22 18:04	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/20/22 18:04	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 18:04	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/20/22 18:04	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/20/22 18:04	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/20/22 18:04	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/20/22 18:04	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/20/22 18:04	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/20/22 18:04	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	106	%	70-130		1		06/20/22 18:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	113	%	70-130		1		06/20/22 18:04	2199-69-1	
Toluene-d8 (S)	102	%	70-130		1		06/20/22 18:04	2037-26-5	

Sample: MW18 **Lab ID: 40246647009** Collected: 06/15/22 12:55 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 11:18	7440-38-2	
Barium, Dissolved	**59.3**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 11:18	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 11:18	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 11:18	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 11:18	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 11:18	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 11:18	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:55	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/23/22 14:10	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 14:10	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/23/22 14:10	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/23/22 14:10	79-00-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW18 **Lab ID: 40246647009** Collected: 06/15/22 12:55 Received: 06/16/22 08:45 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-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 14:10	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/23/22 14:10	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 14:10	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 14:10	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/23/22 14:10	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/23/22 14:10	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/23/22 14:10	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/23/22 14:10	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/23/22 14:10	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 14:10	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/23/22 14:10	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/23/22 14:10	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 14:10	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 14:10	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 14:10	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/23/22 14:10	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/23/22 14:10	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 14:10	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 14:10	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/23/22 14:10	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 14:10	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/23/22 14:10	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 14:10	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/23/22 14:10	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/23/22 14:10	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/23/22 14:10	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 14:10	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/23/22 14:10	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/23/22 14:10	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/23/22 14:10	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/23/22 14:10	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/23/22 14:10	74-95-3	
Dichlorodifluoromethane	**0.51J**	ug/L	5.0	0.46	1		06/23/22 14:10	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 14:10	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 14:10	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/23/22 14:10	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/23/22 14:10	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 14:10	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/23/22 14:10	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/23/22 14:10	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 14:10	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 14:10	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/23/22 14:10	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/23/22 14:10	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 14:10	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: MW18 **Lab ID: 40246647009** Collected: 06/15/22 12:55 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/23/22 14:10	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/23/22 14:10	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 14:10	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/23/22 14:10	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 14:10	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 14:10	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 14:10	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 14:10	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/23/22 14:10	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/23/22 14:10	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/23/22 14:10	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/23/22 14:10	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		06/23/22 14:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	111	%	70-130		1		06/23/22 14:10	2199-69-1	
Toluene-d8 (S)	95	%	70-130		1		06/23/22 14:10	2037-26-5	

Sample: TW26 **Lab ID: 40246647010** Collected: 06/15/22 16:25 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<41.7**	ug/L	125	41.7	5	06/17/22 05:46	06/21/22 11:20	7440-38-2	D3
Barium, Dissolved	**187**	ug/L	25.0	7.5	5	06/17/22 05:46	06/21/22 11:20	7440-39-3	
Cadmium, Dissolved	**<6.6**	ug/L	25.0	6.6	5	06/17/22 05:46	06/21/22 11:20	7440-43-9	D3
Chromium, Dissolved	**<12.7**	ug/L	50.0	12.7	5	06/17/22 05:46	06/21/22 11:20	7440-47-3	D3
Lead, Dissolved	**<29.6**	ug/L	100	29.6	5	06/17/22 05:46	06/21/22 11:20	7439-92-1	D3
Selenium, Dissolved	**<61.2**	ug/L	200	61.2	5	06/17/22 05:46	06/21/22 11:20	7782-49-2	D3
Silver, Dissolved	**<16.0**	ug/L	50.0	16.0	5	06/17/22 05:46	06/21/22 11:20	7440-22-4	D3
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 08:57	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:31	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 15:31	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/23/22 15:31	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/23/22 15:31	79-00-5	
1,1-Dichloroethane	**1.8**	ug/L	1.0	0.30	1		06/23/22 15:31	75-34-3	
1,1-Dichloroethene	**13.5**	ug/L	1.0	0.58	1		06/23/22 15:31	75-35-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: TW26 **Lab ID: 40246647010** Collected: 06/15/22 16:25 Received: 06/16/22 08:45 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-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 15:31	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 15:31	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/23/22 15:31	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/23/22 15:31	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/23/22 15:31	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/23/22 15:31	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/23/22 15:31	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 15:31	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/23/22 15:31	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/23/22 15:31	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:31	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 15:31	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 15:31	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/23/22 15:31	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/23/22 15:31	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 15:31	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 15:31	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/23/22 15:31	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:31	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/23/22 15:31	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 15:31	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/23/22 15:31	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/23/22 15:31	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/23/22 15:31	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 15:31	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/23/22 15:31	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/23/22 15:31	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/23/22 15:31	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/23/22 15:31	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/23/22 15:31	74-95-3	
Dichlorodifluoromethane	**121**	ug/L	5.0	0.46	1		06/23/22 15:31	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 15:31	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 15:31	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/23/22 15:31	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/23/22 15:31	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 15:31	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/23/22 15:31	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/23/22 15:31	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:31	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 15:31	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/23/22 15:31	108-88-3	
Trichloroethene	**27.1**	ug/L	1.0	0.32	1		06/23/22 15:31	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 15:31	75-69-4	
Vinyl chloride	**47.0**	ug/L	1.0	0.17	1		06/23/22 15:31	75-01-4	
cis-1,2-Dichloroethene	**52.6**	ug/L	1.0	0.47	1		06/23/22 15:31	156-59-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: TW26 **Lab ID: 40246647010** Collected: 06/15/22 16:25 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:31	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/23/22 15:31	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 15:31	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 15:31	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 15:31	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 15:31	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/23/22 15:31	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/23/22 15:31	98-06-6	
trans-1,2-Dichloroethene	**2.0**	ug/L	1.0	0.53	1		06/23/22 15:31	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/23/22 15:31	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		06/23/22 15:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		1		06/23/22 15:31	2199-69-1	
Toluene-d8 (S)	98	%	70-130		1		06/23/22 15:31	2037-26-5	

Sample: TW27 **Lab ID: 40246647011** Collected: 06/15/22 15:20 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 11:23	7440-38-2	
Barium, Dissolved	**918**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 11:23	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 11:23	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 11:23	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 11:23	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 11:23	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 11:23	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 09:00	7439-97-6	
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:52	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 15:52	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/23/22 15:52	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/23/22 15:52	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 15:52	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/23/22 15:52	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 15:52	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 15:52	87-61-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: TW27 **Lab ID: 40246647011** Collected: 06/15/22 15:20 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/23/22 15:52	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/23/22 15:52	120-82-1	
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/23/22 15:52	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/23/22 15:52	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/23/22 15:52	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 15:52	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/23/22 15:52	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/23/22 15:52	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:52	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 15:52	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 15:52	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/23/22 15:52	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/23/22 15:52	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 15:52	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 15:52	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/23/22 15:52	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:52	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/23/22 15:52	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 15:52	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/23/22 15:52	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/23/22 15:52	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/23/22 15:52	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 15:52	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/23/22 15:52	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/23/22 15:52	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/23/22 15:52	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/23/22 15:52	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/23/22 15:52	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/23/22 15:52	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 15:52	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 15:52	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/23/22 15:52	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/23/22 15:52	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 15:52	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/23/22 15:52	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/23/22 15:52	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:52	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 15:52	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/23/22 15:52	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/23/22 15:52	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 15:52	75-69-4	
Vinyl chloride	**0.27J**	ug/L	1.0	0.17	1		06/23/22 15:52	75-01-4	1q
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/23/22 15:52	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 15:52	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/23/22 15:52	179601-23-1	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: TW27 **Lab ID: 40246647011** Collected: 06/15/22 15:20 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 15:52	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 15:52	103-65-1	
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 15:52	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 15:52	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/23/22 15:52	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/23/22 15:52	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/23/22 15:52	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/23/22 15:52	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		06/23/22 15:52	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		06/23/22 15:52	2199-69-1	
Toluene-d8 (S)	99	%	70-130		1		06/23/22 15:52	2037-26-5	

Sample: TW28 **Lab ID: 40246647012** Collected: 06/15/22 14:45 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, Dissolved	Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
	Pace Analytical Services - Green Bay								
Arsenic, Dissolved	**<8.3**	ug/L	25.0	8.3	1	06/17/22 05:46	06/21/22 11:25	7440-38-2	
Barium, Dissolved	**60.2**	ug/L	5.0	1.5	1	06/17/22 05:46	06/21/22 11:25	7440-39-3	
Cadmium, Dissolved	**<1.3**	ug/L	5.0	1.3	1	06/17/22 05:46	06/21/22 11:25	7440-43-9	
Chromium, Dissolved	**<2.5**	ug/L	10.0	2.5	1	06/17/22 05:46	06/21/22 11:25	7440-47-3	
Lead, Dissolved	**<5.9**	ug/L	20.0	5.9	1	06/17/22 05:46	06/21/22 11:25	7439-92-1	
Selenium, Dissolved	**<12.2**	ug/L	40.0	12.2	1	06/17/22 05:46	06/21/22 11:25	7782-49-2	
Silver, Dissolved	**<3.2**	ug/L	10.0	3.2	1	06/17/22 05:46	06/21/22 11:25	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
	Pace Analytical Services - Green Bay								
Mercury, Dissolved	**<0.066**	ug/L	0.20	0.066	1	07/05/22 09:55	07/06/22 09:07	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
	Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:12	630-20-6	
1,1,1-Trichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 16:12	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.38**	ug/L	1.0	0.38	1		06/23/22 16:12	79-34-5	
1,1,2-Trichloroethane	**<0.34**	ug/L	5.0	0.34	1		06/23/22 16:12	79-00-5	
1,1-Dichloroethane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 16:12	75-34-3	
1,1-Dichloroethene	**<0.58**	ug/L	1.0	0.58	1		06/23/22 16:12	75-35-4	
1,1-Dichloropropene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 16:12	563-58-6	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 16:12	87-61-6	
1,2,3-Trichloropropane	**<0.56**	ug/L	5.0	0.56	1		06/23/22 16:12	96-18-4	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		06/23/22 16:12	120-82-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: TW28 **Lab ID: 40246647012** Collected: 06/15/22 14:45 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
1,2,4-Trimethylbenzene	**<0.45**	ug/L	1.0	0.45	1		06/23/22 16:12	95-63-6	
1,2-Dibromo-3-chloropropane	**<2.4**	ug/L	5.0	2.4	1		06/23/22 16:12	96-12-8	
1,2-Dibromoethane (EDB)	**<0.31**	ug/L	1.0	0.31	1		06/23/22 16:12	106-93-4	
1,2-Dichlorobenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 16:12	95-50-1	
1,2-Dichloroethane	**<0.29**	ug/L	1.0	0.29	1		06/23/22 16:12	107-06-2	
1,2-Dichloropropane	**<0.45**	ug/L	1.0	0.45	1		06/23/22 16:12	78-87-5	
1,3,5-Trimethylbenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:12	108-67-8	
1,3-Dichlorobenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 16:12	541-73-1	
1,3-Dichloropropane	**<0.30**	ug/L	1.0	0.30	1		06/23/22 16:12	142-28-9	
1,4-Dichlorobenzene	**<0.89**	ug/L	1.0	0.89	1		06/23/22 16:12	106-46-7	
2,2-Dichloropropane	**<4.2**	ug/L	5.0	4.2	1		06/23/22 16:12	594-20-7	
2-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 16:12	95-49-8	
4-Chlorotoluene	**<0.89**	ug/L	5.0	0.89	1		06/23/22 16:12	106-43-4	
Benzene	**<0.30**	ug/L	1.0	0.30	1		06/23/22 16:12	71-43-2	
Bromobenzene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:12	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		06/23/22 16:12	74-97-5	
Bromodichloromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 16:12	75-27-4	
Bromoform	**<3.8**	ug/L	5.0	3.8	1		06/23/22 16:12	75-25-2	
Bromomethane	**<1.2**	ug/L	5.0	1.2	1		06/23/22 16:12	74-83-9	
Carbon tetrachloride	**<0.37**	ug/L	1.0	0.37	1		06/23/22 16:12	56-23-5	
Chlorobenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 16:12	108-90-7	
Chloroethane	**<1.4**	ug/L	5.0	1.4	1		06/23/22 16:12	75-00-3	
Chloroform	**<1.2**	ug/L	5.0	1.2	1		06/23/22 16:12	67-66-3	
Chloromethane	**<1.6**	ug/L	5.0	1.6	1		06/23/22 16:12	74-87-3	
Dibromochloromethane	**<2.6**	ug/L	5.0	2.6	1		06/23/22 16:12	124-48-1	
Dibromomethane	**<0.99**	ug/L	5.0	0.99	1		06/23/22 16:12	74-95-3	
Dichlorodifluoromethane	**<0.46**	ug/L	5.0	0.46	1		06/23/22 16:12	75-71-8	
Diisopropyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 16:12	108-20-3	
Ethylbenzene	**<0.33**	ug/L	1.0	0.33	1		06/23/22 16:12	100-41-4	
Hexachloro-1,3-butadiene	**<2.7**	ug/L	5.0	2.7	1		06/23/22 16:12	87-68-3	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	5.0	1.0	1		06/23/22 16:12	98-82-8	
Methyl-tert-butyl ether	**<1.1**	ug/L	5.0	1.1	1		06/23/22 16:12	1634-04-4	
Methylene Chloride	**<0.32**	ug/L	5.0	0.32	1		06/23/22 16:12	75-09-2	
Naphthalene	**<1.1**	ug/L	5.0	1.1	1		06/23/22 16:12	91-20-3	
Styrene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:12	100-42-5	
Tetrachloroethene	**<0.41**	ug/L	1.0	0.41	1		06/23/22 16:12	127-18-4	
Toluene	**<0.29**	ug/L	1.0	0.29	1		06/23/22 16:12	108-88-3	
Trichloroethene	**<0.32**	ug/L	1.0	0.32	1		06/23/22 16:12	79-01-6	
Trichlorofluoromethane	**<0.42**	ug/L	1.0	0.42	1		06/23/22 16:12	75-69-4	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		06/23/22 16:12	75-01-4	
cis-1,2-Dichloroethene	**<0.47**	ug/L	1.0	0.47	1		06/23/22 16:12	156-59-2	
cis-1,3-Dichloropropene	**<0.36**	ug/L	1.0	0.36	1		06/23/22 16:12	10061-01-5	
m&p-Xylene	**<0.70**	ug/L	2.0	0.70	1		06/23/22 16:12	179601-23-1	
n-Butylbenzene	**<0.86**	ug/L	1.0	0.86	1		06/23/22 16:12	104-51-8	
n-Propylbenzene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 16:12	103-65-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 1162-013
Pace Project No.: 40246647

Sample: TW28 **Lab ID: 40246647012** Collected: 06/15/22 14:45 Received: 06/16/22 08:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260 Pace Analytical Services - Green Bay								
o-Xylene	**<0.35**	ug/L	1.0	0.35	1		06/23/22 16:12	95-47-6	
p-Isopropyltoluene	**<1.0**	ug/L	5.0	1.0	1		06/23/22 16:12	99-87-6	
sec-Butylbenzene	**<0.42**	ug/L	1.0	0.42	1		06/23/22 16:12	135-98-8	
tert-Butylbenzene	**<0.59**	ug/L	1.0	0.59	1		06/23/22 16:12	98-06-6	
trans-1,2-Dichloroethene	**<0.53**	ug/L	1.0	0.53	1		06/23/22 16:12	156-60-5	
trans-1,3-Dichloropropene	**<3.5**	ug/L	5.0	3.5	1		06/23/22 16:12	10061-02-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		06/23/22 16:12	460-00-4	
1,2-Dichlorobenzene-d4 (S)	112	%	70-130		1		06/23/22 16:12	2199-69-1	
Toluene-d8 (S)	96	%	70-130		1		06/23/22 16:12	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

QC Batch: 419995
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury Dissolved
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246647001, 40246647002, 40246647003, 40246647004, 40246647005, 40246647007, 40246647008, 40246647009, 40246647010, 40246647011, 40246647012

METHOD BLANK: 2418932 Matrix: Water
Associated Lab Samples: 40246647001, 40246647002, 40246647003, 40246647004, 40246647005, 40246647007, 40246647008, 40246647009, 40246647010, 40246647011, 40246647012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	<0.066	0.20	07/06/22 08:13	

LABORATORY CONTROL SAMPLE: 2418933

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.7	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2418934 2418935

Parameter	Units	40246890001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	<0.066	5	5	5.0	4.7	99	95	85-115	5	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

QC Batch: 418607
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET Dissolved
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246647001, 40246647002, 40246647003, 40246647004, 40246647005, 40246647007, 40246647008, 40246647009, 40246647010, 40246647011, 40246647012

METHOD BLANK: 2410827 Matrix: Water
Associated Lab Samples: 40246647001, 40246647002, 40246647003, 40246647004, 40246647005, 40246647007, 40246647008, 40246647009, 40246647010, 40246647011, 40246647012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<8.3	25.0	06/21/22 10:43	
Barium, Dissolved	ug/L	<1.5	5.0	06/21/22 10:43	
Cadmium, Dissolved	ug/L	<1.3	5.0	06/21/22 10:43	
Chromium, Dissolved	ug/L	<2.5	10.0	06/21/22 10:43	
Lead, Dissolved	ug/L	<5.9	20.0	06/21/22 10:43	
Selenium, Dissolved	ug/L	<12.2	40.0	06/21/22 10:43	
Silver, Dissolved	ug/L	<3.2	10.0	06/21/22 10:43	

LABORATORY CONTROL SAMPLE: 2410828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	250	260	104	80-120	
Barium, Dissolved	ug/L	250	260	104	80-120	
Cadmium, Dissolved	ug/L	250	260	104	80-120	
Chromium, Dissolved	ug/L	250	257	103	80-120	
Lead, Dissolved	ug/L	250	265	106	80-120	
Selenium, Dissolved	ug/L	250	264	106	80-120	
Silver, Dissolved	ug/L	125	125	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2410829 2410830

Parameter	Units	40246647001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic, Dissolved	ug/L	<8.3	250	250	258	254	103	101	75-125	2	20	
Barium, Dissolved	ug/L	250	250	250	520	504	108	102	75-125	3	20	
Cadmium, Dissolved	ug/L	<1.3	250	250	268	260	107	104	75-125	3	20	
Chromium, Dissolved	ug/L	<2.5	250	250	254	248	101	99	75-125	2	20	
Lead, Dissolved	ug/L	<5.9	250	250	262	256	105	103	75-125	2	20	
Selenium, Dissolved	ug/L	<12.2	250	250	267	258	107	103	75-125	4	20	
Silver, Dissolved	ug/L	<3.2	125	125	130	127	104	101	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

QC Batch: 418596
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246647002, 40246647004, 40246647005, 40246647007, 40246647008

METHOD BLANK: 2410806 Matrix: Water
Associated Lab Samples: 40246647002, 40246647004, 40246647005, 40246647007, 40246647008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	1.0	06/20/22 10:53	
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/20/22 10:53	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	1.0	06/20/22 10:53	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	06/20/22 10:53	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/20/22 10:53	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/20/22 10:53	
1,1-Dichloropropene	ug/L	<0.41	1.0	06/20/22 10:53	
1,2,3-Trichlorobenzene	ug/L	<1.0	5.0	06/20/22 10:53	
1,2,3-Trichloropropane	ug/L	<0.56	5.0	06/20/22 10:53	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	06/20/22 10:53	
1,2,4-Trimethylbenzene	ug/L	<0.45	1.0	06/20/22 10:53	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	5.0	06/20/22 10:53	
1,2-Dibromoethane (EDB)	ug/L	<0.31	1.0	06/20/22 10:53	
1,2-Dichlorobenzene	ug/L	<0.33	1.0	06/20/22 10:53	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/20/22 10:53	
1,2-Dichloropropane	ug/L	<0.45	1.0	06/20/22 10:53	
1,3,5-Trimethylbenzene	ug/L	<0.36	1.0	06/20/22 10:53	
1,3-Dichlorobenzene	ug/L	<0.35	1.0	06/20/22 10:53	
1,3-Dichloropropane	ug/L	<0.30	1.0	06/20/22 10:53	
1,4-Dichlorobenzene	ug/L	<0.89	1.0	06/20/22 10:53	
2,2-Dichloropropane	ug/L	<4.2	5.0	06/20/22 10:53	
2-Chlorotoluene	ug/L	<0.89	5.0	06/20/22 10:53	
4-Chlorotoluene	ug/L	<0.89	5.0	06/20/22 10:53	
Benzene	ug/L	<0.30	1.0	06/20/22 10:53	
Bromobenzene	ug/L	<0.36	1.0	06/20/22 10:53	
Bromochloromethane	ug/L	<0.36	5.0	06/20/22 10:53	
Bromodichloromethane	ug/L	<0.42	1.0	06/20/22 10:53	
Bromoform	ug/L	<3.8	5.0	06/20/22 10:53	
Bromomethane	ug/L	<1.2	5.0	06/20/22 10:53	
Carbon tetrachloride	ug/L	<0.37	1.0	06/20/22 10:53	
Chlorobenzene	ug/L	<0.86	1.0	06/20/22 10:53	
Chloroethane	ug/L	<1.4	5.0	06/20/22 10:53	
Chloroform	ug/L	<1.2	5.0	06/20/22 10:53	
Chloromethane	ug/L	<1.6	5.0	06/20/22 10:53	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/20/22 10:53	
cis-1,3-Dichloropropene	ug/L	<0.36	1.0	06/20/22 10:53	
Dibromochloromethane	ug/L	<2.6	5.0	06/20/22 10:53	
Dibromomethane	ug/L	<0.99	5.0	06/20/22 10:53	
Dichlorodifluoromethane	ug/L	<0.46	5.0	06/20/22 10:53	
Diisopropyl ether	ug/L	<1.1	5.0	06/20/22 10:53	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

METHOD BLANK: 2410806 Matrix: Water
Associated Lab Samples: 40246647002, 40246647004, 40246647005, 40246647007, 40246647008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.33	1.0	06/20/22 10:53	
Hexachloro-1,3-butadiene	ug/L	<2.7	5.0	06/20/22 10:53	
Isopropylbenzene (Cumene)	ug/L	<1.0	5.0	06/20/22 10:53	
m&p-Xylene	ug/L	<0.70	2.0	06/20/22 10:53	
Methyl-tert-butyl ether	ug/L	<1.1	5.0	06/20/22 10:53	
Methylene Chloride	ug/L	<0.32	5.0	06/20/22 10:53	
n-Butylbenzene	ug/L	<0.86	1.0	06/20/22 10:53	
n-Propylbenzene	ug/L	<0.35	1.0	06/20/22 10:53	
Naphthalene	ug/L	<1.1	5.0	06/20/22 10:53	
o-Xylene	ug/L	<0.35	1.0	06/20/22 10:53	
p-Isopropyltoluene	ug/L	<1.0	5.0	06/20/22 10:53	
sec-Butylbenzene	ug/L	<0.42	1.0	06/20/22 10:53	
Styrene	ug/L	<0.36	1.0	06/20/22 10:53	
tert-Butylbenzene	ug/L	<0.59	1.0	06/20/22 10:53	
Tetrachloroethene	ug/L	<0.41	1.0	06/20/22 10:53	
Toluene	ug/L	<0.29	1.0	06/20/22 10:53	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/20/22 10:53	
trans-1,3-Dichloropropene	ug/L	<3.5	5.0	06/20/22 10:53	
Trichloroethene	ug/L	<0.32	1.0	06/20/22 10:53	
Trichlorofluoromethane	ug/L	<0.42	1.0	06/20/22 10:53	
Vinyl chloride	ug/L	<0.17	1.0	06/20/22 10:53	
1,2-Dichlorobenzene-d4 (S)	%	110	70-130	06/20/22 10:53	
4-Bromofluorobenzene (S)	%	104	70-130	06/20/22 10:53	
Toluene-d8 (S)	%	102	70-130	06/20/22 10:53	

LABORATORY CONTROL SAMPLE: 2410807

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	59.5	119	70-134	
1,1,2,2-Tetrachloroethane	ug/L	50	53.4	107	69-130	
1,1,2-Trichloroethane	ug/L	50	54.0	108	70-130	
1,1-Dichloroethane	ug/L	50	55.0	110	70-130	
1,1-Dichloroethene	ug/L	50	61.9	124	74-131	
1,2,4-Trichlorobenzene	ug/L	50	42.1	84	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	47.4	95	64-137	
1,2-Dibromoethane (EDB)	ug/L	50	53.4	107	70-130	
1,2-Dichlorobenzene	ug/L	50	51.9	104	70-130	
1,2-Dichloroethane	ug/L	50	59.6	119	70-137	
1,2-Dichloropropane	ug/L	50	53.0	106	80-121	
1,3-Dichlorobenzene	ug/L	50	50.0	100	70-130	
1,4-Dichlorobenzene	ug/L	50	52.4	105	70-130	
Benzene	ug/L	50	55.2	110	70-130	
Bromodichloromethane	ug/L	50	55.0	110	70-130	
Bromoform	ug/L	50	46.6	93	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

LABORATORY CONTROL SAMPLE: 2410807

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/L	50	55.8	112	21-147	
Carbon tetrachloride	ug/L	50	57.6	115	80-146	
Chlorobenzene	ug/L	50	55.7	111	70-130	
Chloroethane	ug/L	50	70.8	142	52-165	
Chloroform	ug/L	50	57.0	114	80-123	
Chloromethane	ug/L	50	71.4	143	51-122	L1
cis-1,2-Dichloroethene	ug/L	50	46.0	92	70-130	
cis-1,3-Dichloropropene	ug/L	50	50.8	102	70-130	
Dibromochloromethane	ug/L	50	53.9	108	70-130	
Dichlorodifluoromethane	ug/L	50	77.7	155	25-121	L1
Ethylbenzene	ug/L	50	59.4	119	80-120	
Isopropylbenzene (Cumene)	ug/L	50	60.4	121	70-130	
m&p-Xylene	ug/L	100	118	118	70-130	
Methyl-tert-butyl ether	ug/L	50	43.9	88	70-130	
Methylene Chloride	ug/L	50	54.7	109	70-130	
o-Xylene	ug/L	50	57.2	114	70-130	
Styrene	ug/L	50	59.3	119	70-130	
Tetrachloroethene	ug/L	50	54.0	108	70-130	
Toluene	ug/L	50	56.7	113	80-120	
trans-1,2-Dichloroethene	ug/L	50	52.1	104	70-130	
trans-1,3-Dichloropropene	ug/L	50	55.7	111	70-130	
Trichloroethene	ug/L	50	53.4	107	70-130	
Trichlorofluoromethane	ug/L	50	63.2	126	65-160	
Vinyl chloride	ug/L	50	68.6	137	63-134	L1
1,2-Dichlorobenzene-d4 (S)	%			101	70-130	
4-Bromofluorobenzene (S)	%			113	70-130	
Toluene-d8 (S)	%			104	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2411899 2411900

Parameter	Units	40246647002 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	59.5	58.9	119	118	70-134	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	50	50	54.0	53.9	108	108	61-135	0	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	52.4	53.7	105	107	70-130	2	20	
1,1-Dichloroethane	ug/L	<0.30	50	50	54.7	53.7	109	107	70-130	2	20	
1,1-Dichloroethene	ug/L	<0.58	50	50	55.7	55.8	111	112	71-130	0	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	42.8	43.4	86	87	68-131	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	50	50	49.5	48.7	99	97	51-141	2	20	
1,2-Dibromoethane (EDB)	ug/L	<0.31	50	50	53.5	52.3	107	105	70-130	2	20	
1,2-Dichlorobenzene	ug/L	<0.33	50	50	52.4	52.4	105	105	70-130	0	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	59.7	58.2	119	116	70-137	3	20	
1,2-Dichloropropane	ug/L	<0.45	50	50	52.3	51.7	105	103	80-121	1	20	
1,3-Dichlorobenzene	ug/L	<0.35	50	50	50.8	50.7	102	101	70-130	0	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2411899 2411900

Parameter	Units	40246647002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	<0.89	50	50	53.6	53.1	107	106	70-130	1	20	
Benzene	ug/L	<0.30	50	50	54.2	53.3	108	107	70-130	2	20	
Bromodichloromethane	ug/L	<0.42	50	50	55.6	54.4	111	109	70-130	2	20	
Bromoform	ug/L	<3.8	50	50	46.3	46.2	93	92	70-133	0	20	
Bromomethane	ug/L	<1.2	50	50	40.0	41.8	80	84	21-149	5	22	
Carbon tetrachloride	ug/L	<0.37	50	50	56.7	56.0	113	112	80-146	1	20	
Chlorobenzene	ug/L	<0.86	50	50	55.1	53.7	110	107	70-130	3	20	
Chloroethane	ug/L	<1.4	50	50	63.1	78.3	126	157	52-165	21	20	R1
Chloroform	ug/L	<1.2	50	50	56.3	55.7	113	111	80-123	1	20	
Chloromethane	ug/L	<1.6	50	50	47.6	47.4	95	95	42-125	0	20	
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	47.3	46.5	95	93	70-130	2	20	
cis-1,3-Dichloropropene	ug/L	<0.36	50	50	50.7	49.6	101	99	70-130	2	20	
Dibromochloromethane	ug/L	<2.6	50	50	53.8	52.6	108	105	70-130	2	20	
Dichlorodifluoromethane	ug/L	<0.46	50	50	33.6	34.6	67	69	25-121	3	20	
Ethylbenzene	ug/L	<0.33	50	50	58.3	56.7	117	113	80-121	3	20	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	60.1	58.9	120	118	70-130	2	20	
m&p-Xylene	ug/L	<0.70	100	100	115	114	115	114	70-130	1	20	
Methyl-tert-butyl ether	ug/L	<1.1	50	50	45.3	45.3	91	91	70-130	0	20	
Methylene Chloride	ug/L	<0.32	50	50	53.7	52.3	107	105	70-130	3	20	
o-Xylene	ug/L	<0.35	50	50	56.4	56.5	113	113	70-130	0	20	
Styrene	ug/L	<0.36	50	50	57.2	56.7	114	113	70-132	1	20	
Tetrachloroethene	ug/L	<0.41	50	50	53.5	52.2	107	104	70-130	3	20	
Toluene	ug/L	<0.29	50	50	56.0	55.1	112	110	80-120	2	20	
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	53.0	51.4	106	103	70-130	3	20	
trans-1,3-Dichloropropene	ug/L	<3.5	50	50	54.8	53.7	110	107	70-130	2	20	
Trichloroethene	ug/L	<0.32	50	50	53.8	53.5	108	107	70-130	1	20	
Trichlorofluoromethane	ug/L	<0.42	50	50	55.7	54.4	111	109	65-160	2	20	
Vinyl chloride	ug/L	<0.17	50	50	50.4	50.8	101	102	60-137	1	20	
1,2-Dichlorobenzene-d4 (S)	%						101	106	70-130			
4-Bromofluorobenzene (S)	%						112	116	70-130			
Toluene-d8 (S)	%						102	104	70-130			

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

QC Batch: 418962 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40246647001, 40246647003, 40246647009, 40246647010, 40246647011, 40246647012

