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October 12, 2022

Mr. Riley Neumann
Wisconsin Department of Natural Resources
2300 North Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212-3128

Re: *Emerging Contaminant Evaluation Report Second Addendum*
BRRTS #: 02-41-576336 & 02-41-579429
FID #: 241828620
Sunrise Shopping Center
2410-2424 10th Avenue & 1009 Marquette Avenue
South Milwaukee, Wisconsin 53172

Mr. Neumann:

This submission is in response to the Wisconsin Department of Natural Resources (WDNR) November 23, 2020 request for evaluation of potential subsurface impacts from emerging contaminants at the Sunrise Shopping Center facility (Site), including evaluation of per- and polyfluoroalkyl substances (PFAS). The requested sampling and evaluation were conducted and the most recent report summarizing the groundwater sampling results was submitted on October 18, 2021. Upon review of that report, the WDNR requested an additional round of PFAS sampling. The results of the additional round of sampling, together with all previous PFAS sampling is provided in the attached report.

If you have any questions or require additional information, please contact me at (847) 996-3580. Thank you for your time.

Sincerely,
DAI Environmental, Inc.

A handwritten signature in blue ink that reads "Christopher Cailles".
Christopher Cailles, P.E.
Project Engineer

Enclosure



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**EMERGING CONTAMINANT EVALUATION REPORT SECOND ADDENDUM
SUNRISE SHOPPING CENTER
2410-2424 10TH AVENUE & 1009 MARQUETTE AVENUE
SOUTH MILWAUKEE, WISCONSIN 53172
WDNR BRRTS ACTIVITY #02-41-576336 & 02-41-579429
WDNR FID #241828620**

October 12, 2022

DAI Project Number: 6255

**Prepared For:
Carol Investment Corporation
1410 South Clinton Street
Chicago, IL 60607**

**Prepared By:
DAI Environmental, Inc.
27834 North Irma Lee Circle
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1.0 SUMMARY OF PREVIOUS EMERGING CONTAMINANT INVESTIGATIONS

In a letter dated November 23, 2020, the Wisconsin Department of Natural Resources (WDNR) requested an evaluation of potential subsurface impacts from emerging contaminants at the Sunrise Shopping Center facility (Site), including evaluation of per- and polyfluoroalkyl substances (PFAS). Sampling for PFAS in groundwater was initially performed in March 2021 at MW-3 and MW-5, followed by sampling of all six (6) of the existing on-site monitoring wells in August 2021. Sampling of the Ace Hardware sump water treatment system was also performed in August 2021.

The results of the August 2021 sampling identified 15 PFAS constituents in the groundwater samples. PFAS concentrations were observed in all monitoring wells, with the highest contaminant concentrations observed in monitoring well MW-4, and the least impacted groundwater monitoring well was MW-201. Two (2) PFAS constituents were observed at concentrations above the recommended Preventative Action Limits (PALs) in five (5) of the six (6) monitoring wells sampled. The combined concentrations of two (2) or more PFAS constituents were observed at levels above the Enforcement Standard in monitoring wells MW-1 to MW-5, and above the PAL in MW-201. The combined concentrations of two (2) PFAS constituents were observed in the sump water sample above the PAL. However the sump water is treated using activated carbon prior to discharge, and the post-treatment effluent sample results showed no detectable concentrations. Therefore, there is no discharge of any emerging contaminant into the City of South Milwaukee's stormwater sewer system.

After reviewing the August 2021 sampling data, WDNR responded that additional information would need to be provided to demonstrate that the Site was not the source of the PFAS contamination. Therefore, four (4) additional monitoring wells (MW-600 to MW-603) were installed in January 2022 and then sampled in February 2022. A re-sample of monitoring well MW-4 was also completed during the February 2022 sampling. The February 2002 sampling indicated that no PFAS constituents were reported at concentrations above the Preventative Actions Limits (PALs) in MW-600 to MW-602. Conversely, the most up-gradient monitoring well installed on-site (MW-603) had the highest PFAS concentrations anywhere on-site. The data from

MW-603 and the distribution of PFAS concentrations across the Site indicate that the source of PFAS groundwater contamination is from an up-gradient, off-site source.

2.0 ADDITIONAL EMERGING CONTAMINANT INVESTIGATIONS

Upon review of the February 2022 data WDNR requested that at least one (1) additional, complete round of PFAS groundwater sampling be performed prior to submitting a Case Closure Report and Request for Case Closure. A discussion of the methodology and results of the fourth round of PFAS groundwater sampling, performed in August 2022, is provided below.

2.1 STATIC GROUNDWATER ELEVATIONS

Prior to beginning the August 2022 PFAS sampling, a complete round of static water level measurements were recorded using an electronic water level indicator capable of detecting water depth with an accuracy of ± 0.01 ft. The groundwater elevation was measured from the top of the well casing. Because a national geodetic survey datum was not able to be identified, the monitoring wells were surveyed to a generic on-site datum with assumed elevation of 100-ft. All static water level measurements are referenced to the monitoring well elevation survey completed on February 1, 2022.

2.2 MONITORING WELL DEVELOPMENT AND SAMPLING PROCEDURES

Consistent with past sampling rounds and as more fully described in the *Emerging Contaminant Evaluation Report Amendment* dated October 18, 2021, low-flow purging and sampling protocol was followed during the August 2022 sampling event. All existing monitoring wells (MW-1 to MW-5, MW-201, and MW-600 to MW-603) were included in this fourth sampling round. Copies of the low-flow sampling field sheets with the multi-parameter data collected for monitoring for groundwater stability prior to sample collection are included Appendix C.1.G.

Once purging of the monitoring wells was complete and stable groundwater quality parameters were recorded, the low-flow sampler was used to collect the groundwater samples. To collect the groundwater samples, the tubing was disconnected from the multi-parameter flow-through measurement chamber, and groundwater was dispensed directly from low-flow pump tubing into 250-mL unpreserved plastic containers that were obtained from the laboratory. The only exception to the low-flow sampling methodology was for the collection of groundwater from MW-3. As noted in previous sampling events, the use of a peristaltic pump was required to sample MW-3

since this monitoring well has a damaged riser pipe that prevents the insertion of the low-flow pump. The peristaltic pump was operated as close to a low-flow sampling unit as possible.

New disposable nitrile gloves were used to collect each sample to limit cross contamination. The samples were stored on ice immediately after collection and were maintained at a temperature of 4°C or lower via a cooler with ice before being transferred to a refrigerator. Ice packs were not used per the published recommendations indicating a potential for PFAS contamination from the ice packs. The samples were stored in the refrigerator until picked up by the laboratory courier. The courier transported the samples to Pace Analytical Services, LLC (Pace Analytical) of Green Bay, Wisconsin, an independent commercial Wisconsin certified analytical laboratory following standard chain-of-custody procedures. Pace Analytical subsequently transferred the samples to an affiliate laboratory in Baton Rouge, Louisiana, where the groundwater samples were analyzed for PFAS (Wisconsin 33 list per March 1, 2021) via PFAS by EPA 537 Modified.

3.0 GROUNDWATER ANALYTICAL RESULTS

3.1 STATIC GROUNDWATER ELEVATIONS

Static water elevations were collected from all existing monitoring wells on August 2, 2022, prior to beginning the PFAS sampling event. Table A.6 in Attachment A provides a historical summary of quarterly groundwater elevation measurements.

Prior to installation of the 600-series monitoring wells, the consistently observed groundwater flow direction across the Site was northwesterly along the southern half of the Site and north-northeasterly along the northern half of the Site. However, with the addition of the 600-series monitoring wells and the exclusion of MW-1 and MW-3, which are influenced by large areas of backfill, a more east-northeasterly groundwater flow direction has been observed. The potentiometric surface map generated from the August 2, 2022, data is included as Figure B.3.c.23 (see Attachment B). Additionally provided are the three (3) previous potentiometric surface maps from January 2022 (Figure B.3.c.20), February 2022 (Figure B.3.c.21), and April 2022 data (B.3.c.22). The east-northeasterly groundwater flow direction can be observed in each of the four (4) potentiometric surface maps provided in Attachment B.

3.2 GROUNDWATER SAMPLE ANALYTICAL RESULTS

Table A.1.D (see Appendix A) provides a summary of the PFAS analytical results in comparison to the PALs and Enforcement Standards presently recommended for addition to NR 140. The table includes a historical summary of all results of PFAS sampling. The results of each of the four (4) sampling events are included as Figures B.3.b.3a to B.3.b.3d. Figure B.3.b.3e provides a summary of all PFAS results from 2021-2022. Copies of the laboratory analytical reports from the August 2022 sampling is provided in this report as Appendix C.1.E.

As noted from Table A.1.D, 15 of 33 constituents on the WDNR PFAS List have been reported by the laboratory at concentrations above the Limit of Detection (LOD) on at least one (1) occasion during the four (4) rounds of sampling. All other constituents have been reported below the Limit of Quantification (LOQ) during each of the three (3) rounds of sampling. The observed PFAS constituents include:

PFAS with Detectable Concentrations

- Perfluorobutanoic acid (PFBA)
- Perfluoropentanoic acid (PFPeA)
- Perfluorohexanoic acid (PFHxA)
- Perfluoroheptanoic acid (PFHpA)
- Perfluorononanoic acid (PFNA)
- Perfluorodecanoic acid (PFDA)
- Perfluorobutanesulfonic acid (PFBS)
- Perfluoropentanesulfonic acid (PFPeS)
- Perfluorohexanesulfonic acid (PFHxS)
- Perfluoroheptanesulfonic acid (PFHpS)
- 6:2 Fluorotelomersulfonic acid (6:2 FTS)
- Perfluorooctanoic acid (PFOA)*
- Perfluorooctanesulfonic acid (PFOS)*
- Perfluorooctane sulfonamide (PFOSA)*
- N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)*

* – One (1) of six (6) PFAS constituents included in the cumulative concentration objective.

Most of the observed concentrations of the above-listed PFAS constituents were reported below the recommended PALs, or are listed constituents with no recommended PAL. Only two (2) individual PFAS constituents have been reported at concentrations above the PAL: PFNA and PFHxS. In addition to the individual PFAS constituents, the cumulative PFAS concentration for one (1) or more of PFOA, PFOS, PFOSA, and NEtFOSAA have been observed at concentrations above the Enforcement Standard or the PAL. (The other two (2) PFAS constituents that are included in the cumulative PFAS concentration were reported below the LOQ in all wells during each sampling event.) The PFAS concentrations have decreased from 2021 to 2022, with the exception of MW-603 (the most upgradient monitoring well), which indicated concentrations marginally higher in August 2022 than measured in February 2022. A more detailed evaluation of PFAS concentrations by monitoring well is provided below and the monitoring well locations and PFAS concentrations are provided in Figures B.3.b.3a through B.3.b.3e.

MW-603

Monitoring well MW-603 (nearest the southwest property corner) is the most up-gradient well and indicates the highest concentrations of PFAS constituents. Exceedances of the PALs were observed for PFNA and PFHxS in both February and August 2022, and the Enforcement Standard

for cumulative PFAS concentration (PFOA and PFOS) was exceeded in both February and August 2022. The observed PFAS concentrations in August 2022 were marginally higher than the concentrations, but generally comparable to those observed in February 2022.

MW-4

Monitoring well MW-4 is located to the north of monitoring well MW-603 and is cross-gradient to slightly downgradient of MW-603 based upon the observed groundwater elevations. The second highest concentrations of PFAS constituents have been observed in MW-4. Concentrations of PFNA and PFHxS exceeding the PALs were observed in both August 2021 and February 2022. Only PFHxS exceeded the PAL in the August 2022 sampling; the PFNA concentration was reported below the LOD. The Enforcement Standard for cumulative PFAS concentration (PFOA and PFOS) was exceeded during each of the three (3) sampling events. However, all PFAS concentrations in MW-4 have been declining, with the August 2022 results the lowest observed since beginning PFAS sampling. The most recent PFHxS concentration is only 0.01-ng/L above the PAL, and the cumulative PFAS concentration of PFOA and PFOS is only marginally above the 20-ng/L Enforcement Standard.

Monitoring Wells MW-5, MW-201, MW-2, and MW-600

Based upon the east-northeasterly groundwater flow direction, the monitoring wells downgradient of MW-4 in order are 1) MW-5; 2) MW-201 and MW-2; and 3) MW-600. Similar to MW-4, concentrations in MW-5, MW-201, and MW-2 have all decreased, with the August 2022 results being the lowest observed thus far. PFNA has only been observed at a concentration above the LOD once in MW-5, and this concentration was below the PAL. PFHxS concentrations above the PAL have only been observed in MW-5 and MW-2, with the most recent concentrations marginally above the PAL at 4.19-ng/L and 7.14-ng/L. No exceedances of the PAL for PFHxS have been reported in MW-201. The cumulative PFAS concentrations in MW-5 exceeded the Enforcement Standard in March 2021 and August 2021, and MW-2 exceeded the Enforcement Standard in August 2021. However the cumulative PFAS concentrations in all three (3) monitoring wells (MW-201, MW-5 and MW-2) had decreased to below the Enforcement Standard by August 2022. No detectable concentrations have been observed in MW-600, the most downgradient monitoring well, during either the February or August 2022 sampling events.

Monitoring Wells MW-1, MW-3, MW-601, and MW-602

Four (4) monitoring wells (MW-1, MW-3, MW-601, and MW-602) are located downgradient of MW-4 and MW-603 based upon the more easterly groundwater flow direction on the southern portion of the Site. MW-1 and MW3 are located in areas of known fill, while the other two (2) monitoring wells were installed in stratigraphy more consistent with Site-wide conditions (MW-601 and MW-602). Only PFOA was reported previously at a concentration above the LOQ in either MW-601 or MW-602, and no PFAS constituents were reported above the LOQ in the most recent samples collected in August 2022. The PFAS contamination in both MW-1 and MW-3 have declined from 2021 to 2022. The most recent sampling results in August 2022 indicate PFNA below the LOQ and low-level PAL exceedances for PFHxS and cumulative PFAS (PFOS only). MW-1 is observed with nearly similar concentrations as those reported in MW-3, with PAL exceedances for PFHxS and cumulative PFAS (PFOA and PFOS).

4.0 SUMMARY AND CONCLUSIONS

As directed in the WDNR letter dated November 23, 2020, an evaluation of potential emerging contaminants has been completed for the Sunrise Shopping Center Site. During the preliminary sampling performed in March 2021, groundwater contamination for PFAS was observed. Subsequently, three (3) additional rounds of PFAS sampling have been performed (August 2021, February 2022, and August 2022) to better evaluate the potential source and extent of PFAS contamination, as well as establish any trends in the on-site groundwater PFAS concentrations.

Based upon evaluation of the four (4) rounds of PFAS groundwater sampling, together with a review of historical property records, PFAS contamination appears to be the result of an off-site source migrating onto the Sunrise Shopping Center Site. This finding is supported by both the lack of any evidence of an on-site source, and more importantly from the results of the groundwater sampling which show the highest PFAS concentration occurring at the furthest upgradient corner of the Site. While the exact source of the PFAS contamination cannot be determined from the available data, it is noted that the area upgradient of the Site was previously used for industrial operations.

In addition to the source of the contamination being from an off-site location, the most recent data document that the on-site PFAS contamination is declining in concentration. The current trend in concentration with time suggest that the PFAS contamination observed on-site will attenuate to concentrations below the PALs. Therefore, DAI believes that with this report and findings, the current Responsible Party (and property owner) has met the obligations of WDNR's December 9, 2021, request to evaluate emerging contaminants of concern.

As part of the closure request for the Sunrise Shopping Center, a restriction from utilizing the groundwater for potable needs will be applied to the Site. The elimination of the groundwater ingestion route of exposure will prevent human exposure to the PFAS contamination, as well as eliminate exceedances of the PALs and Enforcement Standards for other contaminants of concern at the Site (i.e., Perc and Polynuclear Aromatic Hydrocarbons). Having completed an evaluation

of emerging contaminants of concern, the Responsible Party is requesting WDNR to allow for the preparation of a Case Closure Report and request for Case Closure of the Site.

APPENDIX A

TABLES

**Table A.1.D. Groundwater Analytical Table for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)				PAL ¹	ES ²
	MW-1 (08/04/21)	MW-1 (08/03/22)	MW-2 (08/04/21)	MW-2 (08/03/22)		
Perfluorobutanoic acid (PFBA)	11	4.67	13	7.87	2,000	10,000
Perfluoropentanoic acid (PFPeA)	8.3	3.67	17	14.4	NL	NL
Perfluorohexanoic acid (PFHxA)	7.6	3.73	9.4	5.48	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	5.9	3.7	4.1	2.02	NL	NL
Perfluorononanoic acid (PFNA)	0.82 (J)	<0.494	<0.39	<0.49	3	30
Perfluorodecanoic acid (PFDA)	<0.44	<0.726	<0.44	<0.72	60	300
Perfluoroundecanoic acid (PFUnA)	<0.52	<0.625	<0.53	<0.62	600	3,000
Perfluorododecanoic acid (PFDa)	<0.39	<0.655	<0.4	<0.65	100	500
Perfluorotridecanoic acid (PFTriA)	<0.44	<0.62	<0.45	<0.615	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<0.5	<0.575	<0.5	<0.57	2,000	10,000
Perfluorobutanesulfonic acid (PFBS)	9	5.43	16	6.16	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	2.8 (J)	<0.514	6.7	3.25	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	11	7.21	14	7.14	4	40
Perfluoroheptanesulfonic acid (PFHpS)	<0.42	<0.615	<0.42	<0.61	NL	NL
Perfluorononanesulfonic acid (PFNs)	<0.6	<0.877	<0.6	<0.87	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<0.65	<0.615	<0.65	<0.61	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<0.87	<0.66	<0.88	<0.655	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<0.73	<0.625	<0.74	<0.62	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	1.7 (J)	2.41	3.6 (J)	<0.75	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<1.3	<0.534	<1.3	<0.53	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	<1.1	<0.837	<1.1	<0.83	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSAA)	<0.78	<0.454	<0.78	<0.45	NL	NL
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSE)	<1.1	<0.655	<1.1	<0.65	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<1.7	<3.36	<1.7	<3.34	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<0.4	<0.433	<0.41	<0.43	600	3,000
9-chlorohexamadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<0.4	<0.454	<0.41	<0.45	NL	NL
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.55	<0.454	<0.56	<0.45	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)				PAL ¹	ES ²
	MW-1 (08/04/21)	MW-1 (08/03/22)	MW-2 (08/04/21)	MW-2 (08/03/22)		
Perfluorooctanoic acid (PFOA)**	11	5.14	22	10.8	PAL ¹	ES ²
Perfluorooctanesulfonic acid (PFOS)**	9.6	10.2	14	3.66		
Perfluorooctane sulfonamide (PFOSA)**	<0.51	<0.373	0.84 (J)	<0.37		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<1.1	<0.706	<1.1	<0.7		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<0.63	<0.796	2.5 (J)	<0.79		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<0.8	<0.509	<0.8	<0.505		
TOTAL ³	20.6	15.34	39.34	14.46	2	20

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)			PAL ¹	ES ²
	MW-3 (03/11/21)	MW-3 (08/05/21)	MW-3 (08/05/22)		
Perfluorobutanoic acid (PFBA)	31 (EB)	17	<0.76	2,000	10,000
Perfluoropentanoic acid (PFPeA)	<3.5	20	3.69	NL	NL
Perfluorohexanoic acid (PFHxA)	<3.5	15	3.12	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	4.5 (EB)	25	<0.58	NL	NL
Perfluorononanoic acid (PFNA)	4.3	2.2 (J)	<0.49	3	30
Perfluorodecanoic acid (PFDA)	1.8 (J)	1 (J)	<0.72	60	300
Perfluoroundecanoic acid (PFUnA)	<3.5	<0.54	<0.62	600	3,000
Perfluorododecanoic acid (PFDoA)	<3.5	<0.41	<0.65	100	500
Perfluorotridecanoic acid (PFTriA)	<3.5	<0.46	<0.615	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<3.5	<0.55	<0.57	2,000	10,000
Perfluorobutanesulfonic acid (PFBS)	19	34	11.3	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	<3.5	<0.51	<0.51	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	<3.5	7.1	<0.62	4	40
Perfluoroheptanesulfonic acid (PFHpS)	<3.5	<0.43	<0.61	NL	NL
Perfluorononanesulfonic acid (PFNs)	<3.5	<0.61	<0.87	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<3.5	<0.67	<0.61	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<6.9	<0.9	<0.655	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<6.9	<0.75	<0.62	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	2.7 (J, FB)	<1.8	<0.75	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<6.9	<1.4	<0.53	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	<14	<1.1	<0.83	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSAA)	<6.9	<0.8	<0.45	NL	NL
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSE)	<6.9	<1.1	<0.65	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<6.9	<1.8	<3.34	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<6.9	<0.42	<0.43	600	3,000
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<6.9	<0.42	<0.45	NL	NL
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<6.9	<0.57	<0.45	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)			PAL ¹	ES ²
	MW-3 (03/11/21)	MW-3 (08/05/21)	MW-3 (08/05/22)		
Perfluorooctanoic acid (PFOA)**	12	9.6	<0.42		
Perfluorooctanesulfonic acid (PFOS)**	<3.5	29	10.1		
Perfluorooctane sulfonamide (PFOSA)**	47	4.2	<0.37		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<6.9	<1.2	<0.7	PAL ¹	ES ²
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<6.9	<0.65	<0.79		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<6.9	<0.82	<0.505		
TOTAL ³	59	42.8	10.1	2	20

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)			PAL ¹	ES ²
	MW-4 (08/05/21)	MW-4 (02/04/22)	MW-4 (08/05/22)		
Perfluorobutanoic acid (PFBA)	71	62	<0.742	2,000	10,000
Perfluoropentanoic acid (PFPeA)	33	35	21.1	NL	NL
Perfluorohexanoic acid (PFHxA)	20	17	6.98	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	13	12	4.33	NL	NL
Perfluorononanoic acid (PFNA)	4.4	3.4 (J)	<0.479	3	30
Perfluorodecanoic acid (PFDA)	3.5	2.1 (J)	<0.703	60	300
Perfluoroundecanoic acid (PFUnA)	<0.52	<0.6	<0.605	600	3,000
Perfluorododecanoic acid (PFDoA)	<0.39	<0.45	<0.635	100	500
Perfluorotridecanoic acid (PFTriA)	<0.44	<0.51	<0.601	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<0.53	<0.58	<0.557	2,000	10,000
Perfluorobutanesulfonic acid (PFBS)	71	74	19.9	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	1.8 (J)	3 (J)	<0.498	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	13	13	4.01	4	40
Perfluoroheptanesulfonic acid (PFHpS)	0.9 (J)	<0.48	<0.596	NL	NL
Perfluorononanesulfonic acid (PFNs)	<0.59	<0.68	<0.85	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<0.65	<0.75	<0.596	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<0.87	<1	<0.64	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<0.73	<0.84	<0.605	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	<1.3	<1.9	<0.732	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<1.3	<1.5	<0.518	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	<1	<1.2	<0.811	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSAA)	<0.77	<0.9	<0.439	NL	NL
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSE)	<1.1	<1.2	<0.635	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<1.7	<2	<3.26	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<0.4	<0.47	<0.42	600	3,000
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<0.4	<0.46	<0.439	NL	NL
11-chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.55	<0.64	<0.439	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)			PAL ¹	ES ²
	MW-4 (08/05/21)	MW-4 (02/04/22)	MW-4 (08/05/22)		
Perfluorooctanoic acid (PFOA)**	29	23	7.3		
Perfluorooctanesulfonic acid (PFOS)**	69	40	17.9		
Perfluorooctane sulfonamide (PFOSA)**	<0.51	<0.59	<0.361		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<1.1	<1.3	<0.684	PAL ¹	ES ²
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<0.62	<0.72	<0.771		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<0.79	<0.92	<0.493		
TOTAL ³	98	63	25.2	2	20

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)				PAL ¹	ES ²
	MW-5 (03/11/21)	MW-5 Dup (03/11/21)	MW-5 (08/05/21)	MW-5 (08/05/22)		
Perfluorobutanoic acid (PFBA)	11 (EB)	11 (EB)	26	6.33	2,000	10,000
Perfluoropentanoic acid (PFPeA)	12 (EB)	12 (EB)	18	9.58	NL	NL
Perfluorohexanoic acid (PFHxA)	8.6 (EB)	9.1 (EB)	13	7.7	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	5.9 (EB)	6.4 (EB)	8	3.98	NL	NL
Perfluorononanoic acid (PFNA)	<3.4	<3.4	0.97 (J)	<0.49	3	30
Perfluorodecanoic acid (PFDA)	<3.4	<3.4	<0.44	<0.72	60	300
Perfluoroundecanoic acid (PFUnA)	<3.4	<3.4	<0.52	<0.62	600	3,000
Perfluorododecanoic acid (PFDoA)	<3.4	<3.4	<0.39	<0.65	100	500
Perfluorotridecanoic acid (PFTriA)	<3.4	<3.4	<0.44	<0.615	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<3.4	<3.4	<0.5	<0.57	2,000	10,000
Perfluorobutanesulfonic acid (PFBS)	21	20	17	14.3	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	1.4 (J)	1.3 (J)	1.3 (J)	<0.51	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	5.2	5.9	6.1	4.19	4	40
Perfluoroheptanesulfonic acid (PFHpS)	<3.4	<3.4	<0.42	<0.61	NL	NL
Perfluorononanesulfonic acid (PFNs)	<3.4	<3.4	<0.6	<0.87	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<3.4	<3.4	<0.65	<0.61	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<6.7	<6.9	<0.87	<0.655	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<6.7	<6.9	<0.73	<0.62	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	<6.7	<6.9	<1.7	<0.75	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<6.7	<6.9	<1.3	<0.53	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	<13	<13	<1.1	<0.83	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSAA)	<6.7	<6.9	<0.78	<0.45	NL	NL
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSE)	<6.7	<6.9	<1.1	<0.65	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<6.7	<6.9	<1.7	<3.34	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<6.7	<6.9	<0.4	<0.43	600	3,000
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<6.7	<6.9	<0.4	<0.45	NL	NL
11-chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<6.7	<6.9	<0.55	<0.45	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)				PAL ¹	ES ²
	MW-5 (03/11/21)	MW-5 Dup (03/11/21)	MW-5 (08/05/21)	MW-5 (08/05/22)		
Perfluorooctanoic acid (PFOA)**	12	12	15	9.29		
Perfluorooctanesulfonic acid (PFOS)**	<3.4	<3.4	13	7.68		
Perfluorooctane sulfonamide (PFOSA)**	9.5	9.4	1.8 (J)	<0.37		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<6.7	<6.9	<1.1	<0.7	PAL ¹	ES ²
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<6.7	<6.9	<0.63	<0.79		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<6.7	<6.9	<0.8	<0.505		
TOTAL³	21.5	21.4	29.8	16.97	2	20

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)			PAL ¹	ES ²
	MW-201 (08/04/21)	MW-201 (08/03/22)	MW-201 (08/03/22) Re-extraction		
Perfluorobutanoic acid (PFBA)	1.6 (J)	<0.76	<0.772	2,000	10,000
Perfluoropentanoic acid (PFPeA)	6.1	2.24	<0.447	NL	NL
Perfluorohexanoic acid (PFHxA)	7.2	2.95	<0.478	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	5.3	2.91	<0.589	NL	NL
Perfluorononanoic acid (PFNA)	<0.38	<0.49	<0.498	3	30
Perfluorodecanoic acid (PFDA)	<0.44	<0.72	<0.732	60	300
Perfluoroundecanoic acid (PFUnA)	<0.52	<0.62	<0.63	600	3,000
Perfluorododecanoic acid (PFDmA)	<0.39	<0.65	<0.661	100	500
Perfluorotridecanoic acid (PFTriA)	<0.44	<0.615	<0.625	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<0.5	<0.57	<0.579	2,000	10,000
Perfluorobutanesulfonic acid (PBFS)	3.2 (J)	<0.31	<0.315	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	<0.49	<0.51	<0.518	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	0.95 (J)	<0.62	<0.63	4	40
Perfluoroheptanesulfonic acid (PFHpS)	<0.41	<0.61	<0.62	NL	NL
Perfluorononanesulfonic acid (PFNs)	<0.59	<0.87	<0.884	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<0.65	<0.61	<0.62	NL	NL
Perfluorododecanesulfonic acid (PFDmS)	<0.87	<0.655	<0.666	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<0.73	<0.62	<0.63	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	29	8.18	<0.762	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<1.3	<0.53	<0.539	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	<1	<0.83	<0.843	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSAA)	<0.77	<0.45	<0.457	NL	NL
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSE)	<1.1	<0.65	<0.661	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<1.7	<3.34	<3.39	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<0.4	<0.43	<0.437	600	3,000
9-chlorohexamadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<0.4	<0.45	<0.457	NL	NL
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.55	<0.45	<0.457	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)			PAL ¹	ES ²
	MW-201 (08/04/21)	MW-201 (08/03/22)	MW-201 (08/03/22) Re-extraction		
Perfluorooctanoic acid (PFOA)**	6.7	4.5	<0.427	PAL ¹	ES ²
Perfluorooctanesulfonic acid (PFOS)**	<1.7	<0.38	<0.386		
Perfluorooctane sulfonamide (PFOSA)**	<0.51	<0.37	<0.376		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<1.1	<0.7	<0.711		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<0.62	<0.79	<0.803		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<0.79	<0.505	<0.513		
TOTAL³	6.7	4.5	--	2	20

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)				PAL ¹	ES ²
	MW-600 (02/04/22)	MW-600 (08/04/22)	MW-601 (02/03/22)	MW-601 (08/03/22)		
Perfluorobutanoic acid (PFBA)	4.8	<0.772	5.4	3.6	2,000	10,000
Perfluoropentanoic acid (PFPeA)	0.47 (J)	<0.447	<0.48	<0.433	NL	NL
Perfluorohexanoic acid (PFHxA)	<0.58	<0.478	<0.61	2.64	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	<0.38	<0.589	<0.39	<0.571	NL	NL
Perfluorononanoic acid (PFNA)	<0.39	<0.498	<0.41	<0.482	3	30
Perfluorodecanoic acid (PFDA)	<0.44	<0.732	<0.46	<0.709	60	300
Perfluoroundecanoic acid (PFUnA)	<0.53	<0.63	<0.55	<0.61	600	3,000
Perfluorododecanoic acid (PFDoA)	<0.4	<0.661	<0.42	<0.64	100	500
Perfluorotridecanoic acid (PFTriA)	<0.45	<0.625	<0.47	<0.605	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<0.51	<0.579	<0.53	<0.561	2,000	10,000
Perfluorobutanesulfonic acid (PFBS)	<0.35	<0.315	<0.36	12	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	<0.5	<0.518	<0.52	<0.502	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	<0.47	<0.63	<0.49	<0.61	4	40
Perfluoroheptanesulfonic acid (PFHpS)	<0.42	<0.62	<0.44	<0.6	NL	NL
Perfluorononanesulfonic acid (PFNs)	<0.6	<0.884	<0.63	<0.856	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<0.66	<0.62	<0.68	<0.6	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<0.89	<0.666	<0.92	<0.645	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<0.74	<0.63	<0.77	<0.61	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	16	<0.762	2.9 (J)	<0.738	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<1.4	<0.539	<1.4	<0.522	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	<1.1	<0.843	<1.1	<0.817	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSAA)	<0.79	<0.457	<0.82	<0.443	NL	NL
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSE)	<1.1	<0.661	<1.1	<0.64	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<1.8	<3.39	<1.8	<3.28	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<0.41	<0.437	<0.43	<0.423	600	3,000
9-chlorohexamadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<0.41	<0.457	<0.42	<0.443	NL	NL
11-chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.56	<0.457	<0.58	<0.443	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