METHOD BLANK: 2412524 Matrix: Water
Associated Lab Samples: 40246647001, 40246647003, 40246647009, 40246647010, 40246647011, 40246647012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.36	1.0	06/23/22 09:03	
1,1,1-Trichloroethane	ug/L	<0.30	1.0	06/23/22 09:03	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	1.0	06/23/22 09:03	
1,1,2-Trichloroethane	ug/L	<0.34	5.0	06/23/22 09:03	
1,1-Dichloroethane	ug/L	<0.30	1.0	06/23/22 09:03	
1,1-Dichloroethene	ug/L	<0.58	1.0	06/23/22 09:03	
1,1-Dichloropropene	ug/L	<0.41	1.0	06/23/22 09:03	
1,2,3-Trichlorobenzene	ug/L	<1.0	5.0	06/23/22 09:03	
1,2,3-Trichloropropane	ug/L	<0.56	5.0	06/23/22 09:03	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	06/23/22 09:03	
1,2,4-Trimethylbenzene	ug/L	<0.45	1.0	06/23/22 09:03	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	5.0	06/23/22 09:03	
1,2-Dibromoethane (EDB)	ug/L	<0.31	1.0	06/23/22 09:03	
1,2-Dichlorobenzene	ug/L	<0.33	1.0	06/23/22 09:03	
1,2-Dichloroethane	ug/L	<0.29	1.0	06/23/22 09:03	
1,2-Dichloropropane	ug/L	<0.45	1.0	06/23/22 09:03	
1,3,5-Trimethylbenzene	ug/L	<0.36	1.0	06/23/22 09:03	
1,3-Dichlorobenzene	ug/L	<0.35	1.0	06/23/22 09:03	
1,3-Dichloropropane	ug/L	<0.30	1.0	06/23/22 09:03	
1,4-Dichlorobenzene	ug/L	<0.89	1.0	06/23/22 09:03	
2,2-Dichloropropane	ug/L	<4.2	5.0	06/23/22 09:03	
2-Chlorotoluene	ug/L	<0.89	5.0	06/23/22 09:03	
4-Chlorotoluene	ug/L	<0.89	5.0	06/23/22 09:03	
Benzene	ug/L	<0.30	1.0	06/23/22 09:03	
Bromobenzene	ug/L	<0.36	1.0	06/23/22 09:03	
Bromochloromethane	ug/L	<0.36	5.0	06/23/22 09:03	
Bromodichloromethane	ug/L	<0.42	1.0	06/23/22 09:03	
Bromoform	ug/L	<3.8	5.0	06/23/22 09:03	
Bromomethane	ug/L	<1.2	5.0	06/23/22 09:03	
Carbon tetrachloride	ug/L	<0.37	1.0	06/23/22 09:03	
Chlorobenzene	ug/L	<0.86	1.0	06/23/22 09:03	
Chloroethane	ug/L	<1.4	5.0	06/23/22 09:03	
Chloroform	ug/L	<1.2	5.0	06/23/22 09:03	
Chloromethane	ug/L	<1.6	5.0	06/23/22 09:03	
cis-1,2-Dichloroethene	ug/L	<0.47	1.0	06/23/22 09:03	
cis-1,3-Dichloropropene	ug/L	<0.36	1.0	06/23/22 09:03	
Dibromochloromethane	ug/L	<2.6	5.0	06/23/22 09:03	
Dibromomethane	ug/L	<0.99	5.0	06/23/22 09:03	
Dichlorodifluoromethane	ug/L	<0.46	5.0	06/23/22 09:03	
Diisopropyl ether	ug/L	<1.1	5.0	06/23/22 09:03	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

METHOD BLANK: 2412524 Matrix: Water
Associated Lab Samples: 40246647001, 40246647003, 40246647009, 40246647010, 40246647011, 40246647012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.33	1.0	06/23/22 09:03	
Hexachloro-1,3-butadiene	ug/L	<2.7	5.0	06/23/22 09:03	
Isopropylbenzene (Cumene)	ug/L	<1.0	5.0	06/23/22 09:03	
m&p-Xylene	ug/L	<0.70	2.0	06/23/22 09:03	
Methyl-tert-butyl ether	ug/L	<1.1	5.0	06/23/22 09:03	
Methylene Chloride	ug/L	<0.32	5.0	06/23/22 09:03	
n-Butylbenzene	ug/L	<0.86	1.0	06/23/22 09:03	
n-Propylbenzene	ug/L	<0.35	1.0	06/23/22 09:03	
Naphthalene	ug/L	<1.1	5.0	06/23/22 09:03	
o-Xylene	ug/L	<0.35	1.0	06/23/22 09:03	
p-Isopropyltoluene	ug/L	<1.0	5.0	06/23/22 09:03	
sec-Butylbenzene	ug/L	<0.42	1.0	06/23/22 09:03	
Styrene	ug/L	<0.36	1.0	06/23/22 09:03	
tert-Butylbenzene	ug/L	<0.59	1.0	06/23/22 09:03	
Tetrachloroethene	ug/L	<0.41	1.0	06/23/22 09:03	
Toluene	ug/L	<0.29	1.0	06/23/22 09:03	
trans-1,2-Dichloroethene	ug/L	<0.53	1.0	06/23/22 09:03	
trans-1,3-Dichloropropene	ug/L	<3.5	5.0	06/23/22 09:03	
Trichloroethene	ug/L	<0.32	1.0	06/23/22 09:03	
Trichlorofluoromethane	ug/L	<0.42	1.0	06/23/22 09:03	
Vinyl chloride	ug/L	<0.17	1.0	06/23/22 09:03	
1,2-Dichlorobenzene-d4 (S)	%	106	70-130	06/23/22 09:03	
4-Bromofluorobenzene (S)	%	99	70-130	06/23/22 09:03	
Toluene-d8 (S)	%	97	70-130	06/23/22 09:03	

LABORATORY CONTROL SAMPLE: 2412525

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	56.1	112	70-134	
1,1,2,2-Tetrachloroethane	ug/L	50	52.8	106	69-130	
1,1,2-Trichloroethane	ug/L	50	50.1	100	70-130	
1,1-Dichloroethane	ug/L	50	55.0	110	70-130	
1,1-Dichloroethene	ug/L	50	60.4	121	74-131	
1,2,4-Trichlorobenzene	ug/L	50	49.1	98	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	48.7	97	64-137	
1,2-Dibromoethane (EDB)	ug/L	50	48.3	97	70-130	
1,2-Dichlorobenzene	ug/L	50	53.5	107	70-130	
1,2-Dichloroethane	ug/L	50	52.5	105	70-137	
1,2-Dichloropropane	ug/L	50	54.5	109	80-121	
1,3-Dichlorobenzene	ug/L	50	50.7	101	70-130	
1,4-Dichlorobenzene	ug/L	50	51.7	103	70-130	
Benzene	ug/L	50	54.9	110	70-130	
Bromodichloromethane	ug/L	50	52.3	105	70-130	
Bromoform	ug/L	50	50.6	101	70-130	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

LABORATORY CONTROL SAMPLE: 2412525

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/L	50	54.4	109	21-147	
Carbon tetrachloride	ug/L	50	58.4	117	80-146	
Chlorobenzene	ug/L	50	52.6	105	70-130	
Chloroethane	ug/L	50	62.2	124	52-165	
Chloroform	ug/L	50	55.2	110	80-123	
Chloromethane	ug/L	50	54.3	109	51-122	
cis-1,2-Dichloroethene	ug/L	50	48.6	97	70-130	
cis-1,3-Dichloropropene	ug/L	50	47.4	95	70-130	
Dibromochloromethane	ug/L	50	49.4	99	70-130	
Dichlorodifluoromethane	ug/L	50	49.0	98	25-121	
Ethylbenzene	ug/L	50	55.6	111	80-120	
Isopropylbenzene (Cumene)	ug/L	50	57.0	114	70-130	
m&p-Xylene	ug/L	100	113	113	70-130	
Methyl-tert-butyl ether	ug/L	50	46.5	93	70-130	
Methylene Chloride	ug/L	50	60.2	120	70-130	
o-Xylene	ug/L	50	54.1	108	70-130	
Styrene	ug/L	50	56.4	113	70-130	
Tetrachloroethene	ug/L	50	53.0	106	70-130	
Toluene	ug/L	50	51.9	104	80-120	
trans-1,2-Dichloroethene	ug/L	50	54.5	109	70-130	
trans-1,3-Dichloropropene	ug/L	50	40.7	81	70-130	
Trichloroethene	ug/L	50	53.2	106	70-130	
Trichlorofluoromethane	ug/L	50	57.1	114	65-160	
Vinyl chloride	ug/L	50	55.1	110	63-134	
1,2-Dichlorobenzene-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			107	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2413933 2413934

Parameter	Units	40246850004 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	55.5	55.6	111	111	70-134	0	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.38	50	50	51.4	51.5	103	103	61-135	0	20	
1,1,2-Trichloroethane	ug/L	<0.34	50	50	50.4	49.5	101	99	70-130	2	20	
1,1-Dichloroethane	ug/L	<0.30	50	50	55.6	55.8	111	112	70-130	0	20	
1,1-Dichloroethene	ug/L	<0.58	50	50	60.3	62.6	121	125	71-130	4	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	53.9	54.1	108	108	68-131	0	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.4	50	50	52.2	53.0	104	106	51-141	1	20	
1,2-Dibromoethane (EDB)	ug/L	<0.31	50	50	49.1	48.7	98	97	70-130	1	20	
1,2-Dichlorobenzene	ug/L	<0.33	50	50	53.8	53.6	108	107	70-130	0	20	
1,2-Dichloroethane	ug/L	<0.29	50	50	52.0	51.9	104	104	70-137	0	20	
1,2-Dichloropropane	ug/L	<0.45	50	50	54.9	54.0	110	108	80-121	2	20	
1,3-Dichlorobenzene	ug/L	<0.35	50	50	51.3	51.8	103	104	70-130	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 1162-013
Pace Project No.: 40246647

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2413933 2413934

Parameter	Units	40246850004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	<0.89	50	50	50.7	50.5	101	101	70-130	1	20	
Benzene	ug/L	5.1	50	50	61.2	60.3	112	110	70-130	1	20	
Bromodichloromethane	ug/L	<0.42	50	50	51.8	51.5	104	103	70-130	0	20	
Bromoform	ug/L	<3.8	50	50	50.2	49.0	100	98	70-133	2	20	
Bromomethane	ug/L	<1.2	50	50	58.9	60.5	118	121	21-149	3	22	
Carbon tetrachloride	ug/L	<0.37	50	50	61.1	58.7	122	117	80-146	4	20	
Chlorobenzene	ug/L	<0.86	50	50	54.2	53.6	108	107	70-130	1	20	
Chloroethane	ug/L	<1.4	50	50	62.7	62.0	125	124	52-165	1	20	
Chloroform	ug/L	<1.2	50	50	55.0	54.5	110	109	80-123	1	20	
Chloromethane	ug/L	<1.6	50	50	55.5	52.3	111	105	42-125	6	20	
cis-1,2-Dichloroethene	ug/L	<0.47	50	50	49.6	49.9	99	100	70-130	1	20	
cis-1,3-Dichloropropene	ug/L	<0.36	50	50	49.1	50.0	98	100	70-130	2	20	
Dibromochloromethane	ug/L	<2.6	50	50	49.1	48.2	98	96	70-130	2	20	
Dichlorodifluoromethane	ug/L	<0.46	50	50	47.2	45.5	94	91	25-121	4	20	
Ethylbenzene	ug/L	0.48J	50	50	56.9	57.4	113	114	80-121	1	20	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	50	58.7	58.3	117	117	70-130	1	20	
m&p-Xylene	ug/L	<0.70	100	100	115	113	115	113	70-130	2	20	
Methyl-tert-butyl ether	ug/L	<1.1	50	50	46.0	47.9	92	96	70-130	4	20	
Methylene Chloride	ug/L	<0.32	50	50	59.7	58.3	119	117	70-130	2	20	
o-Xylene	ug/L	<0.35	50	50	54.9	55.5	110	111	70-130	1	20	
Styrene	ug/L	<0.36	50	50	57.5	56.3	115	113	70-132	2	20	
Tetrachloroethene	ug/L	<0.41	50	50	54.3	54.3	109	109	70-130	0	20	
Toluene	ug/L	<0.29	50	50	52.9	52.6	106	105	80-120	1	20	
trans-1,2-Dichloroethene	ug/L	<0.53	50	50	54.8	54.3	110	109	70-130	1	20	
trans-1,3-Dichloropropene	ug/L	<3.5	50	50	41.6	41.3	83	83	70-130	1	20	
Trichloroethene	ug/L	<0.32	50	50	53.5	53.5	107	107	70-130	0	20	
Trichlorofluoromethane	ug/L	<0.42	50	50	57.8	57.5	116	115	65-160	0	20	
Vinyl chloride	ug/L	<0.17	50	50	57.6	56.8	115	114	60-137	1	20	
1,2-Dichlorobenzene-d4 (S)	%						106	103	70-130			
4-Bromofluorobenzene (S)	%						105	104	70-130			
Toluene-d8 (S)	%						99	99	70-130			

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 1162-013
Pace Project No.: 40246647

DEFINITIONS

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1q	Reported value is potentially a result of carryover from previous sample. Insufficient volume for re-analysis from vial without head space.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
R1	RPD value was outside control limits.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 1162-013
Pace Project No.: 40246647

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40246647001	**MW7**	EPA 3010A	418607	EPA 6010D	418703
40246647002	**MW6**	EPA 3010A	418607	EPA 6010D	418703
40246647003	**SUMP 1**	EPA 3010A	418607	EPA 6010D	418703
40246647004	**MW4**	EPA 3010A	418607	EPA 6010D	418703
40246647005	**PZ-4**	EPA 3010A	418607	EPA 6010D	418703
40246647007	**MW-17**	EPA 3010A	418607	EPA 6010D	418703
40246647008	**PZ-16**	EPA 3010A	418607	EPA 6010D	418703
40246647009	**MW18**	EPA 3010A	418607	EPA 6010D	418703
40246647010	**TW26**	EPA 3010A	418607	EPA 6010D	418703
40246647011	**TW27**	EPA 3010A	418607	EPA 6010D	418703
40246647012	**TW28**	EPA 3010A	418607	EPA 6010D	418703
40246647001	**MW7**	EPA 7470	419995	EPA 7470	420056
40246647002	**MW6**	EPA 7470	419995	EPA 7470	420056
40246647003	**SUMP 1**	EPA 7470	419995	EPA 7470	420056
40246647004	**MW4**	EPA 7470	419995	EPA 7470	420056
40246647005	**PZ-4**	EPA 7470	419995	EPA 7470	420056
40246647007	**MW-17**	EPA 7470	419995	EPA 7470	420056
40246647008	**PZ-16**	EPA 7470	419995	EPA 7470	420056
40246647009	**MW18**	EPA 7470	419995	EPA 7470	420056
40246647010	**TW26**	EPA 7470	419995	EPA 7470	420056
40246647011	**TW27**	EPA 7470	419995	EPA 7470	420056
40246647012	**TW28**	EPA 7470	419995	EPA 7470	420056
40246647001	**MW7**	EPA 8260	418962		
40246647002	**MW6**	EPA 8260	418596		
40246647003	**SUMP 1**	EPA 8260	418962		
40246647004	**MW4**	EPA 8260	418596		
40246647005	**PZ-4**	EPA 8260	418596		
40246647007	**MW-17**	EPA 8260	418596		
40246647008	**PZ-16**	EPA 8260	418596		
40246647009	**MW18**	EPA 8260	418962		
40246647010	**TW26**	EPA 8260	418962		
40246647011	**TW27**	EPA 8260	418962		
40246647012	**TW28**	EPA 8260	418962		

Robert E. Lee & Associates, Inc.
Engineering | Surveying | Environmental | Ecological
1250 Centennial Centre Blvd. • Hobart, WI 54155 • 920-662-9641 • FAX 920-662-9141

To ensure the proper handling of samples, please see the back for instructions.

CHAIN OF CUSTODY RECORD

COC # **203248**

Client:	
Project Name:	1324 S. 26th St. - Manitowoc
Project Number:	1162-013
BID #:	

Environmental Program: ☐ LUST ☐ SDWA ☐ WPDES ☐ RCRA ☐ OTHER ____

Requested Turnaround Time
☒ Normal (10-15 DAYS) ☐ Rush
Date Needed: ____
Rushes accepted only w/prior notification

*Preservation Code
N = Nitric Acid (red) O = Sodium Hydroxide
H = Hydrochloric Acid U = Unpreserved (white)
M = Methanol S = Sulfuric Acid (green)

Sampler: Cody Applekamp / Jonah Oettinger

Sample Type (Matrix)
DW = Drinking Water
GW = Groundwater
WW= Wastewater
Soil, Oil, Sludge, Air, Other:

Analyses Required:
(Note special detection limits or methods)

Sample Name	Date	Time		Comp	Grab	Sample Type	No. Of Containers	Filtered? (Y/N)										Laboratory Sample I.D.	Remarks:
								Preservation *(Code)											
									N	Y	N								
									H	N	U								
									VOCs	RCRA Metals	PFAS WI 33 List								
MW7	6-14-22	1115	A/P			GW	6		X	X	X							001	
MW6		1255	A/P				6		X	X	X							002	
Sump 1		1430	A/P				6		X	X	X							003	
MW4		1600	A/P				6		X	X	X							004	
P24		1700	A/P				6		X	X	X							005	
PFAS Blank (Field Reagent)		1800	A/P				1		X	X	X							006	
MW17	6-15-22	1040	A/P			GW	6		X	X	X							007	
P216		1145	A/P				6		X	X	X							008	
MW18		1255	A/P				6		X	X	X							009	
TW26		1625	A/P				6		X	X	X							010	
TW27		1520	A/P				6		X	X	X							011	
TW28		1445	A/P				6		X	X	X							012	

Report to:	Nicole LaPlant
Company:	Robert E. Lee & Associates
Address:	1250 Centennial Centre Blvd.
	Hobart, WI 54155
Telephone:	920-662-9641
Invoice to:	Jaci Erdmann
Company:	Robert E. Lee & Associates
Address:	1250 Centennial Centre Blvd.
	Hobart, WI 54155
Telephone:	920-662-9641

Relinquished By	Date	Time	Received By	Date	Time
1) REL	6-16-2022	0824 A/P	Mary Jo Pace	06/16/22	0824 A/P
2)	06/16/22	0845 A/P	Susan Kilgo Paul	6/16/22	0845 A/P
3)		A/P			A/P

Received by Lab ____ A = AM P = PM

Laboratory Receiving Notes
Temperature of Contents 3 °C
Custody Seal Intact ____
Sample Condition ____
Sample pH ____

Sample Preservation Receipt Form

Client Name: REL Project # 10046647

All containers needing preservation have been checked and noted below: ☒Yes ☐No ☐N/A Initial when completed: MP Date/ Time:

Lab Lot# of pH paper: 1003112 Lab Std #ID of preservation (if pH adjusted):

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	Vials: VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001										2		1					3													X		2.5 / 5 / 10
002										2		1					3													X		2.5 / 5 / 10
003										2		1					3													X		2.5 / 5 / 10
004										2		1					3													X		2.5 / 5 / 10
005										2		1					3													X		2.5 / 5 / 10
006										1		1																		X	6/16/22 MP	2.5 / 5 / 10
007										2		1					3													X		2.5 / 5 / 10
008										2		1					3													X		2.5 / 5 / 10
009										2		1					3													X		2.5 / 5 / 10
010										2		1					3													X		2.5 / 5 / 10
011										2		1					3													X		2.5 / 5 / 10
012										2		1					3													X		2.5 / 5 / 10
013																																2.5 / 5 / 10
014																																2.5 / 5 / 10
015																																2.5 / 5 / 10
016																																2.5 / 5 / 10
017																																2.5 / 5 / 10
018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																																2.5 / 5 / 10

6/16/22 MP

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☒No ☐N/A *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9A	40 mL clear ascorbic	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG5U	100 mL amber glass unpres			VG9D	40 mL clear vial DI	ZPLC	ziploc bag
AG2S	500 mL amber glass H2SO4					GN	
BG3U	250 mL clear glass unpres						

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Client Name: REL

Project #: WO# : 40246647

40246647

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☒ Client ☐ Pace Other:

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 105 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3° /Corr: 3°

Person examining contents:

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Date: 6/16/22 Initials: MP

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

Labeled By Initials: MH

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:	6/16/22 MP ☒Yes (☒No) ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- 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:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
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	12. 005 1710
Trip Blank Present:	☐Yes (☒No) ☒N/A	6/16/22 mp
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: Date/Time:

Comments/ Resolution: Client used White Out on COC 6/16/22 MP

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

This report presents the results from the analyses performed on twelve samples submitted by a representative of Pace Wisconsin. The samples were analyzed for thirty-three perfluorinated compounds using Wisconsin DNR guidance. Reporting limits were set to MDL levels. This report was revised August 1st, 2022 to include the re-extraction results.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank was free of the target perfluorinated compounds at the reporting limits. This indicates that the sample processing procedures did not significantly contribute to the analyte content determined for the sample material.

Laboratory spike samples were also prepared with the sample batch using clean reference matrix that had been fortified with native standards. Wirh the exception of EtFOSAm in LCS-99592, and EtFOSAm and MeFOSA in LCSD-99593, the recovery results were within the method limits. With the exception of EtFOSAm and MeFOSA, the RPDs (relative percent differences) between one designated spike and its duplicate were within the method limits. These analytes were not detected in sample material. Low recoveries indicate a possibility for a false negative for these analytes. A matrix spike was prepared with the sample batch using sample material from a separate project; results from that analysis will be provided upon request.

The four injection internal standards (13C4 PFOA, 13C4 PFOS, 13C2_PFDA, and 13C2_PFHxA) pass for each analysis in the batch verifying that the instrument detector is working as expected.

Diminished extracted internal standard (EIS) recovery ("R" flagged) were present in samples and QC, however, the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard.

Several samples have elevated EIS recoveries ("R" flagged) for FTS. While the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard, in the case of the FTS compounds, the recoveries are anomalously high, and are adversely impacted by matrix. The results for these native compounds should be considered estimated.

Several samples and QC have recoveries less than 1% for selected EIS. The results for these native compounds should be considered estimated.

Values were flagged "I" where incorrect isotope ratios were obtained.

Results that were below the calibration range were flagged "J". Results that were above the calibration range were flagged "E".

Pace Analytical™
www.pacelabs.com

Pace Analytical Services, LLC.
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

Report Prepared for:

Brian Basten
PACE Wisconsin
1241 Bellevue Street
Green Bay WI 54302

REPORT OF LABORATORY ANALYSIS FOR PFAAs

Report Information:

Pace Project #: 10613361
Sample Receipt Date: 06/17/2022
Client Project #: 40246647 Robert E Lee
Client Sub PO #: N/A
State Cert #: N/A

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PFAA Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

August 04, 2022

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
August 4, 2022

Report of Laboratory Analysis

DISCUSSION

This report presents the results from the analyses performed on twelve samples submitted by a representative of Pace Wisconsin. The samples were analyzed for thirty-three perfluorinated compounds using Wisconsin DNR guidance. Reporting limits were set to MDL levels. This report was revised August 4th, 2022 to include the re-extraction results. Samples were re-extracted out of the method recommended hold time of 28 days upon client approval.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank was free of the target perfluorinated compounds at the reporting limits. This indicates that the sample processing procedures did not significantly contribute to the analyte content determined for the sample material.

Laboratory spike samples were also prepared with the sample batch using clean reference matrix that had been fortified with native standards. Wirh the exception of EtFOSAm and MeFOSA in LCSD-99593, the recovery results were within the method limits. With the exception of EtFOSAm and MeFOSA, the RPDs (relative percent differences) between one designated spike and its duplicate were within the method limits. These analytes were not detected in sample material. Low recoveries indicate a possibility for a false negative for these analytes. A matrix spike was prepared with the sample batch using sample material from a separate project; results from that analysis will be provided upon request.

The four injection internal standards (13C4 PFOA, 13C4 PFOS, 13C2_PFDA, and 13C2_PFHxA) pass for each analysis in the batch verifying that the instrument detector is working as expected.

Diminished extracted internal standard (EIS) recovery ("R" flagged) were present in samples and QC, however, the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard.

Several samples have elevated EIS recoveries ("R" flagged) for FTS. While the use of the isotope dilution method generally precludes any adverse impact on those individual native compounds that have a directly associated standard, in the case of the FTS compounds, the recoveries are anomalously high, and are adversely impacted by matrix. The results for these native compounds should be considered estimated.

Several samples and QC have recoveries less than 1% for selected EIS. The results for

DISCUSSION

these native compounds should be considered estimated.

Results for selected analytes were taken from secondary dilutions of the sample extracts in order to bring the results within the calibration range. The affected values were flagged "D" on the results tables.

Values were flagged "I" where incorrect isotope ratios were obtained.

Results that were below the calibration range were flagged "J".

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
		Mississippi	MN00064
		Missouri	10100
A2LA	2926.01	Montana	CERT0092
Alabama	40770	Nebraska	NE-OS-18-06
Alaska-DW	MN00064	Nevada	MN00064
Alaska-UST	17-009	New Hampshire	2081
Arizona	AZ0014	New Jersey	MN002
Arkansas - WW	88-0680	New York	11647
Arkansas-DW	MN00064	North Carolina-	27700
California	2929	North Carolina-	530
Colorado	MN00064	North Dakota	R-036
Connecticut	PH-0256	Ohio-DW	41244
Florida	E87605	Ohio-VAP (170	CL101
Georgia	959	Ohio-VAP (180	CL110
Hawaii	MN00064	Oklahoma	9507
Idaho	MN00064	Oregon- rimary	MN300001
Illinois	200011	Oregon-Second	MN200001
Indiana	C-MN-01	Pennsylvania	68-00563
Iowa	368	Puerto Rico	MN00064
Kansas	E-10167	South Carolina	74003
Kentucky-DW	90062	Tennessee	TN02818
Kentucky-WW	90062	Texas	T104704192
Louisiana-DEQ	AI-84596	Utah	MN00064
Louisiana-DW	MN00064	Vermont	VT-027053137
Maine	MN00064	Virginia	460163
Maryland	322	Washington	C486
Michigan	9909	West Virginia-D	382
Minnesota	027-053-137	West Virginia-D	9952C
Minnesota-Ag	via MN 027-053	Wisconsin	999407970
Minnesota-Petr	1240	Wyoming-UST	via A2LA 2926.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

Appendix A

Sample Management

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Sample ID Cross Reference

Client Sample ID	Pace Sample ID	Date Received	Sample Type
MW7	40246647001	06/17/2022	Water
MW6	40246647002	06/17/2022	Water
SUMP 1	40246647003	06/17/2022	Water
MW4	40246647004	06/17/2022	Water
PZ-4	40246647005	06/17/2022	Water
PFAS BLANK	40246647006	06/17/2022	Water
MW-17	40246647007	06/17/2022	Water
PZ-16	40246647008	06/17/2022	Water
MW18	40246647009	06/17/2022	Water
TW26	40246647010	06/17/2022	Water
TW27	40246647011	06/17/2022	Water
TW28	40246647012	06/17/2022	Water

REPORT OF LABORATORY ANALYSIS

Internal Transfer Chain of Custody

WO# : 10613361

10613361

[X] Samples Pre-Logged into eCOC

State Of Origin: WI

Cert. Needed: [X] Yes

Workorder: 40246647 Workorder Name: 1162-013

Owner Received Date: 6/16/2022 Results Requested By: 7/8/2022

Report To	Subcontract To
Brian Basten Pace Analytical Green Bay 3241 Bellevue Street Suite 9 Green Bay, WI 54302 Phone (920)469-2436	Pace Analytical Minnesota 1700 Elm Street SE Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Unpreserved	Requested Analysis: PFAS WI 33	LAB USE ONLY
1	MW7	PS	6/14/2022 11:15	40246647001	Water	2	X	001
2	MW6	PS	6/14/2022 12:55	40246647002	Water	2	X	002
3	SUMP 1	PS	6/14/2022 14:30	40246647003	Water	2	X	003
4	MW4	PS	6/14/2022 16:00	40246647004	Water	2	X	004
5	P24	PS	6/14/2022 17:00	40246647005	Water	2	X	005
6	PFAS BLANK	PS	6/14/2022 18:00	40246647006	Water	1	X	006
7	MW-17	PS	6/15/2022 10:40	40246647007	Water	2	X	007
8	P216	PS	6/15/2022 11:45	40246647008	Water	2	X	008
9	MW18	PS	6/15/2022 12:55	40246647009	Water	2	X	009
10	TW26	PS	6/15/2022 16:25	40246647010	Water	2	X	010
11	TW27	PS	6/15/2022 15:20	40246647011	Water	2	X	011
12	TW28	PS	6/15/2022 14:45	40246647012	Water	2	X	012

Transfers	Released By	Date/Time	Received By	Date/Time
1	Anthony Zerkle	6/16/22 1700	[illegible] 6/17/22	1000
2				
3				

Comments

Cooler Temperature on Receipt 0.6 °C | Custody Seal (Y) or N | Received on Ice (Y) or N | Samples Intact (Y) or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace	DC#_Title: ENV-FRM-MIN4-0150 v05_Sample Condition Upon Receipt (SCUR)
	Effective Date: 04/12/2022

Sample Condition Upon Receipt

Client Name: Pace Green Bay

Project #:

WO#: 10613361

PM: LAB1 Due Date: 07/02/22

CLIENT: PASI-WI

Courier: ☐Fed Ex ☐UPS ☐USPS ☑Client ☐Pace ☐SpeeDee ☐Commercial

See Exceptions ☐ENV-FRM-MIN4-0142

Tracking Number:

Custody Seal on Cooler/Box Present? ☑Yes ☐No Seals Intact? ☑Yes ☐No Biological Tissue Frozen? ☐Yes ☐No ☑N/A

Packing Material: ☐Bubble Wrap ☑Bubble Bags ☐None ☐Other: Temp Blank? ☑Yes ☐No

Thermometer: ☐T1(0461) ☐T2(1336) ☑T3(0459) ☐T4(0254) ☐T5(0489) ☐T6(0235) ☐T7 (0042) ☐01339252/1710 ☐122639816 ☐140792808

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

Did Samples Originate in West Virginia? ☐Yes ☑No Were All Container Temps Taken? ☐Yes ☐No ☑N/A

Temp should be above freezing to 6°C Cooler Temp Read w/temp blank: 0.3 °C

Average Corrected Temp (no temp blank only): °C ☐See Exceptions ENV-FRM-MIN4-0142 ☐1 Container

Correction Factor: TNC Cooler Temp Corrected w/temp blank: 0.3 °C

USDA Regulated Soil: (☑N/A, water sample/Other:)

Date/Initials of Person Examining Contents: AH 6/17/22

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☐No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐Yes ☐No

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

Location (check one): ☐ Duluth ☑ Minneapolis ☐ Virginia				COMMENTS:
Chain of Custody Present and Filled Out?	☑Yes	☐No		1.
Chain of Custody Relinquished?	☑Yes	☐No		2.
Sampler Name and/or Signature on COC?	☐Yes	☐No	☑N/A	3.
Samples Arrived within Hold Time?	☑Yes	☐No		4. If Fecal: ☐<8 hrs ☐>8hr, <24 hrs, ☐>24 hrs
Short Hold Time Analysis (<72 hr)?	☐Yes	☑No		5. ☐Fecal Coliform ☐HPC ☐Total Coliform/E coli ☐BOD/cBOD ☐Hex Chrome ☐Turbidity ☐Nitrate ☐Nitrite ☐Orthophos ☐Other
Rush Turn Around Time Requested?	☐Yes	☑No		6.
Sufficient Volume?	☑Yes	☐No		7.
Correct Containers Used? -Pace Containers Used?	☑Yes ☑Yes	☐No ☐No		8.
Containers Intact?	☑Yes	☐No		9.
Field Filtered Volume Received for Dissolved Tests?	☐Yes	☐No	☑N/A	10. Is sediment visible in the dissolved container? ☐Yes ☐No
Is sufficient information available to reconcile the samples to the COC? Matrix: ☑Water ☐Soil ☐Oil ☐Other-	☑Yes	☐No		11. If no, write ID/ Date/Time on Container Below: See Exception ☐ ENV-FRM-MIN4-0142
All containers needing acid/base preservation have been checked?	☐Yes	☐No	☑N/A	12. Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>10 Cyanide)	☐Yes	☐No	☑N/A	☐ NaOH ☐ HNO_3 ☐ H_2SO_4 ☐ Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS	☑Yes	☐No	☐N/A	Positive for Res. Chlorine? ☐Yes ☐No pH Paper Lot# See Exception ☐ ENV-FRM-MIN4-0142
				Res. Chlorine | 0-6 Roll | 0-6 Strip | 0-14 Strip
Headspace in Methyl Mercury Container?	☐Yes	☐No	☑N/A	
Extra labels present on soil VOA or WIDRO containers?	☐Yes	☐No	☑N/A	13. See Exception ☐ ENV-FRM-MIN4-0140
Headspace in VOA Vials (greater than 6mm)?	☐Yes	☐No	☑N/A	
Trip Blank Present?	☐Yes	☐No	☑N/A	14.
Trip Blank Custody Seals Present?	☐Yes	☐No	☑N/A	Pace Trip Blank Lot # (if purchased):

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? ☐Yes ☐No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Date: 06/21/22

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

Labeled by: AH 6/21/22

Robert E. Lee & Associates, Inc.
Engineering | Surveying | Environmental | Ecological
1250 Centennial Centre Blvd. • Hobart, WI 54155 • 920-662-9641 • FAX 920-662-9141

To ensure the proper handling of samples, please see the back for instructions.

CHAIN OF CUSTODY RECORD

COC # 203248

Client:
Project Name:
Project Number: | BID #:

Environmental Program:
☐ LUST ☐ SDWA ☐ WPDES ☐ RCRA ☐ OTHER

Requested Turnaround Time
☒ Normal (10-15 DAYS) ☐ Rush
Date Needed: _____
Rushes accepted only w/prior notification

*Preservation Code
N = Nitric Acid (red) O = Sodium Hydroxide
H = Hydrochloric Acid U = Unpreserved (white)
M = Methanol S = Sulfuric Acid (green)

Sampler:

Sample Type (Matrix)
DW = Drinking Water
GW = Groundwater
WW= Wastewater
Soil, Oil, Sludge, Air, Other:

Analyses Required:
(Note special detection limits or methods)

Sample Name	Date	Time		Comp	Grab	No. Of Containers	Filtered ? (Y / N)	Preservation *(Code)	Laboratory Sample I.D.	Remarks:
			A/P			6	N		001	
			A/P						002	
		1430	A/P						003	
			A/P						004	
			A/P						005	
			A/P			1			006	
			A/P						007	
			A/P						008	
			A/P						009	
		1625	A/P						010	
		1520	A/P						011	
		1445	A/P			6			012	

Relinquished By	Date	Time	Received By	Date	Time
1) [illegible] REL	6-16-2022	[illegible] A/P		[illegible]	[illegible] A/P
2) [illegible]	06/16/22	0845 A/P	Susan Kilgo Paul	6/16/22	0845 A/P
3)		A/P			A/P

Received by Lab _____ A = AM P = PM

Laboratory Receiving Notes
Temperature of Contents 3 °C
Custody Seal Intact _____
Sample Condition _____
Sample pH _____

Report to: [illegible]
Company: **Robert E. Lee & Associates**
Address: **1250 Centennial Centre Blvd.**
Hobart, WI 54155
Telephone: **920-662-9641**

Invoice to: [illegible]
Company: **Robert E. Lee & Associates**
Address: **1250 Centennial Centre Blvd.**
Hobart, WI 54155
Telephone: **920-662-9641**

Sample Condition Upon Receipt Form (SCUR)

Client Name: REL

Project #:

WO# : 40246647

40246647

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☒ Client ☐ Pace Other:

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 105 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3° /Corr: 3°

Person examining contents:

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Date: 6/16/22 Initials: MP

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

Labeled By Initials:

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: 6/16/22 MP	☒Yes ☒No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- 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		8.
For Analysis: ☒Yes ☐No MS/MSD:	☐Yes ☒No ☐N/A	
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☒Yes ☐No ☐N/A	11.
Sample Labels match COC:	☐Yes ☒No ☐N/A	12. 005 "1710"
-Includes date/time/ID/Analysis Matrix: W		
Trip Blank Present	☐Yes ☒No ~~☐N/A~~	13. 6/16/22 mp
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: Date/Time:

Comments/ Resolution: Client used White Out on COC 6/16/22 MP

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40246647001-R	MW7	SW3535	33556	PFAS-36	B220727B_00
40246647001-R	MW7	SW3535	33556	PFAS-36	B220802A_05
40246647002-R	MW6	SW3535	33556	PFAS-36	B220727B_00
40246647003-R	SUMP 1	SW3535	33556	PFAS-36	B220727B_00
40246647003-R	SUMP 1	SW3535	33556	PFAS-36	B220802A_06
40246647004-R	MW4	SW3535	33556	PFAS-36	B220727B_00
40246647005-R	PZ-4	SW3535	33556	PFAS-36	B220727B_00
40246647006	PFAS BLANK	SW3535	33346	PFAS-36	B220707A_00
40246647007-R	MW-17	SW3535	33556	PFAS-36	B220727B_00
40246647007-R	MW-17	SW3535	33556	PFAS-36	B220802A_05
40246647008	PZ-16	SW3535	33346	PFAS-36	B220707A_01
40246647009	MW18	SW3535	33346	PFAS-36	B220707A_01
40246647010-R	TW26	SW3535	33556	PFAS-36	B220727B_00
40246647010-R	TW26	SW3535	33556	PFAS-36	B220802A_05
40246647011-R	TW27	SW3535	33556	PFAS-36	B220727B_00
40246647012-R	TW28	SW3535	33556	PFAS-36	B220727B_01

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise (EDL)

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Isotope ratio out of specification

J = Estimated value

L = Suppressive interference, analyte may be biased low

Nn = Value obtained from additional analysis

P = PCDEInterference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = SeeDiscussion

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

Appendix B

Sample Analysis Summary

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW7	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647001-R	Total Amount Extracted	253mL
Lab File ID	B220727B_009	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 11:15	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	27	2.0	0.44	0.44	1	375-22-4		07/27/2022 17:49
PFPeA	10	2.0	0.43	0.43	1	2706-90-3		07/27/2022 17:49
HFPO-DA	ND	2.0	0.52	0.52	1	13252-13-6		07/27/2022 17:49
PFBS	240 D	3.5	0.93	0.93	2	375-73-5		08/03/2022 02:51
PFHxA	6.3	2.0	0.43	0.43	1	307-24-4		07/27/2022 17:49
4:2 FTS	ND	1.8	0.55	0.55	1	757124-72-4		07/27/2022 17:49
PFPeS	3.0	1.9	0.47	0.47	1	2706-91-4		07/27/2022 17:49
PFHpA	3.2	2.0	0.54	0.54	1	375-85-9		07/27/2022 17:49
DONA	ND	1.9	0.51	0.51	1	919005-14-4		07/27/2022 17:49
PFHxS	15	1.8	0.50	0.50	1	355-46-4		07/27/2022 17:49
PFOA	11	2.0	0.58	0.58	1	335-67-1		07/27/2022 17:49
6:2 FTS	ND	1.9	0.64	0.64	1	27619-97-2		07/27/2022 17:49
PFHpS	2.6	1.9	0.41	0.41	1	375-92-8		07/27/2022 17:49
PFNA	ND	2.0	0.73	0.73	1	375-95-1		07/27/2022 17:49
PFOSAm	ND	2.0	0.81	0.81	1	754-91-6		07/27/2022 17:49
PFOS	88	1.8	0.54	0.54	1	1763-23-1		07/27/2022 17:49
MeFOSA	ND	2.0	0.51	0.51	1	31506-32-8		07/27/2022 17:49
PFDA	ND	2.0	0.56	0.56	1	335-76-2		07/27/2022 17:49
EtFOSAm	ND	2.0	0.60	0.60	1	4151-50-2		07/27/2022 17:49
8:2 FTS	ND	1.9	0.65	0.65	1	39108-34-4		07/27/2022 17:49
9-Cl-PF3ON	ND	1.8	0.30	0.30	1	756426-58-1		07/27/2022 17:49
PFNS	ND	1.9	0.44	0.44	1	68259-12-1		07/27/2022 17:49
PFUnDA	ND	2.0	0.53	0.53	1	2058-94-8		07/27/2022 17:49
NMeFOSAA	ND	2.0	0.43	0.43	1	2355-31-9		07/27/2022 17:49
NEtFOSAA	ND	2.0	0.55	0.55	1	2991-50-6		07/27/2022 17:49
PFDS	ND	1.9	0.44	0.44	1	335-77-3		07/27/2022 17:49
PFDOA	ND	2.0	0.48	0.48	1	307-55-1		07/27/2022 17:49
MeFOSE	ND	2.0	0.33	0.33	1	24448-09-7		07/27/2022 17:49
EtFOSE	ND	2.0	0.49	0.49	1	1691-99-2		07/27/2022 17:49
11-Cl-PF3OUdS	ND	1.9	0.43	0.43	1	763051-92-9		07/27/2022 17:49
PFTrDA	ND	2.0	0.61	0.61	1	72629-94-8		07/27/2022 17:49
PFDoS	ND	1.9	0.45	0.45	1	79780-39-5		07/27/2022 17:49
PFTDA	ND	2.0	0.47	0.47	1	376-06-7		07/27/2022 17:49

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW7	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647001-R	Total Amount Extracted	253mL
Lab File ID	B220727B_009	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 11:15	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	22	114	50-150		07/27/2022 17:49
13C4_PFOA	20	24	122	50-150		07/27/2022 17:49
13C2_PFDA	20	24	120	50-150		07/27/2022 17:49
13C4_PFOS	19	22	114	50-150		07/27/2022 17:49

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	19	96	25-150		07/27/2022 17:49
13C5_PFPeA	20	20	102	25-150		07/27/2022 17:49
13C3_PFBS	18	19	101	25-150	D	08/03/2022 02:51
13C2_4:2FTS	18	25	136	25-150		07/27/2022 17:49
13C5_PFHxA	20	23	118	25-150		07/27/2022 17:49
13C4_PFHpA	20	22	110	25-150		07/27/2022 17:49
13C3_PFHxS	19	21	110	25-150		07/27/2022 17:49
13C2_6:2FTS	19	20	105	25-150		07/27/2022 17:49
13C8_PFOA	20	22	109	25-150		07/27/2022 17:49
13C9_PFNA	20	21	105	25-150		07/27/2022 17:49
13C8_PFOS	19	19	98	25-150		07/27/2022 17:49
13C2_8:2FTS	19	17	91	25-150		07/27/2022 17:49
13C6_PFDA	20	17	85	25-150		07/27/2022 17:49
d3-MeFOSAA	20	12	63	25-150		07/27/2022 17:49
13C8_PFOSA	20	14	69	25-150		07/27/2022 17:49
d5-EtFOSAA	20	11	55	25-150		07/27/2022 17:49
13C7_PFUdA	20	14	69	25-150		07/27/2022 17:49
13C2_PFDoA	20	15	74	25-150		07/27/2022 17:49
13C2_PFTeDA	20	9.8	50	25-150		07/27/2022 17:49
13C3_HFPO-DA	20	19	94	25-150		07/27/2022 17:49
d7-N-MeFOSE	20	12	61	10-150		07/27/2022 17:49
d9-N-EtFOSE	20	10	51	10-150		07/27/2022 17:49
d3-N-MeFOSA	20	9.0	46	10-150		07/27/2022 17:49
d5-N-EtFOSA	20	8.3	42	10-150		07/27/2022 17:49

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

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Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.77	5.71	1911		07/27/2022 17:49
13C4_PFOA	N/A	N/A	7.04	6.96	2276		07/27/2022 17:49
13C2_PFDA	N/A	N/A	8.34	8.27	1405		07/27/2022 17:49
13C4_PFOS	N/A	N/A	8.81	8.75	1504		07/27/2022 17:49

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.29	4.30	2338		07/27/2022 17:49
13C5_PFPeA	N/A	N/A	5.13	5.13	1752		07/27/2022 17:49
13C3_PFBS	N/A	N/A	6.05	5.96	613	D	08/03/2022 02:51
13C2_4:2FTS	N/A	N/A	5.51	5.49	184		07/27/2022 17:49
13C5_PFHxA	N/A	N/A	5.78	5.81	1074		07/27/2022 17:49
13C4_PFHpA	N/A	N/A	6.41	6.39	2101		07/27/2022 17:49
13C3_PFHxS	N/A	N/A	7.44	7.45	1249		07/27/2022 17:49
13C2_6:2FTS	N/A	N/A	6.71	6.72	620		07/27/2022 17:49
13C8_PFOA	N/A	N/A	7.04	7.05	2674		07/27/2022 17:49
13C9_PFNA	N/A	N/A	7.69	7.70	2131		07/27/2022 17:49
13C8_PFOS	N/A	N/A	8.81	8.82	1829		07/27/2022 17:49
13C2_8:2FTS	N/A	N/A	7.97	7.98	1741		07/27/2022 17:49
13C6_PFDA	N/A	N/A	8.35	8.35	1559		07/27/2022 17:49
d3-MeFOSAA	N/A	N/A	8.21	8.22	1708		07/27/2022 17:49
13C8_PFOSA	N/A	N/A	10.54	10.56	952		07/27/2022 17:49
d5-EtFOSAA	N/A	N/A	8.50	8.51	1245		07/27/2022 17:49
13C7_PFUdA	N/A	N/A	9.01	9.02	1588		07/27/2022 17:49
13C2_PFDoA	N/A	N/A	9.68	9.69	1392		07/27/2022 17:49
13C2_PFTeDA	N/A	N/A	10.99	10.98	1003		07/27/2022 17:49
13C3_HFPO-DA	N/A	N/A	6.03	6.04	1293		07/27/2022 17:49
d7-N-MeFOSE	N/A	N/A	12.37	12.34	46		07/27/2022 17:49
d9-N-EtFOSE	N/A	N/A	12.84	12.84	244		07/27/2022 17:49
d3-N-MeFOSA	N/A	N/A	12.58	12.56	540		07/27/2022 17:49
d5-N-EtFOSA	N/A	N/A	12.99	13.01	648		07/27/2022 17:49

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW7	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647001-R	Total Amount Extracted	253mL
Lab File ID	B220727B_009	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 11:15	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.30	4.31	254		07/27/2022 17:49
PFPeA	N/A	N/A	5.14	5.12	192		07/27/2022 17:49
HFPO-DA	1.00	0.28	6.04	6.02	ND		07/27/2022 17:49
PFBS	0.49	0.43	6.05	5.99	677	D	08/03/2022 02:51
PFHxA	0.07	0.08	5.78	5.75	158		07/27/2022 17:49
4:2 FTS	0.00	0.80	0.00	5.49	ND		07/27/2022 17:49
PFPeS	0.47	0.41	6.75	6.73	245		07/27/2022 17:49
PFHpA	0.30	0.32	6.41	6.39	14		07/27/2022 17:49
DONA	0.00	0.49	0.00	6.62	ND		07/27/2022 17:49
PFHxS	0.51	0.39	7.45	7.43	610		07/27/2022 17:49
PFOA	0.34	0.39	7.05	7.03	160		07/27/2022 17:49
6:2 FTS	6.10	0.76	6.71	6.72	ND		07/27/2022 17:49
PFHpS	0.49	0.42	8.14	8.13	222		07/27/2022 17:49
PFNA	0.13	0.13	7.70	7.67	ND		07/27/2022 17:49
PFOSAm	N/A	N/A	10.55	10.51	ND		07/27/2022 17:49
PFOS	0.38	0.43	8.63	8.81	453		07/27/2022 17:49
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 17:49
PFDA	0.00	0.18	0.00	8.34	ND		07/27/2022 17:49
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 17:49
8:2 FTS	1.60	0.97	7.98	7.95	ND		07/27/2022 17:49
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 17:49
PFNS	0.00	0.55	0.00	9.52	ND		07/27/2022 17:49
PFUnDA	0.00	0.13	0.00	9.01	ND		07/27/2022 17:49
NMeFOSAA	0.00	0.95	0.00	8.35	ND		07/27/2022 17:49
NEtFOSAA	0.00	0.63	0.00	8.51	ND		07/27/2022 17:49
PFDS	0.00	0.37	0.00	10.16	ND		07/27/2022 17:49
PFDOA	0.00	0.18	0.00	9.69	ND		07/27/2022 17:49
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 17:49
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 17:49
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 17:49
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 17:49
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 17:49
PFTDA	0.00	0.26	0.00	11.00	ND		07/27/2022 17:49

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW6	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647002-R	Total Amount Extracted	256mL
Lab File ID	B220727B_010	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 12:55	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	9.5	2.0	0.43	0.43	1	375-22-4		07/27/2022 18:09
PFPeA	1.3 J	2.0	0.43	0.43	1	2706-90-3		07/27/2022 18:09
HFPO-DA	ND	2.0	0.52	0.52	1	13252-13-6		07/27/2022 18:09
PFBS	9.3	1.7	0.46	0.46	1	375-73-5		07/27/2022 18:09
PFHxA	1.2 J	2.0	0.43	0.43	1	307-24-4		07/27/2022 18:09
4:2 FTS	ND	1.8	0.55	0.55	1	757124-72-4		07/27/2022 18:09
PFPeS	ND	1.8	0.46	0.46	1	2706-91-4		07/27/2022 18:09
PFHpA	0.58 J	2.0	0.54	0.54	1	375-85-9		07/27/2022 18:09
DONA	ND	1.8	0.50	0.50	1	919005-14-4		07/27/2022 18:09
PFHxS	ND	1.8	0.50	0.50	1	355-46-4		07/27/2022 18:09
PFOA	3.0	2.0	0.57	0.57	1	335-67-1		07/27/2022 18:09
6:2 FTS	ND	1.9	0.63	0.63	1	27619-97-2		07/27/2022 18:09
PFHpS	ND	1.9	0.40	0.40	1	375-92-8		07/27/2022 18:09
PFNA	ND	2.0	0.72	0.72	1	375-95-1		07/27/2022 18:09
PFOSAm	ND	2.0	0.80	0.80	1	754-91-6		07/27/2022 18:09
PFOS	0.77 J	1.8	0.54	0.54	1	1763-23-1		07/27/2022 18:09
MeFOSA	ND	2.0	0.50	0.50	1	31506-32-8		07/27/2022 18:09
PFDA	ND	2.0	0.55	0.55	1	335-76-2		07/27/2022 18:09
EtFOSAm	ND	2.0	0.59	0.59	1	4151-50-2		07/27/2022 18:09
8:2 FTS	ND	1.9	0.64	0.64	1	39108-34-4		07/27/2022 18:09
9-Cl-PF3ON	ND	1.8	0.30	0.30	1	756426-58-1		07/27/2022 18:09
PFNS	ND	1.9	0.44	0.44	1	68259-12-1		07/27/2022 18:09
PFUnDA	ND	2.0	0.53	0.53	1	2058-94-8		07/27/2022 18:09
NMeFOSAA	ND	2.0	0.42	0.42	1	2355-31-9		07/27/2022 18:09
NEtFOSAA	ND	2.0	0.54	0.54	1	2991-50-6		07/27/2022 18:09
PFDS	ND	1.9	0.44	0.44	1	335-77-3		07/27/2022 18:09
PFDOA	ND	2.0	0.47	0.47	1	307-55-1		07/27/2022 18:09
MeFOSE	ND	2.0	0.32	0.32	1	24448-09-7		07/27/2022 18:09
EtFOSE	ND	2.0	0.49	0.49	1	1691-99-2		07/27/2022 18:09
11-Cl-PF3OUdS	ND	1.8	0.43	0.43	1	763051-92-9		07/27/2022 18:09
PFTrDA	ND	2.0	0.61	0.61	1	72629-94-8		07/27/2022 18:09
PFDoS	ND	1.9	0.45	0.45	1	79780-39-5		07/27/2022 18:09
PFTDA	ND	2.0	0.47	0.47	1	376-06-7		07/27/2022 18:09

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW6	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647002-R	Total Amount Extracted	256mL
Lab File ID	B220727B_010	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 12:55	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	23	117	50-150		07/27/2022 18:09
13C4_PFOA	20	24	121	50-150		07/27/2022 18:09
13C2_PFDA	20	24	123	50-150		07/27/2022 18:09
13C4_PFOS	19	25	134	50-150		07/27/2022 18:09

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	16	83	25-150		07/27/2022 18:09
13C5_PFPeA	20	20	102	25-150		07/27/2022 18:09
13C3_PFBS	18	22	124	25-150		07/27/2022 18:09
13C2_4:2FTS	18	35	**190**	25-150	R	07/27/2022 18:09
13C5_PFHxA	20	25	127	25-150		07/27/2022 18:09
13C4_PFHpA	20	23	118	25-150		07/27/2022 18:09
13C3_PFHxS	18	24	129	25-150		07/27/2022 18:09
13C2_6:2FTS	19	22	117	25-150		07/27/2022 18:09
13C8_PFOA	20	24	123	25-150		07/27/2022 18:09
13C9_PFNA	20	23	116	25-150		07/27/2022 18:09
13C8_PFOS	19	23	123	25-150		07/27/2022 18:09
13C2_8:2FTS	19	21	113	25-150		07/27/2022 18:09
13C6_PFDA	20	23	115	25-150		07/27/2022 18:09
d3-MeFOSAA	20	22	111	25-150		07/27/2022 18:09
13C8_PFOSA	20	18	93	25-150		07/27/2022 18:09
d5-EtFOSAA	20	15	75	25-150		07/27/2022 18:09
13C7_PFUdA	20	21	108	25-150		07/27/2022 18:09
13C2_PFDoA	20	21	108	25-150		07/27/2022 18:09
13C2_PFTeDA	20	14	73	25-150		07/27/2022 18:09
13C3_HFPO-DA	20	20	105	25-150		07/27/2022 18:09
d7-N-MeFOSE	20	13	65	10-150		07/27/2022 18:09
d9-N-EtFOSE	20	9.2	47	10-150		07/27/2022 18:09
d3-N-MeFOSA	20	9.8	50	10-150		07/27/2022 18:09
d5-N-EtFOSA	20	8.1	41	10-150		07/27/2022 18:09

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW6	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647002-R	Total Amount Extracted	256mL
Lab File ID	B220727B_010	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 12:55	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.77	5.71	1595		07/27/2022 18:09
13C4_PFOA	N/A	N/A	7.04	6.96	2120		07/27/2022 18:09
13C2_PFDA	N/A	N/A	8.36	8.27	1328		07/27/2022 18:09
13C4_PFOS	N/A	N/A	8.83	8.75	2282		07/27/2022 18:09

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.29	4.30	1881		07/27/2022 18:09
13C5_PFPeA	N/A	N/A	5.12	5.13	1219		07/27/2022 18:09
13C3_PFBS	N/A	N/A	6.01	5.96	432		07/27/2022 18:09
13C2_4:2FTS	N/A	N/A	5.51	5.49	176	R	07/27/2022 18:09
13C5_PFHxA	N/A	N/A	5.77	5.81	1195		07/27/2022 18:09
13C4_PFHpA	N/A	N/A	6.40	6.39	1989		07/27/2022 18:09
13C3_PFHxS	N/A	N/A	7.44	7.45	1741		07/27/2022 18:09
13C2_6:2FTS	N/A	N/A	6.71	6.72	577		07/27/2022 18:09
13C8_PFOA	N/A	N/A	7.04	7.05	2256		07/27/2022 18:09
13C9_PFNA	N/A	N/A	7.69	7.70	1555		07/27/2022 18:09
13C8_PFOS	N/A	N/A	8.83	8.82	2029		07/27/2022 18:09
13C2_8:2FTS	N/A	N/A	7.98	7.98	1815		07/27/2022 18:09
13C6_PFDA	N/A	N/A	8.36	8.35	1705		07/27/2022 18:09
d3-MeFOSAA	N/A	N/A	8.22	8.22	2043		07/27/2022 18:09
13C8_PFOSA	N/A	N/A	10.56	10.56	1632		07/27/2022 18:09
d5-EtFOSAA	N/A	N/A	8.51	8.51	1171		07/27/2022 18:09
13C7_PFUdA	N/A	N/A	9.03	9.02	2148		07/27/2022 18:09
13C2_PFDoA	N/A	N/A	9.70	9.69	1549		07/27/2022 18:09
13C2_PFTeDA	N/A	N/A	11.00	10.98	1005		07/27/2022 18:09
13C3_HFPO-DA	N/A	N/A	6.03	6.04	1352		07/27/2022 18:09
d7-N-MeFOSE	N/A	N/A	12.36	12.34	48		07/27/2022 18:09
d9-N-EtFOSE	N/A	N/A	12.84	12.84	325		07/27/2022 18:09
d3-N-MeFOSA	N/A	N/A	12.58	12.56	566		07/27/2022 18:09
d5-N-EtFOSA	N/A	N/A	13.00	13.01	601		07/27/2022 18:09

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW6	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647002-R	Total Amount Extracted	256mL
Lab File ID	B220727B_010	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 12:55	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.29	4.31	162		07/27/2022 18:09
PFPeA	N/A	N/A	5.13	5.12	53	J	07/27/2022 18:09
HFPO-DA	0.38	0.28	6.04	6.02	ND		07/27/2022 18:09
PFBS	0.42	0.48	6.01	5.99	180		07/27/2022 18:09
PFHxA	0.08	0.08	5.78	5.75	53	J	07/27/2022 18:09
4:2 FTS	0.00	0.80	0.00	5.49	ND		07/27/2022 18:09
PFPeS	0.51	0.41	6.75	6.73	ND		07/27/2022 18:09
PFHpA	0.29	0.32	6.41	6.39	17	J	07/27/2022 18:09
DONA	0.00	0.49	0.00	6.62	ND		07/27/2022 18:09
PFHxS	0.47	0.39	7.45	7.43	ND		07/27/2022 18:09
PFOA	0.32	0.39	7.05	7.03	82		07/27/2022 18:09
6:2 FTS	0.73	0.76	6.71	6.72	ND		07/27/2022 18:09
PFHpS	0.35	0.42	8.16	8.13	ND		07/27/2022 18:09
PFNA	0.16	0.13	7.70	7.67	ND		07/27/2022 18:09
PFOSAm	N/A	N/A	10.57	10.51	ND		07/27/2022 18:09
PFOS	0.33	0.43	8.61	8.81	143	J	07/27/2022 18:09
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 18:09
PFDA	0.00	0.18	0.00	8.34	ND		07/27/2022 18:09
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 18:09
8:2 FTS	0.00	0.97	0.00	7.95	ND		07/27/2022 18:09
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 18:09
PFNS	0.00	0.55	0.00	9.52	ND		07/27/2022 18:09
PFUnDA	0.00	0.13	0.00	9.01	ND		07/27/2022 18:09
NMeFOSAA	0.00	0.95	8.08	8.35	ND		07/27/2022 18:09
NEtFOSAA	0.00	0.63	0.00	8.51	ND		07/27/2022 18:09
PFDS	0.00	0.37	0.00	10.16	ND		07/27/2022 18:09
PFDOA	0.00	0.18	0.00	9.69	ND		07/27/2022 18:09
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 18:09
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 18:09
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 18:09
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 18:09
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 18:09
PFTDA	0.00	0.26	0.00	11.00	ND		07/27/2022 18:09

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Pace Analytical Services, LLC
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	SUMP 1	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647003-R	Total Amount Extracted	254mL
Lab File ID	B220727B_011	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 14:30	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	11	2.0	0.43	0.43	1	375-22-4		07/27/2022 18:29
PFPeA	12	2.0	0.43	0.43	1	2706-90-3		07/27/2022 18:29
HFPO-DA	ND	2.0	0.52	0.52	1	13252-13-6		07/27/2022 18:29
PFBS	130 D	17	4.7	4.7	10	375-73-5		08/03/2022 06:11
PFHxA	10	2.0	0.43	0.43	1	307-24-4		07/27/2022 18:29
4:2 FTS	ND	1.8	0.55	0.55	1	757124-72-4		07/27/2022 18:29
PFPeS	4.9	1.8	0.47	0.47	1	2706-91-4		07/27/2022 18:29
PFHpA	5.4	2.0	0.54	0.54	1	375-85-9		07/27/2022 18:29
DONA	ND	1.9	0.51	0.51	1	919005-14-4		07/27/2022 18:29
PFHxS	18	1.8	0.50	0.50	1	355-46-4		07/27/2022 18:29
PFOA	11	2.0	0.58	0.58	1	335-67-1		07/27/2022 18:29
6:2 FTS	1.7 J	1.9	0.63	0.63	1	27619-97-2		07/27/2022 18:29
PFHpS	7.4	1.9	0.40	0.40	1	375-92-8		07/27/2022 18:29
PFNA	1.8 J	2.0	0.73	0.73	1	375-95-1		07/27/2022 18:29
PFOSAm	ND	2.0	0.80	0.80	1	754-91-6		07/27/2022 18:29
PFOS	860 D	18	5.4	5.4	10	1763-23-1		08/03/2022 06:11
MeFOSA	ND	2.0	0.50	0.50	1	31506-32-8		07/27/2022 18:29
PFDA	1.3 J	2.0	0.55	0.55	1	335-76-2		07/27/2022 18:29
EtFOSAm	ND	2.0	0.60	0.60	1	4151-50-2		07/27/2022 18:29
8:2 FTS	ND	1.9	0.64	0.64	1	39108-34-4		07/27/2022 18:29
9-Cl-PF3ON	ND	1.8	0.30	0.30	1	756426-58-1		07/27/2022 18:29
PFNS	ND	1.9	0.44	0.44	1	68259-12-1		07/27/2022 18:29
PFUnDA	ND	2.0	0.53	0.53	1	2058-94-8		07/27/2022 18:29
NMeFOSAA	ND	2.0	0.43	0.43	1	2355-31-9		07/27/2022 18:29
NEtFOSAA	ND	2.0	0.55	0.55	1	2991-50-6		07/27/2022 18:29
PFDS	ND	1.9	0.44	0.44	1	335-77-3		07/27/2022 18:29
PFDOA	ND	2.0	0.48	0.48	1	307-55-1		07/27/2022 18:29
MeFOSE	ND	2.0	0.32	0.32	1	24448-09-7		07/27/2022 18:29
EtFOSE	ND	2.0	0.49	0.49	1	1691-99-2		07/27/2022 18:29
11-Cl-PF3OUdS	ND	1.9	0.43	0.43	1	763051-92-9		07/27/2022 18:29
PFTrDA	ND	2.0	0.61	0.61	1	72629-94-8		07/27/2022 18:29
PFDoS	ND	1.9	0.45	0.45	1	79780-39-5		07/27/2022 18:29
PFTDA	ND	2.0	0.47	0.47	1	376-06-7		07/27/2022 18:29

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	SUMP 1	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647003-R	Total Amount Extracted	254mL
Lab File ID	B220727B_011	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 14:30	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	23	116	50-150		07/27/2022 18:29
13C4_PFOA	20	24	121	50-150		07/27/2022 18:29
13C2_PFDA	20	22	112	50-150		07/27/2022 18:29
13C4_PFOS	19	17	89	50-150		07/27/2022 18:29

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	21	107	25-150		07/27/2022 18:29
13C5_PFPeA	20	21	107	25-150		07/27/2022 18:29
13C3_PFBS	18	18	99	25-150	D	08/03/2022 06:11
13C2_4:2FTS	18	28	**153**	25-150	R	07/27/2022 18:29
13C5_PFHxA	20	22	112	25-150		07/27/2022 18:29
13C4_PFHpA	20	20	103	25-150		07/27/2022 18:29
13C3_PFHxS	19	21	114	25-150		07/27/2022 18:29
13C2_6:2FTS	19	18	98	25-150		07/27/2022 18:29
13C8_PFOA	20	22	113	25-150		07/27/2022 18:29
13C9_PFNA	20	21	105	25-150		07/27/2022 18:29
13C8_PFOS	19	20	104	25-150	D	08/03/2022 06:11
13C2_8:2FTS	19	19	102	25-150		07/27/2022 18:29
13C6_PFDA	20	19	94	25-150		07/27/2022 18:29
d3-MeFOSAA	20	16	83	25-150		07/27/2022 18:29
13C8_PFOSA	20	15	78	25-150		07/27/2022 18:29
d5-EtFOSAA	20	13	65	25-150		07/27/2022 18:29
13C7_PFUdA	20	16	83	25-150		07/27/2022 18:29
13C2_PFDoA	20	16	81	25-150		07/27/2022 18:29
13C2_PFTeDA	20	14	73	25-150		07/27/2022 18:29
13C3_HFPO-DA	20	20	100	25-150		07/27/2022 18:29
d7-N-MeFOSE	20	13	67	10-150		07/27/2022 18:29
d9-N-EtFOSE	20	13	65	10-150		07/27/2022 18:29
d3-N-MeFOSA	20	6.9	35	10-150		07/27/2022 18:29
d5-N-EtFOSA	20	6.5	33	10-150		07/27/2022 18:29