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Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)				PAL ¹	ES ²
	MW-600 (02/04/22)	MW-600 (08/04/22)	MW-601 (02/03/22)	MW-601 (08/03/22)		
Perfluorooctanoic acid (PFOA)**	<0.7	<0.427	<0.73	<0.413	PAL ¹	ES ²
Perfluorooctanesulfonic acid (PFOS)**	<1.7	<0.386	<1.8	<0.374		
Perfluorooctane sulfonamide (PFOSA)**	<0.52	<0.376	<0.54	<0.364		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<1.1	<0.711	<1.2	<0.689		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<0.64	<0.803	<0.66	<0.778		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<0.81	<0.513	<0.84	<0.497		
TOTAL ³	--	--	--	--	2	20

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)				PAL ¹	ES ²
	MW-602 (02/04/22)	MW-602 (08/04/22)	MW-603 (02/03/22)	MW-603 (08/05/22)		
Perfluorobutanoic acid (PFBA)	6.1	4.1	180	60.5	2,000	10,000
Perfluoropentanoic acid (PFPeA)	1.3 (J)	3.71	520	217	NL	NL
Perfluorohexanoic acid (PFHxA)	<0.58	<0.47	230	121	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	0.91 (J)	<0.58	100	78.6	NL	NL
Perfluorononanoic acid (PFNA)	<0.39	<0.49	7.8	10.6	3	30
Perfluorodecanoic acid (PFDA)	<0.44	<0.72	3.3 (J)	5.59	60	300
Perfluoroundecanoic acid (PFUnA)	<0.53	<0.62	<0.56	<0.62	600	3,000
Perfluorododecanoic acid (PFDoA)	<0.4	<0.65	<0.42	<0.65	100	500
Perfluorotridecanoic acid (PFTriA)	<0.45	<0.615	<0.47	<0.615	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<0.51	<0.57	<0.54	<0.57	2,000	10,000
Perfluorobutanesulfonic acid (PFBS)	3.0 (J)	10.5	150	111	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	<0.5	<0.51	4	3.87	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	<0.47	<0.62	23	28	4	40
Perfluoroheptanesulfonic acid (PFHpS)	<0.42	<0.61	1.8 (J)	2.57	NL	NL
Perfluorononanesulfonic acid (PFNs)	<0.6	<0.87	<0.64	<0.87	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<0.66	<0.61	<0.69	<0.61	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<0.88	<0.655	<0.93	<0.655	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<0.74	<0.62	<0.78	<0.62	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	<1.7	<0.75	2.9 (J)	<0.75	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<1.4	<0.53	<1.4	<0.53	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	<1.1	<0.83	<1.1	<0.83	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSAA)	<0.79	<0.45	<0.83	<0.45	NL	NL
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSE)	<1.1	<0.65	<1.1	<0.65	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<1.8	<3.34	<1.9	<3.34	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<0.41	<0.43	<0.43	<0.43	600	3,000
9-chlorohexamadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<0.41	<0.45	<0.43	<0.45	NL	NL
11-chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.56	<0.45	<0.59	<0.45	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)				PAL ¹	ES ²
	MW-602 (02/04/22)	MW-602 (08/04/22)	MW-603 (02/03/22)	MW-603 (08/05/22)		
Perfluorooctanoic acid (PFOA)**	0.78 (J)	<0.42	95	86.4	PAL ¹	ES ²
Perfluorooctanesulfonic acid (PFOS)**	<1.7	<0.38	59	93.4		
Perfluorooctane sulfonamide (PFOSA)**	<0.52	<0.37	<0.55	<0.37		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<1.1	<0.7	<1.2	<0.7		
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<0.63	<0.79	<0.67	<0.79		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<0.8	<0.505	<0.85	<0.505		
TOTAL ³	0.78	--	154	179.8		

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)			PAL ¹	ES ²
	Equipment Blank (03/11/21)	Equipment Blank (08/04/21)	Equipment Blank (08/05/22)		
Perfluorobutanoic acid (PFBA)	9.8 (B)	<0.42	<0.798	2,000	10,000
Perfluoropentanoic acid (PFPeA)	68	<0.56	<0.462	NL	NL
Perfluorohexanoic acid (PFHxA)	2.6 (J)	<0.7	<0.494	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	8.1	<0.46	<0.609	NL	NL
Perfluorononanoic acid (PFNA)	<3.4	<0.47	<0.515	3	30
Perfluorodecanoic acid (PFDA)	<3.4	<0.54	<0.756	60	300
Perfluoroundecanoic acid (PFUnA)	<3.4	<0.64	<0.651	600	3,000
Perfluorododecanoic acid (PFDoA)	<3.4	<0.48	<0.683	100	500
Perfluorotridecanoic acid (PTriA)	<3.4	<0.54	<0.646	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<3.4	<0.61	<0.599	2,000	10,000
Perfluorobutanesulfonic acid (PFBS)	<3.4	<0.61	<0.326	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	<3.4	<0.61	<0.536	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	<3.4	<0.57	<0.651	4	40
Perfluoroheptanesulfonic acid (PFHpS)	<3.4	<0.51	<0.641	NL	NL
Perfluorononanesulfonic acid (PFNs)	<3.4	<0.73	<0.914	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<3.4	<0.8	<0.641	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<6.7	<1.1	<0.688	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<6.7	<0.9	<0.651	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	<6.7	2.2 (J)	<0.788	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<6.7	<1.6	<0.557	NL	NL
N-Methyl perfluoroctane sulfonamide (NMeFOSA)	<13	<1.3	<0.872	NL	NL
N-Methyl perfluoroctane sulfonamide (NMeFOSAA)	<6.7	<0.96	<0.473	NL	NL
N-Methyl perfluoroctane sulfonamidoacetic acid (NMeFOSE)	<6.7	<1.3	<0.683	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<6.7	<2.1	<3.5	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<6.7	<0.5	<0.452	600	3,000
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<6.7	<0.49	<0.473	NL	NL
11-chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<6.7	<0.68	<0.473	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)			PAL ¹	ES ²
	Equipment Blank (03/11/21)	Equipment Blank (08/04/21)	Equipment Blank (08/05/22)		
Perfluorooctanoic acid (PFOA)**	<3.4	<0.85	<0.441		
Perfluorooctanesulfonic acid (PFOS)**	<3.4	<2.1	<0.399		
Perfluorooctane sulfonamide (PFOSA)**	<3.4	<0.63	<0.389		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<6.7	<1.4	<0.735	PAL ¹	ES ²
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<6.7	<0.77	<0.83		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<6.7	<0.98	<0.53		
TOTAL	--	--	--	2	20

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)		PAL ¹	ES ²
	Field Blank (03/11/21)	Field Blank (08/04/21)		
Perfluorobutanoic acid (PFBA)	<3.4	<0.45	2,000	10,000
Perfluoropentanoic acid (PFPeA)	<3.4	<0.59	NL	NL
Perfluorohexanoic acid (PFHxA)	<3.4	<0.74	30,000	150,000
Perfluoroheptanoic acid (PFHpA)	<3.4	<0.48	NL	NL
Perfluorononanoic acid (PFNA)	<3.4	<0.5	3	30
Perfluorodecanoic acid (PFDA)	<3.4	<0.57	60	300
Perfluoroundecanoic acid (PFUnA)	<3.4	<0.67	600	3,000
Perfluorododecanoic acid (PFDoA)	<3.4	<0.51	100	500
Perfluorotridecanoic acid (PFTriA)	<3.4	<0.57	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<3.4	<0.65	2,000	10,000
Perfluorobutanesulfonic acid (PFBS)	<3.4	<0.65	90,000	450,000
Perfluoropentanesulfonic acid (PFPeS)	<3.4	<0.64	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	<3.4	<0.59	4	40
Perfluoroheptanesulfonic acid (PFHpS)	<3.4	<0.54	NL	NL
Perfluorononanesulfonic acid (PFNs)	<3.4	<0.77	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<3.4	<0.84	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<6.8	<1.1	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<6.8	<0.94	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	2.2 (J)	<2.2	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<6.8	<1.7	NL	NL
N-Methyl perfluoroctane sulfonamide (NMeFOSA)	<14	<1.4	NL	NL
N-Methyl perfluoroctane sulfonamide (NMeFOSAA)	<6.8	<1.0	NL	NL
N-Methyl perfluoroctane sulfonamidoacetic acid (NMeFOSE)	<6.8	<1.4	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<6.8	<2.2	30	300
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<6.8	<0.52	600	3,000
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<6.8	<0.52	NL	NL
11-chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<6.8	<0.71	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)		PAL ¹	ES ²
	Field Blank (03/11/21)	Field Blank (08/04/21)		
Perfluorooctanoic acid (PFOA)**	<3.4	<0.89		
Perfluorooctanesulfonic acid (PFOS)**	<3.4	<2.2		
Perfluorooctane sulfonamide (PFOSA)**	<3.4	<0.66		
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)**	<6.8	<1.5	PAL ¹	ES ²
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)**	<6.8	<0.81		
N-Methyl perfluorooctane sulfonamidethanol (NEtFOSE)**	<6.8	<1		
TOTAL	--	--	2	20

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)		PAL ¹	ES ²
	Sump (08/04/21)	Effluent (08/05/21)		
Perfluorobutanoic acid (PFBA)	6.5	<0.35	(2,000)	(10,000)
Perfluoropentanoic acid (PFPeA)	8.2	<0.46	NL	NL
Perfluorohexanoic acid (PFHxA)	5.4	<0.58	(30,000)	(150,000)
Perfluoroheptanoic acid (PFHpA)	2.1 (J)	<0.38	NL	NL
Perfluorononanoic acid (PFNA)	0.45 (J)	<0.39	(3)	(30)
Perfluorodecanoic acid (PFDA)	<0.46	<0.44	(60)	(300)
Perfluoroundecanoic acid (PFUnA)	<0.55	<0.53	(600)	(3,000)
Perfluorododecanoic acid (PFDoA)	<0.41	<0.4	(100)	(500)
Perfluorotridecanoic acid (PFTriA)	<0.46	<0.44	NL	NL
Perfluorotetradecanoic acid (PFTeA)	<0.52	<0.5	(2,000)	(10,000)
Perfluorobutanesulfonic acid (PBFS)	13	<0.5	(90,000)	(450,000)
Perfluoropentanesulfonic acid (PFPeS)	1.1 (J)	<0.5	NL	NL
Perfluorohexanesulfonic acid (PFHxS)	3 (J)	<0.46	(4)	(40)
Perfluoroheptanesulfonic acid (PFHpS)	<0.44	<0.42	NL	NL
Perfluorononanesulfonic acid (PFNs)	<0.62	<0.6	NL	NL
Perfluorodecanesulfonic acid (PFDs)	<0.68	<0.65	NL	NL
Perfluorododecanesulfonic acid (PFDoS)	<0.91	<0.88	NL	NL
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	<0.76	<0.73	NL	NL
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	<1.7	<1.7	NL	NL
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	<1.4	<1.3	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	<1.1	<1.1	NL	NL
N-Methyl perfluorooctane sulfonamide (NMeFOSAA)	<0.81	<0.78	NL	NL
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSE)	<1.1	<1.1	NL	NL
Hexafluoropropylene oxide dimer acid (HFPO-DA)	<1.8	<1.7	(30)	(300)
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	<0.42	<0.41	(600)	(3,000)
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	<0.42	<0.4	NL	NL
11-chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUDs)	<0.58	<0.56	NL	NL

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

**Table A.1.D (Continued). Groundwater Analytical Table
for Emerging Contaminants (ng/L)
(Perfluoroalkyl and Polyfluoroalkyl Substances)**

Emerging Contaminants	Sample Location (Sample Date)		PAL ¹	ES ²
	Sump (08/04/21)	Effluent (08/05/21)		
Perfluorooctanoic acid (PFOA)**	4.8	<0.7		
Perfluorooctanesulfonic acid (PFOS)**	5.9	<1.7		
Perfluorooctane sulfonamide (PFOSA)**	<0.54	<0.51		
N-Ethyl perfluorooctane sulfonamide (N-EtFOSA)**	<1.2	<1.1	PAL ¹	ES ²
N-Ethyl perfluorooctane sulfonamidoacetic acid (N-EtFOSAA)**	<0.66	<0.63		
N-Methyl perfluorooctane sulfonamidethanol (N-EtFOSE)**	<0.83	<0.8		
TOTAL³	10.7	-- (<1.7)	(2)	(20)

¹ – Preventive Action Limits (PALs) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

² – Enforcement Standards (ES) taken from Wisconsin Administrative Code, Chapter NR 140, Table 1

³ – Total combined concentration of six (6) PFAS compared to the PAL and the ES

** – PFAS constituent included in the combined total compared to the PAL and the ES

-- – All PFAS constituents reported below limit of quantification; total concentration taken as highest “non-detect” concentration and listed in parentheses

NL – Not Listed in NR 140 or recommended for inclusion in NR 140

Bold – Concentration exceeds the PAL

Underlined – Concentration exceeds the PAL and the ES

(J) – Concentration reported by the laboratory above the Limit of Detection, but below the Limit of Quantification

(B) – Concentration of contaminant observed in the laboratory method blank sample

(EB) – Concentration of contaminant observed in the equipment blank sample

(FB) – Concentration of contaminant observed in the field blank sample

PFAS via PFAS by ID SOP or EPA Method 537 Modified

Table A.6. Water Level Elevations

Monitoring Well	Top of Casing Elevation*	Date	Measured Depth to Groundwater (ft)	Relative Groundwater Elevation (ft)	
MW-1	98.08 (2022 survey)	08/02/22	2.69	95.39	
		04/11/22	1.18	96.90	
		02/03/22	5.52	92.56	
		01/24/22	4.22	93.83	
	99.13 (2015 survey)	11/11/21	3.97	95.16	
		08/31/21	3.75	95.38	
		05/03/21	2.97	96.16	
		01/18/21	3.34	95.79	
		10/12/20	Obstructed		
		07/14/20	1.79	97.34	
		05/05/20	1.80	97.33	
		01/17/20	2.74	96.39	
		10/24/19	3.07	96.06	
		07/07/19	3.46	95.67	
		04/29/19	2.35	96.78	
		01/25/19	4.65	94.48	
		10/11/18	1.66	97.47	
		07/30/18	3.32	95.81	
		04/08/18	2.24	96.89	
		02/27/18	1.58	97.55	
MW-2	99.32 (2022 survey)	05/30/17	2.17	96.96	
		04/24/15	1.46	97.67	
		03/30/15	1.98	97.15	
		01/27/15	3.93	95.20	
	100.75 (2015 survey)	08/02/22	6.95	92.37	
		04/11/22	6.57	92.75	
		02/03/22	9.32	90.00	
		01/24/22	8.20	91.12	
		11/11/21	7.99	92.76	
		08/31/21	7.70	93.05	
		05/03/21	7.55	93.20	
		01/18/21	8.12	92.63	
		10/12/20	7.82	92.93	
		07/14/20	6.36	94.39	
		05/05/20	6.24	94.51	
		01/17/20	6.83	93.92	
		10/24/19	Obstructed		
		07/07/19	7.51	93.24	
		04/29/19	8.47	92.28	
		01/25/19	8.42	92.33	
		10/11/18	6.45	94.30	
		07/30/18	7.45	93.30	
		04/08/18	8.36	92.39	
		02/27/18	8.54	92.21	
		05/30/17	7.95	92.80	
		04/24/15	7.21	93.54	
		03/30/15	8.01	92.74	
		01/27/15	8.60	92.15	

Table A.6. Water Level Elevations

Monitoring Well	Top of Casing Elevation*	Date	Measured Depth to Groundwater (ft)	Relative Groundwater Elevation (ft)
MW-3	98.97 (2022 survey)	08/02/22	<1	≈98.97
		04/11/22	1.85	91.12
		02/03/22	5.20	93.77
		01/24/22	4.90	94.07
	100.05 (2015 survey)	11/11/21	4.12	95.93
		08/31/21	4.37	95.68
		05/03/21	3.45	96.60
		01/18/21	4.50	95.55
		10/12/20	4.25	95.80
		07/14/20	3.37	96.68
		05/05/20	2.27	97.78
		01/17/20	3.20	96.85
		10/24/19	3.61	96.44
		07/07/19	3.73	96.32
		04/29/19	2.61	97.44
		01/25/19	4.44	95.61
		10/11/18	2.35	97.70
		07/30/18	3.62	96.43
		04/08/18	2.53	97.52
		02/27/18	2.43	97.62
		05/30/17	2.45	97.60
		04/24/15	2.27	97.78
		03/30/15	2.73	97.32
		01/27/15	4.46	95.59
MW-4	99.75 (2022 survey)	08/02/22	5.75	94.00
		04/11/22	5.20	94.55
		02/03/22	8.86	90.89
		01/24/22	7.75	92.00
	100.57 (2015 survey)	11/11/21	6.78	93.79
		08/31/21	6.51	94.06
		05/03/21	6.19	94.38
		01/18/21	6.51	94.06
		10/12/20	6.65	93.92
		07/14/20	5.34	95.23
		05/05/20	5.07	95.50
		01/17/20	6.21	94.36
		10/24/19	6.14	94.43
		07/07/19	6.98	93.59
		04/29/19	7.30	93.27
		01/25/19	6.88	93.69
		10/11/18	5.43	95.14
		07/30/18	6.91	93.66
		04/08/18	7.26	93.31
		02/27/18	7.23	93.34
		05/30/17	6.38	94.19
		04/24/15	5.94	94.63
		03/30/15	7.04	93.53
		01/27/15	6.53	94.04

Table A.6. Water Level Elevations

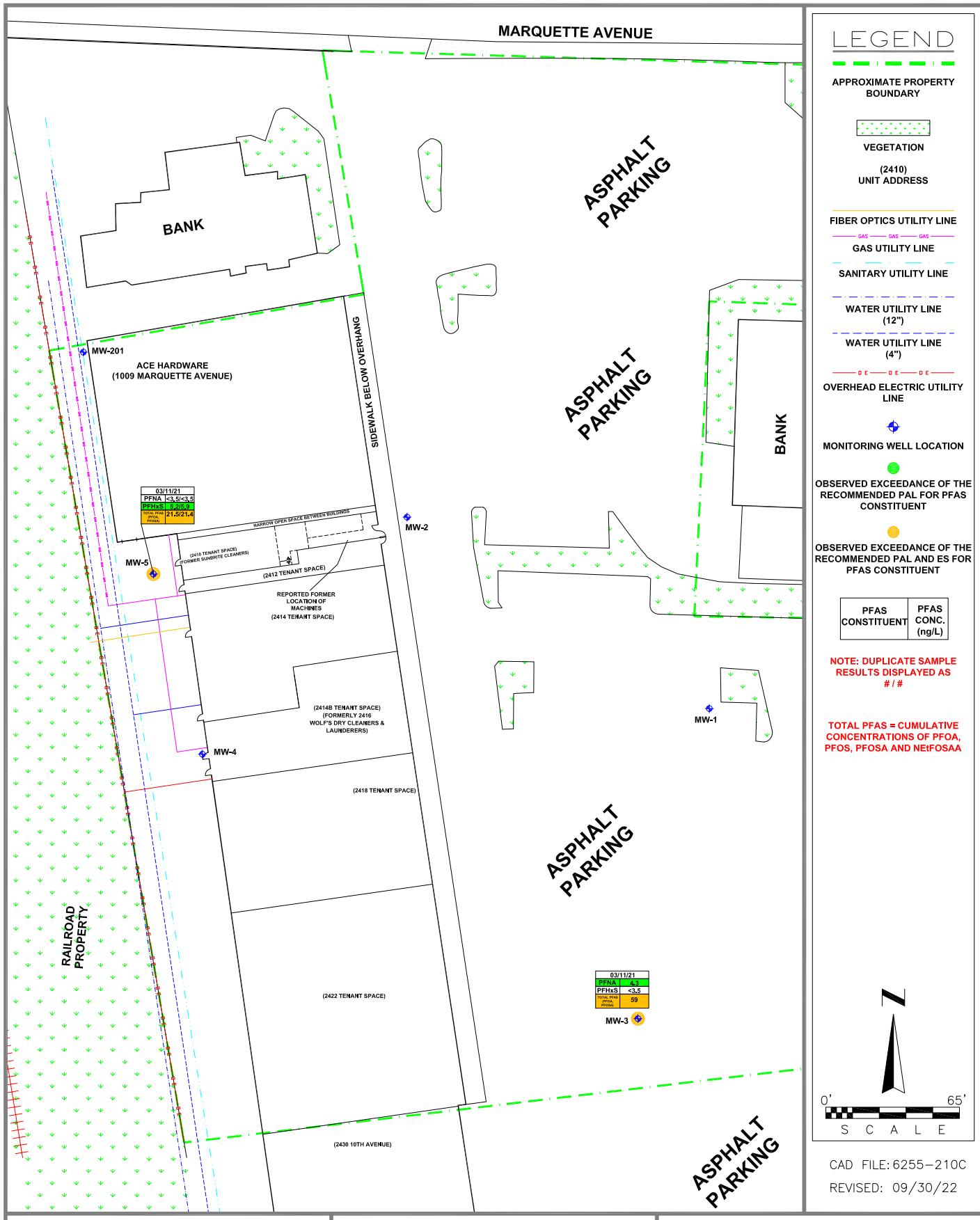
Monitoring Well	Top of Casing Elevation*	Date	Measured Depth to Groundwater (ft)	Relative Groundwater Elevation (ft)
MW-5	99.36 (2022 survey)	08/02/22	6.24	93.12
		04/11/22	5.96	93.40
		02/03/22	7.42	91.94
		01/24/22	7.13	92.23
	100.24 (2015 survey)	11/11/21	6.69	93.55
		08/31/21	6.48	93.76
		05/03/21	6.25	93.99
		01/18/21	5.90	94.34
		10/12/20	6.30	93.94
		07/14/20	5.84	94.39
		05/05/20	5.83	94.41
		01/17/20	5.87	94.37
		10/24/19	5.98	94.26
		07/07/19	6.25	93.99
		04/29/19	6.33	93.91
		01/25/19	6.35	93.89
		10/11/18	5.85	94.39
		07/30/18	6.19	94.05
		04/08/18	6.27	93.97
		02/27/18	6.15	94.09
		05/30/17	5.96	94.28
		04/24/15	5.92	94.32
		03/30/15	6.26	93.98
		01/27/15	6.50	93.74
MW-201	99.43 (2022 survey)	08/02/22	7.45	91.98
		04/11/22	6.48	92.96
		02/03/22	8.67	90.76
		01/24/22	8.48	90.95
	100.10 (2015 survey)	11/11/21	8.12	91.98
		08/31/21	7.78	92.32
		05/03/21	7.56	92.54
		01/18/21	8.24	91.86
		10/12/20	7.95	92.15
		07/14/20	7.11	92.29
		05/05/20	6.44	93.66
		01/17/20	7.00	93.10
		10/24/19	6.57	93.53
		07/07/19	6.72	93.38
		04/29/19	6.82	93.28
		01/25/19	6.88	93.22
		10/11/18	6.22	93.88
		07/30/18	6.69	93.41
		04/08/18	6.79	93.34
		02/27/18	6.46	93.64
		05/30/17	6.26	93.84
		04/24/15	5.91	94.19
		03/30/15	6.28	93.82
		01/27/15	Not Installed	Not Installed

Table A.6. Water Level Elevations

Monitoring Well	Top of Casing Elevation*	Date	Measured Depth to Groundwater (ft)	Relative Groundwater Elevation (ft)
MW-600	97.72 (2022 survey)	08/02/22	8.76	88.96
		04/11/22	Inaccessible	--
		02/03/22	9.60	88.12
		01/24/22	8.80	88.92
MW-601	98.11 (2022 survey)	08/02/22	9.09	89.02
		04/11/22	9.27	88.84
		02/03/22	10.41	87.70
		01/24/22	10.12	87.99
MW-602	99.18 (2022 survey)	08/02/22	9.22	89.96
		04/11/22	8.36	90.82
		02/03/22	10.30	88.88
		01/24/22	10.21	88.97
MW-603	99.52 (2022 survey)	08/02/22	5.52	94.00
		04/11/22	5.14	94.38
		02/03/22	6.54	92.98
		01/24/22	6.42	93.10

* – Relative Elevation compared to a generic 100-ft on-site datum. Static water level measurements collected prior to 2022 compared to survey data from on January 27 and March 30, 2015. Static water level measurements collected beginning in January 2022 compared to a complete resurvey performed on February 1, 2022.

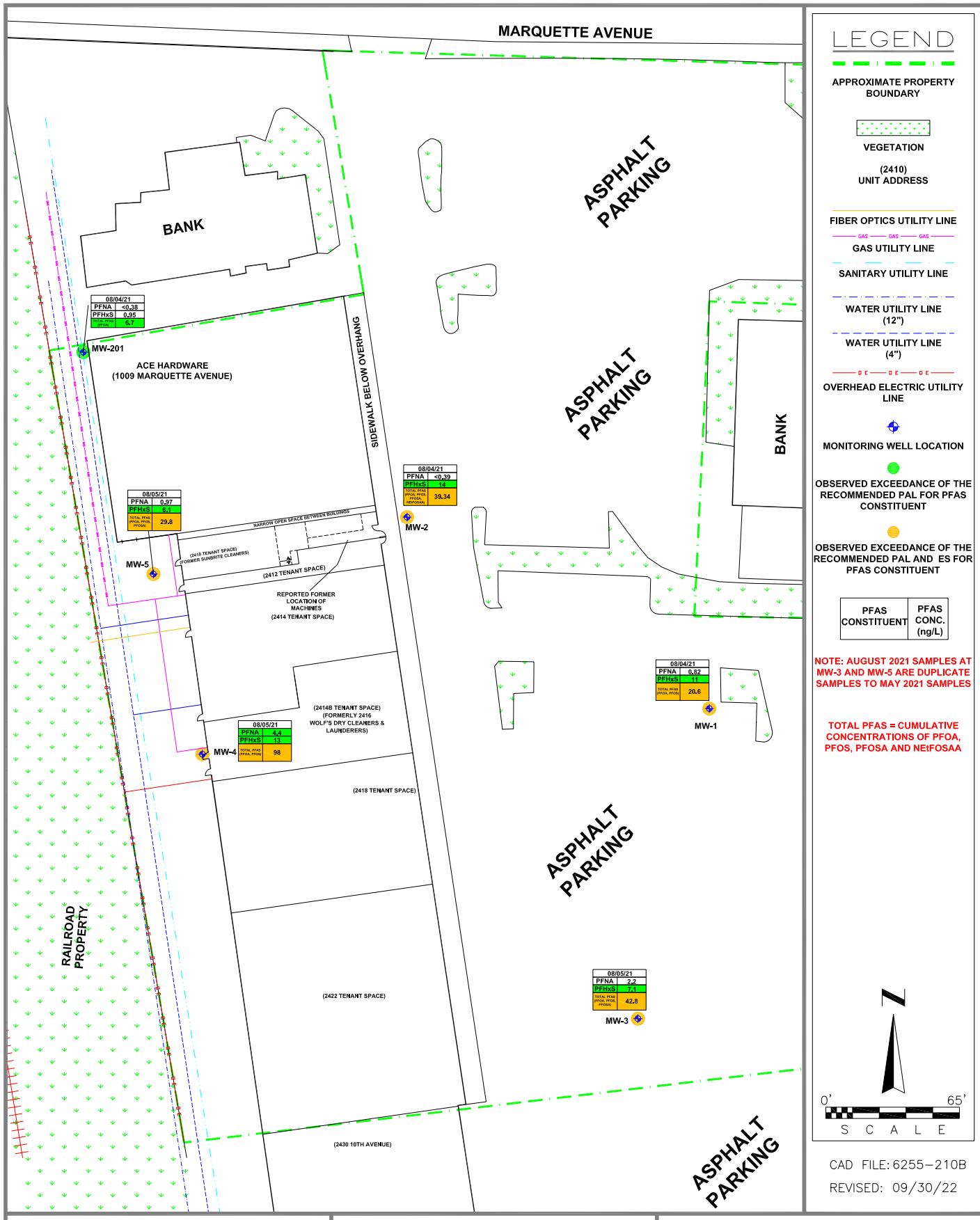
APPENDIX B FIGURES

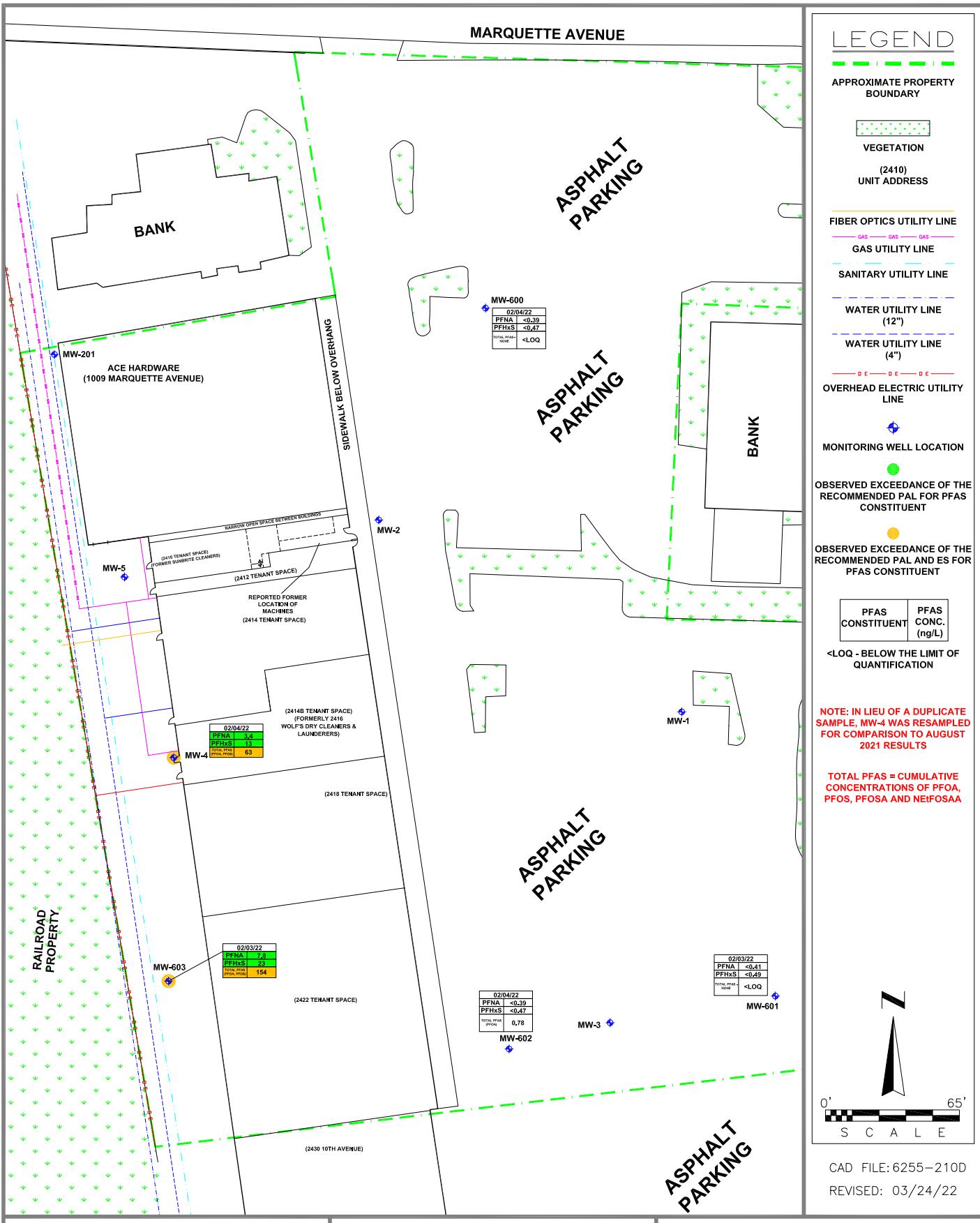


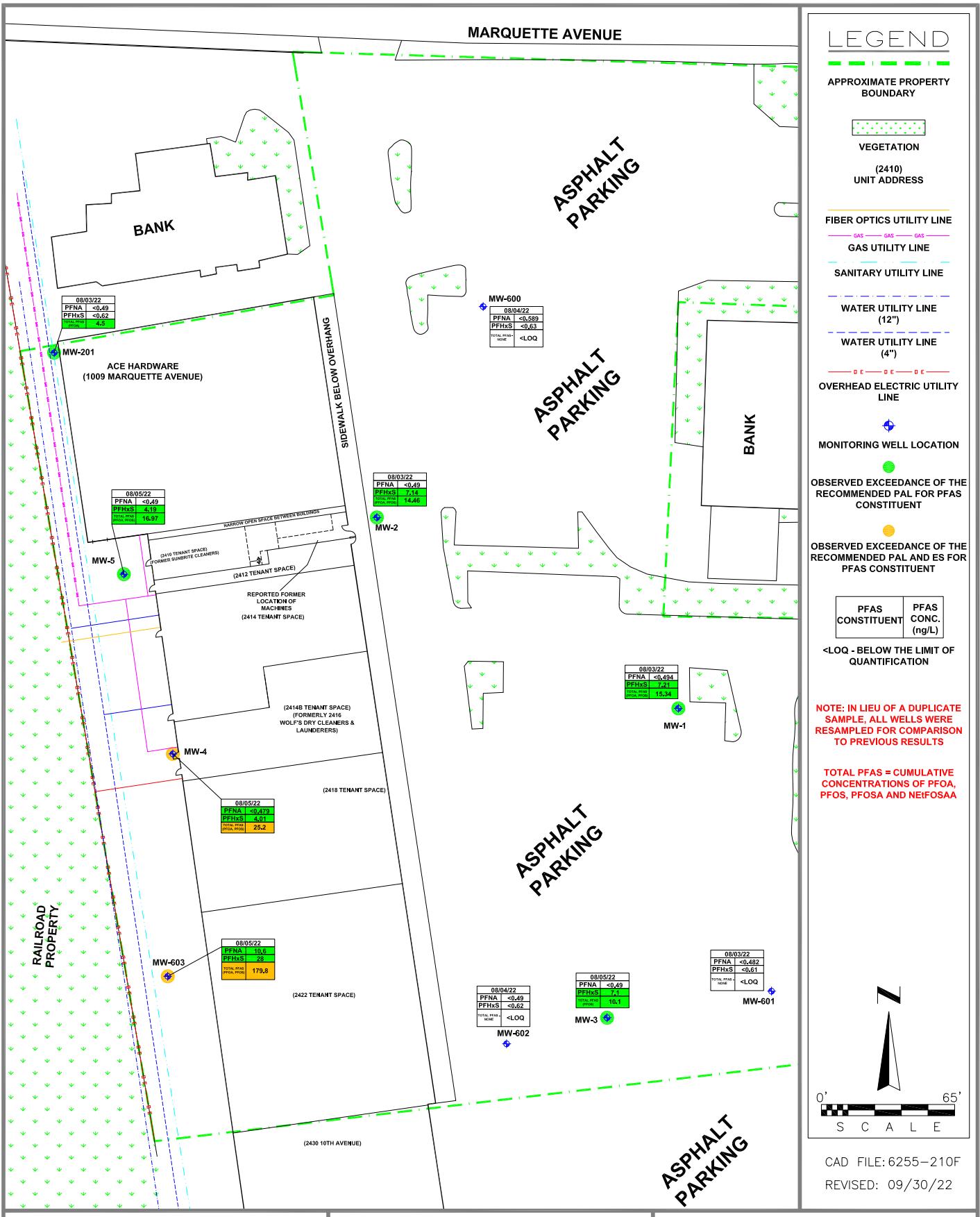
DAM
ENVIRONMENTAL

SUNRISE SHOPPING CENTER
2410-2424 10TH AVENUE
1009 MARQUETTE AVENUE
SOUTH MILWAUKEE, WISCONSIN

FIGURE B.3.b.3a
GROUNDWATER
ISOCONCENTRATION
(PFAS - MAY 2021)