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	SUMP 1	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647003-R	Total Amount Extracted	254mL
Lab File ID	B220727B_011	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 14:30	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.77	5.71	1756		07/27/2022 18:29
13C4_PFOA	N/A	N/A	7.04	6.96	2348		07/27/2022 18:29
13C2_PFDA	N/A	N/A	8.36	8.27	1815		07/27/2022 18:29
13C4_PFOS	N/A	N/A	8.83	8.75	1108		07/27/2022 18:29

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.29	4.30	2696		07/27/2022 18:29
13C5_PFPeA	N/A	N/A	5.13	5.13	2101		07/27/2022 18:29
13C3_PFBS	N/A	N/A	6.04	5.96	447	D	08/03/2022 06:11
13C2_4:2FTS	N/A	N/A	5.51	5.49	203	R	07/27/2022 18:29
13C5_PFHxA	N/A	N/A	5.78	5.81	978		07/27/2022 18:29
13C4_PFHpA	N/A	N/A	6.41	6.39	1685		07/27/2022 18:29
13C3_PFHxS	N/A	N/A	7.45	7.45	1075		07/27/2022 18:29
13C2_6:2FTS	N/A	N/A	6.71	6.72	548		07/27/2022 18:29
13C8_PFOA	N/A	N/A	7.04	7.05	1868		07/27/2022 18:29
13C9_PFNA	N/A	N/A	7.69	7.70	1631		07/27/2022 18:29
13C8_PFOS	N/A	N/A	8.86	8.80	1637	D	08/03/2022 06:11
13C2_8:2FTS	N/A	N/A	7.98	7.98	1184		07/27/2022 18:29
13C6_PFDA	N/A	N/A	8.36	8.35	1452		07/27/2022 18:29
d3-MeFOSAA	N/A	N/A	8.22	8.22	1552		07/27/2022 18:29
13C8_PFOSA	N/A	N/A	10.55	10.56	1020		07/27/2022 18:29
d5-EtFOSAA	N/A	N/A	8.51	8.51	907		07/27/2022 18:29
13C7_PFUdA	N/A	N/A	9.03	9.02	1922		07/27/2022 18:29
13C2_PFDoA	N/A	N/A	9.70	9.69	1110		07/27/2022 18:29
13C2_PFTeDA	N/A	N/A	11.00	10.98	1312		07/27/2022 18:29
13C3_HFPO-DA	N/A	N/A	6.04	6.04	1557		07/27/2022 18:29
d7-N-MeFOSE	N/A	N/A	12.35	12.34	42		07/27/2022 18:29
d9-N-EtFOSE	N/A	N/A	12.82	12.84	50		07/27/2022 18:29
d3-N-MeFOSA	N/A	N/A	12.56	12.56	627		07/27/2022 18:29
d5-N-EtFOSA	N/A	N/A	12.97	13.01	800		07/27/2022 18:29

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	SUMP 1	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647003-R	Total Amount Extracted	254mL
Lab File ID	B220727B_011	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 14:30	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.30	4.31	180		07/27/2022 18:29
PFPeA	N/A	N/A	5.13	5.12	231		07/27/2022 18:29
HFPO-DA	0.30	0.28	6.04	6.02	ND		07/27/2022 18:29
PFBS	0.50	0.45	6.05	5.99	701	D	08/03/2022 06:11
PFHxA	0.08	0.08	5.78	5.75	174		07/27/2022 18:29
4:2 FTS	0.00	0.80	0.00	5.49	ND		07/27/2022 18:29
PFPeS	0.49	0.41	6.75	6.73	219		07/27/2022 18:29
PFHpA	0.30	0.32	6.42	6.39	21		07/27/2022 18:29
DONA	0.00	0.49	0.00	6.62	ND		07/27/2022 18:29
PFHxS	0.50	0.39	7.45	7.43	611		07/27/2022 18:29
PFOA	0.36	0.39	7.05	7.03	247		07/27/2022 18:29
6:2 FTS	0.87	0.76	6.72	6.72	350	J	07/27/2022 18:29
PFHpS	0.48	0.42	8.16	8.13	243		07/27/2022 18:29
PFNA	0.13	0.13	7.70	7.67	322	J	07/27/2022 18:29
PFOSAm	N/A	N/A	10.56	10.51	ND		07/27/2022 18:29
PFOS	0.38	0.38	8.87	8.81	378	D	08/03/2022 06:11
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 18:29
PFDA	0.17	0.18	8.37	8.34	194	J	07/27/2022 18:29
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 18:29
8:2 FTS	0.00	0.97	0.00	7.95	ND		07/27/2022 18:29
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 18:29
PFNS	0.60	0.55	9.52	9.52	ND		07/27/2022 18:29
PFUnDA	0.05	0.13	9.04	9.01	ND		07/27/2022 18:29
NMeFOSAA	0.66	0.95	8.23	8.35	ND		07/27/2022 18:29
NEtFOSAA	0.00	0.63	0.00	8.51	ND		07/27/2022 18:29
PFDS	0.79	0.37	10.17	10.16	ND		07/27/2022 18:29
PFDOA	0.12	0.18	9.71	9.69	ND		07/27/2022 18:29
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 18:29
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 18:29
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 18:29
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 18:29
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 18:29
PFTDA	0.00	0.26	0.00	11.00	ND		07/27/2022 18:29

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW4	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647004-R	Total Amount Extracted	253mL
Lab File ID	B220727B_012	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 16:00	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	12	2.0	0.44	0.44	1	375-22-4		07/27/2022 18:49
PFPeA	1.5 J	2.0	0.43	0.43	1	2706-90-3		07/27/2022 18:49
HFPO-DA	ND	2.0	0.52	0.52	1	13252-13-6		07/27/2022 18:49
PFBS	4.9	1.8	0.47	0.47	1	375-73-5		07/27/2022 18:49
PFHxA	2.2	2.0	0.43	0.43	1	307-24-4		07/27/2022 18:49
4:2 FTS	ND	1.9	0.55	0.55	1	757124-72-4		07/27/2022 18:49
PFPeS	ND	1.9	0.47	0.47	1	2706-91-4		07/27/2022 18:49
PFHpA	1.8 J	2.0	0.54	0.54	1	375-85-9		07/27/2022 18:49
DONA	ND	1.9	0.51	0.51	1	919005-14-4		07/27/2022 18:49
PFHxS	ND	1.8	0.50	0.50	1	355-46-4		07/27/2022 18:49
PFOA	3.9	2.0	0.58	0.58	1	335-67-1		07/27/2022 18:49
6:2 FTS	ND	1.9	0.64	0.64	1	27619-97-2		07/27/2022 18:49
PFHpS	ND	1.9	0.41	0.41	1	375-92-8		07/27/2022 18:49
PFNA	0.81 J	2.0	0.73	0.73	1	375-95-1		07/27/2022 18:49
PFOSAm	ND	2.0	0.81	0.81	1	754-91-6		07/27/2022 18:49
PFOS	32	1.8	0.54	0.54	1	1763-23-1		07/27/2022 18:49
MeFOSA	ND	2.0	0.51	0.51	1	31506-32-8		07/27/2022 18:49
PFDA	ND	2.0	0.56	0.56	1	335-76-2		07/27/2022 18:49
EtFOSAm	ND	2.0	0.60	0.60	1	4151-50-2		07/27/2022 18:49
8:2 FTS	ND	1.9	0.65	0.65	1	39108-34-4		07/27/2022 18:49
9-Cl-PF3ON	ND	1.8	0.30	0.30	1	756426-58-1		07/27/2022 18:49
PFNS	ND	1.9	0.44	0.44	1	68259-12-1		07/27/2022 18:49
PFUnDA	ND	2.0	0.53	0.53	1	2058-94-8		07/27/2022 18:49
NMeFOSAA	ND	2.0	0.43	0.43	1	2355-31-9		07/27/2022 18:49
NEtFOSAA	ND	2.0	0.55	0.55	1	2991-50-6		07/27/2022 18:49
PFDS	ND	1.9	0.45	0.45	1	335-77-3		07/27/2022 18:49
PFDOA	ND	2.0	0.48	0.48	1	307-55-1		07/27/2022 18:49
MeFOSE	ND	2.0	0.33	0.33	1	24448-09-7		07/27/2022 18:49
EtFOSE	ND	2.0	0.49	0.49	1	1691-99-2		07/27/2022 18:49
11-Cl-PF3OUdS	ND	1.9	0.43	0.43	1	763051-92-9		07/27/2022 18:49
PFTrDA	ND	2.0	0.62	0.62	1	72629-94-8		07/27/2022 18:49
PFDoS	ND	1.9	0.46	0.46	1	79780-39-5		07/27/2022 18:49
PFTDA	ND	2.0	0.47	0.47	1	376-06-7		07/27/2022 18:49

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Sample Analysis Summary

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Client Sample ID	MW4	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647004-R	Total Amount Extracted	253mL
Lab File ID	B220727B_012	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 16:00	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	22	109	50-150		07/27/2022 18:49
13C4_PFOA	20	24	121	50-150		07/27/2022 18:49
13C2_PFDA	20	26	131	50-150		07/27/2022 18:49
13C4_PFOS	19	23	119	50-150		07/27/2022 18:49

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	21	105	25-150		07/27/2022 18:49
13C5_PFPeA	20	21	104	25-150		07/27/2022 18:49
13C3_PFBS	18	22	119	25-150		07/27/2022 18:49
13C2_4:2FTS	19	36	**196**	25-150	R	07/27/2022 18:49
13C5_PFHxA	20	24	121	25-150		07/27/2022 18:49
13C4_PFHpA	20	22	109	25-150		07/27/2022 18:49
13C3_PFHxS	19	23	121	25-150		07/27/2022 18:49
13C2_6:2FTS	19	24	128	25-150		07/27/2022 18:49
13C8_PFOA	20	23	116	25-150		07/27/2022 18:49
13C9_PFNA	20	23	114	25-150		07/27/2022 18:49
13C8_PFOS	19	22	118	25-150		07/27/2022 18:49
13C2_8:2FTS	19	23	121	25-150		07/27/2022 18:49
13C6_PFDA	20	23	117	25-150		07/27/2022 18:49
d3-MeFOSAA	20	20	103	25-150		07/27/2022 18:49
13C8_PFOSA	20	19	97	25-150		07/27/2022 18:49
d5-EtFOSAA	20	17	84	25-150		07/27/2022 18:49
13C7_PFUdA	20	23	114	25-150		07/27/2022 18:49
13C2_PFDoA	20	24	119	25-150		07/27/2022 18:49
13C2_PFTeDA	20	16	83	25-150		07/27/2022 18:49
13C3_HFPO-DA	20	21	104	25-150		07/27/2022 18:49
d7-N-MeFOSE	20	17	84	10-150		07/27/2022 18:49
d9-N-EtFOSE	20	13	67	10-150		07/27/2022 18:49
d3-N-MeFOSA	20	3.6	18	10-150		07/27/2022 18:49
d5-N-EtFOSA	20	2.8	14	10-150		07/27/2022 18:49

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW4	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647004-R	Total Amount Extracted	253mL
Lab File ID	B220727B_012	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 16:00	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.77	5.71	1883		07/27/2022 18:49
13C4_PFOA	N/A	N/A	7.05	6.96	2086		07/27/2022 18:49
13C2_PFDA	N/A	N/A	8.36	8.27	1610		07/27/2022 18:49
13C4_PFOS	N/A	N/A	8.83	8.75	1316		07/27/2022 18:49

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.29	4.30	2144		07/27/2022 18:49
13C5_PFPeA	N/A	N/A	5.13	5.13	1598		07/27/2022 18:49
13C3_PFBS	N/A	N/A	6.01	5.96	669		07/27/2022 18:49
13C2_4:2FTS	N/A	N/A	5.51	5.49	252	R	07/27/2022 18:49
13C5_PFHxA	N/A	N/A	5.78	5.81	995		07/27/2022 18:49
13C4_PFHpA	N/A	N/A	6.41	6.39	1643		07/27/2022 18:49
13C3_PFHxS	N/A	N/A	7.45	7.45	1063		07/27/2022 18:49
13C2_6:2FTS	N/A	N/A	6.71	6.72	439		07/27/2022 18:49
13C8_PFOA	N/A	N/A	7.04	7.05	1965		07/27/2022 18:49
13C9_PFNA	N/A	N/A	7.70	7.70	2436		07/27/2022 18:49
13C8_PFOS	N/A	N/A	8.83	8.82	912		07/27/2022 18:49
13C2_8:2FTS	N/A	N/A	7.99	7.98	664		07/27/2022 18:49
13C6_PFDA	N/A	N/A	8.36	8.35	1586		07/27/2022 18:49
d3-MeFOSAA	N/A	N/A	8.23	8.22	1477		07/27/2022 18:49
13C8_PFOSA	N/A	N/A	10.56	10.56	1081		07/27/2022 18:49
d5-EtFOSAA	N/A	N/A	8.52	8.51	1080		07/27/2022 18:49
13C7_PFUdA	N/A	N/A	9.03	9.02	1639		07/27/2022 18:49
13C2_PFDoA	N/A	N/A	9.70	9.69	1315		07/27/2022 18:49
13C2_PFTeDA	N/A	N/A	11.02	10.98	1721		07/27/2022 18:49
13C3_HFPO-DA	N/A	N/A	6.04	6.04	927		07/27/2022 18:49
d7-N-MeFOSE	N/A	N/A	12.36	12.34	54		07/27/2022 18:49
d9-N-EtFOSE	N/A	N/A	12.83	12.84	72		07/27/2022 18:49
d3-N-MeFOSA	N/A	N/A	12.57	12.56	367		07/27/2022 18:49
d5-N-EtFOSA	N/A	N/A	12.98	13.01	497		07/27/2022 18:49

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW4	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647004-R	Total Amount Extracted	253mL
Lab File ID	B220727B_012	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 16:00	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.30	4.31	81		07/27/2022 18:49
PFPeA	N/A	N/A	5.13	5.12	48	J	07/27/2022 18:49
HFPO-DA	0.24	0.28	6.05	6.02	ND		07/27/2022 18:49
PFBS	0.47	0.48	6.02	5.99	202		07/27/2022 18:49
PFHxA	0.10	0.08	5.78	5.75	76		07/27/2022 18:49
4:2 FTS	0.00	0.80	0.00	5.49	ND		07/27/2022 18:49
PFPeS	0.49	0.41	6.76	6.73	ND		07/27/2022 18:49
PFHpA	0.26	0.32	6.42	6.39	27	J	07/27/2022 18:49
DONA	0.00	0.49	0.00	6.62	ND		07/27/2022 18:49
PFHxS	0.42	0.39	7.46	7.43	ND		07/27/2022 18:49
PFOA	0.39	0.39	7.05	7.03	185		07/27/2022 18:49
6:2 FTS	1.10	0.76	6.72	6.72	ND		07/27/2022 18:49
PFHpS	0.59	0.42	8.16	8.13	ND		07/27/2022 18:49
PFNA	0.13	0.13	7.71	7.67	204	J	07/27/2022 18:49
PFOSAm	N/A	N/A	10.57	10.51	ND		07/27/2022 18:49
PFOS	0.36	0.43	8.84	8.81	373		07/27/2022 18:49
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 18:49
PFDA	0.21	0.18	8.37	8.34	ND		07/27/2022 18:49
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 18:49
8:2 FTS	0.00	0.97	0.00	7.95	ND		07/27/2022 18:49
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 18:49
PFNS	0.00	0.55	0.00	9.52	ND		07/27/2022 18:49
PFUnDA	0.14	0.13	9.03	9.01	ND		07/27/2022 18:49
NMeFOSAA	0.43	0.95	8.24	8.35	ND		07/27/2022 18:49
NEtFOSAA	0.76	0.63	8.53	8.51	ND		07/27/2022 18:49
PFDS	0.00	0.37	0.00	10.16	ND		07/27/2022 18:49
PFDOA	0.11	0.18	9.71	9.69	ND		07/27/2022 18:49
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 18:49
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 18:49
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 18:49
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 18:49
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 18:49
PFTDA	0.00	0.26	0.00	11.00	ND		07/27/2022 18:49

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PZ-4	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647005-R	Total Amount Extracted	257mL
Lab File ID	B220727B_013	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 17:00	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	1.9	0.43	0.43	1	375-22-4		07/27/2022 19:09
PFPeA	ND	1.9	0.43	0.43	1	2706-90-3		07/27/2022 19:09
HFPO-DA	ND	1.9	0.51	0.51	1	13252-13-6		07/27/2022 19:09
PFBS	0.67 J	1.7	0.46	0.46	1	375-73-5		07/27/2022 19:09
PFHxA	ND	1.9	0.43	0.43	1	307-24-4		07/27/2022 19:09
4:2 FTS	ND	1.8	0.54	0.54	1	757124-72-4		07/27/2022 19:09
PFPeS	ND	1.8	0.46	0.46	1	2706-91-4		07/27/2022 19:09
PFHpA	ND	1.9	0.54	0.54	1	375-85-9		07/27/2022 19:09
DONA	ND	1.8	0.50	0.50	1	919005-14-4		07/27/2022 19:09
PFHxS	ND	1.8	0.49	0.49	1	355-46-4		07/27/2022 19:09
PFOA	ND	1.9	0.57	0.57	1	335-67-1		07/27/2022 19:09
6:2 FTS	ND	1.8	0.63	0.63	1	27619-97-2		07/27/2022 19:09
PFHpS	ND	1.8	0.40	0.40	1	375-92-8		07/27/2022 19:09
PFNA	ND	1.9	0.72	0.72	1	375-95-1		07/27/2022 19:09
PFOSAm	ND	1.9	0.80	0.80	1	754-91-6		07/27/2022 19:09
PFOS	0.86 J	1.8	0.53	0.53	1	1763-23-1		07/27/2022 19:09
MeFOSA	ND	1.9	0.50	0.50	1	31506-32-8		07/27/2022 19:09
PFDA	ND	1.9	0.55	0.55	1	335-76-2		07/27/2022 19:09
EtFOSAm	ND	1.9	0.59	0.59	1	4151-50-2		07/27/2022 19:09
8:2 FTS	ND	1.9	0.64	0.64	1	39108-34-4		07/27/2022 19:09
9-Cl-PF3ON	ND	1.8	0.30	0.30	1	756426-58-1		07/27/2022 19:09
PFNS	ND	1.9	0.43	0.43	1	68259-12-1		07/27/2022 19:09
PFUnDA	ND	1.9	0.53	0.53	1	2058-94-8		07/27/2022 19:09
NMeFOSAA	ND	1.9	0.42	0.42	1	2355-31-9		07/27/2022 19:09
NEtFOSAA	ND	1.9	0.54	0.54	1	2991-50-6		07/27/2022 19:09
PFDS	ND	1.9	0.44	0.44	1	335-77-3		07/27/2022 19:09
PFDOA	ND	1.9	0.47	0.47	1	307-55-1		07/27/2022 19:09
MeFOSE	ND	1.9	0.32	0.32	1	24448-09-7		07/27/2022 19:09
EtFOSE	ND	1.9	0.48	0.48	1	1691-99-2		07/27/2022 19:09
11-Cl-PF3OUdS	ND	1.8	0.42	0.42	1	763051-92-9		07/27/2022 19:09
PFTrDA	ND	1.9	0.61	0.61	1	72629-94-8		07/27/2022 19:09
PFDoS	ND	1.9	0.45	0.45	1	79780-39-5		07/27/2022 19:09
PFTDA	ND	1.9	0.46	0.46	1	376-06-7		07/27/2022 19:09

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PZ-4	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647005-R	Total Amount Extracted	257mL
Lab File ID	B220727B_013	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 17:00	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	19	21	106	50-150		07/27/2022 19:09
13C4_PFOA	19	23	116	50-150		07/27/2022 19:09
13C2_PFDA	19	22	115	50-150		07/27/2022 19:09
13C4_PFOS	19	21	114	50-150		07/27/2022 19:09

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	19	22	112	25-150		07/27/2022 19:09
13C5_PFPeA	19	22	113	25-150		07/27/2022 19:09
13C3_PFBS	18	20	110	25-150		07/27/2022 19:09
13C2_4:2FTS	18	22	119	25-150		07/27/2022 19:09
13C5_PFHxA	19	24	123	25-150		07/27/2022 19:09
13C4_PFHpA	19	21	106	25-150		07/27/2022 19:09
13C3_PFHxS	18	21	112	25-150		07/27/2022 19:09
13C2_6:2FTS	18	19	103	25-150		07/27/2022 19:09
13C8_PFOA	19	22	112	25-150		07/27/2022 19:09
13C9_PFNA	19	21	107	25-150		07/27/2022 19:09
13C8_PFOS	19	20	107	25-150		07/27/2022 19:09
13C2_8:2FTS	19	19	102	25-150		07/27/2022 19:09
13C6_PFDA	19	21	107	25-150		07/27/2022 19:09
d3-MeFOSAA	19	16	82	25-150		07/27/2022 19:09
13C8_PFOSA	19	11	56	25-150		07/27/2022 19:09
d5-EtFOSAA	19	15	78	25-150		07/27/2022 19:09
13C7_PFUdA	19	18	92	25-150		07/27/2022 19:09
13C2_PFDoA	19	20	101	25-150		07/27/2022 19:09
13C2_PFTeDA	19	14	70	25-150		07/27/2022 19:09
13C3_HFPO-DA	19	20	104	25-150		07/27/2022 19:09
d7-N-MeFOSE	19	4.7	24	10-150		07/27/2022 19:09
d9-N-EtFOSE	19	4.7	24	10-150		07/27/2022 19:09
d3-N-MeFOSA	19	0.29	1	10-150	R	07/27/2022 19:09
d5-N-EtFOSA	19	0.25	1	10-150	R	07/27/2022 19:09

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Client Sample ID	PZ-4	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647005-R	Total Amount Extracted	257mL
Lab File ID	B220727B_013	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 17:00	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.77	5.71	1884		07/27/2022 19:09
13C4_PFOA	N/A	N/A	7.04	6.96	2030		07/27/2022 19:09
13C2_PFDA	N/A	N/A	8.36	8.27	2001		07/27/2022 19:09
13C4_PFOS	N/A	N/A	8.82	8.75	1641		07/27/2022 19:09

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.29	4.30	2049		07/27/2022 19:09
13C5_PFPeA	N/A	N/A	5.13	5.13	2305		07/27/2022 19:09
13C3_PFBS	N/A	N/A	6.01	5.96	926		07/27/2022 19:09
13C2_4:2FTS	N/A	N/A	5.51	5.49	334		07/27/2022 19:09
13C5_PFHxA	N/A	N/A	5.78	5.81	1247		07/27/2022 19:09
13C4_PFHpA	N/A	N/A	6.41	6.39	1528		07/27/2022 19:09
13C3_PFHxS	N/A	N/A	7.45	7.45	1907		07/27/2022 19:09
13C2_6:2FTS	N/A	N/A	6.71	6.72	909		07/27/2022 19:09
13C8_PFOA	N/A	N/A	7.04	7.05	2535		07/27/2022 19:09
13C9_PFNA	N/A	N/A	7.70	7.70	1681		07/27/2022 19:09
13C8_PFOS	N/A	N/A	8.82	8.82	1988		07/27/2022 19:09
13C2_8:2FTS	N/A	N/A	7.98	7.98	2294		07/27/2022 19:09
13C6_PFDA	N/A	N/A	8.36	8.35	1277		07/27/2022 19:09
d3-MeFOSAA	N/A	N/A	8.22	8.22	1625		07/27/2022 19:09
13C8_PFOSA	N/A	N/A	10.53	10.56	1217		07/27/2022 19:09
d5-EtFOSAA	N/A	N/A	8.51	8.51	1394		07/27/2022 19:09
13C7_PFUdA	N/A	N/A	9.02	9.02	2462		07/27/2022 19:09
13C2_PFDoA	N/A	N/A	9.68	9.69	1443		07/27/2022 19:09
13C2_PFTeDA	N/A	N/A	10.99	10.98	1088		07/27/2022 19:09
13C3_HFPO-DA	N/A	N/A	6.03	6.04	1811		07/27/2022 19:09
d7-N-MeFOSE	N/A	N/A	12.34	12.34	42		07/27/2022 19:09
d9-N-EtFOSE	N/A	N/A	12.82	12.84	49		07/27/2022 19:09
d3-N-MeFOSA	N/A	N/A	12.56	12.56	162	R	07/27/2022 19:09
d5-N-EtFOSA	N/A	N/A	12.99	13.01	190	R	07/27/2022 19:09

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PZ-4	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647005-R	Total Amount Extracted	257mL
Lab File ID	B220727B_013	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/14/2022 17:00	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.30	4.31	ND		07/27/2022 19:09
PFPeA	N/A	N/A	5.13	5.12	ND		07/27/2022 19:09
HFPO-DA	0.00	0.28	6.16	6.02	ND		07/27/2022 19:09
PFBS	0.50	0.48	6.02	5.99	139	J	07/27/2022 19:09
PFHxA	0.13	0.08	5.78	5.75	ND		07/27/2022 19:09
4:2 FTS	0.00	0.80	0.00	5.49	ND		07/27/2022 19:09
PFPeS	0.00	0.41	0.00	6.73	ND		07/27/2022 19:09
PFHpA	0.28	0.32	6.41	6.39	ND		07/27/2022 19:09
DONA	0.00	0.49	0.00	6.62	ND		07/27/2022 19:09
PFHxS	0.49	0.39	7.45	7.43	ND		07/27/2022 19:09
PFOA	0.28	0.39	7.05	7.03	ND		07/27/2022 19:09
6:2 FTS	0.97	0.76	6.71	6.72	ND		07/27/2022 19:09
PFHpS	0.00	0.42	0.00	8.13	ND		07/27/2022 19:09
PFNA	0.19	0.13	7.71	7.67	ND		07/27/2022 19:09
PFOSAm	N/A	N/A	0.00	10.51	ND		07/27/2022 19:09
PFOS	0.35	0.43	8.83	8.81	151	J	07/27/2022 19:09
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 19:09
PFDA	0.11	0.18	8.37	8.34	ND		07/27/2022 19:09
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 19:09
8:2 FTS	0.00	0.97	0.00	7.95	ND		07/27/2022 19:09
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 19:09
PFNS	0.00	0.55	0.00	9.52	ND		07/27/2022 19:09
PFUnDA	0.00	0.13	0.00	9.01	ND		07/27/2022 19:09
NMeFOSAA	0.00	0.95	0.00	8.35	ND		07/27/2022 19:09
NEtFOSAA	0.00	0.63	0.00	8.51	ND		07/27/2022 19:09
PFDS	0.00	0.37	0.00	10.16	ND		07/27/2022 19:09
PFDOA	0.30	0.18	9.70	9.69	ND		07/27/2022 19:09
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 19:09
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 19:09
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 19:09
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 19:09
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 19:09
PFTDA	0.00	0.26	0.00	11.00	ND		07/27/2022 19:09

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PFAS BLANK	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647006	Total Amount Extracted	267mL
Lab File ID	B220707A_017	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/14/2022 18:00	CCal File	B220707A_007
Received	06/17/2022 10:00	Ending CCal File	B220707A_019
		Blank File	B220707A_009

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	1.9	0.41	0.41	1	375-22-4		07/07/2022 17:55
PFPeA	ND	1.9	0.41	0.41	1	2706-90-3		07/07/2022 17:55
HFPO-DA	ND	1.9	0.50	0.50	1	13252-13-6		07/07/2022 17:55
PFBS	ND	1.7	0.44	0.44	1	375-73-5		07/07/2022 17:55
PFHxA	ND	1.9	0.41	0.41	1	307-24-4		07/07/2022 17:55
4:2 FTS	ND	1.8	0.52	0.52	1	757124-72-4		07/07/2022 17:55
PFPeS	ND	1.8	0.45	0.45	1	2706-91-4		07/07/2022 17:55
PFHpA	ND	1.9	0.52	0.52	1	375-85-9		07/07/2022 17:55
DONA	ND	1.8	0.48	0.48	1	919005-14-4		07/07/2022 17:55
PFHxS	ND	1.7	0.48	0.48	1	355-46-4		07/07/2022 17:55
PFOA	ND	1.9	0.55	0.55	1	335-67-1		07/07/2022 17:55
6:2 FTS	ND	1.8	0.60	0.60	1	27619-97-2		07/07/2022 17:55
PFHpS	ND	1.8	0.39	0.39	1	375-92-8		07/07/2022 17:55
PFNA	ND	1.9	0.69	0.69	1	375-95-1		07/07/2022 17:55
PFOSAm	ND	1.9	0.77	0.77	1	754-91-6		07/07/2022 17:55
PFOS	ND	1.7	0.51	0.51	1	1763-23-1		07/07/2022 17:55
MeFOSA	ND	1.9	0.48	0.48	1	31506-32-8		07/07/2022 17:55
PFDA	ND	1.9	0.53	0.53	1	335-76-2		07/07/2022 17:55
EtFOSAm	ND	1.9	0.57	0.57	1	4151-50-2		07/07/2022 17:55
8:2 FTS	ND	1.8	0.61	0.61	1	39108-34-4		07/07/2022 17:55
9-Cl-PF3ON	ND	1.7	0.29	0.29	1	756426-58-1		07/07/2022 17:55
PFNS	ND	1.8	0.42	0.42	1	68259-12-1		07/07/2022 17:55
PFUnDA	ND	1.9	0.51	0.51	1	2058-94-8		07/07/2022 17:55
NMeFOSAA	ND	1.9	0.41	0.41	1	2355-31-9		07/07/2022 17:55
NEtFOSAA	ND	1.9	0.52	0.52	1	2991-50-6		07/07/2022 17:55
PFDS	ND	1.8	0.42	0.42	1	335-77-3		07/07/2022 17:55
PFDOA	ND	1.9	0.45	0.45	1	307-55-1		07/07/2022 17:55
MeFOSE	ND	1.9	0.31	0.31	1	24448-09-7		07/07/2022 17:55
EtFOSE	ND	1.9	0.47	0.47	1	1691-99-2		07/07/2022 17:55
11-Cl-PF3OUdS	ND	1.8	0.41	0.41	1	763051-92-9		07/07/2022 17:55
PFTrDA	ND	1.9	0.58	0.58	1	72629-94-8		07/07/2022 17:55
PFDoS	ND	1.8	0.43	0.43	1	79780-39-5		07/07/2022 17:55
PFTDA	ND	1.9	0.45	0.45	1	376-06-7		07/07/2022 17:55

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PFAS BLANK	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647006	Total Amount Extracted	267mL
Lab File ID	B220707A_017	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/14/2022 18:00	CCal File	B220707A_007
Received	06/17/2022 10:00	Ending CCal File	B220707A_019
		Blank File	B220707A_009

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	19	17	93	50-150		07/07/2022 17:55
13C4_PFOA	19	19	100	50-150		07/07/2022 17:55
13C2_PFDA	19	19	103	50-150		07/07/2022 17:55
13C4_PFOS	18	17	97	50-150		07/07/2022 17:55

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	19	20	106	25-150		07/07/2022 17:55
13C5_PFPeA	19	20	106	25-150		07/07/2022 17:55
13C3_PFBS	17	19	108	25-150		07/07/2022 17:55
13C2_4:2FTS	18	20	112	25-150		07/07/2022 17:55
13C5_PFHxA	19	19	102	25-150		07/07/2022 17:55
13C4_PFHpA	19	21	110	25-150		07/07/2022 17:55
13C3_PFHxS	18	18	100	25-150		07/07/2022 17:55
13C2_6:2FTS	18	18	101	25-150		07/07/2022 17:55
13C8_PFOA	19	19	100	25-150		07/07/2022 17:55
13C9_PFNA	19	19	102	25-150		07/07/2022 17:55
13C8_PFOS	18	20	112	25-150		07/07/2022 17:55
13C2_8:2FTS	18	20	109	25-150		07/07/2022 17:55
13C6_PFDA	19	19	101	25-150		07/07/2022 17:55
d3-MeFOSAA	19	14	76	25-150		07/07/2022 17:55
13C8_PFOSA	19	10	55	25-150		07/07/2022 17:55
d5-EtFOSAA	19	13	72	25-150		07/07/2022 17:55
13C7_PFUdA	19	20	109	25-150		07/07/2022 17:55
13C2_PFDoA	19	20	104	25-150		07/07/2022 17:55
13C2_PFTeDA	19	17	89	25-150		07/07/2022 17:55
13C3_HFPO-DA	19	20	106	25-150		07/07/2022 17:55
d7-N-MeFOSE	19	4.8	26	10-150		07/07/2022 17:55
d9-N-EtFOSE	19	4.5	24	10-150		07/07/2022 17:55
d3-N-MeFOSA	19	0.046	**0**	10-150	R	07/07/2022 17:55
d5-N-EtFOSA	19	0.038	**0**	10-150	R	07/07/2022 17:55