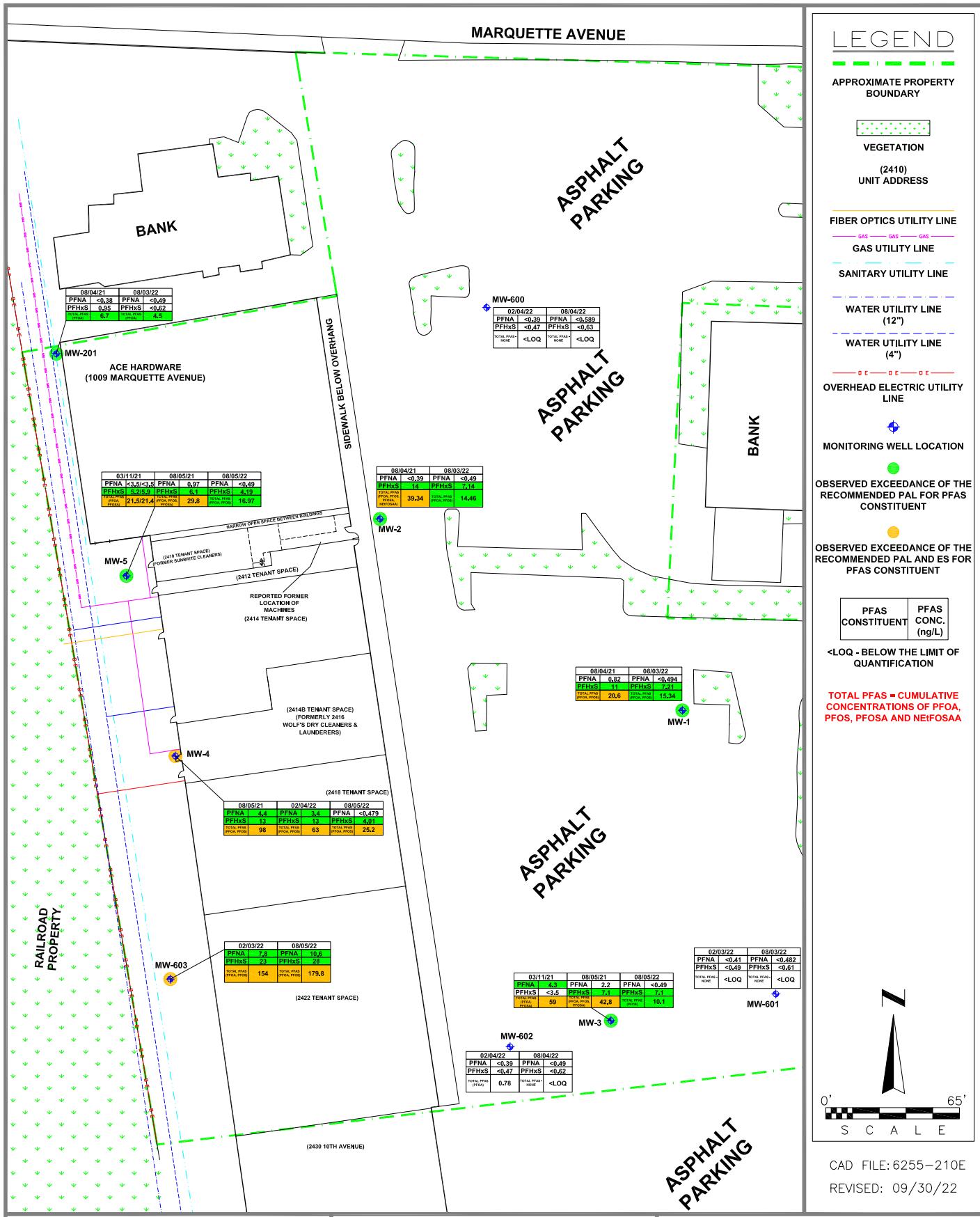




D
ENVIRONMENTAL

**SUNRISE SHOPPING CENTER
2410-2424 10TH AVENUE
1009 MARQUETTE AVENUE
SOUTH MILWAUKEE, WISCONSIN**

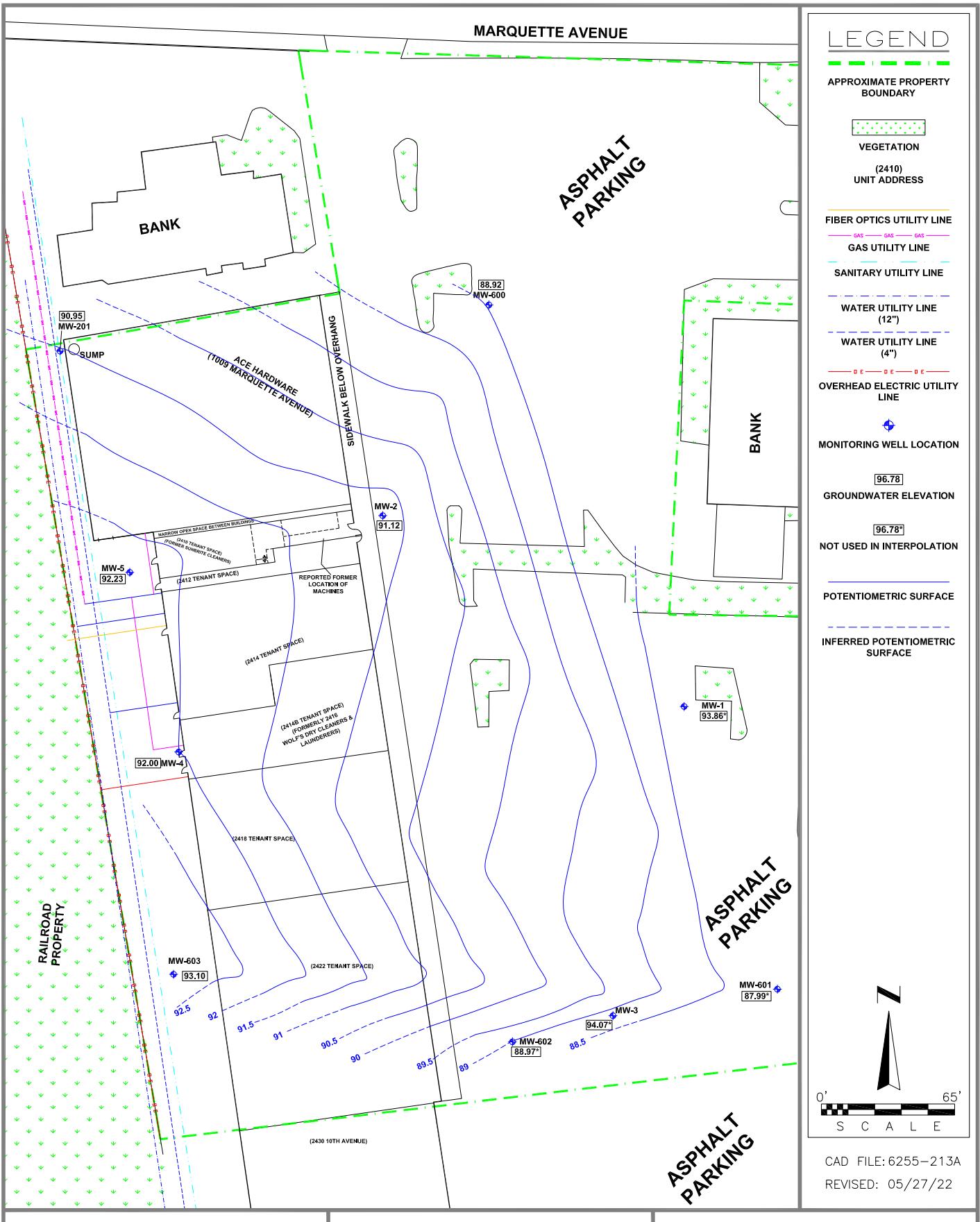
**FIGURE B.3.b.3d
GROUNDWATER
ISOCONCENTRATION
(PFAS - AUGUST 2022)**

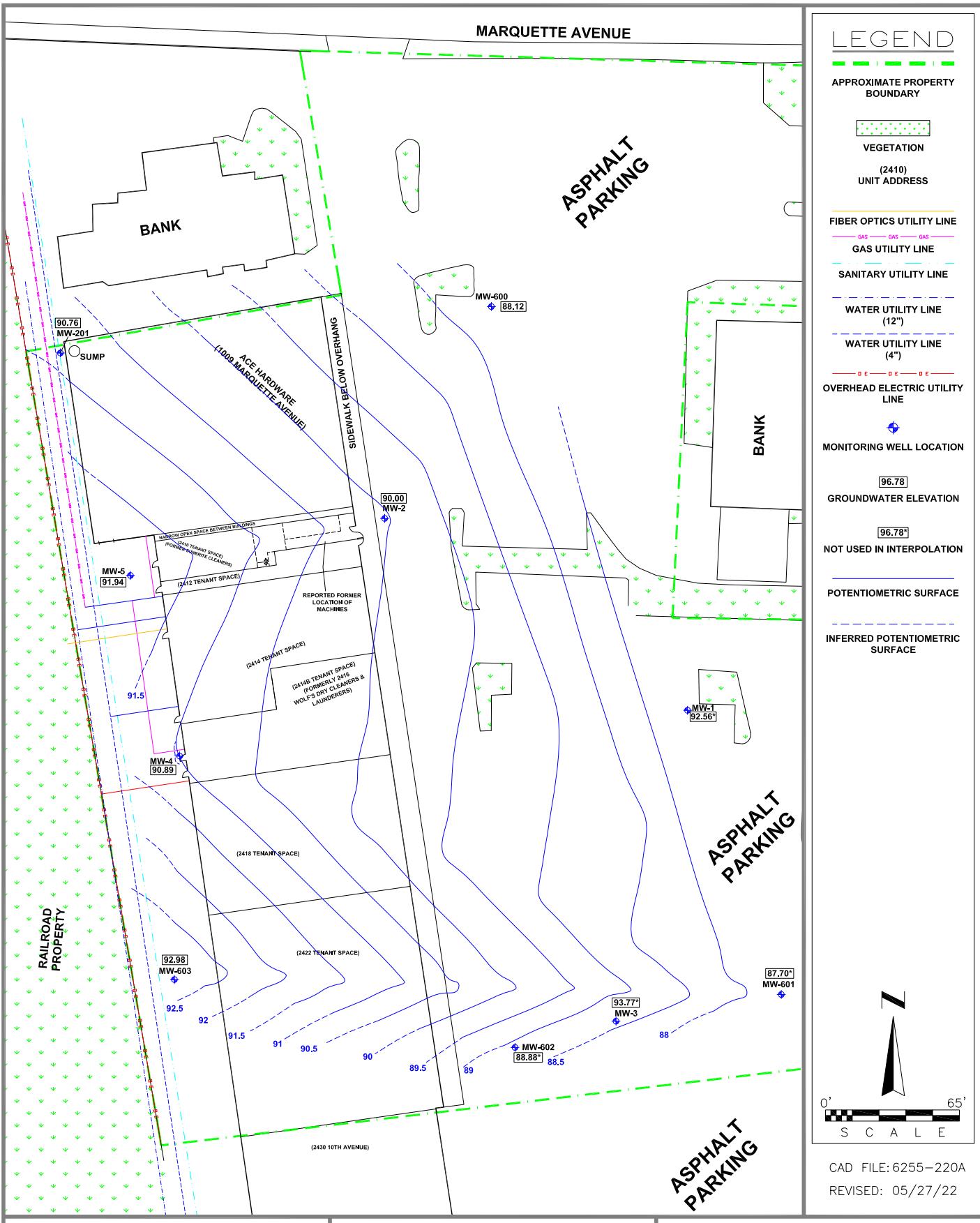


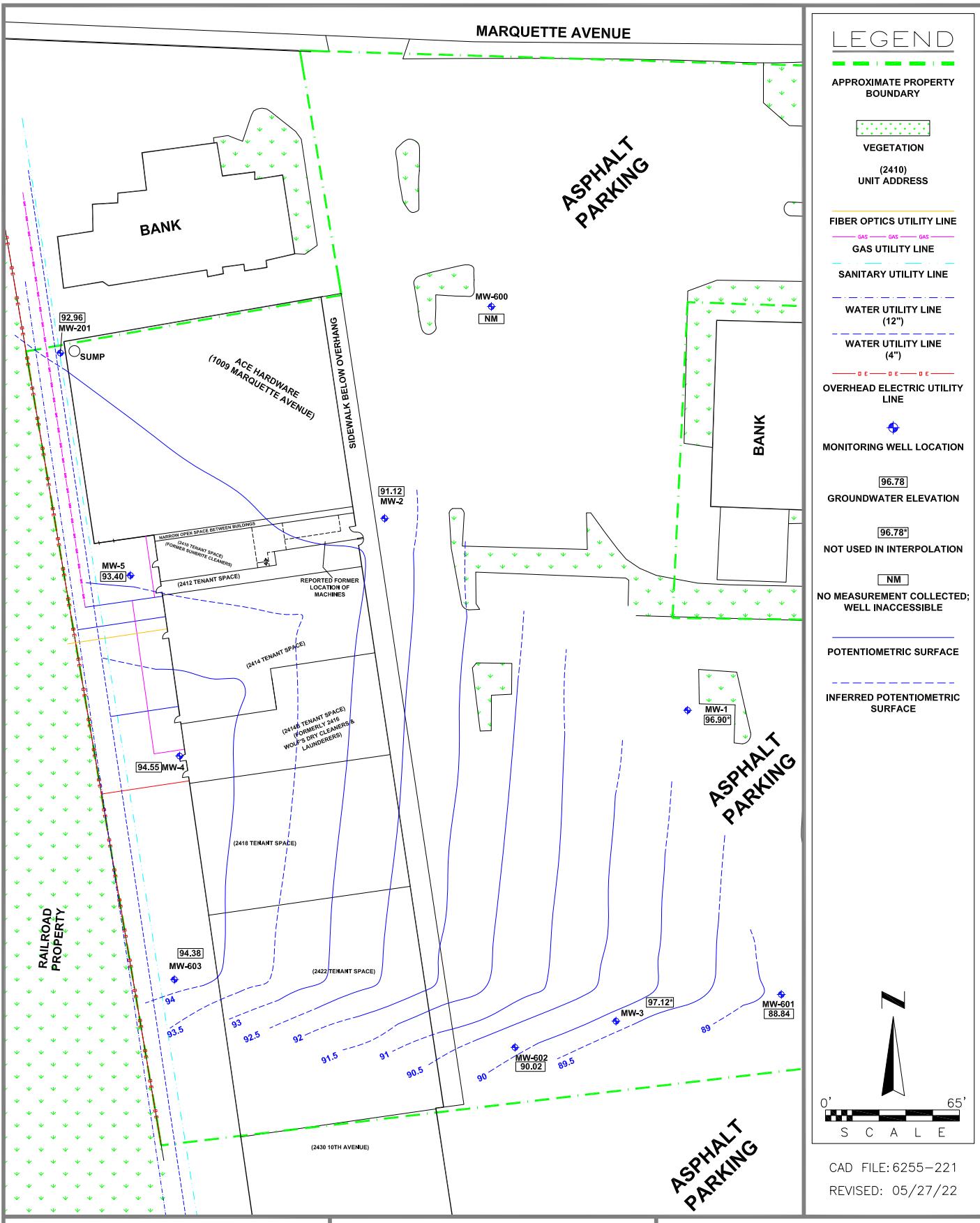
D&I ENVIRONMENTAL

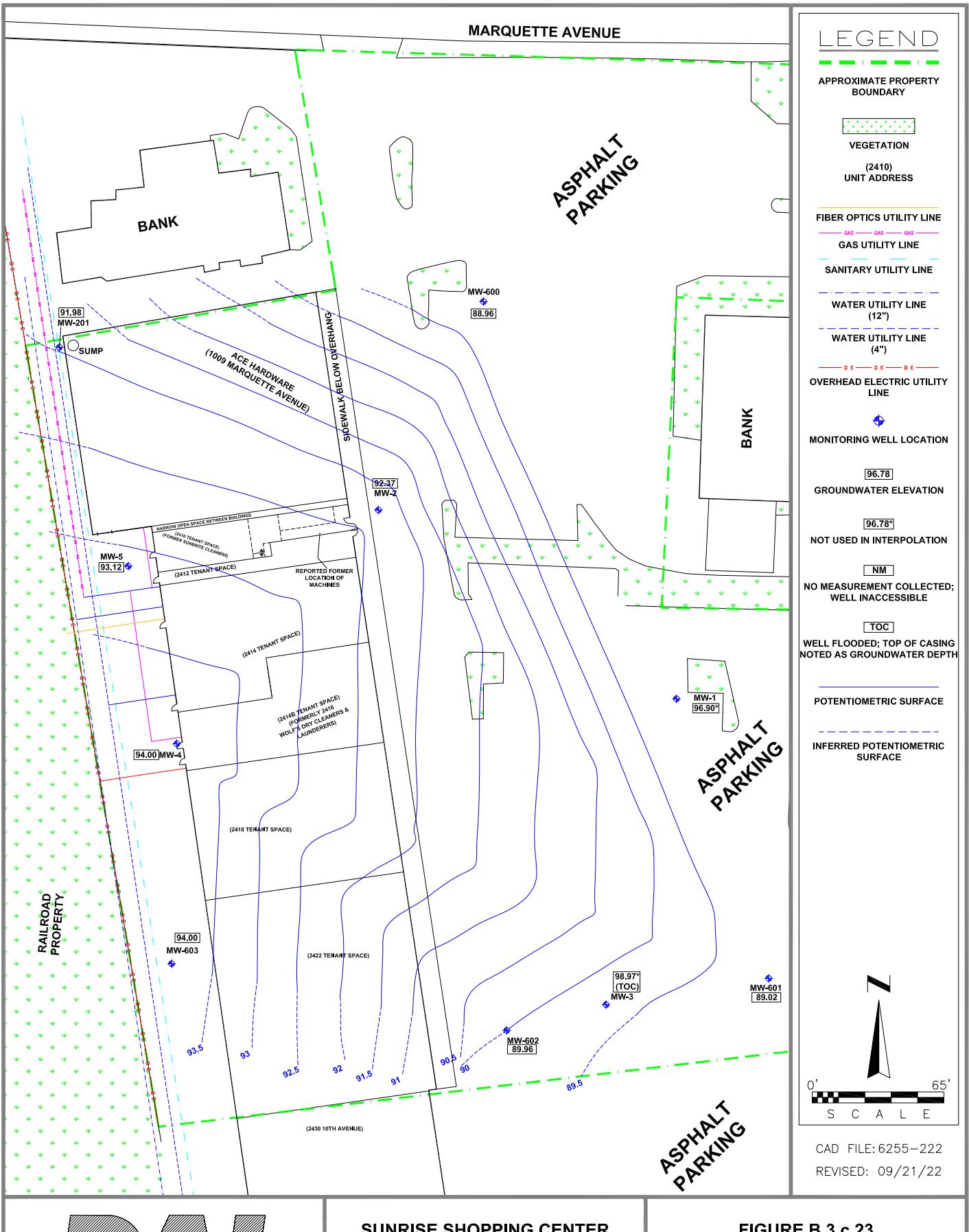
**SUNRISE SHOPPING CENTER
2410-2424 10TH AVENUE
1009 MARQUETTE AVENUE
SOUTH MILWAUKEE, WISCONSIN**

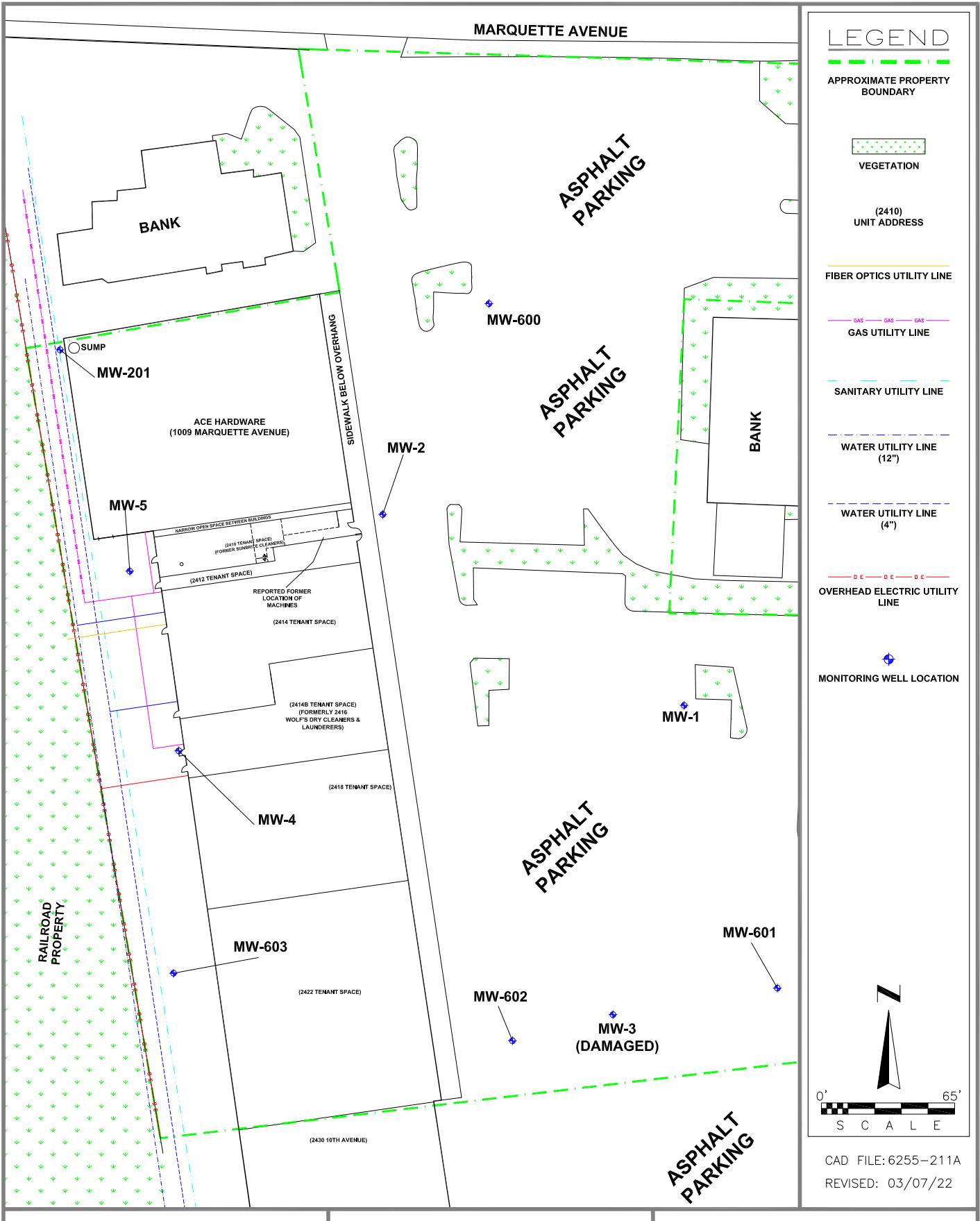
**FIGURE B.3.b.3e
GROUNDWATER
ISOCONCENTRATION
(PFAS - 2021-2022)**











ENVIRONMENTAL

SUNRISE SHOPPING CENTER
2410-2424 10TH AVENUE
1009 MARQUETTE AVENUE
SOUTH MILWAUKEE, WISCONSIN

FIGURE B.3.d
MONITORING WELLS

**APPENDIX C.1.E
LABORATORY ANALYTICAL REPORTS
(EMERGING CONTAMINANTS ANALYSIS, AUGUST 2022)**

September 19, 2022

Chris Cailles
DAI Environmental
Polo Park Business Center
27834 Irma Lee Circle
Lake Forest, IL 60045

RE: Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Dear Chris Cailles:

Enclosed are the analytical results for sample(s) received by the laboratory on August 05, 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 Gulf Coast

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

Sincerely,



Steven Mleczko
steve.mleczko@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jenny Rovzar, DAI



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Pace Analytical Gulf Coast

7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618

North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40249423001	MW-201	Water	08/02/22 13:35	08/05/22 08:00
40249423002	MW-1	Water	08/03/22 11:15	08/05/22 08:00
40249423003	MW-2	Water	08/03/22 12:25	08/05/22 08:00
40249423004	MW-601	Water	08/03/22 13:45	08/05/22 08:00

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SAMPLE ANALYTE COUNT

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40249423001	MW-201	EPA 537 Modified	ADA, SLR2	58	GCLA
40249423002	MW-1	EPA 537 Modified	ADA	58	GCLA
40249423003	MW-2	EPA 537 Modified	ADA	58	GCLA
40249423004	MW-601	EPA 537 Modified	ADA	58	GCLA