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PFAS BLANK	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647006	Total Amount Extracted	267mL
Lab File ID	B220707A_017	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/14/2022 18:00	CCal File	B220707A_007
Received	06/17/2022 10:00	Ending CCal File	B220707A_019
		Blank File	B220707A_009

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.78	5.81	1694		07/07/2022 17:55
13C4_PFOA	N/A	N/A	7.14	7.17	1708		07/07/2022 17:55
13C2_PFDA	N/A	N/A	8.54	8.54	2225		07/07/2022 17:55
13C4_PFOS	N/A	N/A	9.03	9.01	1950		07/07/2022 17:55

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.31	4.32	2602		07/07/2022 17:55
13C5_PFPeA	N/A	N/A	5.10	5.12	2128		07/07/2022 17:55
13C3_PFBS	N/A	N/A	6.04	6.06	2550		07/07/2022 17:55
13C2_4:2FTS	N/A	N/A	5.50	5.52	760		07/07/2022 17:55
13C5_PFHxA	N/A	N/A	5.78	5.81	1968		07/07/2022 17:55
13C4_PFHpA	N/A	N/A	6.46	6.49	1380		07/07/2022 17:55
13C3_PFHxS	N/A	N/A	7.57	7.59	1831		07/07/2022 17:55
13C2_6:2FTS	N/A	N/A	6.79	6.82	1502		07/07/2022 17:55
13C8_PFOA	N/A	N/A	7.14	7.17	1992		07/07/2022 17:55
13C9_PFNA	N/A	N/A	7.83	7.85	2059		07/07/2022 17:55
13C8_PFOS	N/A	N/A	9.03	9.01	3866		07/07/2022 17:55
13C2_8:2FTS	N/A	N/A	8.14	8.15	32571		07/07/2022 17:55
13C6_PFDA	N/A	N/A	8.54	8.54	1519		07/07/2022 17:55
d3-MeFOSAA	N/A	N/A	8.40	8.40	1530		07/07/2022 17:55
13C8_PFOSA	N/A	N/A	10.84	10.77	3493		07/07/2022 17:55
d5-EtFOSAA	N/A	N/A	8.71	8.71	1099		07/07/2022 17:55
13C7_PFUdA	N/A	N/A	9.23	9.22	2529		07/07/2022 17:55
13C2_PFDoA	N/A	N/A	9.93	9.90	1636		07/07/2022 17:55
13C2_PFTeDA	N/A	N/A	11.26	11.21	2655		07/07/2022 17:55
13C3_HFPO-DA	N/A	N/A	6.06	6.09	1871		07/07/2022 17:55
d7-N-MeFOSE	N/A	N/A	12.54	12.49	426		07/07/2022 17:55
d9-N-EtFOSE	N/A	N/A	12.99	12.96	465		07/07/2022 17:55
d3-N-MeFOSA	N/A	N/A	12.74	12.70	47	R	07/07/2022 17:55
d5-N-EtFOSA	N/A	N/A	13.15	13.11	61	R	07/07/2022 17:55

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PFAS BLANK	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647006	Total Amount Extracted	267mL
Lab File ID	B220707A_017	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/14/2022 18:00	CCal File	B220707A_007
Received	06/17/2022 10:00	Ending CCal File	B220707A_019
		Blank File	B220707A_009

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.31	4.33	ND		07/07/2022 17:55
PFPeA	N/A	N/A	5.11	5.12	ND		07/07/2022 17:55
HFPO-DA	0.27	0.30	6.07	6.10	ND		07/07/2022 17:55
PFBS	0.43	0.40	6.04	6.07	ND		07/07/2022 17:55
PFHxA	0.13	0.08	5.79	5.82	ND		07/07/2022 17:55
4:2 FTS	0.00	0.92	0.00	5.53	ND		07/07/2022 17:55
PFPeS	0.00	0.43	0.00	6.86	ND		07/07/2022 17:55
PFHpA	0.35	0.30	6.47	6.50	ND		07/07/2022 17:55
DONA	0.00	0.57	0.00	6.75	ND		07/07/2022 17:55
PFHxS	0.77	0.37	7.57	7.60	ND		07/07/2022 17:55
PFOA	0.51	0.39	7.15	7.18	ND		07/07/2022 17:55
6:2 FTS	0.70	0.87	6.80	6.82	ND		07/07/2022 17:55
PFHpS	0.00	0.38	0.00	8.32	ND		07/07/2022 17:55
PFNA	0.13	0.15	7.84	7.86	ND		07/07/2022 17:55
PFOSAm	N/A	N/A	10.85	10.78	ND		07/07/2022 17:55
PFOS	0.33	0.40	9.03	9.03	ND		07/07/2022 17:55
MeFOSA	0.00	0.56	0.00	12.73	ND		07/07/2022 17:55
PFDA	0.00	0.19	0.00	8.58	ND		07/07/2022 17:55
EtFOSAm	0.00	0.61	0.00	13.10	ND		07/07/2022 17:55
8:2 FTS	0.00	1.10	0.00	8.15	ND		07/07/2022 17:55
9-Cl-PF3ON	0.00	0.05	0.00	9.52	ND		07/07/2022 17:55
PFNS	0.00	0.47	0.00	9.74	ND		07/07/2022 17:55
PFUnDA	0.11	0.13	9.24	9.22	ND		07/07/2022 17:55
NMeFOSAA	0.00	0.76	0.00	8.41	ND		07/07/2022 17:55
NEtFOSAA	0.00	0.72	0.00	8.72	ND		07/07/2022 17:55
PFDS	0.00	0.32	0.00	10.41	ND		07/07/2022 17:55
PFDOA	0.00	0.19	0.00	9.92	ND		07/07/2022 17:55
MeFOSE	N/A	N/A	0.00	12.52	ND		07/07/2022 17:55
EtFOSE	0.00	0.00	0.00	12.99	ND		07/07/2022 17:55
11-Cl-PF3OUdS	0.00	0.02	0.00	10.87	ND		07/07/2022 17:55
PFTrDA	0.00	0.16	0.00	10.59	ND		07/07/2022 17:55
PFDoS	0.00	0.46	0.00	11.61	ND		07/07/2022 17:55
PFTDA	0.00	0.24	0.00	11.21	ND		07/07/2022 17:55

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW-17	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647007-R	Total Amount Extracted	253mL
Lab File ID	B220727B_014	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 10:40	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	19	2.0	0.44	0.44	1	375-22-4		07/27/2022 19:29
PFPeA	4.7	2.0	0.43	0.43	1	2706-90-3		07/27/2022 19:29
HFPO-DA	ND	2.0	0.52	0.52	1	13252-13-6		07/27/2022 19:29
PFBS	230 D	3.5	0.94	0.94	2	375-73-5		08/03/2022 03:11
PFHxA	2.8	2.0	0.43	0.43	1	307-24-4		07/27/2022 19:29
4:2 FTS	ND	1.9	0.55	0.55	1	757124-72-4		07/27/2022 19:29
PFPeS	ND	1.9	0.47	0.47	1	2706-91-4		07/27/2022 19:29
PFHpA	2.6	2.0	0.54	0.54	1	375-85-9		07/27/2022 19:29
DONA	ND	1.9	0.51	0.51	1	919005-14-4		07/27/2022 19:29
PFHxS	1.5 J	1.8	0.50	0.50	1	355-46-4		07/27/2022 19:29
PFOA	4.5	2.0	0.58	0.58	1	335-67-1		07/27/2022 19:29
6:2 FTS	ND	1.9	0.64	0.64	1	27619-97-2		07/27/2022 19:29
PFHpS	0.42 J	1.9	0.41	0.41	1	375-92-8		07/27/2022 19:29
PFNA	3.1	2.0	0.73	0.73	1	375-95-1		07/27/2022 19:29
PFOSAm	ND	2.0	0.81	0.81	1	754-91-6		07/27/2022 19:29
PFOS	200 D	3.7	1.1	1.1	2	1763-23-1		08/03/2022 03:11
MeFOSA	ND	2.0	0.51	0.51	1	31506-32-8		07/27/2022 19:29
PFDA	13	2.0	0.56	0.56	1	335-76-2		07/27/2022 19:29
EtFOSAm	ND	2.0	0.60	0.60	1	4151-50-2		07/27/2022 19:29
8:2 FTS	ND	1.9	0.65	0.65	1	39108-34-4		07/27/2022 19:29
9-Cl-PF3ON	ND	1.8	0.30	0.30	1	756426-58-1		07/27/2022 19:29
PFNS	ND	1.9	0.44	0.44	1	68259-12-1		07/27/2022 19:29
PFUnDA	ND	2.0	0.53	0.53	1	2058-94-8		07/27/2022 19:29
NMeFOSAA	ND	2.0	0.43	0.43	1	2355-31-9		07/27/2022 19:29
NEtFOSAA	ND	2.0	0.55	0.55	1	2991-50-6		07/27/2022 19:29
PFDS	ND	1.9	0.45	0.45	1	335-77-3		07/27/2022 19:29
PFDOA	ND	2.0	0.48	0.48	1	307-55-1		07/27/2022 19:29
MeFOSE	ND	2.0	0.33	0.33	1	24448-09-7		07/27/2022 19:29
EtFOSE	ND	2.0	0.49	0.49	1	1691-99-2		07/27/2022 19:29
11-Cl-PF3OUdS	ND	1.9	0.43	0.43	1	763051-92-9		07/27/2022 19:29
PFTrDA	ND	2.0	0.62	0.62	1	72629-94-8		07/27/2022 19:29
PFDoS	ND	1.9	0.46	0.46	1	79780-39-5		07/27/2022 19:29
PFTDA	ND	2.0	0.47	0.47	1	376-06-7		07/27/2022 19:29

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW-17	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647007-R	Total Amount Extracted	253mL
Lab File ID	B220727B_014	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 10:40	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	19	94	50-150		07/27/2022 19:29
13C4_PFOA	20	25	124	50-150		07/27/2022 19:29
13C2_PFDA	20	23	116	50-150		07/27/2022 19:29
13C4_PFOS	19	23	122	50-150		07/27/2022 19:29

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	13	66	25-150		07/27/2022 19:29
13C5_PFPeA	20	15	78	25-150		07/27/2022 19:29
13C3_PFBS	18	22	118	25-150	D	08/03/2022 03:11
13C2_4:2FTS	19	48	**258**	25-150	R	07/27/2022 19:29
13C5_PFHxA	20	21	105	25-150		07/27/2022 19:29
13C4_PFHpA	20	22	112	25-150		07/27/2022 19:29
13C3_PFHxS	19	23	122	25-150		07/27/2022 19:29
13C2_6:2FTS	19	44	**236**	25-150	R	07/27/2022 19:29
13C8_PFOA	20	24	120	25-150		07/27/2022 19:29
13C9_PFNA	20	25	125	25-150		07/27/2022 19:29
13C8_PFOS	19	25	134	25-150	D	08/03/2022 03:11
13C2_8:2FTS	19	39	**204**	25-150	R	07/27/2022 19:29
13C6_PFDA	20	22	113	25-150		07/27/2022 19:29
d3-MeFOSAA	20	26	132	25-150		07/27/2022 19:29
13C8_PFOSA	20	9.6	49	25-150		07/27/2022 19:29
d5-EtFOSAA	20	24	121	25-150		07/27/2022 19:29
13C7_PFUdA	20	24	123	25-150		07/27/2022 19:29
13C2_PFDoA	20	25	125	25-150		07/27/2022 19:29
13C2_PFTeDA	20	14	72	25-150		07/27/2022 19:29
13C3_HFPO-DA	20	16	82	25-150		07/27/2022 19:29
d7-N-MeFOSE	20	3.9	20	10-150		07/27/2022 19:29
d9-N-EtFOSE	20	3.4	17	10-150		07/27/2022 19:29
d3-N-MeFOSA	20	0.056	**0**	10-150	R	07/27/2022 19:29
d5-N-EtFOSA	20	0.053	**0**	10-150	R	07/27/2022 19:29

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW-17	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647007-R	Total Amount Extracted	253mL
Lab File ID	B220727B_014	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 10:40	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.77	5.71	1113		07/27/2022 19:29
13C4_PFOA	N/A	N/A	7.04	6.96	1839		07/27/2022 19:29
13C2_PFDA	N/A	N/A	8.36	8.27	1537		07/27/2022 19:29
13C4_PFOS	N/A	N/A	8.82	8.75	726		07/27/2022 19:29

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.29	4.30	1935		07/27/2022 19:29
13C5_PFPeA	N/A	N/A	5.12	5.13	1233		07/27/2022 19:29
13C3_PFBS	N/A	N/A	6.04	5.96	228	D	08/03/2022 03:11
13C2_4:2FTS	N/A	N/A	5.51	5.49	101	R	07/27/2022 19:29
13C5_PFHxA	N/A	N/A	5.78	5.81	716		07/27/2022 19:29
13C4_PFHpA	N/A	N/A	6.41	6.39	1260		07/27/2022 19:29
13C3_PFHxS	N/A	N/A	7.45	7.45	573		07/27/2022 19:29
13C2_6:2FTS	N/A	N/A	6.71	6.72	265	R	07/27/2022 19:29
13C8_PFOA	N/A	N/A	7.04	7.05	1627		07/27/2022 19:29
13C9_PFNA	N/A	N/A	7.70	7.70	1613		07/27/2022 19:29
13C8_PFOS	N/A	N/A	8.87	8.80	653	D	08/03/2022 03:11
13C2_8:2FTS	N/A	N/A	7.98	7.98	528	R	07/27/2022 19:29
13C6_PFDA	N/A	N/A	8.36	8.35	1432		07/27/2022 19:29
d3-MeFOSAA	N/A	N/A	8.23	8.22	1777		07/27/2022 19:29
13C8_PFOSA	N/A	N/A	10.55	10.56	1388		07/27/2022 19:29
d5-EtFOSAA	N/A	N/A	8.51	8.51	1158		07/27/2022 19:29
13C7_PFUdA	N/A	N/A	9.03	9.02	1919		07/27/2022 19:29
13C2_PFDoA	N/A	N/A	9.70	9.69	1247		07/27/2022 19:29
13C2_PFTeDA	N/A	N/A	11.01	10.98	1243		07/27/2022 19:29
13C3_HFPO-DA	N/A	N/A	6.04	6.04	1347		07/27/2022 19:29
d7-N-MeFOSE	N/A	N/A	12.35	12.34	51		07/27/2022 19:29
d9-N-EtFOSE	N/A	N/A	12.82	12.84	59		07/27/2022 19:29
d3-N-MeFOSA	N/A	N/A	12.56	12.56	51	R	07/27/2022 19:29
d5-N-EtFOSA	N/A	N/A	12.97	13.01	51	R	07/27/2022 19:29

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW-17	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647007-R	Total Amount Extracted	253mL
Lab File ID	B220727B_014	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 10:40	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.29	4.31	181		07/27/2022 19:29
PFPeA	N/A	N/A	5.13	5.12	83		07/27/2022 19:29
HFPO-DA	1.10	0.28	6.05	6.02	ND		07/27/2022 19:29
PFBS	0.50	0.43	6.05	5.99	397	D	08/03/2022 03:11
PFHxA	0.07	0.08	5.78	5.75	48		07/27/2022 19:29
4:2 FTS	0.00	0.80	0.00	5.49	ND		07/27/2022 19:29
PFPeS	0.43	0.41	6.75	6.73	ND		07/27/2022 19:29
PFHpA	0.28	0.32	6.42	6.39	28		07/27/2022 19:29
DONA	0.00	0.49	0.00	6.62	ND		07/27/2022 19:29
PFHxS	0.29	0.39	7.45	7.43	92	J	07/27/2022 19:29
PFOA	0.40	0.39	7.05	7.03	122		07/27/2022 19:29
6:2 FTS	0.85	0.76	6.71	6.72	ND		07/27/2022 19:29
PFHpS	0.35	0.42	8.15	8.13	57	J	07/27/2022 19:29
PFNA	0.13	0.13	7.70	7.67	244		07/27/2022 19:29
PFOSAm	N/A	N/A	10.57	10.51	ND		07/27/2022 19:29
PFOS	0.39	0.36	8.88	8.81	464	D	08/03/2022 03:11
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 19:29
PFDA	0.21	0.18	8.37	8.34	425		07/27/2022 19:29
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 19:29
8:2 FTS	0.00	0.97	0.00	7.95	ND		07/27/2022 19:29
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 19:29
PFNS	1.10	0.55	9.51	9.52	ND		07/27/2022 19:29
PFUnDA	0.11	0.13	9.02	9.01	ND		07/27/2022 19:29
NMeFOSAA	0.00	0.95	0.00	8.35	ND		07/27/2022 19:29
NEtFOSAA	0.00	0.63	0.00	8.51	ND		07/27/2022 19:29
PFDS	0.00	0.37	0.00	10.16	ND		07/27/2022 19:29
PFDOA	0.00	0.18	0.00	9.69	ND		07/27/2022 19:29
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 19:29
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 19:29
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 19:29
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 19:29
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 19:29
PFTDA	0.00	0.26	0.00	11.00	ND		07/27/2022 19:29

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PZ-16	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647008	Total Amount Extracted	265mL
Lab File ID	B220707A_020	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/15/2022 11:45	CCal File	B220707A_019
Received	06/17/2022 10:00	Ending CCal File	B220707A_030
		Blank File	B220707A_009

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	10	1.9	0.42	0.42	1	375-22-4		07/07/2022 18:55
PFPeA	9.7	1.9	0.41	0.41	1	2706-90-3		07/07/2022 18:55
HFPO-DA	ND	1.9	0.50	0.50	1	13252-13-6		07/07/2022 18:55
PFBS	27	1.7	0.45	0.45	1	375-73-5		07/07/2022 18:55
PFHxA	3.5	1.9	0.41	0.41	1	307-24-4		07/07/2022 18:55
4:2 FTS	ND	1.8	0.53	0.53	1	757124-72-4		07/07/2022 18:55
PFPeS	ND	1.8	0.45	0.45	1	2706-91-4		07/07/2022 18:55
PFHpA	1.5 J	1.9	0.52	0.52	1	375-85-9		07/07/2022 18:55
DONA	ND	1.8	0.49	0.49	1	919005-14-4		07/07/2022 18:55
PFHxS	ND	1.7	0.48	0.48	1	355-46-4		07/07/2022 18:55
PFOA	1.8 J	1.9	0.55	0.55	1	335-67-1		07/07/2022 18:55
6:2 FTS	ND	1.8	0.61	0.61	1	27619-97-2		07/07/2022 18:55
PFHpS	ND	1.8	0.39	0.39	1	375-92-8		07/07/2022 18:55
PFNA	ND	1.9	0.70	0.70	1	375-95-1		07/07/2022 18:55
PFOSAm	ND	1.9	0.77	0.77	1	754-91-6		07/07/2022 18:55
PFOS	2.7	1.7	0.52	0.52	1	1763-23-1		07/07/2022 18:55
MeFOSA	ND	1.9	0.48	0.48	1	31506-32-8		07/07/2022 18:55
PFDA	ND	1.9	0.53	0.53	1	335-76-2		07/07/2022 18:55
EtFOSAm	ND	1.9	0.57	0.57	1	4151-50-2		07/07/2022 18:55
8:2 FTS	ND	1.8	0.62	0.62	1	39108-34-4		07/07/2022 18:55
9-Cl-PF3ON	ND	1.8	0.29	0.29	1	756426-58-1		07/07/2022 18:55
PFNS	ND	1.8	0.42	0.42	1	68259-12-1		07/07/2022 18:55
PFUnDA	ND	1.9	0.51	0.51	1	2058-94-8		07/07/2022 18:55
NMeFOSAA	ND	1.9	0.41	0.41	1	2355-31-9		07/07/2022 18:55
NEtFOSAA	ND	1.9	0.52	0.52	1	2991-50-6		07/07/2022 18:55
PFDS	ND	1.8	0.42	0.42	1	335-77-3		07/07/2022 18:55
PFDOA	ND	1.9	0.46	0.46	1	307-55-1		07/07/2022 18:55
MeFOSE	ND	1.9	0.31	0.31	1	24448-09-7		07/07/2022 18:55
EtFOSE	ND	1.9	0.47	0.47	1	1691-99-2		07/07/2022 18:55
11-Cl-PF3OUdS	ND	1.8	0.41	0.41	1	763051-92-9		07/07/2022 18:55
PFTrDA	ND	1.9	0.59	0.59	1	72629-94-8		07/07/2022 18:55
PFDoS	ND	1.8	0.43	0.43	1	79780-39-5		07/07/2022 18:55
PFTDA	ND	1.9	0.45	0.45	1	376-06-7		07/07/2022 18:55

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PZ-16	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647008	Total Amount Extracted	265mL
Lab File ID	B220707A_020	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/15/2022 11:45	CCal File	B220707A_019
Received	06/17/2022 10:00	Ending CCal File	B220707A_030
		Blank File	B220707A_009

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	19	18	96	50-150		07/07/2022 18:55
13C4_PFOA	19	17	90	50-150		07/07/2022 18:55
13C2_PFDA	19	19	103	50-150		07/07/2022 18:55
13C4_PFOS	18	17	97	50-150		07/07/2022 18:55

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	19	18	98	25-150		07/07/2022 18:55
13C5_PFPeA	19	20	106	25-150		07/07/2022 18:55
13C3_PFBS	18	18	104	25-150		07/07/2022 18:55
13C2_4:2FTS	18	26	146	25-150		07/07/2022 18:55
13C5_PFHxA	19	20	104	25-150		07/07/2022 18:55
13C4_PFHpA	19	22	116	25-150		07/07/2022 18:55
13C3_PFHxS	18	19	107	25-150		07/07/2022 18:55
13C2_6:2FTS	18	21	119	25-150		07/07/2022 18:55
13C8_PFOA	19	21	112	25-150		07/07/2022 18:55
13C9_PFNA	19	20	108	25-150		07/07/2022 18:55
13C8_PFOS	18	22	120	25-150		07/07/2022 18:55
13C2_8:2FTS	18	20	109	25-150		07/07/2022 18:55
13C6_PFDA	19	22	115	25-150		07/07/2022 18:55
d3-MeFOSAA	19	21	109	25-150		07/07/2022 18:55
13C8_PFOSA	19	14	77	25-150		07/07/2022 18:55
d5-EtFOSAA	19	17	91	25-150		07/07/2022 18:55
13C7_PFUdA	19	23	120	25-150		07/07/2022 18:55
13C2_PFDoA	19	21	109	25-150		07/07/2022 18:55
13C2_PFTeDA	19	17	92	25-150		07/07/2022 18:55
13C3_HFPO-DA	19	19	101	25-150		07/07/2022 18:55
d7-N-MeFOSE	19	9.0	48	10-150		07/07/2022 18:55
d9-N-EtFOSE	19	8.1	43	10-150		07/07/2022 18:55
d3-N-MeFOSA	19	1.7	9	10-150	R	07/07/2022 18:55
d5-N-EtFOSA	19	1.5	8	10-150	R	07/07/2022 18:55

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PZ-16	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647008	Total Amount Extracted	265mL
Lab File ID	B220707A_020	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/15/2022 11:45	CCal File	B220707A_019
Received	06/17/2022 10:00	Ending CCal File	B220707A_030
		Blank File	B220707A_009

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.78	5.81	1303		07/07/2022 18:55
13C4_PFOA	N/A	N/A	7.14	7.17	2218		07/07/2022 18:55
13C2_PFDA	N/A	N/A	8.54	8.54	2786		07/07/2022 18:55
13C4_PFOS	N/A	N/A	9.03	9.01	2218		07/07/2022 18:55

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.30	4.32	2289		07/07/2022 18:55
13C5_PFPeA	N/A	N/A	5.09	5.12	1471		07/07/2022 18:55
13C3_PFBS	N/A	N/A	6.04	6.06	728		07/07/2022 18:55
13C2_4:2FTS	N/A	N/A	5.49	5.52	216		07/07/2022 18:55
13C5_PFHxA	N/A	N/A	5.78	5.81	1093		07/07/2022 18:55
13C4_PFHpA	N/A	N/A	6.46	6.49	1723		07/07/2022 18:55
13C3_PFHxS	N/A	N/A	7.57	7.59	1472		07/07/2022 18:55
13C2_6:2FTS	N/A	N/A	6.79	6.82	479		07/07/2022 18:55
13C8_PFOA	N/A	N/A	7.14	7.17	2448		07/07/2022 18:55
13C9_PFNA	N/A	N/A	7.83	7.85	2479		07/07/2022 18:55
13C8_PFOS	N/A	N/A	9.03	9.01	2887		07/07/2022 18:55
13C2_8:2FTS	N/A	N/A	8.14	8.15	2921		07/07/2022 18:55
13C6_PFDA	N/A	N/A	8.54	8.54	1593		07/07/2022 18:55
d3-MeFOSAA	N/A	N/A	8.40	8.40	3555		07/07/2022 18:55
13C8_PFOSA	N/A	N/A	10.84	10.77	4639		07/07/2022 18:55
d5-EtFOSAA	N/A	N/A	8.72	8.71	858		07/07/2022 18:55
13C7_PFUdA	N/A	N/A	9.24	9.22	4151		07/07/2022 18:55
13C2_PFDoA	N/A	N/A	9.93	9.90	1717		07/07/2022 18:55
13C2_PFTeDA	N/A	N/A	11.26	11.21	2460		07/07/2022 18:55
13C3_HFPO-DA	N/A	N/A	6.06	6.09	1333		07/07/2022 18:55
d7-N-MeFOSE	N/A	N/A	12.54	12.49	440		07/07/2022 18:55
d9-N-EtFOSE	N/A	N/A	13.00	12.96	596		07/07/2022 18:55
d3-N-MeFOSA	N/A	N/A	12.75	12.70	790	R	07/07/2022 18:55
d5-N-EtFOSA	N/A	N/A	13.16	13.11	588	R	07/07/2022 18:55

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	PZ-16	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647008	Total Amount Extracted	265mL
Lab File ID	B220707A_020	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/15/2022 11:45	CCal File	B220707A_019
Received	06/17/2022 10:00	Ending CCal File	B220707A_030
		Blank File	B220707A_009

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.31	4.33	206		07/07/2022 18:55
PFPeA	N/A	N/A	5.10	5.12	210		07/07/2022 18:55
HFPO-DA	0.47	0.28	6.07	6.10	ND		07/07/2022 18:55
PFBS	0.43	0.41	6.04	6.07	450		07/07/2022 18:55
PFHxA	0.09	0.09	5.79	5.82	103		07/07/2022 18:55
4:2 FTS	0.00	0.88	0.00	5.53	ND		07/07/2022 18:55
PFPeS	0.53	0.40	6.83	6.86	ND		07/07/2022 18:55
PFHpA	0.29	0.32	6.47	6.50	22	J	07/07/2022 18:55
DONA	0.00	0.61	0.00	6.75	ND		07/07/2022 18:55
PFHxS	0.47	0.36	7.58	7.60	ND		07/07/2022 18:55
PFOA	0.38	0.40	7.15	7.18	121	J	07/07/2022 18:55
6:2 FTS	0.93	0.83	6.79	6.82	ND		07/07/2022 18:55
PFHpS	0.82	0.42	8.32	8.32	ND		07/07/2022 18:55
PFNA	0.11	0.14	7.85	7.86	ND		07/07/2022 18:55
PFOSAm	N/A	N/A	10.84	10.78	ND		07/07/2022 18:55
PFOS	0.34	0.41	8.97	9.03	158		07/07/2022 18:55
MeFOSA	0.00	0.62	0.00	12.73	ND		07/07/2022 18:55
PFDA	0.09	0.19	8.55	8.58	ND		07/07/2022 18:55
EtFOSAm	0.00	0.60	0.00	13.10	ND		07/07/2022 18:55
8:2 FTS	0.00	0.97	0.00	8.15	ND		07/07/2022 18:55
9-Cl-PF3ON	0.00	0.06	0.00	9.52	ND		07/07/2022 18:55
PFNS	0.00	0.49	0.00	9.74	ND		07/07/2022 18:55
PFUnDA	0.00	0.13	0.00	9.22	ND		07/07/2022 18:55
NMeFOSAA	0.00	0.84	0.00	8.41	ND		07/07/2022 18:55
NEtFOSAA	0.00	0.67	0.00	8.72	ND		07/07/2022 18:55
PFDS	0.00	0.34	0.00	10.41	ND		07/07/2022 18:55
PFDOA	0.00	0.17	0.00	9.92	ND		07/07/2022 18:55
MeFOSE	N/A	N/A	0.00	12.52	ND		07/07/2022 18:55
EtFOSE	0.00	0.00	0.00	12.99	ND		07/07/2022 18:55
11-Cl-PF3OUdS	0.00	0.02	0.00	10.87	ND		07/07/2022 18:55
PFTrDA	0.00	0.15	0.00	10.59	ND		07/07/2022 18:55
PFDoS	0.00	0.47	0.00	11.61	ND		07/07/2022 18:55
PFTDA	0.00	0.25	0.00	11.21	ND		07/07/2022 18:55

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW18	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647009	Total Amount Extracted	258mL
Lab File ID	B220707A_021	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/15/2022 12:55	CCal File	B220707A_019
Received	06/17/2022 10:00	Ending CCal File	B220707A_030
		Blank File	B220707A_009

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	15	1.9	0.43	0.43	1	375-22-4		07/07/2022 19:15
PFPeA	9.0	1.9	0.42	0.42	1	2706-90-3		07/07/2022 19:15
HFPO-DA	ND	1.9	0.51	0.51	1	13252-13-6		07/07/2022 19:15
PFBS	28	1.7	0.46	0.46	1	375-73-5		07/07/2022 19:15
PFHxA	6.5	1.9	0.42	0.42	1	307-24-4		07/07/2022 19:15
4:2 FTS	ND	1.8	0.54	0.54	1	757124-72-4		07/07/2022 19:15
PFPeS	9.2	1.8	0.46	0.46	1	2706-91-4		07/07/2022 19:15
PFHpA	7.9	1.9	0.53	0.53	1	375-85-9		07/07/2022 19:15
DONA	ND	1.8	0.50	0.50	1	919005-14-4		07/07/2022 19:15
PFHxS	51	1.8	0.49	0.49	1	355-46-4		07/07/2022 19:15
PFOA	26	1.9	0.57	0.57	1	335-67-1		07/07/2022 19:15
6:2 FTS	2.1	1.8	0.62	0.62	1	27619-97-2		07/07/2022 19:15
PFHpS	7.2	1.8	0.40	0.40	1	375-92-8		07/07/2022 19:15
PFNA	ND	1.9	0.72	0.72	1	375-95-1		07/07/2022 19:15
PFOSAm	ND	1.9	0.79	0.79	1	754-91-6		07/07/2022 19:15
PFOS	140	1.8	0.53	0.53	1	1763-23-1		07/07/2022 19:15
MeFOSA	ND	1.9	0.49	0.49	1	31506-32-8		07/07/2022 19:15
PFDA	ND	1.9	0.55	0.55	1	335-76-2		07/07/2022 19:15
EtFOSAm	ND	1.9	0.59	0.59	1	4151-50-2		07/07/2022 19:15
8:2 FTS	ND	1.9	0.63	0.63	1	39108-34-4		07/07/2022 19:15
9-Cl-PF3ON	ND	1.8	0.30	0.30	1	756426-58-1		07/07/2022 19:15
PFNS	ND	1.9	0.43	0.43	1	68259-12-1		07/07/2022 19:15
PFUnDA	ND	1.9	0.52	0.52	1	2058-94-8		07/07/2022 19:15
NMeFOSAA	ND	1.9	0.42	0.42	1	2355-31-9		07/07/2022 19:15
NEtFOSAA	ND	1.9	0.54	0.54	1	2991-50-6		07/07/2022 19:15
PFDS	ND	1.9	0.44	0.44	1	335-77-3		07/07/2022 19:15
PFDOA	ND	1.9	0.47	0.47	1	307-55-1		07/07/2022 19:15
MeFOSE	ND	1.9	0.32	0.32	1	24448-09-7		07/07/2022 19:15
EtFOSE	ND	1.9	0.48	0.48	1	1691-99-2		07/07/2022 19:15
11-Cl-PF3OUdS	ND	1.8	0.42	0.42	1	763051-92-9		07/07/2022 19:15
PFTrDA	ND	1.9	0.60	0.60	1	72629-94-8		07/07/2022 19:15
PFDoS	ND	1.9	0.45	0.45	1	79780-39-5		07/07/2022 19:15
PFTDA	ND	1.9	0.46	0.46	1	376-06-7		07/07/2022 19:15