GCLA = Pace Analytical Gulf Coast

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SUMMARY OF DETECTION

Project: 6255 SOUTH MILWAUKEE
 Pace Project No.: 40249423

Lab Sample ID	Client Sample ID						
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers	
40249423001	MW-201						
EPA 537 Modified	6:2 Fluorotelomer sulfonate	8.18	ng/L	2.00	08/24/22 19:21		
EPA 537 Modified	Perfluoroheptanoic acid	2.91	ng/L	2.00	08/24/22 19:21		
EPA 537 Modified	Perfluorohexanoic acid (S)	2.95	ng/L	2.00	08/24/22 19:21		
EPA 537 Modified	Perfluoroctanoic acid	4.50	ng/L	2.00	08/24/22 19:21		
EPA 537 Modified	Perfluoropentanoic acid	2.24	ng/L	2.00	08/24/22 19:21		
40249423002	MW-1						
EPA 537 Modified	6:2 Fluorotelomer sulfonate	2.41	ng/L	2.02	08/24/22 19:36		
EPA 537 Modified	Perfluorobutanoic acid	4.67	ng/L	2.02	08/24/22 19:36		
EPA 537 Modified	Perfluorobutanesulfonic acid	5.43	ng/L	2.02	08/24/22 19:36		
EPA 537 Modified	Perfluoroheptanoic acid	3.70	ng/L	2.02	08/24/22 19:36		
EPA 537 Modified	Perfluorohexanoic acid (S)	3.73	ng/L	2.02	08/24/22 19:36		
EPA 537 Modified	Perfluorohexanesulfonic acid	7.21	ng/L	2.02	08/24/22 19:36		
EPA 537 Modified	Perfluoroctanoic acid	5.14	ng/L	2.02	08/24/22 19:36		
EPA 537 Modified	Perfluoroctanesulfonic acid	10.2	ng/L	2.02	08/24/22 19:36		
EPA 537 Modified	Perfluoropentanoic acid	3.67	ng/L	2.02	08/24/22 19:36		
40249423003	MW-2						
EPA 537 Modified	Perfluorobutanoic acid	7.87	ng/L	2.00	08/24/22 19:50		
EPA 537 Modified	Perfluorobutanesulfonic acid	6.16	ng/L	2.00	08/24/22 19:50		
EPA 537 Modified	Perfluoroheptanoic acid	2.02	ng/L	2.00	08/24/22 19:50		
EPA 537 Modified	Perfluorohexanoic acid (S)	5.48	ng/L	2.00	08/24/22 19:50		
EPA 537 Modified	Perfluorohexanesulfonic acid	7.14	ng/L	2.00	08/24/22 19:50		
EPA 537 Modified	Perfluoroctanoic acid	10.8	ng/L	2.00	08/24/22 19:50		
EPA 537 Modified	Perfluoroctanesulfonic acid	3.66	ng/L	2.00	08/24/22 19:50		
EPA 537 Modified	Perfluoropentanoic acid	14.4	ng/L	2.00	08/24/22 19:50		
EPA 537 Modified	PFPeS	3.25	ng/L	2.00	08/24/22 19:50		
40249423004	MW-601						
EPA 537 Modified	Perfluorobutanoic acid	3.60	ng/L	1.97	08/24/22 20:05		
EPA 537 Modified	Perfluorobutanesulfonic acid	12.0	ng/L	1.97	08/24/22 20:05		
EPA 537 Modified	Perfluorohexanoic acid (S)	2.64	ng/L	1.97	08/24/22 20:05		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-201	Lab ID: 40249423001	Collected: 08/02/22 13:35	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water			Analytical Method: EPA 537 Modified	Preparation Method: METHOD					
			Pace Analytical Gulf Coast						
4:2 FTS	<0.620	ng/L	2.00	0.620	1	08/10/22 14:50	08/24/22 19:21	757124-72-4	
4:2 FTS	<0.630	ng/L	2.03	0.630	1	08/30/22 12:58	09/02/22 14:09	757124-72-4	
6:2 Fluorotelomer sulfonate	8.18	ng/L	2.00	0.750	1	08/10/22 14:50	08/24/22 19:21	27619-97-2	
6:2 Fluorotelomer sulfonate	<0.762	ng/L	2.03	0.762	1	08/30/22 12:58	09/02/22 14:09	27619-97-2	
8:2 FTS	<0.530	ng/L	2.00	0.530	1	08/10/22 14:50	08/24/22 19:21	39108-34-4	
8:2 FTS	<0.539	ng/L	2.03	0.539	1	08/30/22 12:58	09/02/22 14:09	39108-34-4	
9Cl-PF3ONS	<0.450	ng/L	2.00	0.450	1	08/10/22 14:50	08/24/22 19:21	756426-58-1	
9Cl-PF3ONS	<0.457	ng/L	2.03	0.457	1	08/30/22 12:58	09/02/22 14:09	756426-58-1	
11Cl-PF3OUdS	<0.450	ng/L	2.00	0.450	1	08/10/22 14:50	08/24/22 19:21	763051-92-9	
11Cl-PF3OUdS	<0.457	ng/L	2.03	0.457	1	08/30/22 12:58	09/02/22 14:09	763051-92-9	
ADONA	<0.430	ng/L	2.00	0.430	1	08/10/22 14:50	08/24/22 19:21	919005-14-4	
ADONA	<0.437	ng/L	2.03	0.437	1	08/30/22 12:58	09/02/22 14:09	919005-14-4	
Perfluoroctanesulfonamide	<0.370	ng/L	2.00	0.370	1	08/10/22 14:50	08/24/22 19:21	754-91-6	
Perfluoroctanesulfonamide	<0.376	ng/L	2.03	0.376	1	08/30/22 12:58	09/02/22 14:09	754-91-6	
HFPO-DA	<3.34	ng/L	10.0	3.34	1	08/10/22 14:50	08/24/22 19:21	13252-13-6	
HFPO-DA	<3.39	ng/L	10.2	3.39	1	08/30/22 12:58	09/02/22 14:09	13252-13-6	
NEtFOSA	<0.700	ng/L	4.00	0.700	1	08/10/22 14:50	08/24/22 19:21	4151-50-2	
NEtFOSA	<0.711	ng/L	4.07	0.711	1	08/30/22 12:58	09/02/22 14:09	4151-50-2	
NEtFOSAA	<0.790	ng/L	4.00	0.790	1	08/10/22 14:50	08/24/22 19:21	2991-50-6	
NEtFOSAA	<0.803	ng/L	4.07	0.803	1	08/30/22 12:58	09/02/22 14:09	2991-50-6	
NETFOSE	<0.505	ng/L	4.00	0.505	1	08/10/22 14:50	08/24/22 19:21	1691-99-2	
NETFOSE	<0.513	ng/L	4.07	0.513	1	08/30/22 12:58	09/02/22 14:09	1691-99-2	
NMeFOSA	<0.830	ng/L	4.00	0.830	1	08/10/22 14:50	08/24/22 19:21	31506-32-8	
NMeFOSA	<0.843	ng/L	4.07	0.843	1	08/30/22 12:58	09/02/22 14:09	31506-32-8	
NMeFOSAA	<0.450	ng/L	4.00	0.450	1	08/10/22 14:50	08/24/22 19:21	2355-31-9	
NMeFOSAA	<0.457	ng/L	4.07	0.457	1	08/30/22 12:58	09/02/22 14:09	2355-31-9	
NMeFOSE	<0.650	ng/L	4.00	0.650	1	08/10/22 14:50	08/24/22 19:21	24448-09-7	
NMeFOSE	<0.661	ng/L	4.07	0.661	1	08/30/22 12:58	09/02/22 14:09	24448-09-7	
Perfluorobutanoic acid	<0.760	ng/L	2.00	0.760	1	08/10/22 14:50	08/24/22 19:21	375-22-4	
Perfluorobutanoic acid	<0.772	ng/L	2.03	0.772	1	08/30/22 12:58	09/02/22 14:09	375-22-4	
Perfluorobutanesulfonic acid	<0.310	ng/L	2.00	0.310	1	08/10/22 14:50	08/24/22 19:21	375-73-5	
Perfluorobutanesulfonic acid	<0.315	ng/L	2.03	0.315	1	08/30/22 12:58	09/02/22 14:09	375-73-5	
Perfluorodecanoic acid (S)	<0.720	ng/L	2.00	0.720	1	08/10/22 14:50	08/24/22 19:21	335-76-2	
Perfluorodecanoic acid (S)	<0.732	ng/L	2.03	0.732	1	08/30/22 12:58	09/02/22 14:09	335-76-2	
Perfluorododecanoic acid	<0.650	ng/L	2.00	0.650	1	08/10/22 14:50	08/24/22 19:21	307-55-1	
Perfluorododecanoic acid	<0.661	ng/L	2.03	0.661	1	08/30/22 12:58	09/02/22 14:09	307-55-1	
PFDoS	<0.655	ng/L	2.00	0.655	1	08/10/22 14:50	08/24/22 19:21	79780-39-5	
PFDoS	<0.666	ng/L	2.03	0.666	1	08/30/22 12:58	09/02/22 14:09	79780-39-5	
PFDS	<0.610	ng/L	2.00	0.610	1	08/10/22 14:50	08/24/22 19:21	335-77-3	
PFDS	<0.620	ng/L	2.03	0.620	1	08/30/22 12:58	09/02/22 14:09	335-77-3	
Perfluoroheptanoic acid	2.91	ng/L	2.00	0.580	1	08/10/22 14:50	08/24/22 19:21	375-85-9	
Perfluoroheptanoic acid	<0.589	ng/L	2.03	0.589	1	08/30/22 12:58	09/02/22 14:09	375-85-9	
PFHpS	<0.610	ng/L	2.00	0.610	1	08/10/22 14:50	08/24/22 19:21	375-92-8	
PFHpS	<0.620	ng/L	2.03	0.620	1	08/30/22 12:58	09/02/22 14:09	375-92-8	
Perfluorohexanoic acid (S)	2.95	ng/L	2.00	0.470	1	08/10/22 14:50	08/24/22 19:21	307-24-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-201	Lab ID: 40249423001	Collected: 08/02/22 13:35	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water									
Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast									
Perfluorohexanoic acid (S)	<0.478	ng/L	2.03	0.478	1	08/30/22 12:58	09/02/22 14:09	307-24-4	
Perfluorohexanesulfonic acid	<0.620	ng/L	2.00	0.620	1	08/10/22 14:50	08/24/22 19:21	355-46-4	
Perfluorohexanesulfonic acid	<0.630	ng/L	2.03	0.630	1	08/30/22 12:58	09/02/22 14:09	355-46-4	
Perfluorononanoic acid	<0.490	ng/L	2.00	0.490	1	08/10/22 14:50	08/24/22 19:21	375-95-1	
Perfluorononanoic acid	<0.498	ng/L	2.03	0.498	1	08/30/22 12:58	09/02/22 14:09	375-95-1	
PFNS	<0.870	ng/L	2.00	0.870	1	08/10/22 14:50	08/24/22 19:21	68259-12-1	
PFNS	<0.884	ng/L	2.03	0.884	1	08/30/22 12:58	09/02/22 14:09	68259-12-1	
Perfluoroctanoic acid	4.50	ng/L	2.00	0.420	1	08/10/22 14:50	08/24/22 19:21	335-67-1	
Perfluoroctanoic acid	<0.427	ng/L	2.03	0.427	1	08/30/22 12:58	09/02/22 14:09	335-67-1	
Perfluoroctanesulfonic acid	<0.380	ng/L	2.00	0.380	1	08/10/22 14:50	08/24/22 19:21	1763-23-1	
Perfluoroctanesulfonic acid	<0.386	ng/L	2.03	0.386	1	08/30/22 12:58	09/02/22 14:09	1763-23-1	
Perfluoropentanoic acid	2.24	ng/L	2.00	0.440	1	08/10/22 14:50	08/24/22 19:21	2706-90-3	
Perfluoropentanoic acid	<0.447	ng/L	2.03	0.447	1	08/30/22 12:58	09/02/22 14:09	2706-90-3	
PFPeS	<0.510	ng/L	2.00	0.510	1	08/10/22 14:50	08/24/22 19:21	2706-91-4	
PFPeS	<0.518	ng/L	2.03	0.518	1	08/30/22 12:58	09/02/22 14:09	2706-91-4	
Perfluorotetradecanoic acid	<0.570	ng/L	2.00	0.570	1	08/10/22 14:50	08/24/22 19:21	376-06-7	
Perfluorotetradecanoic acid	<0.579	ng/L	2.03	0.579	1	08/30/22 12:58	09/02/22 14:09	376-06-7	
Perfluorotridecanoic acid	<0.615	ng/L	2.00	0.615	1	08/10/22 14:50	08/24/22 19:21	72629-94-8	
Perfluorotridecanoic acid	<0.625	ng/L	2.03	0.625	1	08/30/22 12:58	09/02/22 14:09	72629-94-8	
Perfluoroundecanoic acid	<0.620	ng/L	2.00	0.620	1	08/10/22 14:50	08/24/22 19:21	2058-94-8	
Perfluoroundecanoic acid	<0.630	ng/L	2.03	0.630	1	08/30/22 12:58	09/02/22 14:09	2058-94-8	
Surrogates									
d-NEtFOSA	0.2	%	50-150		1	08/10/22 14:50	08/24/22 19:21	4151-50-2-EI	
d-NEtFOSA	85	%	50-150		1	08/30/22 12:58	09/02/22 14:09	4151-50-2-EI	
d-NMeFOSA	86	%	50-150		1	08/30/22 12:58	09/02/22 14:09	31506-32-8-	
d-NMeFOSA	0.1	%	50-150		1	08/10/22 14:50	08/24/22 19:21	31506-32-8-	
d3-NMeFOSAA	88	%	50-150		1	08/30/22 12:58	09/02/22 14:09	2355-31-9-EI	
d3-NMeFOSAA	15	%	50-150		1	08/10/22 14:50	08/24/22 19:21	2355-31-9-EI	
d5-NEtFOSAA	101	%	50-150		1	08/30/22 12:58	09/02/22 14:09	2991-50-6-EI	
d5-NEtFOSAA	10	%	50-150		1	08/10/22 14:50	08/24/22 19:21	2991-50-6-EI	
d7-NMeFOSE	87	%	50-150		1	08/30/22 12:58	09/02/22 14:09	24448-09-7-	
d7-NMeFOSE	0.1	%	50-150		1	08/10/22 14:50	08/24/22 19:21	24448-09-7-	
d9-NEtFOSE	84	%	50-150		1	08/30/22 12:58	09/02/22 14:09	1691-99-2-EI	
d9-NEtFOSE	0.03	%	50-150		1	08/10/22 14:50	08/24/22 19:21	1691-99-2-EI	
M2 4:2 FTS	122	%	50-150		1	08/30/22 12:58	09/02/22 14:09	757124-72-4	
M2 4:2 FTS	58	%	50-150		1	08/10/22 14:50	08/24/22 19:21	757124-72-4	
M2 6:2 FTS	117	%	50-150		1	08/30/22 12:58	09/02/22 14:09	27619-97-2-	
M2 6:2 FTS	52	%	50-150		1	08/10/22 14:50	08/24/22 19:21	27619-97-2-	
M2 8:2 FTS	103	%	50-150		1	08/30/22 12:58	09/02/22 14:09	39108-34-4-	
M2 8:2 FTS	28	%	50-150		1	08/10/22 14:50	08/24/22 19:21	39108-34-4-	
M2PFHxDA	92	%	50-150		1	08/30/22 12:58	09/02/22 14:09	67905-19-5-	
M2PFHxDA	0.8	%	50-150		1	08/10/22 14:50	08/24/22 19:21	67905-19-5-	
M2PFTeDA	89	%	50-150		1	08/30/22 12:58	09/02/22 14:09	376-06-7-EI	
M2PFTeDA	0.1	%	50-150		1	08/10/22 14:50	08/24/22 19:21	376-06-7-EI	
M3HFPODA	100	%	50-150		1	08/30/22 12:58	09/02/22 14:09	13252-13-6-	

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-201	Lab ID: 40249423001	Collected: 08/02/22 13:35	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M3HFPODA	50	%	50-150		1	08/10/22 14:50	08/24/22 19:21	13252-13-6-	
M3PFBS	52	%	50-150		1	08/10/22 14:50	08/24/22 19:21	375-73-5-EI	
M3PFBS	98	%	50-150		1	08/30/22 12:58	09/02/22 14:09	375-73-5-EI	
M3PFHxS	96	%	50-150		1	08/30/22 12:58	09/02/22 14:09	355-46-4-EI	
M3PFHxS	50	%	50-150		1	08/10/22 14:50	08/24/22 19:21	355-46-4-EI	
M4PFHpA	54	%	50-150		1	08/10/22 14:50	08/24/22 19:21	375-85-9-EI	
M4PFHpA	100	%	50-150		1	08/30/22 12:58	09/02/22 14:09	375-85-9-EI	
M5PFHxA	102	%	50-150		1	08/30/22 12:58	09/02/22 14:09	307-24-4-EI	
M5PFHxA	54	%	50-150		1	08/10/22 14:50	08/24/22 19:21	307-24-4-EI	
M5PFPeA	100	%	50-150		1	08/30/22 12:58	09/02/22 14:09	2706-90-3-EI	
M5PFPeA	56	%	50-150		1	08/10/22 14:50	08/24/22 19:21	2706-90-3-EI	
M6PFDA	23	%	50-150		1	08/10/22 14:50	08/24/22 19:21	335-76-2-EI	
M6PFDA	100	%	50-150		1	08/30/22 12:58	09/02/22 14:09	335-76-2-EI	
M7PFUdA	92	%	50-150		1	08/30/22 12:58	09/02/22 14:09	2058-94-8-EI	
M7PFUdA	9	%	50-150		1	08/10/22 14:50	08/24/22 19:21	2058-94-8-EI	
M8FOSA	91	%	50-150		1	08/30/22 12:58	09/02/22 14:09	754-91-6-EI	
M8FOSA	16	%	50-150		1	08/10/22 14:50	08/24/22 19:21	754-91-6-EI	
M8PFOA	50	%	50-150		1	08/10/22 14:50	08/24/22 19:21	335-67-1-EI	
M8PFOA	103	%	50-150		1	08/30/22 12:58	09/02/22 14:09	335-67-1-EI	
M8PFOS	92	%	50-150		1	08/30/22 12:58	09/02/22 14:09	1763-23-1-EI	
M8PFOS	30	%	50-150		1	08/10/22 14:50	08/24/22 19:21	1763-23-1-EI	
M9PFNA	38	%	50-150		1	08/10/22 14:50	08/24/22 19:21	375-95-1-EI	
M9PFNA	104	%	50-150		1	08/30/22 12:58	09/02/22 14:09	375-95-1-EI	
MPFBA	55	%	50-150		1	08/10/22 14:50	08/24/22 19:21	375-22-4-EI	
MPFBA	100	%	50-150		1	08/30/22 12:58	09/02/22 14:09	375-22-4-EI	
MPFDoA	2	%	50-150		1	08/10/22 14:50	08/24/22 19:21	307-55-1-EI	
MPFDoA	95	%	50-150		1	08/30/22 12:58	09/02/22 14:09	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-1	Lab ID: 40249423002	Collected: 08/03/22 11:15	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.625	ng/L	2.02	0.625	1	08/10/22 14:50	08/24/22 19:36	757124-72-4	
6:2 Fluorotelomer sulfonate	2.41	ng/L	2.02	0.756	1	08/10/22 14:50	08/24/22 19:36	27619-97-2	
8:2 FTS	<0.534	ng/L	2.02	0.534	1	08/10/22 14:50	08/24/22 19:36	39108-34-4	
9Cl-PF3ONS	<0.454	ng/L	2.02	0.454	1	08/10/22 14:50	08/24/22 19:36	756426-58-1	
11Cl-PF3OUDS	<0.454	ng/L	2.02	0.454	1	08/10/22 14:50	08/24/22 19:36	763051-92-9	
ADONA	<0.433	ng/L	2.02	0.433	1	08/10/22 14:50	08/24/22 19:36	919005-14-4	
Perfluoroctanesulfonamide	<0.373	ng/L	2.02	0.373	1	08/10/22 14:50	08/24/22 19:36	754-91-6	
HFPO-DA	<3.36	ng/L	10.1	3.36	1	08/10/22 14:50	08/24/22 19:36	13252-13-6	
NEtFOSA	<0.706	ng/L	4.03	0.706	1	08/10/22 14:50	08/24/22 19:36	4151-50-2	
NEtFOSAA	<0.796	ng/L	4.03	0.796	1	08/10/22 14:50	08/24/22 19:36	2991-50-6	
NEtFOSE	<0.509	ng/L	4.03	0.509	1	08/10/22 14:50	08/24/22 19:36	1691-99-2	
NMeFOSA	<0.837	ng/L	4.03	0.837	1	08/10/22 14:50	08/24/22 19:36	31506-32-8	
NMeFOSAA	<0.454	ng/L	4.03	0.454	1	08/10/22 14:50	08/24/22 19:36	2355-31-9	
NMeFOSE	<0.655	ng/L	4.03	0.655	1	08/10/22 14:50	08/24/22 19:36	24448-09-7	
Perfluorobutanoic acid	4.67	ng/L	2.02	0.766	1	08/10/22 14:50	08/24/22 19:36	375-22-4	
Perfluorobutanesulfonic acid	5.43	ng/L	2.02	0.313	1	08/10/22 14:50	08/24/22 19:36	375-73-5	
Perfluorodecanoic acid (S)	<0.726	ng/L	2.02	0.726	1	08/10/22 14:50	08/24/22 19:36	335-76-2	
Perfluorododecanoic acid	<0.655	ng/L	2.02	0.655	1	08/10/22 14:50	08/24/22 19:36	307-55-1	
PFDoS	<0.660	ng/L	2.02	0.660	1	08/10/22 14:50	08/24/22 19:36	79780-39-5	
PFDS	<0.615	ng/L	2.02	0.615	1	08/10/22 14:50	08/24/22 19:36	335-77-3	
Perfluoroheptanoic acid	3.70	ng/L	2.02	0.585	1	08/10/22 14:50	08/24/22 19:36	375-85-9	
PFHpS	<0.615	ng/L	2.02	0.615	1	08/10/22 14:50	08/24/22 19:36	375-92-8	
Perfluorohexanoic acid (S)	3.73	ng/L	2.02	0.474	1	08/10/22 14:50	08/24/22 19:36	307-24-4	
Perfluorohexanesulfonic acid	7.21	ng/L	2.02	0.625	1	08/10/22 14:50	08/24/22 19:36	355-46-4	
Perfluorononanoic acid	<0.494	ng/L	2.02	0.494	1	08/10/22 14:50	08/24/22 19:36	375-95-1	
PFNS	<0.877	ng/L	2.02	0.877	1	08/10/22 14:50	08/24/22 19:36	68259-12-1	
Perfluoroctanoic acid	5.14	ng/L	2.02	0.423	1	08/10/22 14:50	08/24/22 19:36	335-67-1	
Perfluorooctanesulfonic acid	10.2	ng/L	2.02	0.383	1	08/10/22 14:50	08/24/22 19:36	1763-23-1	
Perfluoropentanoic acid	3.67	ng/L	2.02	0.444	1	08/10/22 14:50	08/24/22 19:36	2706-90-3	
PFPeS	<0.514	ng/L	2.02	0.514	1	08/10/22 14:50	08/24/22 19:36	2706-91-4	
Perfluorotetradecanoic acid	<0.575	ng/L	2.02	0.575	1	08/10/22 14:50	08/24/22 19:36	376-06-7	
Perfluorotridecanoic acid	<0.620	ng/L	2.02	0.620	1	08/10/22 14:50	08/24/22 19:36	72629-94-8	
Perfluoroundecanoic acid	<0.625	ng/L	2.02	0.625	1	08/10/22 14:50	08/24/22 19:36	2058-94-8	
Surrogates									
d-NEtFOSA	1	%	50-150		1	08/10/22 14:50	08/24/22 19:36	4151-50-2-EI	MSSV1
								2.7	
d-NMeFOSA	2	%	50-150		1	08/10/22 14:50	08/24/22 19:36	31506-32-8-	MSSV1
								2.7	
d3-NMeFOSAA	71	%	50-150		1	08/10/22 14:50	08/24/22 19:36	2355-31-9-EI	
d5-NEtFOSAA	74	%	50-150		1	08/10/22 14:50	08/24/22 19:36	2991-50-6-EI	
d7-NMeFOSE	15	%	50-150		1	08/10/22 14:50	08/24/22 19:36	24448-09-7-	MSSV1
								2.7	
d9-NEtFOSE	11	%	50-150		1	08/10/22 14:50	08/24/22 19:36	1691-99-2-EI	MSSV1
								2.7	
M2 4:2 FTS	185	%	50-150		1	08/10/22 14:50	08/24/22 19:36	757124-72-4	MSSV1
								2.7	
M2 6:2 FTS	121	%	50-150		1	08/10/22 14:50	08/24/22 19:36	27619-97-2-	

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-1	Lab ID: 40249423002	Collected: 08/03/22 11:15	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M2 8:2 FTS	104	%	50-150		1	08/10/22 14:50	08/24/22 19:36	39108-34-4-	
M2PFHxDa	3	%	50-150		1	08/10/22 14:50	08/24/22 19:36	67905-19-5-	MSSV1 2.7
M2PFTeDA	17	%	50-150		1	08/10/22 14:50	08/24/22 19:36	376-06-7-EI	MSSV1 2.7
M3HFPODA	83	%	50-150		1	08/10/22 14:50	08/24/22 19:36	13252-13-6-	
M3PFBS	87	%	50-150		1	08/10/22 14:50	08/24/22 19:36	375-73-5-EI	
M3PFHxS	92	%	50-150		1	08/10/22 14:50	08/24/22 19:36	355-46-4-EI	
M4PFHpA	98	%	50-150		1	08/10/22 14:50	08/24/22 19:36	375-85-9-EI	
M5PFHxA	100	%	50-150		1	08/10/22 14:50	08/24/22 19:36	307-24-4-EI	
M5PFPeA	84	%	50-150		1	08/10/22 14:50	08/24/22 19:36	2706-90-3-EI	
M6PFDA	89	%	50-150		1	08/10/22 14:50	08/24/22 19:36	335-76-2-EI	
M7PFUdA	70	%	50-150		1	08/10/22 14:50	08/24/22 19:36	2058-94-8-EI	
M8FOSA	49	%	50-150		1	08/10/22 14:50	08/24/22 19:36	754-91-6-EI	MSSV1 2.7
M8PFOA	104	%	50-150		1	08/10/22 14:50	08/24/22 19:36	335-67-1-EI	
M8PFOS	92	%	50-150		1	08/10/22 14:50	08/24/22 19:36	1763-23-1-EI	
M9PFNA	99	%	50-150		1	08/10/22 14:50	08/24/22 19:36	375-95-1-EI	
MPFBA	86	%	50-150		1	08/10/22 14:50	08/24/22 19:36	375-22-4-EI	
MPFDaO	50	%	50-150		1	08/10/22 14:50	08/24/22 19:36	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-2	Lab ID: 40249423003	Collected: 08/03/22 12:25	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water			Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast						
4:2 FTS	<0.620	ng/L	2.00	0.620	1	08/10/22 14:50	08/24/22 19:50	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.750	ng/L	2.00	0.750	1	08/10/22 14:50	08/24/22 19:50	27619-97-2	
8:2 FTS	<0.530	ng/L	2.00	0.530	1	08/10/22 14:50	08/24/22 19:50	39108-34-4	
9Cl-PF3ONS	<0.450	ng/L	2.00	0.450	1	08/10/22 14:50	08/24/22 19:50	756426-58-1	
11Cl-PF3OUDS	<0.450	ng/L	2.00	0.450	1	08/10/22 14:50	08/24/22 19:50	763051-92-9	
ADONA	<0.430	ng/L	2.00	0.430	1	08/10/22 14:50	08/24/22 19:50	919005-14-4	
Perfluoroctanesulfonamide	<0.370	ng/L	2.00	0.370	1	08/10/22 14:50	08/24/22 19:50	754-91-6	
HFPO-DA	<3.34	ng/L	10.0	3.34	1	08/10/22 14:50	08/24/22 19:50	13252-13-6	
NEtFOSA	<0.700	ng/L	4.00	0.700	1	08/10/22 14:50	08/24/22 19:50	4151-50-2	
NEtFOSAA	<0.790	ng/L	4.00	0.790	1	08/10/22 14:50	08/24/22 19:50	2991-50-6	
NEtFOSE	<0.505	ng/L	4.00	0.505	1	08/10/22 14:50	08/24/22 19:50	1691-99-2	
NMeFOSA	<0.830	ng/L	4.00	0.830	1	08/10/22 14:50	08/24/22 19:50	31506-32-8	
NMeFOSAA	<0.450	ng/L	4.00	0.450	1	08/10/22 14:50	08/24/22 19:50	2355-31-9	
NMeFOSE	<0.650	ng/L	4.00	0.650	1	08/10/22 14:50	08/24/22 19:50	24448-09-7	
Perfluorobutanoic acid	7.87	ng/L	2.00	0.760	1	08/10/22 14:50	08/24/22 19:50	375-22-4	
Perfluorobutanesulfonic acid	6.16	ng/L	2.00	0.310	1	08/10/22 14:50	08/24/22 19:50	375-73-5	
Perfluorodecanoic acid (S)	<0.720	ng/L	2.00	0.720	1	08/10/22 14:50	08/24/22 19:50	335-76-2	
Perfluorododecanoic acid	<0.650	ng/L	2.00	0.650	1	08/10/22 14:50	08/24/22 19:50	307-55-1	
PFDoS	<0.655	ng/L	2.00	0.655	1	08/10/22 14:50	08/24/22 19:50	79780-39-5	
PFDS	<0.610	ng/L	2.00	0.610	1	08/10/22 14:50	08/24/22 19:50	335-77-3	
Perfluoroheptanoic acid	2.02	ng/L	2.00	0.580	1	08/10/22 14:50	08/24/22 19:50	375-85-9	
PFHpS	<0.610	ng/L	2.00	0.610	1	08/10/22 14:50	08/24/22 19:50	375-92-8	
Perfluorohexanoic acid (S)	5.48	ng/L	2.00	0.470	1	08/10/22 14:50	08/24/22 19:50	307-24-4	
Perfluorohexanesulfonic acid	7.14	ng/L	2.00	0.620	1	08/10/22 14:50	08/24/22 19:50	355-46-4	
Perfluorononanoic acid	<0.490	ng/L	2.00	0.490	1	08/10/22 14:50	08/24/22 19:50	375-95-1	
PFNS	<0.870	ng/L	2.00	0.870	1	08/10/22 14:50	08/24/22 19:50	68259-12-1	
Perfluoroctanoic acid	10.8	ng/L	2.00	0.420	1	08/10/22 14:50	08/24/22 19:50	335-67-1	
Perfluorooctanesulfonic acid	3.66	ng/L	2.00	0.380	1	08/10/22 14:50	08/24/22 19:50	1763-23-1	
Perfluoropentanoic acid	14.4	ng/L	2.00	0.440	1	08/10/22 14:50	08/24/22 19:50	2706-90-3	
PFPeS	3.25	ng/L	2.00	0.510	1	08/10/22 14:50	08/24/22 19:50	2706-91-4	
Perfluorotetradecanoic acid	<0.570	ng/L	2.00	0.570	1	08/10/22 14:50	08/24/22 19:50	376-06-7	
Perfluorotridecanoic acid	<0.615	ng/L	2.00	0.615	1	08/10/22 14:50	08/24/22 19:50	72629-94-8	
Perfluoroundecanoic acid	<0.620	ng/L	2.00	0.620	1	08/10/22 14:50	08/24/22 19:50	2058-94-8	
Surrogates									
d-NEtFOSA	5	%	50-150		1	08/10/22 14:50	08/24/22 19:50	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	6	%	50-150		1	08/10/22 14:50	08/24/22 19:50	31506-32-8-EI	MSSV1 2.7
d3-NMeFOSAA	62	%	50-150		1	08/10/22 14:50	08/24/22 19:50	2355-31-9-EI	
d5-NEtFOSAA	64	%	50-150		1	08/10/22 14:50	08/24/22 19:50	2991-50-6-EI	
d7-NMeFOSE	30	%	50-150		1	08/10/22 14:50	08/24/22 19:50	24448-09-7-EI	MSSV1 2.7
d9-NEtFOSE	25	%	50-150		1	08/10/22 14:50	08/24/22 19:50	1691-99-2-EI	MSSV1 2.7
M2 4:2 FTS	113	%	50-150		1	08/10/22 14:50	08/24/22 19:50	757124-72-4	
M2 6:2 FTS	101	%	50-150		1	08/10/22 14:50	08/24/22 19:50	27619-97-2-	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-2	Lab ID: 40249423003	Collected: 08/03/22 12:25	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M2 8:2 FTS	89	%	50-150		1	08/10/22 14:50	08/24/22 19:50	39108-34-4-	
M2PFHxDa	29	%	50-150		1	08/10/22 14:50	08/24/22 19:50	67905-19-5-	MSSV1 2.7
M2PFTeDA	47	%	50-150		1	08/10/22 14:50	08/24/22 19:50	376-06-7-EI	MSSV1 2.7
M3HFPODA	86	%	50-150		1	08/10/22 14:50	08/24/22 19:50	13252-13-6-	
M3PFBS	91	%	50-150		1	08/10/22 14:50	08/24/22 19:50	375-73-5-EI	
M3PFHxS	87	%	50-150		1	08/10/22 14:50	08/24/22 19:50	355-46-4-EI	
M4PFHpA	94	%	50-150		1	08/10/22 14:50	08/24/22 19:50	375-85-9-EI	
M5PFHxA	97	%	50-150		1	08/10/22 14:50	08/24/22 19:50	307-24-4-EI	
M5PFPeA	91	%	50-150		1	08/10/22 14:50	08/24/22 19:50	2706-90-3-EI	
M6PFDA	83	%	50-150		1	08/10/22 14:50	08/24/22 19:50	335-76-2-EI	
M7PFUdA	67	%	50-150		1	08/10/22 14:50	08/24/22 19:50	2058-94-8-EI	
M8FOSA	54	%	50-150		1	08/10/22 14:50	08/24/22 19:50	754-91-6-EI	
M8PFOA	96	%	50-150		1	08/10/22 14:50	08/24/22 19:50	335-67-1-EI	
M8PFOS	82	%	50-150		1	08/10/22 14:50	08/24/22 19:50	1763-23-1-EI	
M9PFNA	93	%	50-150		1	08/10/22 14:50	08/24/22 19:50	375-95-1-EI	
MPFBA	90	%	50-150		1	08/10/22 14:50	08/24/22 19:50	375-22-4-EI	
MPFDa	62	%	50-150		1	08/10/22 14:50	08/24/22 19:50	307-55-1-EI	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-601	Lab ID: 40249423004	Collected: 08/03/22 13:45	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water									
Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast									
4:2 FTS	<0.610	ng/L	1.97	0.610	1	08/10/22 14:50	08/24/22 20:05	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.738	ng/L	1.97	0.738	1	08/10/22 14:50	08/24/22 20:05	27619-97-2	
8:2 FTS	<0.522	ng/L	1.97	0.522	1	08/10/22 14:50	08/24/22 20:05	39108-34-4	
9Cl-PF3ONS	<0.443	ng/L	1.97	0.443	1	08/10/22 14:50	08/24/22 20:05	756426-58-1	
11Cl-PF3OuDS	<0.443	ng/L	1.97	0.443	1	08/10/22 14:50	08/24/22 20:05	763051-92-9	
ADONA	<0.423	ng/L	1.97	0.423	1	08/10/22 14:50	08/24/22 20:05	919005-14-4	
Perfluoroctanesulfonamide	<0.364	ng/L	1.97	0.364	1	08/10/22 14:50	08/24/22 20:05	754-91-6	
HFPO-DA	<3.28	ng/L	9.84	3.28	1	08/10/22 14:50	08/24/22 20:05	13252-13-6	
NEtFOSA	<0.689	ng/L	3.94	0.689	1	08/10/22 14:50	08/24/22 20:05	4151-50-2	
NEtFOSAA	<0.778	ng/L	3.94	0.778	1	08/10/22 14:50	08/24/22 20:05	2991-50-6	
NEtFOSE	<0.497	ng/L	3.94	0.497	1	08/10/22 14:50	08/24/22 20:05	1691-99-2	
NMeFOSA	<0.817	ng/L	3.94	0.817	1	08/10/22 14:50	08/24/22 20:05	31506-32-8	
NMeFOSAA	<0.443	ng/L	3.94	0.443	1	08/10/22 14:50	08/24/22 20:05	2355-31-9	
NMeFOSE	<0.640	ng/L	3.94	0.640	1	08/10/22 14:50	08/24/22 20:05	24448-09-7	
Perfluorobutanoic acid	3.60	ng/L	1.97	0.748	1	08/10/22 14:50	08/24/22 20:05	375-22-4	
Perfluorobutanesulfonic acid	12.0	ng/L	1.97	0.305	1	08/10/22 14:50	08/24/22 20:05	375-73-5	
Perfluorodecanoic acid (S)	<0.709	ng/L	1.97	0.709	1	08/10/22 14:50	08/24/22 20:05	335-76-2	
Perfluorododecanoic acid	<0.640	ng/L	1.97	0.640	1	08/10/22 14:50	08/24/22 20:05	307-55-1	
PFDoS	<0.645	ng/L	1.97	0.645	1	08/10/22 14:50	08/24/22 20:05	79780-39-5	
PFDS	<0.600	ng/L	1.97	0.600	1	08/10/22 14:50	08/24/22 20:05	335-77-3	
Perfluoroheptanoic acid	<0.571	ng/L	1.97	0.571	1	08/10/22 14:50	08/24/22 20:05	375-85-9	
PFHpS	<0.600	ng/L	1.97	0.600	1	08/10/22 14:50	08/24/22 20:05	375-92-8	
Perfluorohexanoic acid (S)	2.64	ng/L	1.97	0.463	1	08/10/22 14:50	08/24/22 20:05	307-24-4	
Perfluorohexanesulfonic acid	<0.610	ng/L	1.97	0.610	1	08/10/22 14:50	08/24/22 20:05	355-46-4	
Perfluorononanoic acid	<0.482	ng/L	1.97	0.482	1	08/10/22 14:50	08/24/22 20:05	375-95-1	
PFNS	<0.856	ng/L	1.97	0.856	1	08/10/22 14:50	08/24/22 20:05	68259-12-1	
Perfluorooctanoic acid	<0.413	ng/L	1.97	0.413	1	08/10/22 14:50	08/24/22 20:05	335-67-1	
Perfluorooctanesulfonic acid	<0.374	ng/L	1.97	0.374	1	08/10/22 14:50	08/24/22 20:05	1763-23-1	
Perfluoropentanoic acid	<0.433	ng/L	1.97	0.433	1	08/10/22 14:50	08/24/22 20:05	2706-90-3	
PPPeS	<0.502	ng/L	1.97	0.502	1	08/10/22 14:50	08/24/22 20:05	2706-91-4	
Perfluorotetradecanoic acid	<0.561	ng/L	1.97	0.561	1	08/10/22 14:50	08/24/22 20:05	376-06-7	
Perfluorotridecanoic acid	<0.605	ng/L	1.97	0.605	1	08/10/22 14:50	08/24/22 20:05	72629-94-8	
Perfluoroundecanoic acid	<0.610	ng/L	1.97	0.610	1	08/10/22 14:50	08/24/22 20:05	2058-94-8	
Surrogates									
d-NEtFOSA	3	%	50-150		1	08/10/22 14:50	08/24/22 20:05	4151-50-2-EI	MSSV1 2.7
d-NMeFOSA	3	%	50-150		1	08/10/22 14:50	08/24/22 20:05	31506-32-8-EI	MSSV1 2.7
d3-NMeFOSAA	70	%	50-150		1	08/10/22 14:50	08/24/22 20:05	2355-31-9-EI	
d5-NEtFOSAA	78	%	50-150		1	08/10/22 14:50	08/24/22 20:05	2991-50-6-EI	
d7-NMeFOSE	9	%	50-150		1	08/10/22 14:50	08/24/22 20:05	24448-09-7-EI	MSSV1 2.7
d9-NEtFOSE	10	%	50-150		1	08/10/22 14:50	08/24/22 20:05	1691-99-2-EI	MSSV1 2.7
M2 4:2 FTS	141	%	50-150		1	08/10/22 14:50	08/24/22 20:05	757124-72-4	
M2 6:2 FTS	93	%	50-150		1	08/10/22 14:50	08/24/22 20:05	27619-97-2-	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

Sample: MW-601	Lab ID: 40249423004	Collected: 08/03/22 13:45	Received: 08/05/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M2 8:2 FTS	98	%	50-150		1	08/10/22 14:50	08/24/22 20:05	39108-34-4-	
M2PFHxDa	13	%	50-150		1	08/10/22 14:50	08/24/22 20:05	67905-19-5-	MSSV1 2.7
M2PFTeDA	37	%	50-150		1	08/10/22 14:50	08/24/22 20:05	376-06-7-EI	MSSV1 2.7
M3HFPODA	76	%	50-150		1	08/10/22 14:50	08/24/22 20:05	13252-13-6-	
M3PFBS	78	%	50-150		1	08/10/22 14:50	08/24/22 20:05	375-73-5-EI	
M3PFHxS	84	%	50-150		1	08/10/22 14:50	08/24/22 20:05	355-46-4-EI	
M4PFHpA	87	%	50-150		1	08/10/22 14:50	08/24/22 20:05	375-85-9-EI	
M5PFHxA	91	%	50-150		1	08/10/22 14:50	08/24/22 20:05	307-24-4-EI	
M5PFPeA	70	%	50-150		1	08/10/22 14:50	08/24/22 20:05	2706-90-3-EI	
M6PFDA	83	%	50-150		1	08/10/22 14:50	08/24/22 20:05	335-76-2-EI	
M7PFUdA	74	%	50-150		1	08/10/22 14:50	08/24/22 20:05	2058-94-8-EI	
M8FOSA	18	%	50-150		1	08/10/22 14:50	08/24/22 20:05	754-91-6-EI	MSSV1 2.7
M8PFOA	90	%	50-150		1	08/10/22 14:50	08/24/22 20:05	335-67-1-EI	
M8PFOS	81	%	50-150		1	08/10/22 14:50	08/24/22 20:05	1763-23-1-EI	
M9PFNA	88	%	50-150		1	08/10/22 14:50	08/24/22 20:05	375-95-1-EI	
MPFBA	71	%	50-150		1	08/10/22 14:50	08/24/22 20:05	375-22-4-EI	
MPFDaO	67	%	50-150		1	08/10/22 14:50	08/24/22 20:05	307-55-1-EI	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

QC Batch:	747328	Analysis Method:	EPA 537 Modified
QC Batch Method:	METHOD	Analysis Description:	PFAS 537 Mod Analysis Water
		Laboratory:	Pace Analytical Gulf Coast

Associated Lab Samples: 40249423001, 40249423002, 40249423003, 40249423004

METHOD BLANK: 2382099 Matrix: Water

Associated Lab Samples: 40249423001, 40249423002, 40249423003, 40249423004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	08/24/22 18:23	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	08/24/22 18:23	
8:2 FTS	ng/L	<1.06	4.00	08/24/22 18:23	
9Cl-PF3ONS	ng/L	<0.900	4.00	08/24/22 18:23	
11Cl-PF3OUdS	ng/L	<0.900	4.00	08/24/22 18:23	
ADONA	ng/L	<0.860	4.00	08/24/22 18:23	
Perfluoroctanesulfonamide	ng/L	<0.740	4.00	08/24/22 18:23	
HFPO-DA	ng/L	<6.67	20.0	08/24/22 18:23	
NetFOSA	ng/L	<1.40	8.00	08/24/22 18:23	
NetFOSAA	ng/L	<1.58	8.00	08/24/22 18:23	
NetFOSE	ng/L	<1.01	8.00	08/24/22 18:23	
NMeFOSA	ng/L	<1.66	8.00	08/24/22 18:23	
NMeFOSAA	ng/L	<0.900	8.00	08/24/22 18:23	
NMeFOSE	ng/L	<1.30	8.00	08/24/22 18:23	
Perfluorobutanoic acid	ng/L	<1.52	4.00	08/24/22 18:23	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	08/24/22 18:23	
Perfluorodecanoic acid (S)	ng/L	<1.44	4.00	08/24/22 18:23	
Perfluorododecanoic acid	ng/L	<1.30	4.00	08/24/22 18:23	
PFDoS	ng/L	<1.31	4.00	08/24/22 18:23	
PFDS	ng/L	<1.22	4.00	08/24/22 18:23	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	08/24/22 18:23	
PFHpS	ng/L	<1.22	4.00	08/24/22 18:23	
Perfluorohexanoic acid (S)	ng/L	<0.940	4.00	08/24/22 18:23	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	08/24/22 18:23	
Perfluorononanoic acid	ng/L	<0.980	4.00	08/24/22 18:23	
PFNS	ng/L	<1.74	4.00	08/24/22 18:23	
Perfluoroctanoic acid	ng/L	<0.840	4.00	08/24/22 18:23	
Perfluoroctanesulfonic acid	ng/L	<0.760	4.00	08/24/22 18:23	
Perfluoropentanoic acid	ng/L	<0.880	4.00	08/24/22 18:23	
PFPeS	ng/L	<1.02	4.00	08/24/22 18:23	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	08/24/22 18:23	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	08/24/22 18:23	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	08/24/22 18:23	
d-NEtFOSA	%	37	50-150	08/24/22 18:23	MSSV12.3
d-NMeFOSA	%	47	50-150	08/24/22 18:23	MSSV12.3
d3-NMeFOSAA	%	87	50-150	08/24/22 18:23	
d5-NEtFOSAA	%	97	50-150	08/24/22 18:23	
d7-NMeFOSE	%	68	50-150	08/24/22 18:23	
d9-NEtFOSE	%	61	50-150	08/24/22 18:23	
M2 4:2 FTS	%	96	50-150	08/24/22 18:23	

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

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QUALITY CONTROL DATA

Project: 6255 SOUTH MILWAUKEE

Pace Project No.: 40249423

METHOD BLANK: 2382099

Matrix: Water

Associated Lab Samples: 40249423001, 40249423002, 40249423003, 40249423004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
M2 6:2 FTS	%	101	50-150	08/24/22 18:23	
M2 8:2 FTS	%	99	50-150	08/24/22 18:23	
M2PFHxDA	%	46	50-150	08/24/22 18:23	MSSV12.3
M2PFTeDA	%	72	50-150	08/24/22 18:23	
M3HFPODA	%	90	50-150	08/24/22 18:23	
M3PFBS	%	92	50-150	08/24/22 18:23	
M3PFHxS	%	90	50-150	08/24/22 18:23	
M4PFHpA	%	95	50-150	08/24/22 18:23	
M5PFHxA	%	95	50-150	08/24/22 18:23	
M5PPeA	%	96	50-150	08/24/22 18:23	
M6PFDA	%	94	50-150	08/24/22 18:23	
M7PFUdA	%	90	50-150	08/24/22 18:23	
M8FOSA	%	86	50-150	08/24/22 18:23	
M8PFOA	%	98	50-150	08/24/22 18:23	
M8PFOS	%	90	50-150	08/24/22 18:23	
M9PFNA	%	104	50-150	08/24/22 18:23	
MPFBA	%	96	50-150	08/24/22 18:23	
MPFDoA	%	88	50-150	08/24/22 18:23	

LABORATORY CONTROL SAMPLE: 2382102

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4:2 FTS	ng/L	7.5	9.13	122	70-130	
6:2 Fluorotelomer sulfonate	ng/L	7.61	8.31	109	70-130	
8:2 FTS	ng/L	7.68	8.01	104	70-130	
9Cl-PF3ONS	ng/L	7.46	7.50	100	70-130	
11Cl-PF3OUDs	ng/L	7.54	7.42	98	70-130	
ADONA	ng/L	7.56	7.33	97	70-130	
Perfluoroctanesulfonamide	ng/L	8	8.80	110	70-130	
HFPO-DA	ng/L	16	<6.67	108	70-130	
NetFOSA	ng/L	8	8.37	105	70-130	
NETFOSAA	ng/L	8	<1.58	97	70-130	
NETFOSE	ng/L	8	<1.01	98	70-130	
NMeFOSA	ng/L	8	8.18	102	70-130	
NMeFOSAA	ng/L	8	<0.900	99	70-130	
NMeFOSE	ng/L	8	8.10	101	70-130	
Perfluorobutanoic acid	ng/L	8	8.11	101	70-130	
Perfluorobutanesulfonic acid	ng/L	7.1	7.31	103	70-130	
Perfluorodecanoic acid (S)	ng/L	8	8.14	102	70-130	
Perfluorododecanoic acid	ng/L	8	8.09	101	70-130	
PFDoS	ng/L	7.76	6.11	79	70-130	
PFDS	ng/L	7.72	7.69	100	70-130	
Perfluoroheptanoic acid	ng/L	8	8.05	101	70-130	
PFHpS	ng/L	7.62	7.96	104	70-130	

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QUALITY CONTROL DATA

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

LABORATORY CONTROL SAMPLE: 2382102

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Perfluorohexanoic acid (S)	ng/L	8	8.12	102	70-130	
Perfluorohexanesulfonic acid	ng/L	7.31	7.69	105	70-130	
Perfluorononanoic acid	ng/L	8	8.13	102	70-130	
PFNS	ng/L	7.7	7.91	103	70-130	
Perfluoroctanoic acid	ng/L	8	7.81	98	70-130	
Perfluoroctanesulfonic acid	ng/L	7.42	8.29	112	70-130	
Perfluoropentanoic acid	ng/L	8	7.99	100	70-130	
PFPeS	ng/L	7.53	7.74	103	70-130	
Perfluorotetradecanoic acid	ng/L	8	8.08	101	70-130	
Perfluorotridecanoic acid	ng/L	8	6.98	87	70-130	
Perfluoroundecanoic acid	ng/L	8	7.99	100	70-130	
d-NEtFOSA	%			13	50-150	MSSV12.6
d-NMeFOSA	%			22	50-150	MSSV12.6
d3-NMeFOSAA	%			96	50-150	
d5-NEtFOSAA	%			107	50-150	
d7-NMeFOSE	%			52	50-150	
d9-NEtFOSE	%			45	50-150	MSSV12.6
M2 4:2 FTS	%			103	50-150	
M2 6:2 FTS	%			104	50-150	
M2 8:2 FTS	%			104	50-150	
M2PFHxDA	%			29	50-150	MSSV12.6
M2PFTeDA	%			72	50-150	
M3HFPODA	%			101	50-150	
M3PFBS	%			101	50-150	
M3PFHxS	%			97	50-150	
M4PFHpA	%			106	50-150	
M5PFHxA	%			106	50-150	
M5PFPeA	%			107	50-150	
M6PFDA	%			105	50-150	
M7PFUdA	%			99	50-150	
M8FOSA	%			90	50-150	
M8PFOA	%			108	50-150	
M8PFOS	%			96	50-150	
M9PFNA	%			111	50-150	
MPFBA	%			107	50-150	
MPFDoA	%			96	50-150	

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QUALITY CONTROL DATA

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

QC Batch:	748650	Analysis Method:	EPA 537 Modified
QC Batch Method:	METHOD	Analysis Description:	PFAS 537 Mod Analysis Water
		Laboratory:	Pace Analytical Gulf Coast

Associated Lab Samples: 40249423001

METHOD BLANK: 2389881 Matrix: Water

Associated Lab Samples: 40249423001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	09/02/22 13:10	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	09/02/22 13:10	
8:2 FTS	ng/L	<1.06	4.00	09/02/22 13:10	
9Cl-PF3ONS	ng/L	<0.900	4.00	09/02/22 13:10	
11Cl-PF3OUDs	ng/L	<0.900	4.00	09/02/22 13:10	
ADONA	ng/L	<0.860	4.00	09/02/22 13:10	
Perfluoroctanesulfonamide	ng/L	<0.740	4.00	09/02/22 13:10	
HFPO-DA	ng/L	<6.67	20.0	09/02/22 13:10	
NetFOSA	ng/L	<1.40	8.00	09/02/22 13:10	
NetFOSAA	ng/L	<1.58	8.00	09/02/22 13:10	
NetFOSE	ng/L	<1.01	8.00	09/02/22 13:10	
NMeFOSA	ng/L	<1.66	8.00	09/02/22 13:10	
NMeFOSAA	ng/L	<0.900	8.00	09/02/22 13:10	
NMeFOSE	ng/L	<1.30	8.00	09/02/22 13:10	
Perfluorobutanoic acid	ng/L	<1.52	4.00	09/02/22 13:10	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	09/02/22 13:10	
Perfluorodecanoic acid (S)	ng/L	<1.44	4.00	09/02/22 13:10	
Perfluorododecanoic acid	ng/L	<1.30	4.00	09/02/22 13:10	
PFDoS	ng/L	<1.31	4.00	09/02/22 13:10	
PFDS	ng/L	<1.22	4.00	09/02/22 13:10	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	09/02/22 13:10	
PFHpS	ng/L	<1.22	4.00	09/02/22 13:10	
Perfluorohexanoic acid (S)	ng/L	<0.940	4.00	09/02/22 13:10	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	09/02/22 13:10	
Perfluorononanoic acid	ng/L	<0.980	4.00	09/02/22 13:10	
PFNS	ng/L	<1.74	4.00	09/02/22 13:10	
Perfluoroctanoic acid	ng/L	<0.840	4.00	09/02/22 13:10	
Perfluoroctanesulfonic acid	ng/L	<0.760	4.00	09/02/22 13:10	
Perfluoropentanoic acid	ng/L	<0.880	4.00	09/02/22 13:10	
PFPeS	ng/L	<1.02	4.00	09/02/22 13:10	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	09/02/22 13:10	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	09/02/22 13:10	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	09/02/22 13:10	
d-NEtFOSA	%	24	50-150	09/02/22 13:10	MSSV12.3
d-NMeFOSA	%	36	50-150	09/02/22 13:10	MSSV12.3
d3-NMeFOSAA	%	81	50-150	09/02/22 13:10	
d5-NEtFOSAA	%	88	50-150	09/02/22 13:10	
d7-NMeFOSE	%	58	50-150	09/02/22 13:10	
d9-NEtFOSE	%	47	50-150	09/02/22 13:10	MSSV12.3
M2 4:2 FTS	%	96	50-150	09/02/22 13:10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6255 SOUTH MILWAUKEE

Pace Project No.: 40249423

METHOD BLANK: 2389881

Matrix: Water

Associated Lab Samples: 40249423001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
M2 6:2 FTS	%	95	50-150	09/02/22 13:10	
M2 8:2 FTS	%	96	50-150	09/02/22 13:10	
M2PFHxDA	%	83	50-150	09/02/22 13:10	
M2PFTeDA	%	75	50-150	09/02/22 13:10	
M3HFPODA	%	88	50-150	09/02/22 13:10	
M3PFBS	%	84	50-150	09/02/22 13:10	
M3PFHxS	%	82	50-150	09/02/22 13:10	
M4PFHpA	%	86	50-150	09/02/22 13:10	
M5PFHxA	%	85	50-150	09/02/22 13:10	
M5PPPeA	%	85	50-150	09/02/22 13:10	
M6PFDA	%	90	50-150	09/02/22 13:10	
M7PFUdA	%	81	50-150	09/02/22 13:10	
M8FOSA	%	72	50-150	09/02/22 13:10	
M8PFOA	%	88	50-150	09/02/22 13:10	
M8PFOS	%	83	50-150	09/02/22 13:10	
M9PFNA	%	91	50-150	09/02/22 13:10	
MPFBA	%	87	50-150	09/02/22 13:10	
MPFDoA	%	84	50-150	09/02/22 13:10	

LABORATORY CONTROL SAMPLE & LCSD: 2389882

2389883

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
4:2 FTS	ng/L	75	75.1	75.2	100	100	70-130	0	30	
6:2 Fluorotelomer sulfonate	ng/L	76.1	75.5	77.6	99	102	70-130	3	30	
8:2 FTS	ng/L	76.8	81.1	82.0	106	107	70-130	1	30	
9Cl-PF3ONS	ng/L	74.6	72.8	72.7	98	97	70-130	0	30	
11Cl-PF3OUdS	ng/L	75.4	74.1	74.0	98	98	70-130	0	30	
ADONA	ng/L	75.6	68.9	70.0	91	93	70-130	2	30	
Perfluoroctanesulfonamide	ng/L	80	78.3	78.4	98	98	70-130	0	30	
HFPO-DA	ng/L	160	145	144	91	90	70-130	1	30	
NETFOSA	ng/L	80	66.0	67.5	83	84	70-130	2	30	
NETFOSAA	ng/L	80	75.1	74.7	94	93	70-130	1	30	
NETFOSE	ng/L	80	66.2	67.2	83	84	70-130	1	30	
NMeFOSA	ng/L	80	74.5	73.6	93	92	70-130	1	30	
NMeFOSAA	ng/L	80	79.0	78.0	99	98	70-130	1	30	
NMeFOSE	ng/L	80	71.8	70.2	90	88	70-130	2	30	
Perfluorobutanoic acid	ng/L	80	74.5	75.0	93	94	70-130	1	30	
Perfluorobutanesulfonic acid	ng/L	71	69.3	67.1	98	95	70-130	3	30	
Perfluorodecanoic acid (S)	ng/L	80	76.7	75.8	96	95	70-130	1	30	
Perfluorododecanoic acid	ng/L	80	78.7	78.5	98	98	70-130	0	30	
PFDoS	ng/L	77.6	59.2	59.6	76	77	70-130	1	30	
PFDS	ng/L	77.2	68.9	70.5	89	91	70-130	2	30	
Perfluoroheptanoic acid	ng/L	80	76.6	77.6	96	97	70-130	1	30	
PFHpS	ng/L	76.2	71.0	72.4	93	95	70-130	2	30	

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QUALITY CONTROL DATA

Project: 6255 SOUTH MILWAUKEE

Pace Project No.: 40249423

Parameter	Units	2389882		2389883		% Rec	Limits	RPD	Max RPD		Qualifiers
		Spike Conc.	LCS Result	LCSD Result	% Rec				RPD	Qualifiers	
Perfluorohexanoic acid (S)	ng/L	80	74.7	76.5	93	96	70-130	2	30		
Perfluorohexanesulfonic acid	ng/L	73.1	66.1	68.4	90	94	70-130	3	30		
Perfluorononanoic acid	ng/L	80	77.5	77.0	97	96	70-130	1	30		
PFNS	ng/L	77	70.8	71.4	92	93	70-130	1	30		
Perfluoroctanoic acid	ng/L	80	76.5	77.6	96	97	70-130	1	30		
Perfluoroctanesulfonic acid	ng/L	74.2	68.4	69.1	92	93	70-130	1	30		
Perfluoropentanoic acid	ng/L	80	76.3	77.2	95	97	70-130	1	30		
PFPeS	ng/L	75.3	74.7	70.8	99	94	70-130	5	30		
Perfluorotetradecanoic acid	ng/L	80	76.7	77.5	96	97	70-130	1	30		
Perfluorotridecanoic acid	ng/L	80	73.6	74.5	92	93	70-130	1	30		
Perfluoroundecanoic acid	ng/L	80	77.9	77.4	97	97	70-130	1	30		
d-NEtFOSA	%				72	58	50-150				
d-NMeFOSA	%				68	62	50-150				
d3-NMeFOSAA	%				83	83	50-150				
d5-NEtFOSAA	%				88	89	50-150				
d7-NMeFOSE	%				70	66	50-150				
d9-NEtFOSE	%				77	62	50-150				
M2 4:2 FTS	%				93	95	50-150				
M2 6:2 FTS	%				99	97	50-150				
M2 8:2 FTS	%				91	91	50-150				
M2PFHxDA	%				82	84	50-150				
M2PFTeDA	%				77	79	50-150				
M3HFPDA	%				90	88	50-150				
M3PFBS	%				84	84	50-150				
M3PFHxS	%				85	82	50-150				
M4PFHpA	%				88	86	50-150				
M5PFHxA	%				88	87	50-150				
M5PFPeA	%				87	85	50-150				
M6PFDA	%				90	92	50-150				
M7PPUDa	%				84	84	50-150				
M8FOSA	%				74	77	50-150				
M8PFOA	%				90	89	50-150				
M8PFOS	%				84	83	50-150				
M9PFNA	%				92	94	50-150				
MPFBA	%				88	88	50-150				
MPFDoA	%				83	84	50-150				

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QUALIFIERS

Project: 6255 SOUTH MILWAUKEE
 Pace Project No.: 40249423

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.

WORKORDER QUALIFIERS

WO: 40249423

- [1] Sample 22208092501 was re-extracted due to multiple extracted internal standard failures. The sample was re-extracted with no extracted internal standard failures; however, the LLLCS was not spiked with target compounds and was not reportable. Both data sets are being reported at the request of the client.

ANALYTE QUALIFIERS

- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2382099 (MB for HBN 747328 [LCMS/6319]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2382099 (MB for HBN 747328 [LCMS/6319]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2389881 (MB for HBN 748650 [LCMS/6462]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2382099 (MB for HBN 747328 [LCMS/6319]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2389881 (MB for HBN 748650 [LCMS/6462]).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2389881 (MB for HBN 748650 [LCMS/6462]).
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2382101 (LCSD for HBN 747328 [LCMS/6319]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 2382102 (LCS for HBN 747328 [LCMS/6319]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2382101 (LCSD for HBN 747328 [LCMS/6319]). The recovery of the associated compounds is within control limits.

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QUALIFIERS

Project: 6255 SOUTH MILWAUKEE
Pace Project No.: 40249423

ANALYTE QUALIFIERS

- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 2382102 (LCS for HBN 747328 [LCMS/6319]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2382101 (LCSD for HBN 747328 [LCMS/6319]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 2382102 (LCS for HBN 747328 [LCMS/6319]). The recovery of the associated compounds is within control limits.
- MSSV12.6 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 2382102 (LCS for HBN 747328 [LCMS/6319]). The recovery of the associated compounds is within control limits.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is outside the control limits for sample 22208092502 (MW-1). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22208092502 (MW-1). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22208092503 (MW-2). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFHxDA is outside the control limits for sample 22208092504 (MW-601). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22208092502 (MW-1). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22208092503 (MW-2). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFTA is outside the control limits for sample 22208092504 (MW-601). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22208092502 (MW-1). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M8FOSA is outside the control limits for sample 22208092504 (MW-601). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208092502 (MW-1). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208092503 (MW-2). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208092504 (MW-601). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22208092502 (MW-1). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22208092503 (MW-2). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22208092504 (MW-601). The sample was re-extracted with similar results for this extracted internal standard.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 6255 SOUTH MILWAUKEE

Pace Project No.: 40249423

ANALYTE QUALIFIERS

- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22208092502 (MW-1). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22208092503 (MW-2). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22208092504 (MW-601). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22208092502 (MW-1). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22208092503 (MW-2). The sample was re-extracted with similar results for this extracted internal standard.
- MSSV12.7 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22208092504 (MW-601). The sample was re-extracted with similar results for this extracted internal standard.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

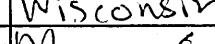
Project: 6255 SOUTH MILWAUKEE
 Pace Project No.: 40249423

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40249423001	MW-201	METHOD	747328	EPA 537 Modified	748315
40249423001	MW-201	METHOD	748650	EPA 537 Modified	749023
40249423002	MW-1	METHOD	747328	EPA 537 Modified	748315
40249423003	MW-2	METHOD	747328	EPA 537 Modified	748315
40249423004	MW-601	METHOD	747328	EPA 537 Modified	748315

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name:	DAI Environmental
Branch/Location:	Lake Forest, IL
Project Contact:	Chris Cailles
Phone:	847-573-8900
Project Number:	6255
Project Name:	South Milwaukee
Project State:	Wisconsin
Sampled By (Print):	Marcus Gresschner
Sampled By (Sign):	
PO #:	
	Regulatory Program



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of

CHAIN OF CUSTODY

*Preservation Codes						
A=None	B=HCl	C=H ₂ SO ₄	D=HNO ₃	E=DI Water	F=Methanol	G=NaOH
H=Sodium Bisulfate Solution	I=Sodium Thiosulfate	J=Other				

Quarantine By:	Date/Time:	Received By:	Date/Time:
Mike D	8/4/22 10:30	Mike D	8/4/22 10:30
Quarantine By:	Date/Time:	Received By:	Date/Time:
Mike D	8/4/22 5:00	CS Logistics	8/4/22 8:00
Quarantine By:	Date/Time:	Received By:	Date/Time:
CS Logistics	8/5/22 0800	Mike D	8/5/22 0800
Quarantine By:	Date/Time:	Received By:	Date/Time:
Quarantine By:	Date/Time:	Received By:	Date/Time:

PACE Project No.