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW18	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647009	Total Amount Extracted	258mL
Lab File ID	B220707A_021	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/15/2022 12:55	CCal File	B220707A_019
Received	06/17/2022 10:00	Ending CCal File	B220707A_030
		Blank File	B220707A_009

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	19	17	86	50-150		07/07/2022 19:15
13C4_PFOA	19	16	82	50-150		07/07/2022 19:15
13C2_PFDA	19	16	82	50-150		07/07/2022 19:15
13C4_PFOS	19	15	81	50-150		07/07/2022 19:15

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	19	15	77	25-150		07/07/2022 19:15
13C5_PFPeA	19	18	91	25-150		07/07/2022 19:15
13C3_PFBS	18	16	90	25-150		07/07/2022 19:15
13C2_4:2FTS	18	23	130	25-150		07/07/2022 19:15
13C5_PFHxA	19	18	91	25-150		07/07/2022 19:15
13C4_PFHpA	19	20	103	25-150		07/07/2022 19:15
13C3_PFHxS	18	16	87	25-150		07/07/2022 19:15
13C2_6:2FTS	18	20	108	25-150		07/07/2022 19:15
13C8_PFOA	19	18	95	25-150		07/07/2022 19:15
13C9_PFNA	19	18	93	25-150		07/07/2022 19:15
13C8_PFOS	19	17	93	25-150		07/07/2022 19:15
13C2_8:2FTS	19	15	81	25-150		07/07/2022 19:15
13C6_PFDA	19	18	95	25-150		07/07/2022 19:15
d3-MeFOSAA	19	15	79	25-150		07/07/2022 19:15
13C8_PFOSA	19	8.4	43	25-150		07/07/2022 19:15
d5-EtFOSAA	19	12	64	25-150		07/07/2022 19:15
13C7_PFUdA	19	17	86	25-150		07/07/2022 19:15
13C2_PFDoA	19	15	78	25-150		07/07/2022 19:15
13C2_PFTeDA	19	10.0	52	25-150		07/07/2022 19:15
13C3_HFPO-DA	19	17	88	25-150		07/07/2022 19:15
d7-N-MeFOSE	19	4.9	25	10-150		07/07/2022 19:15
d9-N-EtFOSE	19	4.7	24	10-150		07/07/2022 19:15
d3-N-MeFOSA	19	0.041	0	10-150	R	07/07/2022 19:15
d5-N-EtFOSA	19	0.037	0	10-150	R	07/07/2022 19:15

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW18	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647009	Total Amount Extracted	258mL
Lab File ID	B220707A_021	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/15/2022 12:55	CCal File	B220707A_019
Received	06/17/2022 10:00	Ending CCal File	B220707A_030
		Blank File	B220707A_009

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.78	5.81	1618		07/07/2022 19:15
13C4_PFOA	N/A	N/A	7.15	7.17	2272		07/07/2022 19:15
13C2_PFDA	N/A	N/A	8.54	8.54	2479		07/07/2022 19:15
13C4_PFOS	N/A	N/A	9.03	9.01	1820		07/07/2022 19:15

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.30	4.32	2404		07/07/2022 19:15
13C5_PFPeA	N/A	N/A	5.10	5.12	1404		07/07/2022 19:15
13C3_PFBS	N/A	N/A	6.04	6.06	490		07/07/2022 19:15
13C2_4:2FTS	N/A	N/A	5.50	5.52	171		07/07/2022 19:15
13C5_PFHxA	N/A	N/A	5.78	5.81	1071		07/07/2022 19:15
13C4_PFHpA	N/A	N/A	6.47	6.49	1756		07/07/2022 19:15
13C3_PFHxS	N/A	N/A	7.57	7.59	1561		07/07/2022 19:15
13C2_6:2FTS	N/A	N/A	6.80	6.82	442		07/07/2022 19:15
13C8_PFOA	N/A	N/A	7.15	7.17	2491		07/07/2022 19:15
13C9_PFNA	N/A	N/A	7.84	7.85	2267		07/07/2022 19:15
13C8_PFOS	N/A	N/A	9.03	9.01	2689		07/07/2022 19:15
13C2_8:2FTS	N/A	N/A	8.14	8.15	1076		07/07/2022 19:15
13C6_PFDA	N/A	N/A	8.54	8.54	2289		07/07/2022 19:15
d3-MeFOSAA	N/A	N/A	8.41	8.40	2390		07/07/2022 19:15
13C8_PFOSA	N/A	N/A	10.84	10.77	4743		07/07/2022 19:15
d5-EtFOSAA	N/A	N/A	8.71	8.71	1340		07/07/2022 19:15
13C7_PFUdA	N/A	N/A	9.24	9.22	2320		07/07/2022 19:15
13C2_PFDoA	N/A	N/A	9.93	9.90	1251		07/07/2022 19:15
13C2_PFTeDA	N/A	N/A	11.26	11.21	2426		07/07/2022 19:15
13C3_HFPO-DA	N/A	N/A	6.06	6.09	1418		07/07/2022 19:15
d7-N-MeFOSE	N/A	N/A	12.54	12.49	312		07/07/2022 19:15
d9-N-EtFOSE	N/A	N/A	13.00	12.96	421		07/07/2022 19:15
d3-N-MeFOSA	N/A	N/A	12.75	12.70	36	R	07/07/2022 19:15
d5-N-EtFOSA	N/A	N/A	13.16	13.16	24	R	07/07/2022 19:15

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	MW18	Extraction Date	07/06/2022 12:06
Lab Sample ID	40246647009	Total Amount Extracted	258mL
Lab File ID	B220707A_021	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220629A02
Collected	06/15/2022 12:55	CCal File	B220707A_019
Received	06/17/2022 10:00	Ending CCal File	B220707A_030
		Blank File	B220707A_009

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.31	4.33	188		07/07/2022 19:15
PFPeA	N/A	N/A	5.10	5.12	190		07/07/2022 19:15
HFPO-DA	0.18	0.28	6.08	6.10	ND		07/07/2022 19:15
PFBS	0.45	0.41	6.05	6.07	442		07/07/2022 19:15
PFHxA	0.08	0.09	5.79	5.82	118		07/07/2022 19:15
4:2 FTS	0.00	0.88	0.00	5.53	ND		07/07/2022 19:15
PFPeS	0.48	0.40	6.83	6.86	262		07/07/2022 19:15
PFHpA	0.29	0.32	6.48	6.50	17		07/07/2022 19:15
DONA	0.00	0.61	0.00	6.75	ND		07/07/2022 19:15
PFHxS	0.44	0.36	7.58	7.60	965		07/07/2022 19:15
PFOA	0.41	0.40	7.15	7.18	267		07/07/2022 19:15
6:2 FTS	1.10	0.83	6.80	6.82	333		07/07/2022 19:15
PFHpS	0.52	0.42	8.32	8.32	158		07/07/2022 19:15
PFNA	0.12	0.14	7.84	7.86	ND		07/07/2022 19:15
PFOSAm	N/A	N/A	10.84	10.78	ND		07/07/2022 19:15
PFOS	0.42	0.41	8.96	9.03	227		07/07/2022 19:15
MeFOSA	0.00	0.62	0.00	12.73	ND		07/07/2022 19:15
PFDA	0.00	0.19	0.00	8.58	ND		07/07/2022 19:15
EtFOSAm	0.00	0.60	0.00	13.10	ND		07/07/2022 19:15
8:2 FTS	0.00	0.97	0.00	8.15	ND		07/07/2022 19:15
9-Cl-PF3ON	0.00	0.06	0.00	9.52	ND		07/07/2022 19:15
PFNS	0.00	0.49	0.00	9.74	ND		07/07/2022 19:15
PFUnDA	0.00	0.13	0.00	9.22	ND		07/07/2022 19:15
NMeFOSAA	0.00	0.84	0.00	8.41	ND		07/07/2022 19:15
NEtFOSAA	0.00	0.67	0.00	8.72	ND		07/07/2022 19:15
PFDS	0.00	0.34	0.00	10.41	ND		07/07/2022 19:15
PFDOA	0.00	0.17	0.00	9.92	ND		07/07/2022 19:15
MeFOSE	N/A	N/A	0.00	12.52	ND		07/07/2022 19:15
EtFOSE	0.00	0.00	0.00	12.99	ND		07/07/2022 19:15
11-Cl-PF3OUdS	0.00	0.02	0.00	10.87	ND		07/07/2022 19:15
PFTrDA	0.00	0.15	0.00	10.59	ND		07/07/2022 19:15
PFDoS	0.00	0.47	0.00	11.61	ND		07/07/2022 19:15
PFTDA	0.00	0.25	0.00	11.21	ND		07/07/2022 19:15

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW26	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647010-R	Total Amount Extracted	250mL
Lab File ID	B220727B_015	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 16:25	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	9.8	2.0	0.44	0.44	1	375-22-4		07/27/2022 19:49
PFPeA	21	2.0	0.44	0.44	1	2706-90-3		07/27/2022 19:49
HFPO-DA	ND	2.0	0.53	0.53	1	13252-13-6		07/27/2022 19:49
PFBS	94	1.8	0.47	0.47	1	375-73-5		07/27/2022 19:49
PFHxA	20	2.0	0.44	0.44	1	307-24-4		07/27/2022 19:49
4:2 FTS	ND	1.9	0.56	0.56	1	757124-72-4		07/27/2022 19:49
PFPeS	7.6	1.9	0.47	0.47	1	2706-91-4		07/27/2022 19:49
PFHpA	19	2.0	0.55	0.55	1	375-85-9		07/27/2022 19:49
DONA	ND	1.9	0.51	0.51	1	919005-14-4		07/27/2022 19:49
PFHxS	93	1.8	0.51	0.51	1	355-46-4		07/27/2022 19:49
PFOA	71	2.0	0.58	0.58	1	335-67-1		07/27/2022 19:49
6:2 FTS	34 I	1.9	0.64	0.64	1	27619-97-2		07/27/2022 19:49
PFHpS	38	1.9	0.41	0.41	1	375-92-8		07/27/2022 19:49
PFNA	6.7	2.0	0.74	0.74	1	375-95-1		07/27/2022 19:49
PFOSAm	ND	2.0	0.82	0.82	1	754-91-6		07/27/2022 19:49
PFOS	210 D	3.7	1.1	1.1	2	1763-23-1		08/03/2022 03:31
MeFOSA	ND	2.0	0.51	0.51	1	31506-32-8		07/27/2022 19:49
PFDA	ND	2.0	0.56	0.56	1	335-76-2		07/27/2022 19:49
EtFOSAm	ND	2.0	0.61	0.61	1	4151-50-2		07/27/2022 19:49
8:2 FTS	5.5	1.9	0.65	0.65	1	39108-34-4		07/27/2022 19:49
9-Cl-PF3ON	ND	1.9	0.30	0.30	1	756426-58-1		07/27/2022 19:49
PFNS	ND	1.9	0.45	0.45	1	68259-12-1		07/27/2022 19:49
PFUnDA	ND	2.0	0.54	0.54	1	2058-94-8		07/27/2022 19:49
NMeFOSAA	ND	2.0	0.43	0.43	1	2355-31-9		07/27/2022 19:49
NEtFOSAA	ND	2.0	0.55	0.55	1	2991-50-6		07/27/2022 19:49
PFDS	ND	1.9	0.45	0.45	1	335-77-3		07/27/2022 19:49
PFDOA	ND	2.0	0.48	0.48	1	307-55-1		07/27/2022 19:49
MeFOSE	ND	2.0	0.33	0.33	1	24448-09-7		07/27/2022 19:49
EtFOSE	ND	2.0	0.50	0.50	1	1691-99-2		07/27/2022 19:49
11-Cl-PF3OUdS	ND	1.9	0.44	0.44	1	763051-92-9		07/27/2022 19:49
PFTrDA	ND	2.0	0.62	0.62	1	72629-94-8		07/27/2022 19:49
PFDoS	ND	1.9	0.46	0.46	1	79780-39-5		07/27/2022 19:49
PFTDA	ND	2.0	0.48	0.48	1	376-06-7		07/27/2022 19:49

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1700 Elm Street, Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444
www.pacelabs.com

Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW26	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647010-R	Total Amount Extracted	250mL
Lab File ID	B220727B_015	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 16:25	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	17	85	50-150		07/27/2022 19:49
13C4_PFOA	20	22	111	50-150		07/27/2022 19:49
13C2_PFDA	20	27	137	50-150		07/27/2022 19:49
13C4_PFOS	19	22	116	50-150		07/27/2022 19:49

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	12	58	25-150		07/27/2022 19:49
13C5_PFPeA	20	15	77	25-150		07/27/2022 19:49
13C3_PFBS	19	20	108	25-150		07/27/2022 19:49
13C2_4:2FTS	19	27	144	25-150		07/27/2022 19:49
13C5_PFHxA	20	19	95	25-150		07/27/2022 19:49
13C4_PFHpA	20	20	102	25-150		07/27/2022 19:49
13C3_PFHxS	19	23	123	25-150		07/27/2022 19:49
13C2_6:2FTS	19	39	**206**	25-150	R	07/27/2022 19:49
13C8_PFOA	20	23	115	25-150		07/27/2022 19:49
13C9_PFNA	20	25	123	25-150		07/27/2022 19:49
13C8_PFOS	19	27	143	25-150	D	08/03/2022 03:31
13C2_8:2FTS	19	28	146	25-150		07/27/2022 19:49
13C6_PFDA	20	22	111	25-150		07/27/2022 19:49
d3-MeFOSAA	20	20	101	25-150		07/27/2022 19:49
13C8_PFOSA	20	18	92	25-150		07/27/2022 19:49
d5-EtFOSAA	20	16	82	25-150		07/27/2022 19:49
13C7_PFUdA	20	20	101	25-150		07/27/2022 19:49
13C2_PFDoA	20	22	110	25-150		07/27/2022 19:49
13C2_PFTeDA	20	13	67	25-150		07/27/2022 19:49
13C3_HFPO-DA	20	17	85	25-150		07/27/2022 19:49
d7-N-MeFOSE	20	14	69	10-150		07/27/2022 19:49
d9-N-EtFOSE	20	12	61	10-150		07/27/2022 19:49
d3-N-MeFOSA	20	9.1	46	10-150		07/27/2022 19:49
d5-N-EtFOSA	20	8.0	40	10-150		07/27/2022 19:49

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Lab Sample ID	40246647010-R	Total Amount Extracted	250mL
Lab File ID	B220727B_015	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 16:25	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.79	5.71	1139		07/27/2022 19:49
13C4_PFOA	N/A	N/A	7.05	6.96	1969		07/27/2022 19:49
13C2_PFDA	N/A	N/A	8.38	8.27	2492		07/27/2022 19:49
13C4_PFOS	N/A	N/A	8.84	8.75	580		07/27/2022 19:49

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.28	4.30	1453		07/27/2022 19:49
13C5_PFPeA	N/A	N/A	5.13	5.13	844		07/27/2022 19:49
13C3_PFBS	N/A	N/A	6.02	5.96	183		07/27/2022 19:49
13C2_4:2FTS	N/A	N/A	5.53	5.49	99		07/27/2022 19:49
13C5_PFHxA	N/A	N/A	5.79	5.81	711		07/27/2022 19:49
13C4_PFHpA	N/A	N/A	6.42	6.39	1411		07/27/2022 19:49
13C3_PFHxS	N/A	N/A	7.46	7.45	478		07/27/2022 19:49
13C2_6:2FTS	N/A	N/A	6.72	6.72	238	R	07/27/2022 19:49
13C8_PFOA	N/A	N/A	7.05	7.05	1701		07/27/2022 19:49
13C9_PFNA	N/A	N/A	7.71	7.70	1941		07/27/2022 19:49
13C8_PFOS	N/A	N/A	8.86	8.80	666	D	08/03/2022 03:31
13C2_8:2FTS	N/A	N/A	8.00	7.98	659		07/27/2022 19:49
13C6_PFDA	N/A	N/A	8.38	8.35	1999		07/27/2022 19:49
d3-MeFOSAA	N/A	N/A	8.24	8.22	1656		07/27/2022 19:49
13C8_PFOSA	N/A	N/A	10.55	10.56	1557		07/27/2022 19:49
d5-EtFOSAA	N/A	N/A	8.53	8.51	1259		07/27/2022 19:49
13C7_PFUdA	N/A	N/A	9.04	9.02	2074		07/27/2022 19:49
13C2_PFDoA	N/A	N/A	9.71	9.69	1323		07/27/2022 19:49
13C2_PFTeDA	N/A	N/A	11.02	10.98	1539		07/27/2022 19:49
13C3_HFPO-DA	N/A	N/A	6.05	6.04	1072		07/27/2022 19:49
d7-N-MeFOSE	N/A	N/A	12.38	12.34	51		07/27/2022 19:49
d9-N-EtFOSE	N/A	N/A	12.85	12.84	199		07/27/2022 19:49
d3-N-MeFOSA	N/A	N/A	12.59	12.56	969		07/27/2022 19:49
d5-N-EtFOSA	N/A	N/A	13.01	13.01	637		07/27/2022 19:49

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW26	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647010-R	Total Amount Extracted	250mL
Lab File ID	B220727B_015	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 16:25	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.28	4.31	23		07/27/2022 19:49
PFPeA	N/A	N/A	5.14	5.12	131		07/27/2022 19:49
HFPO-DA	1.60	0.28	6.06	6.02	ND		07/27/2022 19:49
PFBS	0.48	0.48	6.03	5.99	279		07/27/2022 19:49
PFHxA	0.07	0.08	5.80	5.75	124		07/27/2022 19:49
4:2 FTS	1.90	0.80	5.53	5.49	ND		07/27/2022 19:49
PFPeS	0.45	0.41	6.76	6.73	87		07/27/2022 19:49
PFHpA	0.31	0.32	6.42	6.39	23		07/27/2022 19:49
DONA	0.00	0.49	0.00	6.62	ND		07/27/2022 19:49
PFHxS	0.46	0.39	7.46	7.43	631		07/27/2022 19:49
PFOA	0.43	0.39	7.06	7.03	418		07/27/2022 19:49
6:2 FTS	1.40	0.76	6.72	6.72	1858	I	07/27/2022 19:49
PFHpS	0.46	0.42	8.17	8.13	163		07/27/2022 19:49
PFNA	0.13	0.13	7.71	7.67	343		07/27/2022 19:49
PFOSAm	N/A	N/A	10.56	10.51	ND		07/27/2022 19:49
PFOS	0.35	0.36	8.66	8.81	356	D	08/03/2022 03:31
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 19:49
PFDA	0.22	0.18	8.39	8.34	ND		07/27/2022 19:49
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 19:49
8:2 FTS	0.90	0.97	8.00	7.95	3409		07/27/2022 19:49
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 19:49
PFNS	0.00	0.55	0.00	9.52	ND		07/27/2022 19:49
PFUnDA	0.00	0.13	0.00	9.01	ND		07/27/2022 19:49
NMeFOSAA	0.78	0.95	8.25	8.35	ND		07/27/2022 19:49
NEtFOSAA	0.00	0.63	0.00	8.51	ND		07/27/2022 19:49
PFDS	0.00	0.37	0.00	10.16	ND		07/27/2022 19:49
PFDOA	0.00	0.18	0.00	9.69	ND		07/27/2022 19:49
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 19:49
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 19:49
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 19:49
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 19:49
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 19:49
PFTDA	0.00	0.26	0.00	11.00	ND		07/27/2022 19:49

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW27	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647011-R	Total Amount Extracted	250mL
Lab File ID	B220727B_016	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 15:20	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	21	2.0	0.44	0.44	1	375-22-4		07/27/2022 20:09
PFPeA	4.2	2.0	0.44	0.44	1	2706-90-3		07/27/2022 20:09
HFPO-DA	ND	2.0	0.53	0.53	1	13252-13-6		07/27/2022 20:09
PFBS	100	1.8	0.47	0.47	1	375-73-5		07/27/2022 20:09
PFHxA	2.5	2.0	0.44	0.44	1	307-24-4		07/27/2022 20:09
4:2 FTS	ND	1.9	0.56	0.56	1	757124-72-4		07/27/2022 20:09
PFPeS	5.2	1.9	0.47	0.47	1	2706-91-4		07/27/2022 20:09
PFHpA	1.9 J	2.0	0.55	0.55	1	375-85-9		07/27/2022 20:09
DONA	ND	1.9	0.51	0.51	1	919005-14-4		07/27/2022 20:09
PFHxS	10	1.8	0.51	0.51	1	355-46-4		07/27/2022 20:09
PFOA	9.8	2.0	0.58	0.58	1	335-67-1		07/27/2022 20:09
6:2 FTS	ND	1.9	0.64	0.64	1	27619-97-2		07/27/2022 20:09
PFHpS	1.1 J	1.9	0.41	0.41	1	375-92-8		07/27/2022 20:09
PFNA	ND	2.0	0.74	0.74	1	375-95-1		07/27/2022 20:09
PFOSAm	ND	2.0	0.82	0.82	1	754-91-6		07/27/2022 20:09
PFOS	19	1.8	0.55	0.55	1	1763-23-1		07/27/2022 20:09
MeFOSA	ND	2.0	0.51	0.51	1	31506-32-8		07/27/2022 20:09
PFDA	ND	2.0	0.56	0.56	1	335-76-2		07/27/2022 20:09
EtFOSAm	ND	2.0	0.61	0.61	1	4151-50-2		07/27/2022 20:09
8:2 FTS	ND	1.9	0.65	0.65	1	39108-34-4		07/27/2022 20:09
9-Cl-PF3ON	ND	1.9	0.30	0.30	1	756426-58-1		07/27/2022 20:09
PFNS	ND	1.9	0.45	0.45	1	68259-12-1		07/27/2022 20:09
PFUnDA	ND	2.0	0.54	0.54	1	2058-94-8		07/27/2022 20:09
NMeFOSAA	ND	2.0	0.43	0.43	1	2355-31-9		07/27/2022 20:09
NEtFOSAA	ND	2.0	0.55	0.55	1	2991-50-6		07/27/2022 20:09
PFDS	ND	1.9	0.45	0.45	1	335-77-3		07/27/2022 20:09
PFDOA	ND	2.0	0.48	0.48	1	307-55-1		07/27/2022 20:09
MeFOSE	ND	2.0	0.33	0.33	1	24448-09-7		07/27/2022 20:09
EtFOSE	ND	2.0	0.50	0.50	1	1691-99-2		07/27/2022 20:09
11-Cl-PF3OUdS	ND	1.9	0.44	0.44	1	763051-92-9		07/27/2022 20:09
PFTrDA	ND	2.0	0.62	0.62	1	72629-94-8		07/27/2022 20:09
PFDoS	ND	1.9	0.46	0.46	1	79780-39-5		07/27/2022 20:09
PFTDA	ND	2.0	0.48	0.48	1	376-06-7		07/27/2022 20:09

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Lab Sample ID	40246647011-R	Total Amount Extracted	250mL
Lab File ID	B220727B_016	Percent Moisture	N/A
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Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	25	123	50-150		07/27/2022 20:09
13C4_PFOA	20	24	119	50-150		07/27/2022 20:09
13C2_PFDA	20	26	132	50-150		07/27/2022 20:09
13C4_PFOS	19	24	126	50-150		07/27/2022 20:09

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	18	89	25-150		07/27/2022 20:09
13C5_PFPeA	20	22	109	25-150		07/27/2022 20:09
13C3_PFBS	19	22	120	25-150		07/27/2022 20:09
13C2_4:2FTS	19	31	**164**	25-150	R	07/27/2022 20:09
13C5_PFHxA	20	26	132	25-150		07/27/2022 20:09
13C4_PFHpA	20	23	115	25-150		07/27/2022 20:09
13C3_PFHxS	19	24	124	25-150		07/27/2022 20:09
13C2_6:2FTS	19	20	108	25-150		07/27/2022 20:09
13C8_PFOA	20	24	121	25-150		07/27/2022 20:09
13C9_PFNA	20	23	115	25-150		07/27/2022 20:09
13C8_PFOS	19	20	105	25-150		07/27/2022 20:09
13C2_8:2FTS	19	19	98	25-150		07/27/2022 20:09
13C6_PFDA	20	19	96	25-150		07/27/2022 20:09
d3-MeFOSAA	20	19	94	25-150		07/27/2022 20:09
13C8_PFOSA	20	17	84	25-150		07/27/2022 20:09
d5-EtFOSAA	20	16	80	25-150		07/27/2022 20:09
13C7_PFUdA	20	19	93	25-150		07/27/2022 20:09
13C2_PFDoA	20	20	99	25-150		07/27/2022 20:09
13C2_PFTeDA	20	16	79	25-150		07/27/2022 20:09
13C3_HFPO-DA	20	22	112	25-150		07/27/2022 20:09
d7-N-MeFOSE	20	13	67	10-150		07/27/2022 20:09
d9-N-EtFOSE	20	12	62	10-150		07/27/2022 20:09
d3-N-MeFOSA	20	5.5	27	10-150		07/27/2022 20:09
d5-N-EtFOSA	20	5.1	26	10-150		07/27/2022 20:09

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		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.79	5.71	1204		07/27/2022 20:09
13C4_PFOA	N/A	N/A	7.06	6.96	1726		07/27/2022 20:09
13C2_PFDA	N/A	N/A	8.37	8.27	1668		07/27/2022 20:09
13C4_PFOS	N/A	N/A	8.84	8.75	1619		07/27/2022 20:09

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.29	4.30	2313		07/27/2022 20:09
13C5_PFPeA	N/A	N/A	5.14	5.13	1547		07/27/2022 20:09
13C3_PFBS	N/A	N/A	6.03	5.96	384		07/27/2022 20:09
13C2_4:2FTS	N/A	N/A	5.53	5.49	202	R	07/27/2022 20:09
13C5_PFHxA	N/A	N/A	5.79	5.81	1208		07/27/2022 20:09
13C4_PFHpA	N/A	N/A	6.42	6.39	1943		07/27/2022 20:09
13C3_PFHxS	N/A	N/A	7.46	7.45	1478		07/27/2022 20:09
13C2_6:2FTS	N/A	N/A	6.73	6.72	510		07/27/2022 20:09
13C8_PFOA	N/A	N/A	7.06	7.05	2449		07/27/2022 20:09
13C9_PFNA	N/A	N/A	7.71	7.70	2148		07/27/2022 20:09
13C8_PFOS	N/A	N/A	8.85	8.82	1451		07/27/2022 20:09
13C2_8:2FTS	N/A	N/A	8.00	7.98	1941		07/27/2022 20:09
13C6_PFDA	N/A	N/A	8.38	8.35	1519		07/27/2022 20:09
d3-MeFOSAA	N/A	N/A	8.24	8.22	1932		07/27/2022 20:09
13C8_PFOSA	N/A	N/A	10.55	10.56	1531		07/27/2022 20:09
d5-EtFOSAA	N/A	N/A	8.53	8.51	1059		07/27/2022 20:09
13C7_PFUdA	N/A	N/A	9.04	9.02	2470		07/27/2022 20:09
13C2_PFDoA	N/A	N/A	9.71	9.69	1455		07/27/2022 20:09
13C2_PFTeDA	N/A	N/A	11.02	10.98	856		07/27/2022 20:09
13C3_HFPO-DA	N/A	N/A	6.05	6.04	1607		07/27/2022 20:09
d7-N-MeFOSE	N/A	N/A	12.39	12.34	48		07/27/2022 20:09
d9-N-EtFOSE	N/A	N/A	12.86	12.84	216		07/27/2022 20:09
d3-N-MeFOSA	N/A	N/A	12.61	12.56	1087		07/27/2022 20:09
d5-N-EtFOSA	N/A	N/A	13.02	13.01	710		07/27/2022 20:09

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW27	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647011-R	Total Amount Extracted	250mL
Lab File ID	B220727B_016	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 15:20	CCal File	B220727B_005
Received	06/17/2022 10:00	Ending CCal File	B220727B_017
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.29	4.31	207		07/27/2022 20:09
PFPeA	N/A	N/A	5.14	5.12	92		07/27/2022 20:09
HFPO-DA	0.40	0.28	6.06	6.02	ND		07/27/2022 20:09
PFBS	0.50	0.48	6.03	5.99	407		07/27/2022 20:09
PFHxA	0.07	0.08	5.80	5.75	85		07/27/2022 20:09
4:2 FTS	0.00	0.80	0.00	5.49	ND		07/27/2022 20:09
PFPeS	0.49	0.41	6.76	6.73	279		07/27/2022 20:09
PFHpA	0.33	0.32	6.43	6.39	18	J	07/27/2022 20:09
DONA	0.00	0.49	0.00	6.62	ND		07/27/2022 20:09
PFHxS	0.50	0.39	7.47	7.43	431		07/27/2022 20:09
PFOA	0.36	0.39	7.06	7.03	176		07/27/2022 20:09
6:2 FTS	1.10	0.76	6.73	6.72	ND		07/27/2022 20:09
PFHpS	0.47	0.42	8.17	8.13	145	J	07/27/2022 20:09
PFNA	0.13	0.13	7.72	7.67	ND		07/27/2022 20:09
PFOSAm	N/A	N/A	10.55	10.51	ND		07/27/2022 20:09
PFOS	0.35	0.43	8.78	8.81	309		07/27/2022 20:09
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 20:09
PFDA	0.00	0.18	0.00	8.34	ND		07/27/2022 20:09
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 20:09
8:2 FTS	0.00	0.97	0.00	7.95	ND		07/27/2022 20:09
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 20:09
PFNS	0.00	0.55	0.00	9.52	ND		07/27/2022 20:09
PFUnDA	0.15	0.13	9.04	9.01	ND		07/27/2022 20:09
NMeFOSAA	1.30	0.95	8.22	8.35	ND		07/27/2022 20:09
NEtFOSAA	0.00	0.63	0.00	8.51	ND		07/27/2022 20:09
PFDS	0.00	0.37	0.00	10.16	ND		07/27/2022 20:09
PFDOA	0.00	0.18	0.00	9.69	ND		07/27/2022 20:09
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 20:09
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 20:09
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 20:09
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 20:09
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 20:09
PFTDA	0.00	0.26	0.00	11.00	ND		07/27/2022 20:09

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW28	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647012-R	Total Amount Extracted	254mL
Lab File ID	B220727B_018	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 14:45	CCal File	B220727B_017
Received	06/17/2022 10:00	Ending CCal File	B220727B_028
		Blank File	B220727B_007