Receipt Temp = 7 °C

Sample Receipt pH

Cooler Custody Seal

Page 25 of 27

Sample Preservation Receipt Form

Client Name: DAI

Project # 40249423

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

Lab Lot# of pH paper:

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

Initial when completed:

Date/
Time:

Pace Lab #	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																													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				
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, 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						

DC#_Title: ENV-FRM-GBAY-0014 v02_SCUR
Revision: 3 | Effective Date: | Issued by: Green Bay

Sample Condition Upon Receipt Form (SCUR)

Project #:

Client Name: DA 1

WO# : 40249423



40249423

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 - 98 Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 2 /Corr: 2

Temp Blank Present: yes no

Biological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:

Date: 8/5/22 Initials: AJ

Labeled By Initials: AJ

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <i>WJ#, mail, invoice, filter, preserv 8/5/22 N1c</i>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. <i>W</i>
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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 2 of 2

September 01, 2022

Chris Cailles
DAI Environmental
Polo Park Business Center
27834 Irma Lee Circle
Lake Forest, IL 60045

RE: Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Dear Chris Cailles:

Enclosed are the analytical results for sample(s) received by the laboratory on August 09, 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 Gulf Coast

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

Sincerely,



Steven Mleczko
steve.mleczko@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jenny Rovzar, DAI



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Pace Analytical Gulf Coast

7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618

North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 6255 S. MILWAUKEE
 Pace Project No.: 40249506

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40249506001	MW-3	Water	08/08/22 10:00	08/09/22 08:00
40249506002	MW-603	Water	08/08/22 11:25	08/09/22 08:00
40249506003	MW-4	Water	08/08/22 12:20	08/09/22 08:00
40249506004	MW-5	Water	08/08/22 13:20	08/09/22 08:00
40249506005	EQUIPMENT BLANK	Water	08/08/22 08:00	08/09/22 08:00

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SAMPLE ANALYTE COUNT

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40249506001	MW-3	EPA 537 Modified	SLR2	58	GCLA
40249506002	MW-603	EPA 537 Modified	SLR2	58	GCLA
40249506003	MW-4	EPA 537 Modified	SLR2	58	GCLA
40249506004	MW-5	EPA 537 Modified	SLR2	58	GCLA
40249506005	EQUIPMENT BLANK	EPA 537 Modified	SLR2	58	GCLA

GCLA = Pace Analytical Gulf Coast

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SUMMARY OF DETECTION

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40249506001	MW-3					
EPA 537 Modified	Perfluorobutanesulfonic acid	11.3	ng/L	2.00	08/19/22 23:45	
EPA 537 Modified	Perfluorohexanoic acid (S)	3.12	ng/L	2.00	08/19/22 23:45	
EPA 537 Modified	Perfluoroctanesulfonic acid	10.1	ng/L	2.00	08/19/22 23:45	
EPA 537 Modified	Perfluoropentanoic acid	3.69	ng/L	2.00	08/19/22 23:45	
40249506002	MW-603					
EPA 537 Modified	Perfluorobutanoic acid	60.5	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluorobutanesulfonic acid	111	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluorodecanoic acid (S)	5.59	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluoroheptanoic acid	78.6	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	PFHpS	2.57	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluorohexanoic acid (S)	121	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluorohexanesulfonic acid	28.0	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluorononanoic acid	10.6	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluoroctanoic acid	86.4	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluoroctanesulfonic acid	93.4	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	Perfluoropentanoic acid	217	ng/L	2.00	08/20/22 00:14	
EPA 537 Modified	PFPeS	3.87	ng/L	2.00	08/20/22 00:14	
40249506003	MW-4					
EPA 537 Modified	Perfluorobutanesulfonic acid	19.9	ng/L	1.95	08/20/22 00:29	
EPA 537 Modified	Perfluoroheptanoic acid	4.33	ng/L	1.95	08/20/22 00:29	
EPA 537 Modified	Perfluorohexanoic acid (S)	6.98	ng/L	1.95	08/20/22 00:29	
EPA 537 Modified	Perfluorohexanesulfonic acid	4.01	ng/L	1.95	08/20/22 00:29	
EPA 537 Modified	Perfluoroctanoic acid	7.30	ng/L	1.95	08/20/22 00:29	
EPA 537 Modified	Perfluoroctanesulfonic acid	17.9	ng/L	1.95	08/20/22 00:29	
EPA 537 Modified	Perfluoropentanoic acid	21.1	ng/L	1.95	08/20/22 00:29	
40249506004	MW-5					
EPA 537 Modified	Perfluorobutanoic acid	6.33	ng/L	2.00	08/20/22 00:43	
EPA 537 Modified	Perfluorobutanesulfonic acid	14.3	ng/L	2.00	08/20/22 00:43	
EPA 537 Modified	Perfluoroheptanoic acid	3.98	ng/L	2.00	08/20/22 00:43	
EPA 537 Modified	Perfluorohexanoic acid (S)	7.70	ng/L	2.00	08/20/22 00:43	
EPA 537 Modified	Perfluorohexanesulfonic acid	4.19	ng/L	2.00	08/20/22 00:43	
EPA 537 Modified	Perfluoroctanoic acid	9.29	ng/L	2.00	08/20/22 00:43	
EPA 537 Modified	Perfluoroctanesulfonic acid	7.68	ng/L	2.00	08/20/22 00:43	
EPA 537 Modified	Perfluoropentanoic acid	9.58	ng/L	2.00	08/20/22 00:43	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: MW-3	Lab ID: 40249506001	Collected: 08/08/22 10:00	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water			Analytical Method: EPA 537 Modified	Preparation Method: METHOD					
			Pace Analytical Gulf Coast						
4:2 FTS	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/19/22 23:45	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.750	ng/L	2.00	0.750	1	08/15/22 15:30	08/19/22 23:45	27619-97-2	
8:2 FTS	<0.530	ng/L	2.00	0.530	1	08/15/22 15:30	08/19/22 23:45	39108-34-4	
9Cl-PF3ONS	<0.450	ng/L	2.00	0.450	1	08/15/22 15:30	08/19/22 23:45	756426-58-1	
11Cl-PF3OuDS	<0.450	ng/L	2.00	0.450	1	08/15/22 15:30	08/19/22 23:45	763051-92-9	
ADONA	<0.430	ng/L	2.00	0.430	1	08/15/22 15:30	08/19/22 23:45	919005-14-4	
Perfluoroctanesulfonamide	<0.370	ng/L	2.00	0.370	1	08/15/22 15:30	08/19/22 23:45	754-91-6	
HFPO-DA	<3.34	ng/L	10.0	3.34	1	08/15/22 15:30	08/19/22 23:45	13252-13-6	
NEtFOSA	<0.700	ng/L	4.00	0.700	1	08/15/22 15:30	08/19/22 23:45	4151-50-2	
NEtFOSAA	<0.790	ng/L	4.00	0.790	1	08/15/22 15:30	08/19/22 23:45	2991-50-6	
NEtFOSE	<0.505	ng/L	4.00	0.505	1	08/15/22 15:30	08/19/22 23:45	1691-99-2	
NMeFOSA	<0.830	ng/L	4.00	0.830	1	08/15/22 15:30	08/19/22 23:45	31506-32-8	
NMeFOSAA	<0.450	ng/L	4.00	0.450	1	08/15/22 15:30	08/19/22 23:45	2355-31-9	
NMeFOSE	<0.650	ng/L	4.00	0.650	1	08/15/22 15:30	08/19/22 23:45	24448-09-7	
Perfluorobutanoic acid	<0.760	ng/L	2.00	0.760	1	08/15/22 15:30	08/19/22 23:45	375-22-4	
Perfluorobutanesulfonic acid	11.3	ng/L	2.00	0.310	1	08/15/22 15:30	08/19/22 23:45	375-73-5	
Perfluorodecanoic acid (S)	<0.720	ng/L	2.00	0.720	1	08/15/22 15:30	08/19/22 23:45	335-76-2	
Perfluorododecanoic acid	<0.650	ng/L	2.00	0.650	1	08/15/22 15:30	08/19/22 23:45	307-55-1	
PFDoS	<0.655	ng/L	2.00	0.655	1	08/15/22 15:30	08/19/22 23:45	79780-39-5	
PFDS	<0.610	ng/L	2.00	0.610	1	08/15/22 15:30	08/19/22 23:45	335-77-3	
Perfluoroheptanoic acid	<0.580	ng/L	2.00	0.580	1	08/15/22 15:30	08/19/22 23:45	375-85-9	
PFHpS	<0.610	ng/L	2.00	0.610	1	08/15/22 15:30	08/19/22 23:45	375-92-8	
Perfluorohexanoic acid (S)	3.12	ng/L	2.00	0.470	1	08/15/22 15:30	08/19/22 23:45	307-24-4	
Perfluorohexanesulfonic acid	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/19/22 23:45	355-46-4	
Perfluorononanoic acid	<0.490	ng/L	2.00	0.490	1	08/15/22 15:30	08/19/22 23:45	375-95-1	
PFNS	<0.870	ng/L	2.00	0.870	1	08/15/22 15:30	08/19/22 23:45	68259-12-1	
Perfluoroctanoic acid	<0.420	ng/L	2.00	0.420	1	08/15/22 15:30	08/19/22 23:45	335-67-1	
Perfluorooctanesulfonic acid	10.1	ng/L	2.00	0.380	1	08/15/22 15:30	08/19/22 23:45	1763-23-1	
Perfluoropentanoic acid	3.69	ng/L	2.00	0.440	1	08/15/22 15:30	08/19/22 23:45	2706-90-3	
PPPeS	<0.510	ng/L	2.00	0.510	1	08/15/22 15:30	08/19/22 23:45	2706-91-4	
Perfluorotetradecanoic acid	<0.570	ng/L	2.00	0.570	1	08/15/22 15:30	08/19/22 23:45	376-06-7	
Perfluorotridecanoic acid	<0.615	ng/L	2.00	0.615	1	08/15/22 15:30	08/19/22 23:45	72629-94-8	
Perfluoroundecanoic acid	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/19/22 23:45	2058-94-8	
Surrogates									
d-NEtFOSA	6	%	50-150		1	08/15/22 15:30	08/19/22 23:45	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	7	%	50-150		1	08/15/22 15:30	08/19/22 23:45	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	106	%	50-150		1	08/15/22 15:30	08/19/22 23:45	2355-31-9-EI	
d5-NEtFOSAA	118	%	50-150		1	08/15/22 15:30	08/19/22 23:45	2991-50-6-EI	
d7-NMeFOSE	48	%	50-150		1	08/15/22 15:30	08/19/22 23:45	24448-09-7-	MSSV1 2.3
d9-NEtFOSE	44	%	50-150		1	08/15/22 15:30	08/19/22 23:45	1691-99-2-EI	MSSV1 2.3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: MW-3	Lab ID: 40249506001	Collected: 08/08/22 10:00	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M2 4:2 FTS	251	%	50-150		1	08/15/22 15:30	08/19/22 23:45	757124-72-4	MSSV1 2.3, MSSV1 2.5
M2 6:2 FTS	225	%	50-150		1	08/15/22 15:30	08/19/22 23:45	27619-97-2-	MSSV1 2.3, MSSV1 2.5
M2 8:2 FTS	166	%	50-150		1	08/15/22 15:30	08/19/22 23:45	39108-34-4-	MSSV1 2.3, MSSV1 2.5
M2PFHxDA	39	%	50-150		1	08/15/22 15:30	08/19/22 23:45	67905-19-5-	MSSV1 2.3
M2PFTeDA	70	%	50-150		1	08/15/22 15:30	08/19/22 23:45	376-06-7-EI	
M3HFPODA	84	%	50-150		1	08/15/22 15:30	08/19/22 23:45	13252-13-6-	
M3PFBS	86	%	50-150		1	08/15/22 15:30	08/19/22 23:45	375-73-5-EI	
M3PFHxS	96	%	50-150		1	08/15/22 15:30	08/19/22 23:45	355-46-4-EI	
M4PFHpA	99	%	50-150		1	08/15/22 15:30	08/19/22 23:45	375-85-9-EI	
M5PFHxA	97	%	50-150		1	08/15/22 15:30	08/19/22 23:45	307-24-4-EI	
M5PFPeA	74	%	50-150		1	08/15/22 15:30	08/19/22 23:45	2706-90-3-EI	
M6PFDA	122	%	50-150		1	08/15/22 15:30	08/19/22 23:45	335-76-2-EI	
M7PFUdA	115	%	50-150		1	08/15/22 15:30	08/19/22 23:45	2058-94-8-EI	
M8FOSA	80	%	50-150		1	08/15/22 15:30	08/19/22 23:45	754-91-6-EI	
M8PFOA	113	%	50-150		1	08/15/22 15:30	08/19/22 23:45	335-67-1-EI	
M8PFOS	111	%	50-150		1	08/15/22 15:30	08/19/22 23:45	1763-23-1-EI	
M9PFNA	115	%	50-150		1	08/15/22 15:30	08/19/22 23:45	375-95-1-EI	
MPFBA	75	%	50-150		1	08/15/22 15:30	08/19/22 23:45	375-22-4-EI	
MPFDa	101	%	50-150		1	08/15/22 15:30	08/19/22 23:45	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: MW-603	Lab ID: 40249506002	Collected: 08/08/22 11:25	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 00:14	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.750	ng/L	2.00	0.750	1	08/15/22 15:30	08/20/22 00:14	27619-97-2	
8:2 FTS	<0.530	ng/L	2.00	0.530	1	08/15/22 15:30	08/20/22 00:14	39108-34-4	
9Cl-PF3ONS	<0.450	ng/L	2.00	0.450	1	08/15/22 15:30	08/20/22 00:14	756426-58-1	
11Cl-PF3OUDS	<0.450	ng/L	2.00	0.450	1	08/15/22 15:30	08/20/22 00:14	763051-92-9	
ADONA	<0.430	ng/L	2.00	0.430	1	08/15/22 15:30	08/20/22 00:14	919005-14-4	
Perfluoroctanesulfonamide	<0.370	ng/L	2.00	0.370	1	08/15/22 15:30	08/20/22 00:14	754-91-6	
HFPO-DA	<3.34	ng/L	10.0	3.34	1	08/15/22 15:30	08/20/22 00:14	13252-13-6	
NEtFOSA	<0.700	ng/L	4.00	0.700	1	08/15/22 15:30	08/20/22 00:14	4151-50-2	
NEtFOSAA	<0.790	ng/L	4.00	0.790	1	08/15/22 15:30	08/20/22 00:14	2991-50-6	
NEtFOSE	<0.505	ng/L	4.00	0.505	1	08/15/22 15:30	08/20/22 00:14	1691-99-2	
NMeFOSA	<0.830	ng/L	4.00	0.830	1	08/15/22 15:30	08/20/22 00:14	31506-32-8	
NMeFOSAA	<0.450	ng/L	4.00	0.450	1	08/15/22 15:30	08/20/22 00:14	2355-31-9	
NMeFOSE	<0.650	ng/L	4.00	0.650	1	08/15/22 15:30	08/20/22 00:14	24448-09-7	
Perfluorobutanoic acid	60.5	ng/L	2.00	0.760	1	08/15/22 15:30	08/20/22 00:14	375-22-4	
Perfluorobutanesulfonic acid	111	ng/L	2.00	0.310	1	08/15/22 15:30	08/20/22 00:14	375-73-5	
Perfluorodecanoic acid (S)	5.59	ng/L	2.00	0.720	1	08/15/22 15:30	08/20/22 00:14	335-76-2	
Perfluorododecanoic acid	<0.650	ng/L	2.00	0.650	1	08/15/22 15:30	08/20/22 00:14	307-55-1	
PFDoS	<0.655	ng/L	2.00	0.655	1	08/15/22 15:30	08/20/22 00:14	79780-39-5	
PFDS	<0.610	ng/L	2.00	0.610	1	08/15/22 15:30	08/20/22 00:14	335-77-3	
Perfluoroheptanoic acid	78.6	ng/L	2.00	0.580	1	08/15/22 15:30	08/20/22 00:14	375-85-9	
PFHpS	2.57	ng/L	2.00	0.610	1	08/15/22 15:30	08/20/22 00:14	375-92-8	
Perfluorohexanoic acid (S)	121	ng/L	2.00	0.470	1	08/15/22 15:30	08/20/22 00:14	307-24-4	
Perfluorohexanesulfonic acid	28.0	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 00:14	355-46-4	
Perfluorononanoic acid	10.6	ng/L	2.00	0.490	1	08/15/22 15:30	08/20/22 00:14	375-95-1	
PFNS	<0.870	ng/L	2.00	0.870	1	08/15/22 15:30	08/20/22 00:14	68259-12-1	
Perfluorooctanoic acid	86.4	ng/L	2.00	0.420	1	08/15/22 15:30	08/20/22 00:14	335-67-1	
Perfluorooctanesulfonic acid	93.4	ng/L	2.00	0.380	1	08/15/22 15:30	08/20/22 00:14	1763-23-1	
Perfluoropentanoic acid	217	ng/L	2.00	0.440	1	08/15/22 15:30	08/20/22 00:14	2706-90-3	
PFPeS	3.87	ng/L	2.00	0.510	1	08/15/22 15:30	08/20/22 00:14	2706-91-4	
Perfluorotetradecanoic acid	<0.570	ng/L	2.00	0.570	1	08/15/22 15:30	08/20/22 00:14	376-06-7	
Perfluorotridecanoic acid	<0.615	ng/L	2.00	0.615	1	08/15/22 15:30	08/20/22 00:14	72629-94-8	
Perfluoroundecanoic acid	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 00:14	2058-94-8	
Surrogates									
d-NEtFOSA	45	%	50-150		1	08/15/22 15:30	08/20/22 00:14	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	49	%	50-150		1	08/15/22 15:30	08/20/22 00:14	31506-32-8- MSSV1 2.3	
d3-NMeFOSAA	99	%	50-150		1	08/15/22 15:30	08/20/22 00:14	2355-31-9-EI	
d5-NEtFOSAA	115	%	50-150		1	08/15/22 15:30	08/20/22 00:14	2991-50-6-EI	
d7-NMeFOSE	102	%	50-150		1	08/15/22 15:30	08/20/22 00:14	24448-09-7-	
d9-NEtFOSE	97	%	50-150		1	08/15/22 15:30	08/20/22 00:14	1691-99-2-EI	
M2 4:2 FTS	136	%	50-150		1	08/15/22 15:30	08/20/22 00:14	757124-72-4	
M2 6:2 FTS	134	%	50-150		1	08/15/22 15:30	08/20/22 00:14	27619-97-2-	
M2 8:2 FTS	132	%	50-150		1	08/15/22 15:30	08/20/22 00:14	39108-34-4-	
M2PFHxD	114	%	50-150		1	08/15/22 15:30	08/20/22 00:14	67905-19-5-	

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: MW-603	Lab ID: 40249506002	Collected: 08/08/22 11:25	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M2PFTeDA	102	%	50-150		1	08/15/22 15:30	08/20/22 00:14	376-06-7-EI	
M3HFPODA	125	%	50-150		1	08/15/22 15:30	08/20/22 00:14	13252-13-6	
M3PFBS	113	%	50-150		1	08/15/22 15:30	08/20/22 00:14	375-73-5-EI	
M3PFHxS	118	%	50-150		1	08/15/22 15:30	08/20/22 00:14	355-46-4-EI	
M4PFHpA	116	%	50-150		1	08/15/22 15:30	08/20/22 00:14	375-85-9-EI	
M5PFHxA	120	%	50-150		1	08/15/22 15:30	08/20/22 00:14	307-24-4-EI	
M5PFPeA	114	%	50-150		1	08/15/22 15:30	08/20/22 00:14	2706-90-3-EI	
M6PFDA	120	%	50-150		1	08/15/22 15:30	08/20/22 00:14	335-76-2-EI	
M7PFUdA	114	%	50-150		1	08/15/22 15:30	08/20/22 00:14	2058-94-8-EI	
M8FOSA	103	%	50-150		1	08/15/22 15:30	08/20/22 00:14	754-91-6-EI	
M8PFOA	119	%	50-150		1	08/15/22 15:30	08/20/22 00:14	335-67-1-EI	
M8PFOS	115	%	50-150		1	08/15/22 15:30	08/20/22 00:14	1763-23-1-EI	
M9PFNA	119	%	50-150		1	08/15/22 15:30	08/20/22 00:14	375-95-1-EI	
MPFBA	115	%	50-150		1	08/15/22 15:30	08/20/22 00:14	375-22-4-EI	
MPFDa	109	%	50-150		1	08/15/22 15:30	08/20/22 00:14	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: MW-4	Lab ID: 40249506003	Collected: 08/08/22 12:20	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.605	ng/L	1.95	0.605	1	08/15/22 15:30	08/20/22 00:29	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.732	ng/L	1.95	0.732	1	08/15/22 15:30	08/20/22 00:29	27619-97-2	
8:2 FTS	<0.518	ng/L	1.95	0.518	1	08/15/22 15:30	08/20/22 00:29	39108-34-4	
9Cl-PF3ONS	<0.439	ng/L	1.95	0.439	1	08/15/22 15:30	08/20/22 00:29	756426-58-1	
11Cl-PF3OuDS	<0.439	ng/L	1.95	0.439	1	08/15/22 15:30	08/20/22 00:29	763051-92-9	
ADONA	<0.420	ng/L	1.95	0.420	1	08/15/22 15:30	08/20/22 00:29	919005-14-4	
Perfluoroctanesulfonamide	<0.361	ng/L	1.95	0.361	1	08/15/22 15:30	08/20/22 00:29	754-91-6	
HFPO-DA	<3.26	ng/L	9.77	3.26	1	08/15/22 15:30	08/20/22 00:29	13252-13-6	
NEtFOSA	<0.684	ng/L	3.91	0.684	1	08/15/22 15:30	08/20/22 00:29	4151-50-2	
NEtFOSAA	<0.771	ng/L	3.91	0.771	1	08/15/22 15:30	08/20/22 00:29	2991-50-6	
NEtFOSE	<0.493	ng/L	3.91	0.493	1	08/15/22 15:30	08/20/22 00:29	1691-99-2	
NMeFOSA	<0.811	ng/L	3.91	0.811	1	08/15/22 15:30	08/20/22 00:29	31506-32-8	
NMeFOSAA	<0.439	ng/L	3.91	0.439	1	08/15/22 15:30	08/20/22 00:29	2355-31-9	
NMeFOSE	<0.635	ng/L	3.91	0.635	1	08/15/22 15:30	08/20/22 00:29	24448-09-7	
Perfluorobutanoic acid	<0.742	ng/L	1.95	0.742	1	08/15/22 15:30	08/20/22 00:29	375-22-4	
Perfluorobutanesulfonic acid	19.9	ng/L	1.95	0.303	1	08/15/22 15:30	08/20/22 00:29	375-73-5	
Perfluorodecanoic acid (S)	<0.703	ng/L	1.95	0.703	1	08/15/22 15:30	08/20/22 00:29	335-76-2	
Perfluorododecanoic acid	<0.635	ng/L	1.95	0.635	1	08/15/22 15:30	08/20/22 00:29	307-55-1	
PFDoS	<0.640	ng/L	1.95	0.640	1	08/15/22 15:30	08/20/22 00:29	79780-39-5	
PFDS	<0.596	ng/L	1.95	0.596	1	08/15/22 15:30	08/20/22 00:29	335-77-3	
Perfluoroheptanoic acid	4.33	ng/L	1.95	0.566	1	08/15/22 15:30	08/20/22 00:29	375-85-9	
PFHpS	<0.596	ng/L	1.95	0.596	1	08/15/22 15:30	08/20/22 00:29	375-92-8	
Perfluorohexanoic acid (S)	6.98	ng/L	1.95	0.459	1	08/15/22 15:30	08/20/22 00:29	307-24-4	
Perfluorohexanesulfonic acid	4.01	ng/L	1.95	0.605	1	08/15/22 15:30	08/20/22 00:29	355-46-4	
Perfluorononanoic acid	<0.479	ng/L	1.95	0.479	1	08/15/22 15:30	08/20/22 00:29	375-95-1	
PFNS	<0.850	ng/L	1.95	0.850	1	08/15/22 15:30	08/20/22 00:29	68259-12-1	
Perfluoroctanoic acid	7.30	ng/L	1.95	0.410	1	08/15/22 15:30	08/20/22 00:29	335-67-1	
Perfluorooctanesulfonic acid	17.9	ng/L	1.95	0.371	1	08/15/22 15:30	08/20/22 00:29	1763-23-1	
Perfluoropentanoic acid	21.1	ng/L	1.95	0.430	1	08/15/22 15:30	08/20/22 00:29	2706-90-3	
PPPeS	<0.498	ng/L	1.95	0.498	1	08/15/22 15:30	08/20/22 00:29	2706-91-4	
Perfluorotetradecanoic acid	<0.557	ng/L	1.95	0.557	1	08/15/22 15:30	08/20/22 00:29	376-06-7	
Perfluorotridecanoic acid	<0.601	ng/L	1.95	0.601	1	08/15/22 15:30	08/20/22 00:29	72629-94-8	
Perfluoroundecanoic acid	<0.605	ng/L	1.95	0.605	1	08/15/22 15:30	08/20/22 00:29	2058-94-8	
Surrogates									
d-NEtFOSA	11	%	50-150		1	08/15/22 15:30	08/20/22 00:29	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	13	%	50-150		1	08/15/22 15:30	08/20/22 00:29	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	103	%	50-150		1	08/15/22 15:30	08/20/22 00:29	2355-31-9-EI	
d5-NEtFOSAA	113	%	50-150		1	08/15/22 15:30	08/20/22 00:29	2991-50-6-EI	
d7-NMeFOSE	61	%	50-150		1	08/15/22 15:30	08/20/22 00:29	24448-09-7-	
d9-NEtFOSE	60	%	50-150		1	08/15/22 15:30	08/20/22 00:29	1691-99-2-EI	
M2 4:2 FTS	282	%	50-150		1	08/15/22 15:30	08/20/22 00:29	757124-72-4	MSSV1 2.3
M2 6:2 FTS	193	%	50-150		1	08/15/22 15:30	08/20/22 00:29	27619-97-2-	MSSV1 2.3

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: MW-4	Lab ID: 40249506003	Collected: 08/08/22 12:20	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M2 8:2 FTS	144	%	50-150		1	08/15/22 15:30	08/20/22 00:29	39108-34-4-	
M2PFHxDA	86	%	50-150		1	08/15/22 15:30	08/20/22 00:29	67905-19-5-	
M2PFTeDA	98	%	50-150		1	08/15/22 15:30	08/20/22 00:29	376-06-7-EI	
M3HFPODA	89	%	50-150		1	08/15/22 15:30	08/20/22 00:29	13252-13-6-	
M3PFBS	93	%	50-150		1	08/15/22 15:30	08/20/22 00:29	375-73-5-EI	
M3PFHxS	105	%	50-150		1	08/15/22 15:30	08/20/22 00:29	355-46-4-EI	
M4PFHpA	111	%	50-150		1	08/15/22 15:30	08/20/22 00:29	375-85-9-EI	
M5PFHxA	109	%	50-150		1	08/15/22 15:30	08/20/22 00:29	307-24-4-EI	
M5PPPeA	84	%	50-150		1	08/15/22 15:30	08/20/22 00:29	2706-90-3-EI	
M6PFDA	124	%	50-150		1	08/15/22 15:30	08/20/22 00:29	335-76-2-EI	
M7PFUdA	116	%	50-150		1	08/15/22 15:30	08/20/22 00:29	2058-94-8-EI	
M8FOSA	97	%	50-150		1	08/15/22 15:30	08/20/22 00:29	754-91-6-EI	
M8PFOA	126	%	50-150		1	08/15/22 15:30	08/20/22 00:29	335-67-1-EI	
M8PFOS	113	%	50-150		1	08/15/22 15:30	08/20/22 00:29	1763-23-1-EI	
M9PFNA	125	%	50-150		1	08/15/22 15:30	08/20/22 00:29	375-95-1-EI	
MPFBA	83	%	50-150		1	08/15/22 15:30	08/20/22 00:29	375-22-4-EI	
MPFDa	107	%	50-150		1	08/15/22 15:30	08/20/22 00:29	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: MW-5	Lab ID: 40249506004	Collected: 08/08/22 13:20	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 00:43	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.750	ng/L	2.00	0.750	1	08/15/22 15:30	08/20/22 00:43	27619-97-2	
8:2 FTS	<0.530	ng/L	2.00	0.530	1	08/15/22 15:30	08/20/22 00:43	39108-34-4	
9Cl-PF3ONS	<0.450	ng/L	2.00	0.450	1	08/15/22 15:30	08/20/22 00:43	756426-58-1	
11Cl-PF3OUDS	<0.450	ng/L	2.00	0.450	1	08/15/22 15:30	08/20/22 00:43	763051-92-9	
ADONA	<0.430	ng/L	2.00	0.430	1	08/15/22 15:30	08/20/22 00:43	919005-14-4	
Perfluoroctanesulfonamide	<0.370	ng/L	2.00	0.370	1	08/15/22 15:30	08/20/22 00:43	754-91-6	
HFPO-DA	<3.34	ng/L	10.0	3.34	1	08/15/22 15:30	08/20/22 00:43	13252-13-6	
NEtFOSA	<0.700	ng/L	4.00	0.700	1	08/15/22 15:30	08/20/22 00:43	4151-50-2	
NEtFOSAA	<0.790	ng/L	4.00	0.790	1	08/15/22 15:30	08/20/22 00:43	2991-50-6	
NEtFOSE	<0.505	ng/L	4.00	0.505	1	08/15/22 15:30	08/20/22 00:43	1691-99-2	
NMeFOSA	<0.830	ng/L	4.00	0.830	1	08/15/22 15:30	08/20/22 00:43	31506-32-8	
NMeFOSAA	<0.450	ng/L	4.00	0.450	1	08/15/22 15:30	08/20/22 00:43	2355-31-9	
NMeFOSE	<0.650	ng/L	4.00	0.650	1	08/15/22 15:30	08/20/22 00:43	24448-09-7	
Perfluorobutanoic acid	6.33	ng/L	2.00	0.760	1	08/15/22 15:30	08/20/22 00:43	375-22-4	
Perfluorobutanesulfonic acid	14.3	ng/L	2.00	0.310	1	08/15/22 15:30	08/20/22 00:43	375-73-5	
Perfluorodecanoic acid (S)	<0.720	ng/L	2.00	0.720	1	08/15/22 15:30	08/20/22 00:43	335-76-2	
Perfluorododecanoic acid	<0.650	ng/L	2.00	0.650	1	08/15/22 15:30	08/20/22 00:43	307-55-1	
PFDoS	<0.655	ng/L	2.00	0.655	1	08/15/22 15:30	08/20/22 00:43	79780-39-5	
PFDS	<0.610	ng/L	2.00	0.610	1	08/15/22 15:30	08/20/22 00:43	335-77-3	
Perfluoroheptanoic acid	3.98	ng/L	2.00	0.580	1	08/15/22 15:30	08/20/22 00:43	375-85-9	
PFHpS	<0.610	ng/L	2.00	0.610	1	08/15/22 15:30	08/20/22 00:43	375-92-8	
Perfluorohexanoic acid (S)	7.70	ng/L	2.00	0.470	1	08/15/22 15:30	08/20/22 00:43	307-24-4	
Perfluorohexanesulfonic acid	4.19	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 00:43	355-46-4	
Perfluorononanoic acid	<0.490	ng/L	2.00	0.490	1	08/15/22 15:30	08/20/22 00:43	375-95-1	
PFNS	<0.870	ng/L	2.00	0.870	1	08/15/22 15:30	08/20/22 00:43	68259-12-1	
Perfluoroctanoic acid	9.29	ng/L	2.00	0.420	1	08/15/22 15:30	08/20/22 00:43	335-67-1	
Perfluorooctanesulfonic acid	7.68	ng/L	2.00	0.380	1	08/15/22 15:30	08/20/22 00:43	1763-23-1	
Perfluoropentanoic acid	9.58	ng/L	2.00	0.440	1	08/15/22 15:30	08/20/22 00:43	2706-90-3	
PPPeS	<0.510	ng/L	2.00	0.510	1	08/15/22 15:30	08/20/22 00:43	2706-91-4	
Perfluorotetradecanoic acid	<0.570	ng/L	2.00	0.570	1	08/15/22 15:30	08/20/22 00:43	376-06-7	
Perfluorotridecanoic acid	<0.615	ng/L	2.00	0.615	1	08/15/22 15:30	08/20/22 00:43	72629-94-8	
Perfluoroundecanoic acid	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 00:43	2058-94-8	
Surrogates									
d-NEtFOSA	21	%	50-150		1	08/15/22 15:30	08/20/22 00:43	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	26	%	50-150		1	08/15/22 15:30	08/20/22 00:43	31506-32-8-	MSSV1 2.3
d3-NMeFOSAA	129	%	50-150		1	08/15/22 15:30	08/20/22 00:43	2355-31-9-EI	
d5-NEtFOSAA	139	%	50-150		1	08/15/22 15:30	08/20/22 00:43	2991-50-6-EI	
d7-NMeFOSE	108	%	50-150		1	08/15/22 15:30	08/20/22 00:43	24448-09-7-	
d9-NEtFOSE	99	%	50-150		1	08/15/22 15:30	08/20/22 00:43	1691-99-2-EI	
M2 4:2 FTS	204	%	50-150		1	08/15/22 15:30	08/20/22 00:43	757124-72-4	MSSV1 2.3
M2 6:2 FTS	165	%	50-150		1	08/15/22 15:30	08/20/22 00:43	27619-97-2-	MSSV1 2.3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: MW-5	Lab ID: 40249506004	Collected: 08/08/22 13:20	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water			Analytical Method: EPA 537 Modified Preparation Method: METHOD						
			Pace Analytical Gulf Coast						
Surrogates									
M2 8:2 FTS	167	%	50-150		1	08/15/22 15:30	08/20/22 00:43	39108-34-4-	MSSV1 2.3
M2PFHxDA	51	%	50-150		1	08/15/22 15:30	08/20/22 00:43	67905-19-5-	
M2PFTeDA	107	%	50-150		1	08/15/22 15:30	08/20/22 00:43	376-06-7-EI	
M3HFPODA	144	%	50-150		1	08/15/22 15:30	08/20/22 00:43	13252-13-6-	
M3PFBS	136	%	50-150		1	08/15/22 15:30	08/20/22 00:43	375-73-5-EI	
M3PFHxS	142	%	50-150		1	08/15/22 15:30	08/20/22 00:43	355-46-4-EI	
M4PFHxA	143	%	50-150		1	08/15/22 15:30	08/20/22 00:43	375-85-9-EI	
M5PFHxA	148	%	50-150		1	08/15/22 15:30	08/20/22 00:43	307-24-4-EI	
M5PFPeA	138	%	50-150		1	08/15/22 15:30	08/20/22 00:43	2706-90-3-EI	
M6PFDA	147	%	50-150		1	08/15/22 15:30	08/20/22 00:43	335-76-2-EI	
M7PFUDa	140	%	50-150		1	08/15/22 15:30	08/20/22 00:43	2058-94-8-EI	
M8FOSA	126	%	50-150		1	08/15/22 15:30	08/20/22 00:43	754-91-6-EI	
M8PFOA	149	%	50-150		1	08/15/22 15:30	08/20/22 00:43	335-67-1-EI	
M8PFOS	142	%	50-150		1	08/15/22 15:30	08/20/22 00:43	1763-23-1-EI	
M9PFNA	147	%	50-150		1	08/15/22 15:30	08/20/22 00:43	375-95-1-EI	
MPFBA	136	%	50-150		1	08/15/22 15:30	08/20/22 00:43	375-22-4-EI	
MPFDoA	133	%	50-150		1	08/15/22 15:30	08/20/22 00:43	307-55-1-EI	

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE

Pace Project No.: 40249506

Sample: EQUIPMENT BLANK	Lab ID: 40249506005	Collected: 08/08/22 08:00	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
4:2 FTS	<0.651	ng/L	2.10	0.651	1	08/15/22 15:30	08/20/22 00:58	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.788	ng/L	2.10	0.788	1	08/15/22 15:30	08/20/22 00:58	27619-97-2	
8:2 FTS	<0.557	ng/L	2.10	0.557	1	08/15/22 15:30	08/20/22 00:58	39108-34-4	
9Cl-PF3ONS	<0.473	ng/L	2.10	0.473	1	08/15/22 15:30	08/20/22 00:58	756426-58-1	
11Cl-PF3OUDS	<0.473	ng/L	2.10	0.473	1	08/15/22 15:30	08/20/22 00:58	763051-92-9	
ADONA	<0.452	ng/L	2.10	0.452	1	08/15/22 15:30	08/20/22 00:58	919005-14-4	
Perfluoroctanesulfonamide	<0.389	ng/L	2.10	0.389	1	08/15/22 15:30	08/20/22 00:58	754-91-6	
HFPO-DA	<3.50	ng/L	10.5	3.50	1	08/15/22 15:30	08/20/22 00:58	13252-13-6	
NEtFOSA	<0.735	ng/L	4.20	0.735	1	08/15/22 15:30	08/20/22 00:58	4151-50-2	
NEtFOSAA	<0.830	ng/L	4.20	0.830	1	08/15/22 15:30	08/20/22 00:58	2991-50-6	
NEtFOSE	<0.530	ng/L	4.20	0.530	1	08/15/22 15:30	08/20/22 00:58	1691-99-2	
NMeFOSA	<0.872	ng/L	4.20	0.872	1	08/15/22 15:30	08/20/22 00:58	31506-32-8	
NMeFOSAA	<0.473	ng/L	4.20	0.473	1	08/15/22 15:30	08/20/22 00:58	2355-31-9	
NMeFOSE	<0.683	ng/L	4.20	0.683	1	08/15/22 15:30	08/20/22 00:58	24448-09-7	
Perfluorobutanoic acid	<0.798	ng/L	2.10	0.798	1	08/15/22 15:30	08/20/22 00:58	375-22-4	
Perfluorobutanesulfonic acid	<0.326	ng/L	2.10	0.326	1	08/15/22 15:30	08/20/22 00:58	375-73-5	
Perfluorodecanoic acid (S)	<0.756	ng/L	2.10	0.756	1	08/15/22 15:30	08/20/22 00:58	335-76-2	
Perfluorododecanoic acid	<0.683	ng/L	2.10	0.683	1	08/15/22 15:30	08/20/22 00:58	307-55-1	
PFDoS	<0.688	ng/L	2.10	0.688	1	08/15/22 15:30	08/20/22 00:58	79780-39-5	
PFDS	<0.641	ng/L	2.10	0.641	1	08/15/22 15:30	08/20/22 00:58	335-77-3	
Perfluoroheptanoic acid	<0.609	ng/L	2.10	0.609	1	08/15/22 15:30	08/20/22 00:58	375-85-9	
PFHpS	<0.641	ng/L	2.10	0.641	1	08/15/22 15:30	08/20/22 00:58	375-92-8	
Perfluorohexanoic acid (S)	<0.494	ng/L	2.10	0.494	1	08/15/22 15:30	08/20/22 00:58	307-24-4	
Perfluorohexanesulfonic acid	<0.651	ng/L	2.10	0.651	1	08/15/22 15:30	08/20/22 00:58	355-46-4	
Perfluorononanoic acid	<0.515	ng/L	2.10	0.515	1	08/15/22 15:30	08/20/22 00:58	375-95-1	
PFNS	<0.914	ng/L	2.10	0.914	1	08/15/22 15:30	08/20/22 00:58	68259-12-1	
Perfluoroctanoic acid	<0.441	ng/L	2.10	0.441	1	08/15/22 15:30	08/20/22 00:58	335-67-1	
Perfluorooctanesulfonic acid	<0.399	ng/L	2.10	0.399	1	08/15/22 15:30	08/20/22 00:58	1763-23-1	
Perfluoropentanoic acid	<0.462	ng/L	2.10	0.462	1	08/15/22 15:30	08/20/22 00:58	2706-90-3	
PFPeS	<0.536	ng/L	2.10	0.536	1	08/15/22 15:30	08/20/22 00:58	2706-91-4	
Perfluorotetradecanoic acid	<0.599	ng/L	2.10	0.599	1	08/15/22 15:30	08/20/22 00:58	376-06-7	
Perfluorotridecanoic acid	<0.646	ng/L	2.10	0.646	1	08/15/22 15:30	08/20/22 00:58	72629-94-8	
Perfluoroundecanoic acid	<0.651	ng/L	2.10	0.651	1	08/15/22 15:30	08/20/22 00:58	2058-94-8	
Surrogates									
d-NEtFOSA	41	%	50-150		1	08/15/22 15:30	08/20/22 00:58	4151-50-2-EI	MSSV1 2.3
d-NMeFOSA	53	%	50-150		1	08/15/22 15:30	08/20/22 00:58	31506-32-8	
d3-NMeFOSAA	107	%	50-150		1	08/15/22 15:30	08/20/22 00:58	2355-31-9-EI	
d5-NEtFOSAA	126	%	50-150		1	08/15/22 15:30	08/20/22 00:58	2991-50-6-EI	
d7-NMeFOSE	104	%	50-150		1	08/15/22 15:30	08/20/22 00:58	24448-09-7-EI	
d9-NEtFOSE	102	%	50-150		1	08/15/22 15:30	08/20/22 00:58	1691-99-2-EI	
M2 4:2 FTS	129	%	50-150		1	08/15/22 15:30	08/20/22 00:58	757124-72-4	
M2 6:2 FTS	134	%	50-150		1	08/15/22 15:30	08/20/22 00:58	27619-97-2	
M2 8:2 FTS	146	%	50-150		1	08/15/22 15:30	08/20/22 00:58	39108-34-4	
M2PFHxDA	138	%	50-150		1	08/15/22 15:30	08/20/22 00:58	67905-19-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

Sample: EQUIPMENT BLANK Lab ID: 40249506005 Collected: 08/08/22 08:00 Received: 08/09/22 08:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water									
Analytical Method: EPA 537 Modified Preparation Method: METHOD									
Pace Analytical Gulf Coast									
Surrogates									
M2PFTeDA	118	%	50-150		1	08/15/22 15:30	08/20/22 00:58	376-06-7-EI	
M3HFPODA	128	%	50-150		1	08/15/22 15:30	08/20/22 00:58	13252-13-6	
M3PFBS	124	%	50-150		1	08/15/22 15:30	08/20/22 00:58	375-73-5-EI	
M3PFHxS	123	%	50-150		1	08/15/22 15:30	08/20/22 00:58	355-46-4-EI	
M4PFHpA	123	%	50-150		1	08/15/22 15:30	08/20/22 00:58	375-85-9-EI	
M5PFHxA	125	%	50-150		1	08/15/22 15:30	08/20/22 00:58	307-24-4-EI	
M5PFPeA	129	%	50-150		1	08/15/22 15:30	08/20/22 00:58	2706-90-3-EI	
M6PFDA	126	%	50-150		1	08/15/22 15:30	08/20/22 00:58	335-76-2-EI	
M7PFUdA	123	%	50-150		1	08/15/22 15:30	08/20/22 00:58	2058-94-8-EI	
M8FOSA	112	%	50-150		1	08/15/22 15:30	08/20/22 00:58	754-91-6-EI	
M8PFOA	125	%	50-150		1	08/15/22 15:30	08/20/22 00:58	335-67-1-EI	
M8PFOS	123	%	50-150		1	08/15/22 15:30	08/20/22 00:58	1763-23-1-EI	
M9PFNA	132	%	50-150		1	08/15/22 15:30	08/20/22 00:58	375-95-1-EI	
MPFBA	126	%	50-150		1	08/15/22 15:30	08/20/22 00:58	375-22-4-EI	
MPFDa	119	%	50-150		1	08/15/22 15:30	08/20/22 00:58	307-55-1-EI	

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QUALITY CONTROL DATA

Project: 6255 S. MILWAUKEE

Pace Project No.: 40249506

QC Batch:	747608	Analysis Method:	EPA 537 Modified
QC Batch Method:	METHOD	Analysis Description:	PFAS 537 Mod Analysis Water
		Laboratory:	Pace Analytical Gulf Coast

Associated Lab Samples: 40249506001, 40249506002, 40249506003, 40249506004, 40249506005

METHOD BLANK: 2383753

Matrix: Water

Associated Lab Samples: 40249506001, 40249506002, 40249506003, 40249506004, 40249506005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	08/19/22 22:32	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	08/19/22 22:32	
8:2 FTS	ng/L	<1.06	4.00	08/19/22 22:32	
9Cl-PF3ONS	ng/L	<0.900	4.00	08/19/22 22:32	
11Cl-PF3OUdS	ng/L	<0.900	4.00	08/19/22 22:32	
ADONA	ng/L	<0.860	4.00	08/19/22 22:32	
Perfluorooctanesulfonamide	ng/L	<0.740	4.00	08/19/22 22:32	
HFPO-DA	ng/L	<6.67	20.0	08/19/22 22:32	
NetFOSA	ng/L	<1.40	8.00	08/19/22 22:32	
NetFOSAA	ng/L	<1.58	8.00	08/19/22 22:32	
NetFOSE	ng/L	<1.01	8.00	08/19/22 22:32	
NMeFOSA	ng/L	<1.66	8.00	08/19/22 22:32	
NMeFOSAA	ng/L	<0.900	8.00	08/19/22 22:32	
NMeFOSE	ng/L	<1.30	8.00	08/19/22 22:32	
Perfluorobutanoic acid	ng/L	<1.52	4.00	08/19/22 22:32	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	08/19/22 22:32	
Perfluorodecanoic acid (S)	ng/L	<1.44	4.00	08/19/22 22:32	
Perfluorododecanoic acid	ng/L	<1.30	4.00	08/19/22 22:32	
PFDoS	ng/L	<1.31	4.00	08/19/22 22:32	
PFDS	ng/L	<1.22	4.00	08/19/22 22:32	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	08/19/22 22:32	
PFHpS	ng/L	<1.22	4.00	08/19/22 22:32	
Perfluorohexanoic acid (S)	ng/L	<0.940	4.00	08/19/22 22:32	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	08/19/22 22:32	
Perfluorononanoic acid	ng/L	<0.980	4.00	08/19/22 22:32	
PFNS	ng/L	<1.74	4.00	08/19/22 22:32	
Perfluorooctanoic acid	ng/L	<0.840	4.00	08/19/22 22:32	
Perfluorooctanesulfonic acid	ng/L	<0.760	4.00	08/19/22 22:32	
Perfluoropentanoic acid	ng/L	<0.880	4.00	08/19/22 22:32	
PFPeS	ng/L	<1.02	4.00	08/19/22 22:32	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	08/19/22 22:32	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	08/19/22 22:32	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	08/19/22 22:32	
d-NEtFOSA	%	94	50-150	08/19/22 22:32	
d-NMeFOSA	%	86	50-150	08/19/22 22:32	
d3-NMeFOSAA	%	104	50-150	08/19/22 22:32	
d5-NEtFOSAA	%	118	50-150	08/19/22 22:32	
d7-NMeFOSE	%	108	50-150	08/19/22 22:32	
d9-NEtFOSE	%	107	50-150	08/19/22 22:32	
M2 4:2 FTS	%	116	50-150	08/19/22 22:32	

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

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QUALITY CONTROL DATA

Project: 6255 S. MILWAUKEE

Pace Project No.: 40249506

METHOD BLANK: 2383753

Matrix: Water

Associated Lab Samples: 40249506001, 40249506002, 40249506003, 40249506004, 40249506005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
M2 6:2 FTS	%	118	50-150	08/19/22 22:32	
M2 8:2 FTS	%	123	50-150	08/19/22 22:32	
M2PFHxDA	%	123	50-150	08/19/22 22:32	
M2PFTeDA	%	105	50-150	08/19/22 22:32	
M3HFPODA	%	113	50-150	08/19/22 22:32	
M3PFBS	%	108	50-150	08/19/22 22:32	
M3PFHxS	%	109	50-150	08/19/22 22:32	
M4PFHpA	%	110	50-150	08/19/22 22:32	
M5PFHxA	%	111	50-150	08/19/22 22:32	
M5PPeA	%	110	50-150	08/19/22 22:32	
M6PFDA	%	110	50-150	08/19/22 22:32	
M7PFUdA	%	110	50-150	08/19/22 22:32	
M8FOSA	%	100	50-150	08/19/22 22:32	
M8PFOA	%	113	50-150	08/19/22 22:32	
M8PFOS	%	109	50-150	08/19/22 22:32	
M9PFNA	%	115	50-150	08/19/22 22:32	
MPFBA	%	110	50-150	08/19/22 22:32	
MPFDoA	%	106	50-150	08/19/22 22:32	

LABORATORY CONTROL SAMPLE & LCSD: 2383754

2383755

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
4:2 FTS	ng/L	75	75.4	74.8	101	100	70-130	1	30	
6:2 Fluorotelomer sulfonate	ng/L	76.1	73.4	78.6	96	103	70-130	7	30	
8:2 FTS	ng/L	76.8	79.0	78.9	103	103	70-130	0	30	
9Cl-PF3ONS	ng/L	74.6	70.4	73.6	94	99	70-130	4	30	
11Cl-PF3OUdS	ng/L	75.4	71.2	72.2	94	96	70-130	1	30	
ADONA	ng/L	75.6	68.8	71.1	91	94	70-130	3	30	
Perfluoroctanesulfonamide	ng/L	80	76.9	79.1	96	99	70-130	3	30	
HFPO-DA	ng/L	160	142	148	89	92	70-130	4	30	
NETFOSA	ng/L	80	72.0	73.8	90	92	70-130	3	30	
NETFOSAA	ng/L	80	75.4	76.8	94	96	70-130	2	30	
NETFOSE	ng/L	80	72.3	74.0	90	93	70-130	2	30	
NMeFOSA	ng/L	80	71.2	78.8	89	98	70-130	10	30	
NMeFOSAA	ng/L	80	80.5	79.6	101	100	70-130	1	30	
NMeFOSE	ng/L	80	74.5	73.0	93	91	70-130	2	30	
Perfluorobutanoic acid	ng/L	80	73.6	75.7	92	95	70-130	3	30	
Perfluorobutanesulfonic acid	ng/L	71	67.8	69.0	96	97	70-130	2	30	
Perfluorodecanoic acid (S)	ng/L	80	74.4	77.8	93	97	70-130	5	30	
Perfluorododecanoic acid	ng/L	80	76.9	78.4	96	98	70-130	2	30	
PFDoS	ng/L	77.6	72.4	69.3	93	89	70-130	4	30	
PFDS	ng/L	77.2	70.6	72.2	91	94	70-130	2	30	
Perfluoroheptanoic acid	ng/L	80	74.8	77.4	93	97	70-130	3	30	
PFHpS	ng/L	76.2	69.6	72.0	91	94	70-130	3	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6255 S. MILWAUKEE

Pace Project No.: 40249506

LABORATORY CONTROL SAMPLE & LCSD: 2383754

2383755

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Perfluorohexanoic acid (S)	ng/L	80	74.0	76.1	92	95	70-130	3	30	
Perfluorohexanesulfonic acid	ng/L	73.1	66.5	67.9	91	93	70-130	2	30	
Perfluorononanoic acid	ng/L	80	74.5	78.3	93	98	70-130	5	30	
PFNS	ng/L	77	70.7	74.9	92	97	70-130	6	30	
Perfluoroctanoic acid	ng/L	80	73.7	75.9	92	95	70-130	3	30	
Perfluoroctanesulfonic acid	ng/L	74.2	67.7	70.0	91	94	70-130	3	30	
Perfluoropentanoic acid	ng/L	80	73.6	76.7	92	96	70-130	4	30	
PFPeS	ng/L	75.3	70.6	72.3	94	96	70-130	2	30	
Perfluorotetradecanoic acid	ng/L	80	74.7	80.0	93	100	70-130	7	30	
Perfluorotridecanoic acid	ng/L	80	75.2	75.7	94	95	70-130	1	30	
Perfluoroundecanoic acid	ng/L	80	75.8	79.2	95	99	70-130	4	30	
d-NEtFOSA	%				85	117	50-150			
d-NMeFOSA	%				81	107	50-150			
d3-NMeFOSAA	%				107	132	50-150			
d5-NEtFOSAA	%				116	145	50-150			
d7-NMeFOSE	%				107	135	50-150			
d9-NEtFOSE	%				108	132	50-150			
M2 4:2 FTS	%				113	145	50-150			
M2 6:2 FTS	%				120	144	50-150			
M2 8:2 FTS	%				117	146	50-150			
M2PFHxDA	%				118	137	50-150			
M2PFTeDA	%				109	129	50-150			
M3HFPDA	%				116	146	50-150			
M3PFBS	%				109	138	50-150			
M3PFHxS	%				114	141	50-150			
M4PFHpA	%				112	140	50-150			
M5PFHxA	%				113	140	50-150			
M5PFPeA	%				113	142	50-150			
M6PFDA	%				114	141	50-150			
M7PFUdA	%				113	138	50-150			
M8FOSA	%				106	130	50-150			
M8PFOA	%				115	143	50-150			
M8PFOS	%				111	138	50-150			
M9PFNA	%				120	147	50-150			
MPFBA	%				113	140	50-150			
MPFDoA	%				109	135	50-150			

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QUALIFIERS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

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

- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is outside the control limits for sample 22208102401 (MW-3).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is outside the control limits for sample 22208102403 (MW-4).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is outside the control limits for sample 22208102404 (MW-5).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 6:2 FTS is outside the control limits for sample 22208102401 (MW-3).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 6:2 FTS is outside the control limits for sample 22208102403 (MW-4).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 6:2 FTS is outside the control limits for sample 22208102404 (MW-5).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 8:2 FTS is outside the control limits for sample 22208102401 (MW-3).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 8:2 FTS is outside the control limits for sample 22208102404 (MW-5).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2PFhxDA is outside the control limits for sample 22208102401 (MW-3).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208102401 (MW-3).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208102402 (MW-603).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208102403 (MW-4).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208102404 (MW-5).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208102405 (EQUIPMENT BLANK).

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QUALIFIERS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249506

ANALYTE QUALIFIERS

- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22208102401 (MW-3).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22208102402 (MW-603).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22208102403 (MW-4).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22208102404 (MW-5).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d7-NMeFOSE is outside the control limits for sample 22208102401 (MW-3).
- MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d9-NEtFOSE is outside the control limits for sample 22208102401 (MW-3).
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is above the upper control limits for sample 22208102401 (MW-3). There are no target hits for the associated compounds.
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 6:2 FTS is above the upper control limits for sample 22208102401 (MW-3). There are no target hits for the associated compounds.
- MSSV12.5 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 8:2 FTS is above the upper control limits for sample 22208102401 (MW-3). There are no target hits for the associated compounds.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6255 S. MILWAUKEE
 Pace Project No.: 40249506

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40249506001	MW-3	METHOD	747608	EPA 537 Modified	747983
40249506002	MW-603	METHOD	747608	EPA 537 Modified	747983
40249506003	MW-4	METHOD	747608	EPA 537 Modified	747983
40249506004	MW-5	METHOD	747608	EPA 537 Modified	747983
40249506005	EQUIPMENT BLANK	METHOD	747608	EPA 537 Modified	747983

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name:	DAT Environmental	
Branch/Location:	Lake Forest	
Project Contact:	Chris Cailles	
Phone:	847-573-8100	
Project Number:	6255	
Project Name:	S. Milwaukee	
Project State:	WI	
Sampled By (Print):	Marie Gyselman	
Sampled By (Sign):		
PO #:		Regular Program

The logo for Pace Analytical consists of the company name in a stylized, italicized font with a registered trademark symbol, and the website address below it.

UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

Page 1 of

40249506

CHAIN OF CUSTODY

*Preservation Codes						
A=None	B=HCl	C=H ₂ SO ₄	D=HNO ₃	E=DI Water	F=Methanol	G=NaOH
H=Sodium Bisulfate Solution	I=Sodium Thiosulfate	J=Other				

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)	Relinquished By: <i>Marcus Karl</i>	Date/Time: <i>8/8/22 12:10</i>	Received By: <i>Mike S.</i>	Date/Time: <i>8/8/22 12:10</i>	PACE Project No. <i>40149J06</i>
Date Needed:					
Transmit Prelim Rush Results by (complete what you want):	Relinquished By: <i>Mike S.</i>	Date/Time: <i>8/8/22 5:00</i>	Received By: <i>CS Logistics</i>	Date/Time: <i>8/8/22 8:00</i>	Receipt Temp = <i>3</i> °C
Email #1:	Relinquished By: <i>CS Logistics</i>	Date/Time: <i>8/8/22 8:00</i>	Received By: <i>Mike S.</i>	Date/Time: <i>8/9/22 08:00</i>	Sample Receipt pH
Email #2:					OK / Adjusted
Telephone:	Relinquished By:	Date/Time:	Received By:	Date/Time:	Cooler Custody Seal
Fax:					Present / Not Present
Samples on HOLD are subject to special pricing and release of liability	Relinquished By:	Date/Time:	Received By:	Date/Time:	Intact / Not Intact

Sample Preservation Receipt Form

Project #

Client Name: DAJ

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

Lab Lot# of pH paper:

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

Initial when completed:

Date/
Time:

Pace Lab #	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									2																				2.5 / 5 / 10				
002									2																				2.5 / 5 / 10				
003									2																				2.5 / 5 / 10				
004									2																				2.5 / 5 / 10				
005									4																				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						

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40249506

Client Name: DAT

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

40249506

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes noCustody Seal on Samples Present: yes no Seals intact: yes noPacking Material: Bubble Wrap Bubble Bags None Other ZiplocThermometer Used SR - 120 Type of Ice: Wet Blue Dry None

Cooler Temperature Uncorr: 3 /Corr: 3

 Samples on iceTemp Blank Present: yes noBiological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:

Date: 8/9/22 /Initials mlt

Labeled By Initials:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. NO mail or invoice mlt 8/9/22
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time:
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		8.
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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 log in

Page 2 of 2

September 01, 2022

Chris Cailles
DAI Environmental
Polo Park Business Center
27834 Irma Lee Circle
Lake Forest, IL 60045

RE: Project: 6255 S. MILWAUKEE
Pace Project No.: 40249507

Dear Chris Cailles:

Enclosed are the analytical results for sample(s) received by the laboratory on August 09, 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 Gulf Coast

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

Sincerely,



Steven Mleczko
steve.mleczko@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Jenny Rovzar, DAI



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249507

Pace Analytical Gulf Coast

7979 Innovation Park Drive, Baton Rouge, LA 70820
Arkansas Certification #: 88-0655
DoD ELAP Certification #: 6429-01
Florida Certification #: E87854
Illinois Certification #: 004585
Kansas Certification #: E-10354
Louisiana/LELAP Certification #: 01955
North Carolina Certification #: 618

North Dakota Certification #: R-195
Oklahoma Certification #: 2019-101
South Carolina Certification #: 73006001
Texas Certification #: T104704178-19-11
USDA Soil Permit # P330-19-00209
Virginia Certification #: 460215
Washington Certification #: C929

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249507

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40249507001	MW-600	Water	08/04/22 11:50	08/09/22 08:00
40249507002	MW-602	Water	08/04/22 10:15	08/09/22 08:00

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SAMPLE ANALYTE COUNT

Project: 6255 S. MILWAUKEE
 Pace Project No.: 40249507

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40249507001	MW-600	EPA 537 Modified	SLR2	58	GCLA
40249507002	MW-602	EPA 537 Modified	SLR2	58	GCLA

GCLA = Pace Analytical Gulf Coast

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SUMMARY OF DETECTION

Project: 6255 S. MILWAUKEE
 Pace Project No.: 40249507

Lab Sample ID	Client Sample ID	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40249507002	MW-602						
EPA 537 Modified	Perfluorobutanoic acid		4.10	ng/L	2.00	08/20/22 01:27	
EPA 537 Modified	Perfluorobutanesulfonic acid		10.5	ng/L	2.00	08/20/22 01:27	
EPA 537 Modified	Perfluoropentanoic acid		3.71	ng/L	2.00	08/20/22 01:27	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249507

Sample: MW-600	Lab ID: 40249507001	Collected: 08/04/22 11:50	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water			Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast						
4:2 FTS	<0.630	ng/L	2.03	0.630	1	08/15/22 15:30	08/20/22 01:13	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.762	ng/L	2.03	0.762	1	08/15/22 15:30	08/20/22 01:13	27619-97-2	
8:2 FTS	<0.539	ng/L	2.03	0.539	1	08/15/22 15:30	08/20/22 01:13	39108-34-4	
9Cl-PF3ONS	<0.457	ng/L	2.03	0.457	1	08/15/22 15:30	08/20/22 01:13	756426-58-1	
11Cl-PF3OUDS	<0.457	ng/L	2.03	0.457	1	08/15/22 15:30	08/20/22 01:13	763051-92-9	
ADONA	<0.437	ng/L	2.03	0.437	1	08/15/22 15:30	08/20/22 01:13	919005-14-4	
Perfluoroctanesulfonamide	<0.376	ng/L	2.03	0.376	1	08/15/22 15:30	08/20/22 01:13	754-91-6	
HFPO-DA	<3.39	ng/L	10.2	3.39	1	08/15/22 15:30	08/20/22 01:13	13252-13-6	
NEtFOSA	<0.711	ng/L	4.07	0.711	1	08/15/22 15:30	08/20/22 01:13	4151-50-2	
NEtFOSAA	<0.803	ng/L	4.07	0.803	1	08/15/22 15:30	08/20/22 01:13	2991-50-6	
NEtFOSE	<0.513	ng/L	4.07	0.513	1	08/15/22 15:30	08/20/22 01:13	1691-99-2	
NMeFOSA	<0.843	ng/L	4.07	0.843	1	08/15/22 15:30	08/20/22 01:13	31506-32-8	
NMeFOSAA	<0.457	ng/L	4.07	0.457	1	08/15/22 15:30	08/20/22 01:13	2355-31-9	
NMeFOSE	<0.661	ng/L	4.07	0.661	1	08/15/22 15:30	08/20/22 01:13	24448-09-7	
Perfluorobutanoic acid	<0.772	ng/L	2.03	0.772	1	08/15/22 15:30	08/20/22 01:13	375-22-4	
Perfluorobutanesulfonic acid	<0.315	ng/L	2.03	0.315	1	08/15/22 15:30	08/20/22 01:13	375-73-5	
Perfluorodecanoic acid (S)	<0.732	ng/L	2.03	0.732	1	08/15/22 15:30	08/20/22 01:13	335-76-2	
Perfluorododecanoic acid	<0.661	ng/L	2.03	0.661	1	08/15/22 15:30	08/20/22 01:13	307-55-1	
PFDoS	<0.666	ng/L	2.03	0.666	1	08/15/22 15:30	08/20/22 01:13	79780-39-5	
PFDS	<0.620	ng/L	2.03	0.620	1	08/15/22 15:30	08/20/22 01:13	335-77-3	
Perfluoroheptanoic acid	<0.589	ng/L	2.03	0.589	1	08/15/22 15:30	08/20/22 01:13	375-85-9	
PFHpS	<0.620	ng/L	2.03	0.620	1	08/15/22 15:30	08/20/22 01:13	375-92-8	
Perfluorohexanoic acid (S)	<0.478	ng/L	2.03	0.478	1	08/15/22 15:30	08/20/22 01:13	307-24-4	
Perfluorohexanesulfonic acid	<0.630	ng/L	2.03	0.630	1	08/15/22 15:30	08/20/22 01:13	355-46-4	
Perfluorononanoic acid	<0.498	ng/L	2.03	0.498	1	08/15/22 15:30	08/20/22 01:13	375-95-1	
PFNS	<0.884	ng/L	2.03	0.884	1	08/15/22 15:30	08/20/22 01:13	68259-12-1	
Perfluoroctanoic acid	<0.427	ng/L	2.03	0.427	1	08/15/22 15:30	08/20/22 01:13	335-67-1	
Perfluorooctanesulfonic acid	<0.386	ng/L	2.03	0.386	1	08/15/22 15:30	08/20/22 01:13	1763-23-1	
Perfluoropentanoic acid	<0.447	ng/L	2.03	0.447	1	08/15/22 15:30	08/20/22 01:13	2706-90-3	
PFPeS	<0.518	ng/L	2.03	0.518	1	08/15/22 15:30	08/20/22 01:13	2706-91-4	
Perfluorotetradecanoic acid	<0.579	ng/L	2.03	0.579	1	08/15/22 15:30	08/20/22 01:13	376-06-7	
Perfluorotridecanoic acid	<0.625	ng/L	2.03	0.625	1	08/15/22 15:30	08/20/22 01:13	72629-94-8	
Perfluoroundecanoic acid	<0.630	ng/L	2.03	0.630	1	08/15/22 15:30	08/20/22 01:13	2058-94-8	
Surrogates									
d-NEtFOSA	67	%	50-150		1	08/15/22 15:30	08/20/22 01:13	4151-50-2-EI	
d-NMeFOSA	74	%	50-150		1	08/15/22 15:30	08/20/22 01:13	31506-32-8-	
d3-NMeFOSAA	110	%	50-150		1	08/15/22 15:30	08/20/22 01:13	2355-31-9-EI	
d5-NEtFOSAA	126	%	50-150		1	08/15/22 15:30	08/20/22 01:13	2991-50-6-EI	
d7-NMeFOSE	114	%	50-150		1	08/15/22 15:30	08/20/22 01:13	24448-09-7-	
d9-NEtFOSE	112	%	50-150		1	08/15/22 15:30	08/20/22 01:13	1691-99-2-EI	
M2 4:2 FTS	146	%	50-150		1	08/15/22 15:30	08/20/22 01:13	757124-72-4	
M2 6:2 FTS	135	%	50-150		1	08/15/22 15:30	08/20/22 01:13	27619-97-2-	
M2 8:2 FTS	143	%	50-150		1	08/15/22 15:30	08/20/22 01:13	39108-34-4-	
M2PFHxDA	106	%	50-150		1	08/15/22 15:30	08/20/22 01:13	67905-19-5-	
M2PFTeDA	113	%	50-150		1	08/15/22 15:30	08/20/22 01:13	376-06-7-EI	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249507