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	18	2.0	0.43	0.43	1	375-22-4		07/27/2022 20:49
PFPeA	6.3	2.0	0.43	0.43	1	2706-90-3		07/27/2022 20:49
HFPO-DA	ND	2.0	0.52	0.52	1	13252-13-6		07/27/2022 20:49
PFBS	140	1.7	0.47	0.47	1	375-73-5		07/27/2022 20:49
PFHxA	3.7	2.0	0.43	0.43	1	307-24-4		07/27/2022 20:49
4:2 FTS	ND	1.8	0.55	0.55	1	757124-72-4		07/27/2022 20:49
PFPeS	4.2	1.9	0.47	0.47	1	2706-91-4		07/27/2022 20:49
PFHpA	2.4	2.0	0.54	0.54	1	375-85-9		07/27/2022 20:49
DONA	ND	1.9	0.51	0.51	1	919005-14-4		07/27/2022 20:49
PFHxS	14	1.8	0.50	0.50	1	355-46-4		07/27/2022 20:49
PFOA	13	2.0	0.58	0.58	1	335-67-1		07/27/2022 20:49
6:2 FTS	ND	1.9	0.64	0.64	1	27619-97-2		07/27/2022 20:49
PFHpS	1.2 J	1.9	0.41	0.41	1	375-92-8		07/27/2022 20:49
PFNA	ND	2.0	0.73	0.73	1	375-95-1		07/27/2022 20:49
PFOSAm	ND	2.0	0.81	0.81	1	754-91-6		07/27/2022 20:49
PFOS	25	1.8	0.54	0.54	1	1763-23-1		07/27/2022 20:49
MeFOSA	ND	2.0	0.50	0.50	1	31506-32-8		07/27/2022 20:49
PFDA	ND	2.0	0.56	0.56	1	335-76-2		07/27/2022 20:49
EtFOSAm	ND	2.0	0.60	0.60	1	4151-50-2		07/27/2022 20:49
8:2 FTS	ND	1.9	0.64	0.64	1	39108-34-4		07/27/2022 20:49
9-Cl-PF3ON	ND	1.8	0.30	0.30	1	756426-58-1		07/27/2022 20:49
PFNS	ND	1.9	0.44	0.44	1	68259-12-1		07/27/2022 20:49
PFUnDA	ND	2.0	0.53	0.53	1	2058-94-8		07/27/2022 20:49
NMeFOSAA	ND	2.0	0.43	0.43	1	2355-31-9		07/27/2022 20:49
NEtFOSAA	ND	2.0	0.55	0.55	1	2991-50-6		07/27/2022 20:49
PFDS	ND	1.9	0.44	0.44	1	335-77-3		07/27/2022 20:49
PFDOA	ND	2.0	0.48	0.48	1	307-55-1		07/27/2022 20:49
MeFOSE	ND	2.0	0.32	0.32	1	24448-09-7		07/27/2022 20:49
EtFOSE	ND	2.0	0.49	0.49	1	1691-99-2		07/27/2022 20:49
11-Cl-PF3OUdS	ND	1.9	0.43	0.43	1	763051-92-9		07/27/2022 20:49
PFTrDA	ND	2.0	0.61	0.61	1	72629-94-8		07/27/2022 20:49
PFDoS	ND	1.9	0.45	0.45	1	79780-39-5		07/27/2022 20:49
PFTDA	ND	2.0	0.47	0.47	1	376-06-7		07/27/2022 20:49

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW28	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647012-R	Total Amount Extracted	254mL
Lab File ID	B220727B_018	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 14:45	CCal File	B220727B_017
Received	06/17/2022 10:00	Ending CCal File	B220727B_028
		Blank File	B220727B_007

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	18	93	50-150		07/27/2022 20:49
13C4_PFOA	20	25	126	50-150		07/27/2022 20:49
13C2_PFDA	20	22	112	50-150		07/27/2022 20:49
13C4_PFOS	19	22	116	50-150		07/27/2022 20:49

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	14	70	25-150		07/27/2022 20:49
13C5_PFPeA	20	17	87	25-150		07/27/2022 20:49
13C3_PFBS	18	19	102	25-150		07/27/2022 20:49
13C2_4:2FTS	18	54	**294**	25-150	R	07/27/2022 20:49
13C5_PFHxA	20	19	98	25-150		07/27/2022 20:49
13C4_PFHpA	20	22	112	25-150		07/27/2022 20:49
13C3_PFHxS	19	23	125	25-150		07/27/2022 20:49
13C2_6:2FTS	19	39	**211**	25-150	R	07/27/2022 20:49
13C8_PFOA	20	25	125	25-150		07/27/2022 20:49
13C9_PFNA	20	22	113	25-150		07/27/2022 20:49
13C8_PFOS	19	22	119	25-150		07/27/2022 20:49
13C2_8:2FTS	19	29	**154**	25-150	R	07/27/2022 20:49
13C6_PFDA	20	22	109	25-150		07/27/2022 20:49
d3-MeFOSAA	20	23	119	25-150		07/27/2022 20:49
13C8_PFOSA	20	18	90	25-150		07/27/2022 20:49
d5-EtFOSAA	20	23	115	25-150		07/27/2022 20:49
13C7_PFUdA	20	28	143	25-150		07/27/2022 20:49
13C2_PFDoA	20	24	121	25-150		07/27/2022 20:49
13C2_PFTeDA	20	19	98	25-150		07/27/2022 20:49
13C3_HFPO-DA	20	19	94	25-150		07/27/2022 20:49
d7-N-MeFOSE	20	12	63	10-150		07/27/2022 20:49
d9-N-EtFOSE	20	14	70	10-150		07/27/2022 20:49
d3-N-MeFOSA	20	4.9	25	10-150		07/27/2022 20:49
d5-N-EtFOSA	20	4.2	21	10-150		07/27/2022 20:49

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW28	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647012-R	Total Amount Extracted	254mL
Lab File ID	B220727B_018	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 14:45	CCal File	B220727B_017
Received	06/17/2022 10:00	Ending CCal File	B220727B_028
		Blank File	B220727B_007

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.80	5.71	1209		07/27/2022 20:49
13C4_PFOA	N/A	N/A	7.07	6.96	1825		07/27/2022 20:49
13C2_PFDA	N/A	N/A	8.39	8.27	1582		07/27/2022 20:49
13C4_PFOS	N/A	N/A	8.85	8.75	1101		07/27/2022 20:49

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.28	4.30	1669		07/27/2022 20:49
13C5_PFPeA	N/A	N/A	5.14	5.13	1361		07/27/2022 20:49
13C3_PFBS	N/A	N/A	6.04	5.96	393		07/27/2022 20:49
13C2_4:2FTS	N/A	N/A	5.53	5.49	246	R	07/27/2022 20:49
13C5_PFHxA	N/A	N/A	5.80	5.81	797		07/27/2022 20:49
13C4_PFHpA	N/A	N/A	6.43	6.39	1518		07/27/2022 20:49
13C3_PFHxS	N/A	N/A	7.48	7.45	880		07/27/2022 20:49
13C2_6:2FTS	N/A	N/A	6.74	6.72	414	R	07/27/2022 20:49
13C8_PFOA	N/A	N/A	7.07	7.05	1879		07/27/2022 20:49
13C9_PFNA	N/A	N/A	7.72	7.70	1662		07/27/2022 20:49
13C8_PFOS	N/A	N/A	8.86	8.82	1347		07/27/2022 20:49
13C2_8:2FTS	N/A	N/A	8.01	7.98	804	R	07/27/2022 20:49
13C6_PFDA	N/A	N/A	8.39	8.35	1731		07/27/2022 20:49
d3-MeFOSAA	N/A	N/A	8.25	8.22	1768		07/27/2022 20:49
13C8_PFOSA	N/A	N/A	10.55	10.56	1218		07/27/2022 20:49
d5-EtFOSAA	N/A	N/A	8.54	8.51	1499		07/27/2022 20:49
13C7_PFUdA	N/A	N/A	9.05	9.02	2329		07/27/2022 20:49
13C2_PFDoA	N/A	N/A	9.72	9.69	1164		07/27/2022 20:49
13C2_PFTeDA	N/A	N/A	11.02	10.98	1443		07/27/2022 20:49
13C3_HFPO-DA	N/A	N/A	6.06	6.04	1338		07/27/2022 20:49
d7-N-MeFOSE	N/A	N/A	12.39	12.34	59		07/27/2022 20:49
d9-N-EtFOSE	N/A	N/A	12.85	12.84	313		07/27/2022 20:49
d3-N-MeFOSA	N/A	N/A	12.59	12.56	694		07/27/2022 20:49
d5-N-EtFOSA	N/A	N/A	13.01	13.01	622		07/27/2022 20:49

REPORT OF LABORATORY ANALYSIS

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Sample Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	TW28	Extraction Date	07/25/2022 15:49
Lab Sample ID	40246647012-R	Total Amount Extracted	254mL
Lab File ID	B220727B_018	Percent Moisture	N/A
Matrix	Non_Potable_Water	Ical ID	220722B02
Collected	06/15/2022 14:45	CCal File	B220727B_017
Received	06/17/2022 10:00	Ending CCal File	B220727B_028
		Blank File	B220727B_007

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.28	4.31	147		07/27/2022 20:49
PFPeA	N/A	N/A	5.14	5.12	81		07/27/2022 20:49
HFPO-DA	0.33	0.26	6.07	6.02	ND		07/27/2022 20:49
PFBS	0.52	0.47	6.04	5.99	608		07/27/2022 20:49
PFHxA	0.06	0.08	5.81	5.75	63		07/27/2022 20:49
4:2 FTS	0.00	0.83	0.00	5.49	ND		07/27/2022 20:49
PFPeS	0.46	0.43	6.77	6.73	169		07/27/2022 20:49
PFHpA	0.33	0.32	6.44	6.39	21		07/27/2022 20:49
DONA	0.00	0.53	0.00	6.62	ND		07/27/2022 20:49
PFHxS	0.49	0.41	7.48	7.43	352		07/27/2022 20:49
PFOA	0.35	0.38	7.08	7.03	249		07/27/2022 20:49
6:2 FTS	2.80	0.93	6.74	6.72	ND		07/27/2022 20:49
PFHpS	0.50	0.38	8.19	8.13	79	J	07/27/2022 20:49
PFNA	0.10	0.12	7.73	7.67	ND		07/27/2022 20:49
PFOSAm	N/A	N/A	10.56	10.51	ND		07/27/2022 20:49
PFOS	0.33	0.40	8.60	8.81	495		07/27/2022 20:49
MeFOSA	0.00	0.56	0.00	12.61	ND		07/27/2022 20:49
PFDA	0.00	0.19	0.00	8.34	ND		07/27/2022 20:49
EtFOSAm	0.00	0.54	0.00	13.03	ND		07/27/2022 20:49
8:2 FTS	0.00	0.92	0.00	7.95	ND		07/27/2022 20:49
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 20:49
PFNS	0.00	0.51	0.00	9.52	ND		07/27/2022 20:49
PFUnDA	0.00	0.12	0.00	9.01	ND		07/27/2022 20:49
NMeFOSAA	0.00	0.92	0.00	8.35	ND		07/27/2022 20:49
NEtFOSAA	0.00	0.65	0.00	8.51	ND		07/27/2022 20:49
PFDS	0.00	0.35	0.00	10.16	ND		07/27/2022 20:49
PFDOA	0.00	0.18	0.00	9.69	ND		07/27/2022 20:49
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 20:49
EtFOSE	0.00	0.00	0.00	12.89	ND		07/27/2022 20:49
11-Cl-PF3OUdS	0.00	0.02	0.00	10.64	ND		07/27/2022 20:49
PFTrDA	0.00	0.17	0.00	10.36	ND		07/27/2022 20:49
PFDoS	0.00	0.52	0.00	11.39	ND		07/27/2022 20:49
PFTDA	0.00	0.27	0.00	11.00	ND		07/27/2022 20:49

REPORT OF LABORATORY ANALYSIS

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKKB	Extraction Date	07/06/2022 12:06
Lab Sample ID	BLANK-99591	Total Amount Extracted	260mL
Lab File ID	B220707A_009	Percent Moisture	N/A
Matrix	Water	Ical ID	220629A02
Collected	06/21/2022 13:16	CCal File	B220707A_007
Received	06/21/2022 13:16	Ending CCal File	B220707A_019
		Blank File	

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	1.9	0.42	0.42	1	375-22-4		07/07/2022 15:15
PFPeA	ND	1.9	0.42	0.42	1	2706-90-3		07/07/2022 15:15
HFPO-DA	ND	1.9	0.51	0.51	1	13252-13-6		07/07/2022 15:15
PFBS	ND	1.7	0.46	0.46	1	375-73-5		07/07/2022 15:15
PFHxA	ND	1.9	0.42	0.42	1	307-24-4		07/07/2022 15:15
4:2 FTS	ND	1.8	0.54	0.54	1	757124-72-4		07/07/2022 15:15
PFPeS	ND	1.8	0.46	0.46	1	2706-91-4		07/07/2022 15:15
PFHpA	ND	1.9	0.53	0.53	1	375-85-9		07/07/2022 15:15
DONA	ND	1.8	0.49	0.49	1	919005-14-4		07/07/2022 15:15
PFHxS	ND	1.8	0.49	0.49	1	355-46-4		07/07/2022 15:15
PFOA	ND	1.9	0.56	0.56	1	335-67-1		07/07/2022 15:15
6:2 FTS	ND	1.8	0.62	0.62	1	27619-97-2		07/07/2022 15:15
PFHpS	ND	1.8	0.40	0.40	1	375-92-8		07/07/2022 15:15
PFNA	ND	1.9	0.71	0.71	1	375-95-1		07/07/2022 15:15
PFOSAm	ND	1.9	0.79	0.79	1	754-91-6		07/07/2022 15:15
PFOS	ND	1.8	0.53	0.53	1	1763-23-1		07/07/2022 15:15
MeFOSA	ND	1.9	0.49	0.49	1	31506-32-8		07/07/2022 15:15
PFDA	ND	1.9	0.54	0.54	1	335-76-2		07/07/2022 15:15
EtFOSAm	ND	1.9	0.59	0.59	1	4151-50-2		07/07/2022 15:15
8:2 FTS	ND	1.8	0.63	0.63	1	39108-34-4		07/07/2022 15:15
9-Cl-PF3ON	ND	1.8	0.29	0.29	1	756426-58-1		07/07/2022 15:15
PFNS	ND	1.8	0.43	0.43	1	68259-12-1		07/07/2022 15:15
PFUnDA	ND	1.9	0.52	0.52	1	2058-94-8		07/07/2022 15:15
NMeFOSAA	ND	1.9	0.42	0.42	1	2355-31-9		07/07/2022 15:15
NEtFOSAA	ND	1.9	0.53	0.53	1	2991-50-6		07/07/2022 15:15
PFDS	ND	1.9	0.43	0.43	1	335-77-3		07/07/2022 15:15
PFDOA	ND	1.9	0.46	0.46	1	307-55-1		07/07/2022 15:15
MeFOSE	ND	1.9	0.32	0.32	1	24448-09-7		07/07/2022 15:15
EtFOSE	ND	1.9	0.48	0.48	1	1691-99-2		07/07/2022 15:15
11-Cl-PF3OUdS	ND	1.8	0.42	0.42	1	763051-92-9		07/07/2022 15:15
PFTrDA	ND	1.9	0.60	0.60	1	72629-94-8		07/07/2022 15:15
PFDoS	ND	1.9	0.44	0.44	1	79780-39-5		07/07/2022 15:15
PFTDA	ND	1.9	0.46	0.46	1	376-06-7		07/07/2022 15:15

REPORT OF LABORATORY ANALYSIS

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKKB	Extraction Date	07/06/2022 12:06
Lab Sample ID	BLANK-99591	Total Amount Extracted	260mL
Lab File ID	B220707A_009	Percent Moisture	N/A
Matrix	Water	Ical ID	220629A02
Collected	06/21/2022 13:16	CCal File	B220707A_007
Received	06/21/2022 13:16	Ending CCal File	B220707A_019
		Blank File	

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	19	16	84	50-150		07/07/2022 15:15
13C4_PFOA	19	17	89	50-150		07/07/2022 15:15
13C2_PFDA	19	17	91	50-150		07/07/2022 15:15
13C4_PFOS	18	17	95	50-150		07/07/2022 15:15

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	19	19	97	50-150		07/07/2022 15:15
13C5_PFPeA	19	18	95	50-150		07/07/2022 15:15
13C3_PFBS	18	17	98	50-150		07/07/2022 15:15
13C2_4:2FTS	18	18	98	50-150		07/07/2022 15:15
13C5_PFHxA	19	18	95	50-150		07/07/2022 15:15
13C4_PFHpA	19	19	97	50-150		07/07/2022 15:15
13C3_PFHxS	18	17	91	50-150		07/07/2022 15:15
13C2_6:2FTS	18	17	91	50-150		07/07/2022 15:15
13C8_PFOA	19	18	96	50-150		07/07/2022 15:15
13C9_PFNA	19	17	89	50-150		07/07/2022 15:15
13C8_PFOS	18	18	99	50-150		07/07/2022 15:15
13C2_8:2FTS	18	15	83	50-150		07/07/2022 15:15
13C6_PFDA	19	18	93	50-150		07/07/2022 15:15
d3-MeFOSAA	19	15	79	50-150		07/07/2022 15:15
13C8_PFOSA	19	13	68	50-150		07/07/2022 15:15
d5-EtFOSAA	19	14	71	50-150		07/07/2022 15:15
13C7_PFUdA	19	18	91	50-150		07/07/2022 15:15
13C2_PFDoA	19	16	82	50-150		07/07/2022 15:15
13C2_PFTeDA	19	16	85	50-150		07/07/2022 15:15
13C3_HFPO-DA	19	18	96	50-150		07/07/2022 15:15
d7-N-MeFOSE	19	6.6	34	20-150		07/07/2022 15:15
d9-N-EtFOSE	19	5.4	28	20-150		07/07/2022 15:15
d3-N-MeFOSA	19	0.030	0	20-150	R	07/07/2022 15:15
d5-N-EtFOSA	19	0.023	0	20-150	R	07/07/2022 15:15

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKKB	Extraction Date	07/06/2022 12:06
Lab Sample ID	BLANK-99591	Total Amount Extracted	260mL
Lab File ID	B220707A_009	Percent Moisture	N/A
Matrix	Water	Ical ID	220629A02
Collected	06/21/2022 13:16	CCal File	B220707A_007
Received	06/21/2022 13:16	Ending CCal File	B220707A_019
		Blank File	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.78	5.81	1944		07/07/2022 15:15
13C4_PFOA	N/A	N/A	7.14	7.17	2165		07/07/2022 15:15
13C2_PFDA	N/A	N/A	8.54	8.54	2614		07/07/2022 15:15
13C4_PFOS	N/A	N/A	9.03	9.01	2087		07/07/2022 15:15

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.31	4.32	2966		07/07/2022 15:15
13C5_PFPeA	N/A	N/A	5.10	5.12	2022		07/07/2022 15:15
13C3_PFBS	N/A	N/A	6.04	6.06	3288		07/07/2022 15:15
13C2_4:2FTS	N/A	N/A	5.50	5.52	629		07/07/2022 15:15
13C5_PFHxA	N/A	N/A	5.79	5.81	1936		07/07/2022 15:15
13C4_PFHpA	N/A	N/A	6.47	6.49	1918		07/07/2022 15:15
13C3_PFHxS	N/A	N/A	7.57	7.59	1973		07/07/2022 15:15
13C2_6:2FTS	N/A	N/A	6.79	6.82	2009		07/07/2022 15:15
13C8_PFOA	N/A	N/A	7.14	7.17	2362		07/07/2022 15:15
13C9_PFNA	N/A	N/A	7.83	7.85	2238		07/07/2022 15:15
13C8_PFOS	N/A	N/A	9.03	9.01	3406		07/07/2022 15:15
13C2_8:2FTS	N/A	N/A	8.14	8.15	370		07/07/2022 15:15
13C6_PFDA	N/A	N/A	8.54	8.54	4390		07/07/2022 15:15
d3-MeFOSAA	N/A	N/A	8.40	8.40	1542		07/07/2022 15:15
13C8_PFOSA	N/A	N/A	10.84	10.77	3699		07/07/2022 15:15
d5-EtFOSAA	N/A	N/A	8.72	8.71	887		07/07/2022 15:15
13C7_PFUdA	N/A	N/A	9.24	9.22	94437		07/07/2022 15:15
13C2_PFDoA	N/A	N/A	9.94	9.90	1432		07/07/2022 15:15
13C2_PFTeDA	N/A	N/A	11.27	11.21	1712		07/07/2022 15:15
13C3_HFPO-DA	N/A	N/A	6.07	6.09	1523		07/07/2022 15:15
d7-N-MeFOSE	N/A	N/A	12.53	12.49	333		07/07/2022 15:15
d9-N-EtFOSE	N/A	N/A	12.99	12.96	476		07/07/2022 15:15
d3-N-MeFOSA	N/A	N/A	12.73	12.70	102	R	07/07/2022 15:15
d5-N-EtFOSA	N/A	N/A	13.17	13.11	21	R	07/07/2022 15:15

REPORT OF LABORATORY ANALYSIS

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKKB	Extraction Date	07/06/2022 12:06
Lab Sample ID	BLANK-99591	Total Amount Extracted	260mL
Lab File ID	B220707A_009	Percent Moisture	N/A
Matrix	Water	Ical ID	220629A02
Collected	06/21/2022 13:16	CCal File	B220707A_007
Received	06/21/2022 13:16	Ending CCal File	B220707A_019
		Blank File	

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.30	4.33	ND		07/07/2022 15:15
PFPeA	N/A	N/A	5.11	5.12	ND		07/07/2022 15:15
HFPO-DA	0.46	0.30	6.08	6.10	ND		07/07/2022 15:15
PFBS	0.37	0.40	6.05	6.07	ND		07/07/2022 15:15
PFHxA	0.09	0.08	5.80	5.82	ND		07/07/2022 15:15
4:2 FTS	0.00	0.92	0.00	5.53	ND		07/07/2022 15:15
PFPeS	0.00	0.43	0.00	6.86	ND		07/07/2022 15:15
PFHpA	0.46	0.30	6.48	6.50	ND		07/07/2022 15:15
DONA	0.00	0.57	0.00	6.75	ND		07/07/2022 15:15
PFHxS	0.00	0.37	0.00	7.60	ND		07/07/2022 15:15
PFOA	0.44	0.39	7.15	7.18	ND		07/07/2022 15:15
6:2 FTS	1.40	0.87	6.80	6.82	ND		07/07/2022 15:15
PFHpS	0.00	0.38	0.00	8.32	ND		07/07/2022 15:15
PFNA	0.18	0.15	7.84	7.86	ND		07/07/2022 15:15
PFOSAm	N/A	N/A	10.85	10.78	ND		07/07/2022 15:15
PFOS	0.50	0.40	9.04	9.03	ND		07/07/2022 15:15
MeFOSA	0.00	0.56	0.00	12.73	ND		07/07/2022 15:15
PFDA	0.00	0.19	0.00	8.58	ND		07/07/2022 15:15
EtFOSAm	0.00	0.61	0.00	13.10	ND		07/07/2022 15:15
8:2 FTS	0.00	1.10	0.00	8.15	ND		07/07/2022 15:15
9-Cl-PF3ON	0.00	0.05	0.00	9.52	ND		07/07/2022 15:15
PFNS	0.00	0.47	0.00	9.74	ND		07/07/2022 15:15
PFUnDA	0.22	0.13	9.23	9.22	ND		07/07/2022 15:15
NMeFOSAA	0.00	0.76	0.00	8.41	ND		07/07/2022 15:15
NEtFOSAA	0.00	0.72	0.00	8.72	ND		07/07/2022 15:15
PFDS	0.00	0.32	0.00	10.41	ND		07/07/2022 15:15
PFDOA	0.00	0.19	0.00	9.92	ND		07/07/2022 15:15
MeFOSE	N/A	N/A	0.00	12.52	ND		07/07/2022 15:15
EtFOSE	0.00	0.00	0.00	12.99	ND		07/07/2022 15:15
11-Cl-PF3OUdS	0.00	0.02	0.00	10.87	ND		07/07/2022 15:15
PFTrDA	0.00	0.16	0.00	10.59	ND		07/07/2022 15:15
PFDoS	0.00	0.46	0.00	11.61	ND		07/07/2022 15:15
PFTDA	0.00	0.24	0.00	11.21	ND		07/07/2022 15:15

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKSC	Extraction Date	07/25/2022 15:49
Lab Sample ID	BLANK-100191	Total Amount Extracted	250mL
Lab File ID	B220727B_007	Percent Moisture	N/A
Matrix	Water	Ical ID	220722B02
Collected	07/22/2022 15:59	CCal File	B220727B_005
Received	07/22/2022 15:59	Ending CCal File	B220727B_017
		Blank File	

Compound	Concentration (ng/L)	QL (ng/L)	RL (ng/L)	MDL (ng/L)	Dil.	CAS No.	Qual.	Analyzed
PFBA	ND	2.0	0.44	0.44	1	375-22-4		07/27/2022 17:09
PFPeA	ND	2.0	0.44	0.44	1	2706-90-3		07/27/2022 17:09
HFPO-DA	ND	2.0	0.53	0.53	1	13252-13-6		07/27/2022 17:09
PFBS	ND	1.8	0.47	0.47	1	375-73-5		07/27/2022 17:09
PFHxA	ND	2.0	0.44	0.44	1	307-24-4		07/27/2022 17:09
4:2 FTS	ND	1.9	0.56	0.56	1	757124-72-4		07/27/2022 17:09
PFPeS	ND	1.9	0.48	0.48	1	2706-91-4		07/27/2022 17:09
PFHpA	ND	2.0	0.55	0.55	1	375-85-9		07/27/2022 17:09
DONA	ND	1.9	0.51	0.51	1	919005-14-4		07/27/2022 17:09
PFHxS	ND	1.8	0.51	0.51	1	355-46-4		07/27/2022 17:09
PFOA	ND	2.0	0.58	0.58	1	335-67-1		07/27/2022 17:09
6:2 FTS	ND	1.9	0.64	0.64	1	27619-97-2		07/27/2022 17:09
PFHpS	ND	1.9	0.41	0.41	1	375-92-8		07/27/2022 17:09
PFNA	ND	2.0	0.74	0.74	1	375-95-1		07/27/2022 17:09
PFOSAm	ND	2.0	0.82	0.82	1	754-91-6		07/27/2022 17:09
PFOS	ND	1.8	0.55	0.55	1	1763-23-1		07/27/2022 17:09
MeFOSA	ND	2.0	0.51	0.51	1	31506-32-8		07/27/2022 17:09
PFDA	ND	2.0	0.56	0.56	1	335-76-2		07/27/2022 17:09
EtFOSAm	ND	2.0	0.61	0.61	1	4151-50-2		07/27/2022 17:09
8:2 FTS	ND	1.9	0.65	0.65	1	39108-34-4		07/27/2022 17:09
9-Cl-PF3ON	ND	1.9	0.30	0.30	1	756426-58-1		07/27/2022 17:09
PFNS	ND	1.9	0.45	0.45	1	68259-12-1		07/27/2022 17:09
PFUnDA	ND	2.0	0.54	0.54	1	2058-94-8		07/27/2022 17:09
NMeFOSAA	ND	2.0	0.43	0.43	1	2355-31-9		07/27/2022 17:09
NEtFOSAA	ND	2.0	0.56	0.56	1	2991-50-6		07/27/2022 17:09
PFDS	ND	1.9	0.45	0.45	1	335-77-3		07/27/2022 17:09
PFDOA	ND	2.0	0.48	0.48	1	307-55-1		07/27/2022 17:09
MeFOSE	ND	2.0	0.33	0.33	1	24448-09-7		07/27/2022 17:09
EtFOSE	ND	2.0	0.50	0.50	1	1691-99-2		07/27/2022 17:09
11-Cl-PF3OUdS	ND	1.9	0.44	0.44	1	763051-92-9		07/27/2022 17:09
PFTrDA	ND	2.0	0.62	0.62	1	72629-94-8		07/27/2022 17:09
PFDoS	ND	1.9	0.46	0.46	1	79780-39-5		07/27/2022 17:09
PFTDA	ND	2.0	0.48	0.48	1	376-06-7		07/27/2022 17:09

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKSC	Extraction Date	07/25/2022 15:49
Lab Sample ID	BLANK-100191	Total Amount Extracted	250mL
Lab File ID	B220727B_007	Percent Moisture	N/A
Matrix	Water	Ical ID	220722B02
Collected	07/22/2022 15:59	CCal File	B220727B_005
Received	07/22/2022 15:59	Ending CCal File	B220727B_017
		Blank File	

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C2_PFHxA	20	21	103	50-150		07/27/2022 17:09
13C4_PFOA	20	22	108	50-150		07/27/2022 17:09
13C2_PFDA	20	20	102	50-150		07/27/2022 17:09
13C4_PFOS	19	21	112	50-150		07/27/2022 17:09

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	Analyzed
13C4_PFBA	20	23	117	50-150		07/27/2022 17:09
13C5_PFPeA	20	21	104	50-150		07/27/2022 17:09
13C3_PFBS	19	20	110	50-150		07/27/2022 17:09
13C2_4:2FTS	19	19	100	50-150		07/27/2022 17:09
13C5_PFHxA	20	23	113	50-150		07/27/2022 17:09
13C4_PFHpA	20	20	98	50-150		07/27/2022 17:09
13C3_PFHxS	19	22	116	50-150		07/27/2022 17:09
13C2_6:2FTS	19	20	105	50-150		07/27/2022 17:09
13C8_PFOA	20	20	101	50-150		07/27/2022 17:09
13C9_PFNA	20	19	94	50-150		07/27/2022 17:09
13C8_PFOS	19	18	96	50-150		07/27/2022 17:09
13C2_8:2FTS	19	21	108	50-150		07/27/2022 17:09
13C6_PFDA	20	20	101	50-150		07/27/2022 17:09
d3-MeFOSAA	20	20	98	50-150		07/27/2022 17:09
13C8_PFOSA	20	19	95	50-150		07/27/2022 17:09
d5-EtFOSAA	20	19	93	50-150		07/27/2022 17:09
13C7_PFUdA	20	21	103	50-150		07/27/2022 17:09
13C2_PFDoA	20	22	108	50-150		07/27/2022 17:09
13C2_PFTeDA	20	17	87	50-150		07/27/2022 17:09
13C3_HFPO-DA	20	20	99	50-150		07/27/2022 17:09
d7-N-MeFOSE	20	19	97	20-150		07/27/2022 17:09
d9-N-EtFOSE	20	20	99	20-150		07/27/2022 17:09
d3-N-MeFOSA	20	18	90	20-150		07/27/2022 17:09
d5-N-EtFOSA	20	17	87	20-150		07/27/2022 17:09

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKSC	Extraction Date	07/25/2022 15:49
Lab Sample ID	BLANK-100191	Total Amount Extracted	250mL
Lab File ID	B220727B_007	Percent Moisture	N/A
Matrix	Water	Ical ID	220722B02
Collected	07/22/2022 15:59	CCal File	B220727B_005
Received	07/22/2022 15:59	Ending CCal File	B220727B_017
		Blank File	

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C2_PFHxA	N/A	N/A	5.77	5.71	2087		07/27/2022 17:09
13C4_PFOA	N/A	N/A	7.04	6.96	1988		07/27/2022 17:09
13C2_PFDA	N/A	N/A	8.37	8.27	1227		07/27/2022 17:09
13C4_PFOS	N/A	N/A	8.84	8.75	1808		07/27/2022 17:09

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
13C4_PFBA	N/A	N/A	4.29	4.30	2591		07/27/2022 17:09
13C5_PFPeA	N/A	N/A	5.13	5.13	2659		07/27/2022 17:09
13C3_PFBS	N/A	N/A	6.01	5.96	2475		07/27/2022 17:09
13C2_4:2FTS	N/A	N/A	5.51	5.49	1076		07/27/2022 17:09
13C5_PFHxA	N/A	N/A	5.77	5.81	2064		07/27/2022 17:09
13C4_PFHpA	N/A	N/A	6.41	6.39	1661		07/27/2022 17:09
13C3_PFHxS	N/A	N/A	7.45	7.45	1871		07/27/2022 17:09
13C2_6:2FTS	N/A	N/A	6.71	6.72	2198		07/27/2022 17:09
13C8_PFOA	N/A	N/A	7.04	7.05	2287		07/27/2022 17:09
13C9_PFNA	N/A	N/A	7.70	7.70	1966		07/27/2022 17:09
13C8_PFOS	N/A	N/A	8.84	8.82	2067		07/27/2022 17:09
13C2_8:2FTS	N/A	N/A	7.99	7.98	2147		07/27/2022 17:09
13C6_PFDA	N/A	N/A	8.37	8.35	1291		07/27/2022 17:09
d3-MeFOSAA	N/A	N/A	8.23	8.22	1457		07/27/2022 17:09
13C8_PFOSA	N/A	N/A	10.55	10.56	1424		07/27/2022 17:09
d5-EtFOSAA	N/A	N/A	8.52	8.51	1067		07/27/2022 17:09
13C7_PFUdA	N/A	N/A	9.03	9.02	2457		07/27/2022 17:09
13C2_PFDoA	N/A	N/A	9.69	9.69	1376		07/27/2022 17:09
13C2_PFTeDA	N/A	N/A	11.00	10.98	1020		07/27/2022 17:09
13C3_HFPO-DA	N/A	N/A	6.03	6.04	1382		07/27/2022 17:09
d7-N-MeFOSE	N/A	N/A	12.37	12.34	45		07/27/2022 17:09
d9-N-EtFOSE	N/A	N/A	12.84	12.84	215		07/27/2022 17:09
d3-N-MeFOSA	N/A	N/A	12.58	12.56	747		07/27/2022 17:09
d5-N-EtFOSA	N/A	N/A	13.00	13.01	738		07/27/2022 17:09

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Method Blank Analysis Summary

PFAS by Isotope Dilution

Client Sample ID	BLKSC	Extraction Date	07/25/2022 15:49
Lab Sample ID	BLANK-100191	Total Amount Extracted	250mL
Lab File ID	B220727B_007	Percent Moisture	N/A
Matrix	Water	Ical ID	220722B02
Collected	07/22/2022 15:59	CCal File	B220727B_005
Received	07/22/2022 15:59	Ending CCal File	B220727B_017
		Blank File	

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers	Analyzed
PFBA	N/A	N/A	4.29	4.31	ND		07/27/2022 17:09
PFPeA	N/A	N/A	5.13	5.12	ND		07/27/2022 17:09
HFPO-DA	0.56	0.28	6.05	6.02	ND		07/27/2022 17:09
PFBS	0.37	0.48	6.02	5.99	ND		07/27/2022 17:09
PFHxA	0.13	0.08	5.78	5.75	ND		07/27/2022 17:09
4:2 FTS	0.00	0.80	0.00	5.49	ND		07/27/2022 17:09
PFPeS	0.00	0.41	0.00	6.73	ND		07/27/2022 17:09
PFHpA	0.00	0.32	0.00	6.39	ND		07/27/2022 17:09
DONA	0.58	0.49	6.64	6.62	ND		07/27/2022 17:09
PFHxS	0.00	0.39	0.00	7.43	ND		07/27/2022 17:09
PFOA	0.49	0.39	7.05	7.03	ND		07/27/2022 17:09
6:2 FTS	0.78	0.76	6.71	6.72	ND		07/27/2022 17:09
PFHpS	0.00	0.42	0.00	8.13	ND		07/27/2022 17:09
PFNA	0.14	0.13	7.71	7.67	ND		07/27/2022 17:09
PFOSAm	N/A	N/A	10.57	10.51	ND		07/27/2022 17:09
PFOS	0.51	0.43	8.84	8.81	ND		07/27/2022 17:09
MeFOSA	0.00	0.54	0.00	12.61	ND		07/27/2022 17:09
PFDA	0.00	0.18	0.00	8.34	ND		07/27/2022 17:09
EtFOSAm	0.00	0.53	0.00	13.03	ND		07/27/2022 17:09
8:2 FTS	1.50	0.97	8.00	7.95	ND		07/27/2022 17:09
9-Cl-PF3ON	0.00	0.06	0.00	9.31	ND		07/27/2022 17:09
PFNS	0.53	0.55	9.52	9.52	ND		07/27/2022 17:09
PFUnDA	0.07	0.13	9.04	9.01	ND		07/27/2022 17:09
NMeFOSAA	0.46	0.95	8.24	8.35	ND		07/27/2022 17:09
NEtFOSAA	0.00	0.63	0.00	8.51	ND		07/27/2022 17:09
PFDS	0.49	0.37	10.17	10.16	ND		07/27/2022 17:09
PFDOA	0.14	0.18	9.70	9.69	ND		07/27/2022 17:09
MeFOSE	N/A	N/A	0.00	12.41	ND		07/27/2022 17:09
EtFOSE	0.00	0.00	12.89	12.89	ND		07/27/2022 17:09
11-Cl-PF3OUdS	0.05	0.02	10.65	10.64	ND		07/27/2022 17:09
PFTrDA	0.22	0.17	10.36	10.36	ND		07/27/2022 17:09
PFDoS	0.40	0.52	11.41	11.39	ND		07/27/2022 17:09
PFTDA	0.22	0.26	11.01	11.00	ND		07/27/2022 17:09

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-99592	Instrument ID	10LCMS02
Run File Name	B220707A_010	Column ID	1071B00011
Analyzed	07/07/2022 15:35	Ical ID	220629A02
Injected By	NH	Level	L

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	19	16	87	50-150	
13C4_PFOA	19	17	91	50-150	
13C2_PFDA	19	17	93	50-150	
13C4_PFOS	18	17	96	50-150	

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	19	19	101	50-150	
13C5_PFPeA	19	19	100	50-150	
13C3_PFBS	17	18	101	50-150	
13C2_4:2FTS	18	17	99	50-150	
13C5_PFHxA	19	19	100	50-150	
13C4_PFHpA	19	20	107	50-150	
13C3_PFHxS	18	17	94	50-150	
13C2_6:2FTS	18	17	95	50-150	
13C8_PFOA	19	19	100	50-150	
13C9_PFNA	19	18	98	50-150	
13C8_PFOS	18	20	113	50-150	
13C2_8:2FTS	18	18	98	50-150	
13C6_PFDA	19	20	104	50-150	
d3-MeFOSAA	19	19	101	50-150	
13C8_PFOSA	19	14	73	50-150	
d5-EtFOSAA	19	18	95	50-150	
13C7_PFUdA	19	20	108	50-150	
13C2_PFDoA	19	19	103	50-150	
13C2_PFTeDA	19	18	95	50-150	
13C3_HFPO-DA	19	19	101	50-150	
d7-N-MeFOSE	19	8.3	44	20-150	
d9-N-EtFOSE	19	7.5	40	20-150	
d3-N-MeFOSA	19	0.22	1	20-150	R
d5-N-EtFOSA	19	0.19	1	20-150	R

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-99592	Instrument ID	10LCMS02
Run File Name	B220707A_010	Column ID	1071B00011
Analyzed	07/07/2022 15:35	Ical ID	220629A02
Injected By	NH	Level	L

Native Analytes

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	CAS No.
PFBA	3.8	4.7	124	50-150		375-22-4
PFPeA	3.8	4.3	115	50-150		2706-90-3
HFPO-DA	3.8	4.2	111	50-150		13252-13-6
PFBS	3.3	3.8	115	50-150		375-73-5
PFHxA	3.8	4.7	125	50-150		307-24-4
4:2 FTS	3.5	4.2	118	50-150		757124-72-4
PFPeS	3.5	4.1	115	50-150		2706-91-4
PFHpA	3.8	4.6	122	50-150		375-85-9
DONA	3.5	3.9	109	50-150		919005-14-4
PFHxS	3.4	3.8	111	50-150		355-46-4
PFOA	3.8	4.3	115	50-150		335-67-1
6:2 FTS	3.6	3.6	102	50-150		27619-97-2
PFHpS	3.6	4.1	115	50-150		375-92-8
PFNA	3.8	4.3	114	50-150		375-95-1
PFOSAm	3.8	4.3	115	50-150		754-91-6
PFOS	3.5	3.6	103	50-150		1763-23-1
MeFOSA	3.8	3.2	86	50-150		31506-32-8
PFDA	3.8	3.9	104	50-150		335-76-2
EtFOSAm	3.8	2.6	69	50-150		4151-50-2
8:2 FTS	3.6	3.6	99	50-150		39108-34-4
9-Cl-PF3ON	3.5	3.0	87	50-150		756426-58-1
PFNS	3.6	3.6	99	50-150		68259-12-1
PFUnDA	3.8	4.4	118	50-150		2058-94-8
NMeFOSAA	3.8	4.1	109	50-150		2355-31-9
NEtFOSAA	3.8	4.4	116	50-150		2991-50-6
PFDS	3.6	3.3	91	50-150		335-77-3
PFDOA	3.8	4.3	114	50-150		307-55-1
MeFOSE	3.8	4.6	122	50-150		24448-09-7
EtFOSE	3.8	3.9	105	50-150		1691-99-2
11-Cl-PF3OUdS	3.5	3.1	88	50-150		763051-92-9
PFTrDA	3.8	3.6	95	50-150		72629-94-8
PFDoS	3.6	3.0	83	50-150		79780-39-5
PFTDA	3.8	4.0	106	50-150		376-06-7

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-99592	Instrument ID	10LCMS02
Run File Name	B220707A_010	Column ID	1071B00011
Analyzed	07/07/2022 15:35	Ical ID	220629A02
Injected By	NH	Level	L

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
13C2_PFHxA	N/A	N/A	5.78	5.81	1495	
13C4_PFOA	N/A	N/A	7.14	7.17	1885	
13C2_PFDA	N/A	N/A	8.55	8.54	1876	
13C4_PFOS	N/A	N/A	9.04	9.01	11999	

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
13C4_PFBA	N/A	N/A	4.31	4.32	2585	
13C5_PFPeA	N/A	N/A	5.10	5.12	2018	
13C3_PFBS	N/A	N/A	6.04	6.06	1616	
13C2_4:2FTS	N/A	N/A	5.49	5.52	663	
13C5_PFHxA	N/A	N/A	5.78	5.81	1731	
13C4_PFHpA	N/A	N/A	6.47	6.49	1873	
13C3_PFHxS	N/A	N/A	7.57	7.59	1730	
13C2_6:2FTS	N/A	N/A	6.79	6.82	1979	
13C8_PFOA	N/A	N/A	7.15	7.17	2383	
13C9_PFNA	N/A	N/A	7.84	7.85	2746	
13C8_PFOS	N/A	N/A	9.05	9.01	26697	
13C2_8:2FTS	N/A	N/A	8.14	8.15	212	
13C6_PFDA	N/A	N/A	8.55	8.54	1866	
d3-MeFOSAA	N/A	N/A	8.41	8.40	1683	
13C8_PFOSA	N/A	N/A	10.85	10.77	4033	
d5-EtFOSAA	N/A	N/A	8.72	8.71	1007	
13C7_PFUdA	N/A	N/A	9.26	9.22	2418	
13C2_PFDoA	N/A	N/A	9.95	9.90	1207	
13C2_PFTeDA	N/A	N/A	11.28	11.21	2300	
13C3_HFPO-DA	N/A	N/A	6.06	6.09	1771	
d7-N-MeFOSE	N/A	N/A	12.54	12.49	379	
d9-N-EtFOSE	N/A	N/A	12.99	12.96	476	
d3-N-MeFOSA	N/A	N/A	12.74	12.70	522	R
d5-N-EtFOSA	N/A	N/A	13.15	13.11	193	R

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-99592	Instrument ID	10LCMS02
Run File Name	B220707A_010	Column ID	1071B00011
Analyzed	07/07/2022 15:35	Ical ID	220629A02
Injected By	NH	Level	L

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
PFBA	N/A	N/A	4.31	4.33	156	
PFPeA	N/A	N/A	5.10	5.12	455	
HFPO-DA	0.28	0.30	6.07	6.10	996	
PFBS	0.41	0.40	6.04	6.07	1064	
PFHxA	0.09	0.08	5.79	5.82	294	
4:2 FTS	0.80	0.92	5.50	5.53	8745	
PFPeS	0.42	0.43	6.83	6.86	1267	
PFHpA	0.29	0.30	6.48	6.50	17	
DONA	0.61	0.57	6.72	6.75	1402	
PFHxS	0.36	0.37	7.58	7.60	1160	
PFOA	0.38	0.39	7.15	7.18	197	
6:2 FTS	0.96	0.87	6.79	6.82	603	
PFHpS	0.40	0.38	8.33	8.32	1526	
PFNA	0.13	0.15	7.85	7.86	584	
PFOSAm	N/A	N/A	10.86	10.78	907	
PFOS	0.45	0.40	9.06	9.03	556	
MeFOSA	0.62	0.56	12.75	12.73	1011	
PFDA	0.20	0.19	8.55	8.58	304	
EtFOSAm	0.50	0.61	13.18	13.18	95	
8:2 FTS	1.00	1.10	8.15	8.15	214	
9-Cl-PF3ON	0.06	0.05	9.57	9.52	1123	
PFNS	0.46	0.47	9.76	9.74	1152	
PFUnDA	0.13	0.13	9.26	9.22	422	
NMeFOSAA	0.74	0.76	8.42	8.41	113	
NEtFOSAA	0.59	0.72	8.74	8.72	356	
PFDS	0.33	0.32	10.44	10.41	2229	
PFDOA	0.16	0.19	9.96	9.92	374	
MeFOSE	N/A	N/A	12.58	12.52	272	
EtFOSE	0.00	0.00	13.03	12.99	278	
11-Cl-PF3OUdS	0.02	0.02	10.92	10.87	669	
PFTrDA	0.15	0.16	10.64	10.59	346	
PFDoS	0.48	0.46	11.68	11.61	2658	
PFTDA	0.26	0.24	11.28	11.21	262	

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-100192	Instrument ID	10LCMS02
Run File Name	B220727B_008	Column ID	1071B00011
Analyzed	07/27/2022 17:29	Ical ID	220722B02
Injected By	NH	Level	L

Injection Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C2_PFHxA	20	21	107	50-150	
13C4_PFOA	20	25	124	50-150	
13C2_PFDA	20	23	113	50-150	
13C4_PFOS	19	24	126	50-150	

Extracted Internal Standards

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers
13C4_PFBA	20	25	123	50-150	
13C5_PFPeA	20	22	109	50-150	
13C3_PFBS	19	23	122	50-150	
13C2_4:2FTS	19	21	111	50-150	
13C5_PFHxA	20	23	113	50-150	
13C4_PFHpA	20	22	108	50-150	
13C3_PFHxS	19	22	116	50-150	
13C2_6:2FTS	19	20	106	50-150	
13C8_PFOA	20	22	110	50-150	
13C9_PFNA	20	22	109	50-150	
13C8_PFOS	19	22	114	50-150	
13C2_8:2FTS	19	19	101	50-150	
13C6_PFDA	20	20	98	50-150	
d3-MeFOSAA	20	19	94	50-150	
13C8_PFOSA	20	19	94	50-150	
d5-EtFOSAA	20	17	83	50-150	
13C7_PFUdA	20	21	104	50-150	
13C2_PFDoA	20	20	101	50-150	
13C2_PFTeDA	20	19	93	50-150	
13C3_HFPO-DA	20	21	105	50-150	
d7-N-MeFOSE	20	19	94	20-150	
d9-N-EtFOSE	20	16	78	20-150	
d3-N-MeFOSA	20	16	78	20-150	
d5-N-EtFOSA	20	15	77	20-150	

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-100192	Instrument ID	10LCMS02
Run File Name	B220727B_008	Column ID	1071B00011
Analyzed	07/27/2022 17:29	Ical ID	220722B02
Injected By	NH	Level	L

Native Analytes

Compound	Known Conc.	Conc. Found	%Recovery	Recovery Limits	Qualifiers	CAS No.
PFBA	4.0	4.5	111	50-150		375-22-4
PFPeA	4.0	4.8	120	50-150		2706-90-3
HFPO-DA	4.0	4.8	120	50-150		13252-13-6
PFBS	3.5	4.3	120	50-150		375-73-5
PFHxA	4.0	4.8	119	50-150		307-24-4
4:2 FTS	3.7	4.3	115	50-150		757124-72-4
PFPeS	3.8	4.2	113	50-150		2706-91-4
PFHpA	4.0	4.5	114	50-150		375-85-9
DONA	3.8	4.4	115	50-150		919005-14-4
PFHxS	3.6	4.1	113	50-150		355-46-4
PFOA	4.0	5.0	124	50-150		335-67-1
6:2 FTS	3.8	4.6	121	50-150		27619-97-2
PFHpS	3.8	4.4	115	50-150		375-92-8
PFNA	4.0	4.8	121	50-150		375-95-1
PFOSAm	4.0	4.6	115	50-150		754-91-6
PFOS	3.7	3.9	106	50-150		1763-23-1
MeFOSA	4.0	4.3	108	50-150		31506-32-8
PFDA	4.0	4.5	114	50-150		335-76-2
EtFOSAm	4.0	4.3	107	50-150		4151-50-2
8:2 FTS	3.8	5.1	133	50-150		39108-34-4
9-Cl-PF3ON	3.7	4.1	110	50-150		756426-58-1
PFNS	3.8	4.5	116	50-150		68259-12-1
PFUnDA	4.0	4.4	110	50-150		2058-94-8
NMeFOSAA	4.0	4.0	101	50-150		2355-31-9
NEtFOSAA	4.0	4.4	110	50-150		2991-50-6
PFDS	3.9	4.2	110	50-150		335-77-3
PFDOA	4.0	4.5	113	50-150		307-55-1
MeFOSE	4.0	4.5	111	50-150		24448-09-7
EtFOSE	4.0	4.9	122	50-150		1691-99-2
11-Cl-PF3OUdS	3.8	3.8	100	50-150		763051-92-9
PFTrDA	4.0	4.8	120	50-150		72629-94-8
PFDoS	3.9	4.1	107	50-150		79780-39-5
PFTDA	4.0	4.2	105	50-150		376-06-7

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-100192	Instrument ID	10LCMS02
Run File Name	B220727B_008	Column ID	1071B00011
Analyzed	07/27/2022 17:29	Ical ID	220722B02
Injected By	NH	Level	L

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
13C2_PFHxA	N/A	N/A	5.78	5.71	1740	
13C4_PFOA	N/A	N/A	7.04	6.96	1970	
13C2_PFDA	N/A	N/A	8.35	8.27	1260	
13C4_PFOS	N/A	N/A	8.82	8.75	1391	

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
13C4_PFBA	N/A	N/A	4.30	4.30	2705	
13C5_PFPeA	N/A	N/A	5.13	5.13	2347	
13C3_PFBS	N/A	N/A	6.01	5.96	2678	
13C2_4:2FTS	N/A	N/A	5.52	5.49	786	
13C5_PFHxA	N/A	N/A	5.78	5.81	1607	
13C4_PFHpA	N/A	N/A	6.40	6.39	2014	
13C3_PFHxS	N/A	N/A	7.44	7.45	2170	
13C2_6:2FTS	N/A	N/A	6.71	6.72	2563	
13C8_PFOA	N/A	N/A	7.04	7.05	2141	
13C9_PFNA	N/A	N/A	7.69	7.70	2190	
13C8_PFOS	N/A	N/A	8.82	8.82	1882	
13C2_8:2FTS	N/A	N/A	7.97	7.98	4215	
13C6_PFDA	N/A	N/A	8.35	8.35	1558	
d3-MeFOSAA	N/A	N/A	8.22	8.22	1057	
13C8_PFOSA	N/A	N/A	10.56	10.56	1134	
d5-EtFOSAA	N/A	N/A	8.51	8.51	1119	
13C7_PFUdA	N/A	N/A	9.02	9.02	2605	
13C2_PFDoA	N/A	N/A	9.70	9.69	1243	
13C2_PFTeDA	N/A	N/A	11.01	10.98	1130	
13C3_HFPO-DA	N/A	N/A	6.03	6.04	1700	
d7-N-MeFOSE	N/A	N/A	12.38	12.34	51	
d9-N-EtFOSE	N/A	N/A	12.85	12.84	208	
d3-N-MeFOSA	N/A	N/A	12.59	12.56	695	
d5-N-EtFOSA	N/A	N/A	13.01	13.01	792	

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LCS Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCS-100192	Instrument ID	10LCMS02
Run File Name	B220727B_008	Column ID	1071B00011
Analyzed	07/27/2022 17:29	Ical ID	220722B02
Injected By	NH	Level	L

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
PFBA	N/A	N/A	4.30	4.31	142	
PFPeA	N/A	N/A	5.14	5.12	304	
HFPO-DA	0.29	0.28	6.04	6.02	731	
PFBS	0.41	0.48	6.02	5.99	1055	
PFHxA	0.08	0.08	5.78	5.75	284	
4:2 FTS	0.81	0.80	5.52	5.49	1865	
PFPeS	0.44	0.41	6.75	6.73	1238	
PFHpA	0.29	0.32	6.41	6.39	21	
DONA	0.58	0.49	6.64	6.62	1469	
PFHxS	0.40	0.39	7.45	7.43	1052	
PFOA	0.37	0.39	7.04	7.03	262	
6:2 FTS	0.86	0.76	6.71	6.72	500	
PFHpS	0.39	0.42	8.14	8.13	1417	
PFNA	0.13	0.13	7.69	7.67	582	
PFOSAm	N/A	N/A	10.57	10.51	984	
PFOS	0.42	0.43	8.83	8.81	366	
MeFOSA	0.56	0.54	12.62	12.61	606	
PFDA	0.20	0.18	8.36	8.34	359	
EtFOSAm	0.52	0.53	13.03	13.03	772	
8:2 FTS	0.81	0.97	7.98	7.95	1338061	
9-Cl-PF3ON	0.06	0.06	9.33	9.31	1290	
PFNS	0.53	0.55	9.52	9.52	1296	
PFUnDA	0.14	0.13	9.03	9.01	466	
NMeFOSAA	0.99	0.95	8.23	8.35	1366	
NEtFOSAA	0.66	0.63	8.52	8.51	361	
PFDS	0.33	0.37	10.18	10.16	1141	
PFDOA	0.20	0.18	9.71	9.69	404	
MeFOSE	N/A	N/A	12.42	12.41	369	
EtFOSE	0.00	0.00	12.89	12.89	297	
11-Cl-PF3OUdS	0.02	0.02	10.65	10.64	1001	
PFTrDA	0.18	0.17	10.37	10.36	357	
PFDoS	0.52	0.52	11.41	11.39	1392	
PFTDA	0.26	0.26	11.02	11.00	394	

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LCSD Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCSD-99606	Instrument ID	10LCMS02
Run File Name	B220707A_011	Column ID	1071B00011
Analyzed	07/07/2022 15:55	Ical ID	220629A02
Injected By	NH	Level	L

Injection Internal Standards

Compound	Known Conc.	LCS Conc. Found	LCS Rec. %	LCSD Conc. Found	LCSD Rec. %	RPD %	Recovery Limits	Qualifiers
13C2_PFHxA	20	16	87	16	82	6.6	50-150	
13C4_PFOA	20	17	91	17	88	3.4	50-150	
13C2_PFDA	20	17	93	17	85	8.7	50-150	
13C4_PFOS	19	17	96	16	84	13.6	50-150	

Extracted Internal Standards

Compound	Known Conc.	LCS Conc. Found	LCS Rec. %	LCSD Conc. Found	LCSD Rec. %	RPD %	Recovery Limits	Qualifiers
13C4_PFBA	20	19	101	18	91	10.1	50-150	
13C5_PFPeA	20	19	100	18	90	11.1	50-150	
13C3_PFBS	18	18	101	16	89	12.4	50-150	
13C2_4:2FTS	18	17	99	16	90	9.6	50-150	
13C5_PFHxA	20	19	100	18	94	6.9	50-150	
13C4_PFHpA	20	20	107	18	94	12.7	50-150	
13C3_PFHxS	18	17	94	16	86	8.4	50-150	
13C2_6:2FTS	19	17	95	16	88	7.7	50-150	
13C8_PFOA	20	19	100	18	90	10.7	50-150	
13C9_PFNA	20	18	98	17	88	10.7	50-150	
13C8_PFOS	19	20	113	18	94	18.8	50-150	
13C2_8:2FTS	19	18	98	18	94	3.7	50-150	
13C6_PFDA	20	20	104	18	91	12.9	50-150	
d3-MeFOSAA	20	19	101	17	86	16.3	50-150	
13C8_PFOSA	20	14	**73**	6.5	**33**	**74.0**	50-150	R
d5-EtFOSAA	20	18	95	18	90	6.1	50-150	
13C7_PFUdA	20	20	108	18	94	13.3	50-150	
13C2_PFDoA	20	19	103	17	88	15.4	50-150	
13C2_PFTeDA	20	18	95	15	79	18.2	50-150	
13C3_HFPO-DA	20	19	101	18	90	12.2	50-150	
d7-N-MeFOSE	20	8.3	**44**	1.0	**5**	**157.8**	20-150	R
d9-N-EtFOSE	20	7.5	**40**	0.81	**4**	**162.4**	20-150	R
d3-N-MeFOSA	20	0.22	**1**	0.0051	**0**	**191.5**	20-150	R
d5-N-EtFOSA	20	0.19	**1**	0.00	**0**	**200.0**	20-150	R

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LCSD Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCSD-99606	Instrument ID	10LCMS02
Run File Name	B220707A_011	Column ID	1071B00011
Analyzed	07/07/2022 15:55	Ical ID	220629A02
Injected By	NH	Level	L

Native Analytes

Compound	Known Conc.	LCS Conc. Found	LCS Rec. %	LCSD Conc. Found	LCSD Rec. %	RPD %	Recovery Limits	Qualifiers
PFBA	3.9	4.7	124	4.5	115	7.2	50-150	
PFPeA	3.9	4.3	115	4.3	110	4.7	50-150	
HFPO-DA	3.9	4.2	111	4.3	111	0.1	50-150	
PFBS	3.5	3.8	115	3.7	106	7.8	50-150	
PFHxA	3.9	4.7	125	4.3	111	11.7	50-150	
4:2 FTS	3.7	4.2	118	3.5	96	21.0	50-150	
PFPeS	3.7	4.1	115	3.8	104	9.7	50-150	
PFHpA	3.9	4.6	122	4.2	107	13.7	50-150	
DONA	3.7	3.9	109	4.1	110	0.3	50-150	
PFHxS	3.6	3.8	111	3.7	104	7.3	50-150	
PFOA	3.9	4.3	115	4.2	109	5.7	50-150	
6:2 FTS	3.7	3.6	102	3.9	104	2.8	50-150	
PFHpS	3.7	4.1	115	4.1	110	4.2	50-150	
PFNA	3.9	4.3	114	4.1	106	7.4	50-150	
PFOSAm	3.9	4.3	115	3.8	98	15.6	50-150	
PFOS	3.6	3.6	103	4.0	111	8.1	50-150	
MeFOSA	3.9	3.2	**86**	0.00	**0**	**200.0**	50-150	R
PFDA	3.9	3.9	104	4.0	103	0.9	50-150	
EtFOSAm	3.9	2.6	**69**	-39	**-1000**	**200.0**	50-150	R
8:2 FTS	3.7	3.6	99	3.9	104	4.4	50-150	
9-Cl-PF3ON	3.6	3.0	87	3.4	92	6.2	50-150	
PFNS	3.7	3.6	99	3.8	100	0.8	50-150	
PFUnDA	3.9	4.4	118	3.9	101	16.1	50-150	
NMeFOSAA	3.9	4.1	109	3.9	101	8.3	50-150	
NEtFOSAA	3.9	4.4	116	4.0	102	12.9	50-150	
PFDS	3.8	3.3	91	3.5	92	0.5	50-150	
PFDOA	3.9	4.3	114	4.1	104	8.9	50-150	
MeFOSE	3.9	4.6	122	4.4	112	8.6	50-150	
EtFOSE	3.9	3.9	105	4.3	110	4.7	50-150	
11-Cl-PF3OUdS	3.7	3.1	88	3.3	91	3.0	50-150	
PFTrDA	3.9	3.6	95	3.8	98	2.7	50-150	
PFDoS	3.8	3.0	83	3.1	81	2.6	50-150	
PFTDA	3.9	4.0	106	4.1	104	2.1	50-150	

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LCSD Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCSD-99606	Instrument ID	10LCMS02
Run File Name	B220707A_011	Column ID	1071B00011
Analyzed	07/07/2022 15:55	Ical ID	220629A02
Injected By	NH	Level	L

Injection Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
13C2_PFHxA	N/A	N/A	5.78	5.81	1701	
13C4_PFOA	N/A	N/A	7.15	7.17	2118	
13C2_PFDA	N/A	N/A	8.54	8.54	2087	
13C4_PFOS	N/A	N/A	9.03	9.01	2640	

Extracted Internal Standards

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
13C4_PFBA	N/A	N/A	4.30	4.32	2716	
13C5_PFPeA	N/A	N/A	5.10	5.12	1827	
13C3_PFBS	N/A	N/A	6.04	6.06	1750	
13C2_4:2FTS	N/A	N/A	5.49	5.52	636	
13C5_PFHxA	N/A	N/A	5.78	5.81	1744	
13C4_PFHpA	N/A	N/A	6.47	6.49	1909	
13C3_PFHxS	N/A	N/A	7.57	7.59	1947	
13C2_6:2FTS	N/A	N/A	6.80	6.82	1714	
13C8_PFOA	N/A	N/A	7.15	7.17	2540	
13C9_PFNA	N/A	N/A	7.84	7.85	2449	
13C8_PFOS	N/A	N/A	9.03	9.01	139814	
13C2_8:2FTS	N/A	N/A	8.14	8.15	52694	
13C6_PFDA	N/A	N/A	8.54	8.54	1808	
d3-MeFOSAA	N/A	N/A	8.41	8.40	1479	
13C8_PFOSA	N/A	N/A	10.84	10.77	1416	R
d5-EtFOSAA	N/A	N/A	8.72	8.71	950	
13C7_PFUdA	N/A	N/A	9.24	9.22	3563	
13C2_PFDoA	N/A	N/A	9.94	9.90	1308	
13C2_PFTeDA	N/A	N/A	11.27	11.21	1861	
13C3_HFPO-DA	N/A	N/A	6.06	6.09	1314	
d7-N-MeFOSE	N/A	N/A	12.53	12.49	160	R
d9-N-EtFOSE	N/A	N/A	12.99	12.96	148	R
d3-N-MeFOSA	N/A	N/A	12.77	12.70	7	R
d5-N-EtFOSA	N/A	N/A	0.00	13.11	ND	R

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LCSD Analysis Summary

PFAS by Isotope Dilution

Lab Sample ID	LCSD-99606	Instrument ID	10LCMS02
Run File Name	B220707A_011	Column ID	1071B00011
Analyzed	07/07/2022 15:55	Ical ID	220629A02
Injected By	NH	Level	L

Native Analytes

Compound	Ion Abund. Ratio	Reference Ratio	Retention Time	Reference Time	Signal to Noise	Qualifiers
PFBA	N/A	N/A	4.31	4.33	125	
PFPeA	N/A	N/A	5.10	5.12	434	
HFPO-DA	0.28	0.30	6.07	6.10	744	
PFBS	0.42	0.40	6.04	6.07	1263	
PFHxA	0.07	0.08	5.79	5.82	260	
4:2 FTS	0.98	0.92	5.50	5.53	2171	
PFPeS	0.43	0.43	6.83	6.86	1385	
PFHpA	0.30	0.30	6.47	6.50	18	
DONA	0.54	0.57	6.72	6.75	1403	
PFHxS	0.36	0.37	7.58	7.60	1772	
PFOA	0.36	0.39	7.16	7.18	256	
6:2 FTS	0.84	0.87	6.80	6.82	435	
PFHpS	0.40	0.38	8.32	8.32	1870	
PFNA	0.14	0.15	7.85	7.86	540	
PFOSAm	N/A	N/A	10.84	10.78	433	
PFOS	0.41	0.40	9.04	9.03	436	
MeFOSA	0.00	0.56	0.00	12.73	ND	R
PFDA	0.17	0.19	8.55	8.58	286	
EtFOSAm	0.00	0.61	0.00	13.10	ND	R
8:2 FTS	0.90	1.10	8.15	8.15	4753	
9-Cl-PF3ON	0.07	0.05	9.56	9.52	1313	
PFNS	0.51	0.47	9.75	9.74	1364	
PFUnDA	0.16	0.13	9.25	9.22	432	
NMeFOSAA	0.90	0.76	8.41	8.41	9516	
NEtFOSAA	0.66	0.72	8.73	8.72	320	
PFDS	0.35	0.32	10.42	10.41	1338	
PFDOA	0.18	0.19	9.94	9.92	345	
MeFOSE	N/A	N/A	12.58	12.52	98	
EtFOSE	0.00	0.00	13.03	12.99	54	
11-Cl-PF3OUdS	0.02	0.02	10.90	10.87	719	
PFTrDA	0.14	0.16	10.62	10.59	337	
PFDoS	0.45	0.46	11.67	11.61	4012	
PFTDA	0.24	0.24	11.27	11.21	302	

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