Sample: MW-600	Lab ID: 40249507001	Collected: 08/04/22 11:50	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M3HFPODA	136	%	50-150		1	08/15/22 15:30	08/20/22 01:13	13252-13-6-	
M3PFBS	128	%	50-150		1	08/15/22 15:30	08/20/22 01:13	375-73-5-EI	
M3PFHxS	131	%	50-150		1	08/15/22 15:30	08/20/22 01:13	355-46-4-EI	
M4PFHpA	130	%	50-150		1	08/15/22 15:30	08/20/22 01:13	375-85-9-EI	
M5PFHxA	134	%	50-150		1	08/15/22 15:30	08/20/22 01:13	307-24-4-EI	
M5PFPeA	130	%	50-150		1	08/15/22 15:30	08/20/22 01:13	2706-90-3-EI	
M6PFDA	130	%	50-150		1	08/15/22 15:30	08/20/22 01:13	335-76-2-EI	
M7PFUdA	129	%	50-150		1	08/15/22 15:30	08/20/22 01:13	2058-94-8-EI	
M8FOSA	115	%	50-150		1	08/15/22 15:30	08/20/22 01:13	754-91-6-EI	
M8PFOA	133	%	50-150		1	08/15/22 15:30	08/20/22 01:13	335-67-1-EI	
M8PFOS	125	%	50-150		1	08/15/22 15:30	08/20/22 01:13	1763-23-1-EI	
M9PFNA	134	%	50-150		1	08/15/22 15:30	08/20/22 01:13	375-95-1-EI	
MPFBA	128	%	50-150		1	08/15/22 15:30	08/20/22 01:13	375-22-4-EI	
MPFDa	122	%	50-150		1	08/15/22 15:30	08/20/22 01:13	307-55-1-EI	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249507

Sample: MW-602	Lab ID: 40249507002	Collected: 08/04/22 10:15	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water			Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast						
4:2 FTS	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 01:27	757124-72-4	
6:2 Fluorotelomer sulfonate	<0.750	ng/L	2.00	0.750	1	08/15/22 15:30	08/20/22 01:27	27619-97-2	
8:2 FTS	<0.530	ng/L	2.00	0.530	1	08/15/22 15:30	08/20/22 01:27	39108-34-4	
9Cl-PF3ONS	<0.450	ng/L	2.00	0.450	1	08/15/22 15:30	08/20/22 01:27	756426-58-1	
11Cl-PF3OuDS	<0.450	ng/L	2.00	0.450	1	08/15/22 15:30	08/20/22 01:27	763051-92-9	
ADONA	<0.430	ng/L	2.00	0.430	1	08/15/22 15:30	08/20/22 01:27	919005-14-4	
Perfluoroctanesulfonamide	<0.370	ng/L	2.00	0.370	1	08/15/22 15:30	08/20/22 01:27	754-91-6	
HFPO-DA	<3.34	ng/L	10.0	3.34	1	08/15/22 15:30	08/20/22 01:27	13252-13-6	
NEtFOSA	<0.700	ng/L	4.00	0.700	1	08/15/22 15:30	08/20/22 01:27	4151-50-2	
NEtFOSAA	<0.790	ng/L	4.00	0.790	1	08/15/22 15:30	08/20/22 01:27	2991-50-6	
NEtFOSE	<0.505	ng/L	4.00	0.505	1	08/15/22 15:30	08/20/22 01:27	1691-99-2	
NMeFOSA	<0.830	ng/L	4.00	0.830	1	08/15/22 15:30	08/20/22 01:27	31506-32-8	
NMeFOSAA	<0.450	ng/L	4.00	0.450	1	08/15/22 15:30	08/20/22 01:27	2355-31-9	
NMeFOSE	<0.650	ng/L	4.00	0.650	1	08/15/22 15:30	08/20/22 01:27	24448-09-7	
Perfluorobutanoic acid	4.10	ng/L	2.00	0.760	1	08/15/22 15:30	08/20/22 01:27	375-22-4	
Perfluorobutanesulfonic acid	10.5	ng/L	2.00	0.310	1	08/15/22 15:30	08/20/22 01:27	375-73-5	
Perfluorodecanoic acid (S)	<0.720	ng/L	2.00	0.720	1	08/15/22 15:30	08/20/22 01:27	335-76-2	
Perfluorododecanoic acid	<0.650	ng/L	2.00	0.650	1	08/15/22 15:30	08/20/22 01:27	307-55-1	
PFDoS	<0.655	ng/L	2.00	0.655	1	08/15/22 15:30	08/20/22 01:27	79780-39-5	
PFDS	<0.610	ng/L	2.00	0.610	1	08/15/22 15:30	08/20/22 01:27	335-77-3	
Perfluoroheptanoic acid	<0.580	ng/L	2.00	0.580	1	08/15/22 15:30	08/20/22 01:27	375-85-9	
PFHpS	<0.610	ng/L	2.00	0.610	1	08/15/22 15:30	08/20/22 01:27	375-92-8	
Perfluorohexanoic acid (S)	<0.470	ng/L	2.00	0.470	1	08/15/22 15:30	08/20/22 01:27	307-24-4	
Perfluorohexanesulfonic acid	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 01:27	355-46-4	
Perfluorononanoic acid	<0.490	ng/L	2.00	0.490	1	08/15/22 15:30	08/20/22 01:27	375-95-1	
PFNS	<0.870	ng/L	2.00	0.870	1	08/15/22 15:30	08/20/22 01:27	68259-12-1	
Perfluoroctanoic acid	<0.420	ng/L	2.00	0.420	1	08/15/22 15:30	08/20/22 01:27	335-67-1	
Perfluoroctanesulfonic acid	<0.380	ng/L	2.00	0.380	1	08/15/22 15:30	08/20/22 01:27	1763-23-1	
Perfluoropentanoic acid	3.71	ng/L	2.00	0.440	1	08/15/22 15:30	08/20/22 01:27	2706-90-3	
PFPeS	<0.510	ng/L	2.00	0.510	1	08/15/22 15:30	08/20/22 01:27	2706-91-4	
Perfluorotetradecanoic acid	<0.570	ng/L	2.00	0.570	1	08/15/22 15:30	08/20/22 01:27	376-06-7	
Perfluorotridecanoic acid	<0.615	ng/L	2.00	0.615	1	08/15/22 15:30	08/20/22 01:27	72629-94-8	
Perfluoroundecanoic acid	<0.620	ng/L	2.00	0.620	1	08/15/22 15:30	08/20/22 01:27	2058-94-8	
Surrogates									
d-NEtFOSA	23	%	50-150		1	08/15/22 15:30	08/20/22 01:27	4151-50-2-EI	MSSV1
								2.3	
d-NMeFOSA	29	%	50-150		1	08/15/22 15:30	08/20/22 01:27	31506-32-8-	MSSV1
								2.3	
d3-NMeFOSAA	98	%	50-150		1	08/15/22 15:30	08/20/22 01:27	2355-31-9-EI	
d5-NEtFOSAA	108	%	50-150		1	08/15/22 15:30	08/20/22 01:27	2991-50-6-EI	
d7-NMeFOSE	93	%	50-150		1	08/15/22 15:30	08/20/22 01:27	24448-09-7-	
d9-NEtFOSE	80	%	50-150		1	08/15/22 15:30	08/20/22 01:27	1691-99-2-EI	
M2 4:2 FTS	176	%	50-150		1	08/15/22 15:30	08/20/22 01:27	757124-72-4	MSSV1
								2.3	
M2 6:2 FTS	132	%	50-150		1	08/15/22 15:30	08/20/22 01:27	27619-97-2-	
M2 8:2 FTS	124	%	50-150		1	08/15/22 15:30	08/20/22 01:27	39108-34-4-	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249507

Sample: MW-602	Lab ID: 40249507002	Collected: 08/04/22 10:15	Received: 08/09/22 08:00	Matrix: Water					
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
EPA 537 Mod Full Water	Analytical Method: EPA 537 Modified Preparation Method: METHOD Pace Analytical Gulf Coast								
Surrogates									
M2PFHxD	103	%	50-150		1	08/15/22 15:30	08/20/22 01:27	67905-19-5-	
M2PFTeDA	101	%	50-150		1	08/15/22 15:30	08/20/22 01:27	376-06-7-EI	
M3HFPODA	109	%	50-150		1	08/15/22 15:30	08/20/22 01:27	13252-13-6-	
M3PFBS	100	%	50-150		1	08/15/22 15:30	08/20/22 01:27	375-73-5-EI	
M3PFHxS	110	%	50-150		1	08/15/22 15:30	08/20/22 01:27	355-46-4-EI	
M4PFHpA	112	%	50-150		1	08/15/22 15:30	08/20/22 01:27	375-85-9-EI	
M5PFHxA	117	%	50-150		1	08/15/22 15:30	08/20/22 01:27	307-24-4-EI	
M5PPeA	97	%	50-150		1	08/15/22 15:30	08/20/22 01:27	2706-90-3-EI	
M6PFDA	111	%	50-150		1	08/15/22 15:30	08/20/22 01:27	335-76-2-EI	
M7PFUdA	109	%	50-150		1	08/15/22 15:30	08/20/22 01:27	2058-94-8-EI	
M8FOSA	97	%	50-150		1	08/15/22 15:30	08/20/22 01:27	754-91-6-EI	
M8PFOA	116	%	50-150		1	08/15/22 15:30	08/20/22 01:27	335-67-1-EI	
M8PFOS	110	%	50-150		1	08/15/22 15:30	08/20/22 01:27	1763-23-1-EI	
M9PFNA	114	%	50-150		1	08/15/22 15:30	08/20/22 01:27	375-95-1-EI	
MPFBA	103	%	50-150		1	08/15/22 15:30	08/20/22 01:27	375-22-4-EI	
MPFDa	106	%	50-150		1	08/15/22 15:30	08/20/22 01:27	307-55-1-EI	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 6255 S. MILWAUKEE

Pace Project No.: 40249507

QC Batch: 747608

QC Batch Method: METHOD

Analysis Method: EPA 537 Modified

Analysis Description: PFAS 537 Mod Analysis Water

Laboratory: Pace Analytical Gulf Coast

Associated Lab Samples: 40249507001, 40249507002

METHOD BLANK: 2383753

Matrix: Water

Associated Lab Samples: 40249507001, 40249507002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4:2 FTS	ng/L	<1.24	4.00	08/19/22 22:32	
6:2 Fluorotelomer sulfonate	ng/L	<1.50	4.00	08/19/22 22:32	
8:2 FTS	ng/L	<1.06	4.00	08/19/22 22:32	
9Cl-PF3ONS	ng/L	<0.900	4.00	08/19/22 22:32	
11Cl-PF3OUdS	ng/L	<0.900	4.00	08/19/22 22:32	
ADONA	ng/L	<0.860	4.00	08/19/22 22:32	
Perfluoroctanesulfonamide	ng/L	<0.740	4.00	08/19/22 22:32	
HFPO-DA	ng/L	<6.67	20.0	08/19/22 22:32	
NetFOSA	ng/L	<1.40	8.00	08/19/22 22:32	
NetFOSAA	ng/L	<1.58	8.00	08/19/22 22:32	
NetFOSE	ng/L	<1.01	8.00	08/19/22 22:32	
NMeFOSA	ng/L	<1.66	8.00	08/19/22 22:32	
NMeFOSAA	ng/L	<0.900	8.00	08/19/22 22:32	
NMeFOSE	ng/L	<1.30	8.00	08/19/22 22:32	
Perfluorobutanoic acid	ng/L	<1.52	4.00	08/19/22 22:32	
Perfluorobutanesulfonic acid	ng/L	<0.620	4.00	08/19/22 22:32	
Perfluorodecanoic acid (S)	ng/L	<1.44	4.00	08/19/22 22:32	
Perfluorododecanoic acid	ng/L	<1.30	4.00	08/19/22 22:32	
PFDoS	ng/L	<1.31	4.00	08/19/22 22:32	
PFDS	ng/L	<1.22	4.00	08/19/22 22:32	
Perfluoroheptanoic acid	ng/L	<1.16	4.00	08/19/22 22:32	
PFHpS	ng/L	<1.22	4.00	08/19/22 22:32	
Perfluorohexanoic acid (S)	ng/L	<0.940	4.00	08/19/22 22:32	
Perfluorohexanesulfonic acid	ng/L	<1.24	4.00	08/19/22 22:32	
Perfluorononanoic acid	ng/L	<0.980	4.00	08/19/22 22:32	
PFNS	ng/L	<1.74	4.00	08/19/22 22:32	
Perfluoroctanoic acid	ng/L	<0.840	4.00	08/19/22 22:32	
Perfluoroctanesulfonic acid	ng/L	<0.760	4.00	08/19/22 22:32	
Perfluoropentanoic acid	ng/L	<0.880	4.00	08/19/22 22:32	
PFPeS	ng/L	<1.02	4.00	08/19/22 22:32	
Perfluorotetradecanoic acid	ng/L	<1.14	4.00	08/19/22 22:32	
Perfluorotridecanoic acid	ng/L	<1.23	4.00	08/19/22 22:32	
Perfluoroundecanoic acid	ng/L	<1.24	4.00	08/19/22 22:32	
d-NetFOSA	%	94	50-150	08/19/22 22:32	
d-NMeFOSA	%	86	50-150	08/19/22 22:32	
d3-NMeFOSAA	%	104	50-150	08/19/22 22:32	
d5-NetFOSAA	%	118	50-150	08/19/22 22:32	
d7-NMeFOSE	%	108	50-150	08/19/22 22:32	
d9-NetFOSE	%	107	50-150	08/19/22 22:32	
M2 4:2 FTS	%	116	50-150	08/19/22 22:32	

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

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QUALITY CONTROL DATA

Project: 6255 S. MILWAUKEE

Pace Project No.: 40249507

METHOD BLANK: 2383753

Matrix: Water

Associated Lab Samples: 40249507001, 40249507002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
M2 6:2 FTS	%	118	50-150	08/19/22 22:32	
M2 8:2 FTS	%	123	50-150	08/19/22 22:32	
M2PFHxDA	%	123	50-150	08/19/22 22:32	
M2PFTeDA	%	105	50-150	08/19/22 22:32	
M3HFPODA	%	113	50-150	08/19/22 22:32	
M3PFBS	%	108	50-150	08/19/22 22:32	
M3PFHxS	%	109	50-150	08/19/22 22:32	
M4PFHpA	%	110	50-150	08/19/22 22:32	
M5PFHxA	%	111	50-150	08/19/22 22:32	
M5PPPeA	%	110	50-150	08/19/22 22:32	
M6PFDA	%	110	50-150	08/19/22 22:32	
M7PFUdA	%	110	50-150	08/19/22 22:32	
M8FOSA	%	100	50-150	08/19/22 22:32	
M8PFOA	%	113	50-150	08/19/22 22:32	
M8PFOS	%	109	50-150	08/19/22 22:32	
M9PFNA	%	115	50-150	08/19/22 22:32	
MPFBA	%	110	50-150	08/19/22 22:32	
MPFDoA	%	106	50-150	08/19/22 22:32	

LABORATORY CONTROL SAMPLE & LCSD: 2383754

2383755

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
4:2 FTS	ng/L	75	75.4	74.8	101	100	70-130	1	30	
6:2 Fluorotelomer sulfonate	ng/L	76.1	73.4	78.6	96	103	70-130	7	30	
8:2 FTS	ng/L	76.8	79.0	78.9	103	103	70-130	0	30	
9Cl-PF3ONS	ng/L	74.6	70.4	73.6	94	99	70-130	4	30	
11Cl-PF3OUdS	ng/L	75.4	71.2	72.2	94	96	70-130	1	30	
ADONA	ng/L	75.6	68.8	71.1	91	94	70-130	3	30	
Perfluoroctanesulfonamide	ng/L	80	76.9	79.1	96	99	70-130	3	30	
HFPO-DA	ng/L	160	142	148	89	92	70-130	4	30	
NETFOSA	ng/L	80	72.0	73.8	90	92	70-130	3	30	
NETFOSAA	ng/L	80	75.4	76.8	94	96	70-130	2	30	
NETFOSE	ng/L	80	72.3	74.0	90	93	70-130	2	30	
NMeFOSA	ng/L	80	71.2	78.8	89	98	70-130	10	30	
NMeFOSAA	ng/L	80	80.5	79.6	101	100	70-130	1	30	
NMeFOSE	ng/L	80	74.5	73.0	93	91	70-130	2	30	
Perfluorobutanoic acid	ng/L	80	73.6	75.7	92	95	70-130	3	30	
Perfluorobutanesulfonic acid	ng/L	71	67.8	69.0	96	97	70-130	2	30	
Perfluorodecanoic acid (S)	ng/L	80	74.4	77.8	93	97	70-130	5	30	
Perfluorododecanoic acid	ng/L	80	76.9	78.4	96	98	70-130	2	30	
PFDoS	ng/L	77.6	72.4	69.3	93	89	70-130	4	30	
PFDS	ng/L	77.2	70.6	72.2	91	94	70-130	2	30	
Perfluoroheptanoic acid	ng/L	80	74.8	77.4	93	97	70-130	3	30	
PFHpS	ng/L	76.2	69.6	72.0	91	94	70-130	3	30	

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

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QUALITY CONTROL DATA

Project: 6255 S. MILWAUKEE

Pace Project No.: 40249507

Parameter	Units	Spike	LCS	LCSD	LCS	LCSD	% Rec	RPD	Max	Qualifiers
		Conc.	Result	Result	% Rec	% Rec	Limits		RPD	
Perfluorohexanoic acid (S)	ng/L	80	74.0	76.1	92	95	70-130	3	30	
Perfluorohexanesulfonic acid	ng/L	73.1	66.5	67.9	91	93	70-130	2	30	
Perfluorononanoic acid	ng/L	80	74.5	78.3	93	98	70-130	5	30	
PFNS	ng/L	77	70.7	74.9	92	97	70-130	6	30	
Perfluoroctanoic acid	ng/L	80	73.7	75.9	92	95	70-130	3	30	
Perfluoroctanesulfonic acid	ng/L	74.2	67.7	70.0	91	94	70-130	3	30	
Perfluoropentanoic acid	ng/L	80	73.6	76.7	92	96	70-130	4	30	
PFPeS	ng/L	75.3	70.6	72.3	94	96	70-130	2	30	
Perfluorotetradecanoic acid	ng/L	80	74.7	80.0	93	100	70-130	7	30	
Perfluorotridecanoic acid	ng/L	80	75.2	75.7	94	95	70-130	1	30	
Perfluoroundecanoic acid	ng/L	80	75.8	79.2	95	99	70-130	4	30	
d-NEtFOSA	%				85	117	50-150			
d-NMeFOSA	%				81	107	50-150			
d3-NMeFOSAA	%				107	132	50-150			
d5-NEtFOSAA	%				116	145	50-150			
d7-NMeFOSE	%				107	135	50-150			
d9-NEtFOSE	%				108	132	50-150			
M2 4:2 FTS	%				113	145	50-150			
M2 6:2 FTS	%				120	144	50-150			
M2 8:2 FTS	%				117	146	50-150			
M2PFHxDA	%				118	137	50-150			
M2PFTeDA	%				109	129	50-150			
M3HFPDA	%				116	146	50-150			
M3PFBS	%				109	138	50-150			
M3PFHxS	%				114	141	50-150			
M4PFHpA	%				112	140	50-150			
M5PFHxA	%				113	140	50-150			
M5PFPeA	%				113	142	50-150			
M6PFDA	%				114	141	50-150			
M7PFUDa	%				113	138	50-150			
M8FOSA	%				106	130	50-150			
M8PFOA	%				115	143	50-150			
M8PFOS	%				111	138	50-150			
M9PFNA	%				120	147	50-150			
MPFBA	%				113	140	50-150			
MPFDoA	%				109	135	50-150			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 6255 S. MILWAUKEE
Pace Project No.: 40249507

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

MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard M2 4:2 FTS is outside the control limits for sample 22208102502 (MW-602).

MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NEtFOSA is outside the control limits for sample 22208102502 (MW-602).

MSSV12.3 In the EPA 537 Mod Isotope Dilution analysis, the recovery for the extracted internal standard d-NMeFOSA is outside the control limits for sample 22208102502 (MW-602).

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 6255 S. MILWAUKEE
 Pace Project No.: 40249507

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40249507001	MW-600	METHOD	747608	EPA 537 Modified	747983
40249507002	MW-602	METHOD	747608	EPA 537 Modified	747983

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CHAIN-OF-CUSTODY Analytical Request Document

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

Company: DAI Environmental		Billing Information:							
Address:									
Report To: Chris Caille		Email To:							
Copy To:		Site Collection Info/Address:							
Customer Project Name/Number: 6255 S. Milwaukee		State: WI		County/City: Time Zone Collected:					
Phone: _____		Site/Facility ID #: _____		Compliance Monitoring? [] Yes [] No					
Email: _____									
Collected By (print): Marcus Gregchner		Purchase Order #: _____ Quote #: _____		DW PWS ID #: _____ DW Location Code: _____					
Collected By (signature):		Turnaround Date Required:		Immediately Packed on Ice: [] Yes [] No					
Sample Disposal: [] Dispose as appropriate [] Return [] Archive: _____ [] Hold: _____		Rush: [] Same Day [] Next Day [] 2 Day [] 3 Day [] 4 Day [] 5 Day (Expedite Charges Apply)		Field Filtered (if applicable): [] Yes [] No Analysis: _____					
* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)									
Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Res Cl	# Ct			
			Date	Time			Date	Time	
MW-600	GW			8/4/22	11:50				
MW-602	GW			8/4/22	10:11				
Customer Remarks / Special Conditions / Possible Hazards:			Type of Ice Used:		Wet	Blue	Dry	None	
			Packing Material Used:		<i>(circle)</i>				
			Radchem sample(s) screened (<500 cpm):		Y N				
Relinquished by/Company: (Signature) CS Logistics		Date/Time: 8/4/22 08:00		Received by/Company: (Signature) mwhite					
Relinquished by/Company: (Signature)		Date/Time:		Received by/Company: (Signature)					
Relinquished by/Company: (Signature)		Date/Time:		Received by/Company: (Signature)					

**LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or
MTJL Log-in Number Here**

40249802

ALL SHADED AREAS are for LAB USE ONLY

Container Preservative Type **						Lab Project Manager:
** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other						
Analyses						Lab Profile/Line:
						Lab Sample Receipt Checklist:
						Custody Seals Present/Intact Y N NA
						Custody Signatures Present Y N NA
						Collector Signature Present Y N NA
						Bottles Intact Y N NA
						Correct Bottles Y N NA
						Sufficient Volume Y N NA
						Samples Received on Ice Y N NA
						VOA - Headspace Acceptable Y N NA
						USDA Regulated Soils Y N NA
						Samples in Holding Time Y N NA
						Residual Chlorine Present Y N NA
						Cl Strips: _____
						Sample pH Acceptable Y N NA
						pH Strips: _____
						Sulfide Present Y N NA
						Lead Acetate Strips: _____
						LAB USE ONLY:
						Lab Sample # / Comments:
						<i>COL</i>
						<i>COL</i>
SHORT HOLDS PRESENT (<72 hours): Y N N/A						Lab Sample Temperature Info:
Lab Tracking #: 2825854						Temp Blank Received: Y N NA
Samples received via: FEDEX UPS Client Courier Pace Courier						Therm ID#: _____
Date/Time: 8/19/08						Cooler 1 Temp Upon Receipt: ____ oC
MTJL LAB USE ONLY						Cooler 1 Therm. Corr. Factor: ____ oC
Table #: _____						Cooler 1 Corrected Temp: ____ oC
Acctnum: _____						Comments: _____
Template: _____						Trip Blank Received: Y N NA
Prelogin: _____						HCL MeOH TSP Other
PM: _____						Non Conformance(s): YES / NO
PB: _____						Page: Page 15 of: _____

Sample Preservation Receipt Form

Project #

Client Name: DANAll containers needing preservation have been checked and noted below: Yes NoN/A

Lab Lot# of pH paper:

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

Initial when completed:

Date/
Time:

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) ¹	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
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				
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						

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #: _____

Client Name: DAHWO# : **40249507**Courier: CS Logistics Fed Ex Speedee UPS Waltco
 Client Pace Other: _____

40249507

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes noCustody Seal on Samples Present: yes no Seals intact: yes noPacking Material: Bubble Wrap Bubble Bags None Other ZiplocThermometer Used SR - 120 Type of Ice: Wet Blue Dry None Samples on iceCooler Temperature Uncorr: 3 /Corr: 3Temp Blank Present: yes no Biological Tissue is Frozen: yes no

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:

Date: 5/12 /Initials: mjtLabeled By Initials: mjt

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time: - VOA Samples frozen upon receipt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used: -Pace Containers Used: -Pace IR Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <i>Placed by time for 001, 002 has no time M/T 8/9/14</i>
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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 log in

Page 2 of 2

APPENDIX C.1.G
LOW-FLOW DEVELOPMENT FIELD LOGS
(EMERGING CONTAMINANT SAMPLING, AUGUST 2022)

Low-Flow Groundwater Sampling: Field Data Sheet

Well Number: MW-1		Site: 6255 S. Milwaukee								
Field Staff: MN	Date: 8/3/22	Project #: 6255								
Well depth (ft bgs): 14.42	Purge equipment: Meca Typhoon	Diameter Gal per ft								
Depth to water (ft bTOC): 2.82 (w pump inside)	Pump Intake Depth: ~ 12.5'	2" 0.163								
Water Column Depth (ft): 11.6		3" 0.367								
Well Diameter (in): 2"		4" 0.653								
Well Volume (gal):	Water quality meter: YST	6" 1.469								
Screened Interval (ft bgs):		8" 2.611								
Field Parameters										
Time	Depth to Water (ft bgs)	Flow Rate (mL/min)	Total Volume (gal)	Temp (deg C)	Dissolved Oxygen (mg/L)	Conductivity (mS/cm)	pH (SU)	ORP (mV)	Turbidity (NTU)	Color/Odor
Stabilization	<0.3 ft	100 to 500		+/- 1 deg C	+/- 10%	+/- 3%	+/- 0.1	+/- 10 mV	+/- 10%	
10:15	2.82	450	.25	18.1	4.59	4.18	8.33	0.3	7	brown
10:20	4.55	400	.50	18.9	4.76	4.92	8.73	14.0		Clear
10:25	5.00	300	.75	19.5	4.47	4.44	9.04	13.5		"
10:30	5.10	350	1.0	20.6	6.06	3.76	9.57	12.0		"
16:35	5.13	350	1.25	21.1	4.43	3.29	9.99	13.4		"
10:40	5.31	300	1.50	20.7	4.34	4.03	10.13	15.9		"
10:45	5.52	350	1.75	21.1	4.17	4.32	10.31	17.0		"
10:50	5.60	350	2.0	21.2	4.27	4.57	10.47	17.8		"
10:55	5.64	400	2.25	21.4	4.16	4.66	10.49	18.1		"
11:00	5.67	300	2.5	21.5	4.12	4.108	10.50	18.3		
11:05	5.72	350	2.6	21.5	4.11	4.109	10.46	18.5		
			2.756							
Comments										
Sampling										
Depth to Water Before Sampling: 5.72										
Sample Methodology:										
Sample Name: MW-1										
Sample Date/Time: 8/3/22 11:15										
Sampler: MN										
Filtered Metals Collected: Y/N Filter Size:										
Sample Observations										
Parameters:										

Low-Flow Groundwater Sampling: Field Data Sheet

Well Number: MW-2		Site: S. Milwaukee								
Field Staff: ML	Date: 8/3/22	Project #: 6255								
Well depth (ft bgs): 12.86	Purge equipment: Mega Typhoon	Diameter (in)								
Depth to water (ft bTOC): 6.80 w Pump / 6.95 w/o pump	Pump Intake Depth: 14.0	2" 0.163								
Water Column Depth (ft):	Water quality meter: YSI	3" 0.367								
Well Diameter (in): 2"		4" 0.653								
Well Volume (gal):		6" 1.469								
Screened Interval (ft bgs):		8" 2.611								
Field Parameters										
Time	Depth to Water (ft bgs)	Flow Rate (mL/min)	Total Volume (gal)	Temp (deg C)	Dissolved Oxygen (mg/L)	Conductivity (mS/cm)	pH (SU)	ORP (mV)	Turbidity (NTU)	Color/Odor
Stabilization	<0.3 ft	100 to 500		+/- 1 deg C	+/- 10%	+/- 3%	+/- 0.1	+/- 10 mV	+/- 10%	No S/60
11:40	7.80	400	25.5	19.1	7.06	9.50	7.27	16.3		11
11:45	7.42	300	21	19.1	4.65	9.62	7.30	20.2		11
11:50	8.81	350	21.5	19.1	4.65	9.79	7.35	26.5		11
11:55	9.68	350	26 gal	18.5	4.60	9.40	7.37	27.1		11
12:00	10.40	500	2.5	17.5	4.99	9.73	13.15	28.9		11
12:05	10.55	400		17.6	4.98	9.74	14.92	29.6		11
12:10	10.60	350		17.4	5.03	9.70	15.02	29.7		
12:15	8.60									
12:20	13.60									
Comments										
Sampling										
Depth to Water Before Sampling:										
Sample Methodology:										
Sample Name:										
Sample Date/Time: 8/3/22 12:25										
Sampler:										
Filtered Metals Collected: Y/N Filter Size:										
Sample Observations										
Parameters:										

Low-Flow Groundwater Sampling: Field Data Sheet

Low-Flow Groundwater Sampling: Field Data Sheet

Well Number: MW-5			Site: S. Milwaukee							
Field Staff: MN			Date: 8-5-22	Project #: 6255						
Well depth (ft bgs): 13.14			Purge equipment: Mega Typhoon							
Depth to water (ft bTOC): 6.17 w/pump/6.24 w/o pump										
Water Column Depth (ft):			Pump Intake Depth: 12'							
Well Diameter (in): 12"										
Well Volume (gal):			Water quality meter: YSI							
Screened Interval (ft bgs):										
Field Parameters										
Time	Depth to Water (ft bgs)	Flow Rate (mL/min)	Total Volume (gal)	Temp (deg C)	Dissolved Oxygen (mg/L)	Conductivity (mS/cm)	pH (SU)	ORP (mV)	Turbidity (NTU)	Color/Odor
Stabilization	<0.3 ft	100 to 500		+/- 1 deg C	+/- 10%	+/- 3%	+/- 0.1	+/- 10 mV	+/- 10%	
12:45	6.17	400	0	18.8	8.50	3.31	7.28	-39	2/10	Pretty clear
12:50	6.81	350	.25	18.4	4.86	3.25	7.33	-8.8	"	"
12:55	7.04	350	.5	19.3	4.25	3.26	7.31	-8.4	"	"
1:00	7.33	300	.75	19.0	4.12	3.18	7.28	-9.6	"	"
12:05	7.54	350	1.0	19.7	3.91	3.12	7.25	-8.7	"	"
1:10	7.70	400	1.25	19.4	3.86	3.11	7.26	-8.8	"	"
1:15	8.01	350	1.5	19.3	3.86	3.14	7.25	-9.2	"	"
Comments										
Sampling										
Depth to Water Before Sampling:										
Sample Methodology:										
Sample Name:										
Sample Date/Time: 8-5-22 1:20										
Sampler:										
Filtered Metals Collected: Y/N			Filter Size:							
Sample Observations										
Parameters:										

Low-Flow Groundwater Sampling: Field Data Sheet

Well Number: MN - 261		Site: 6255 S. Milwaukee								
Field Staff: MG		Date:	Project #: 6255							
Well depth (ft bgs): 14.75		Purge equipment: Megatyphoon XL								
Depth to water (ft bTOC): 7.45		Pump Intake Depth: 12.5'								
Water Column Depth (ft):		Water quality meter: YSI								
Well Diameter (in): 2"										
Well Volume (gal):										
Screened Interval (ft bgs):										
Field Parameters										
Time	Depth to Water (ft bgs)	Flow Rate (mL/min)	Total Volume (gal)	Temp (deg C)	Dissolved Oxygen (mg/L)	Conductivity (mS/cm)	pH (SU)	ORP (mV)	Turbidity (NTU)	Color/Odor
Stabilization	<0.3 ft	100 to 500		+/- 1 deg C	+/- 10%	+/- 3%	+/- 0.1	+/- 10 mV	+/- 10%	
1:05	7.45	400		16.5	4.02	1.87	6.72	-22-10	clear	
1:10	7.88	300		17.9	4.89	1.17	7.01	+1.4=9.7	clear	
1:15	8.60	350		18.9	4.76	1.39	6.97	-8.3	"	
1:20	9.08	400		18.7	4.24	1.39	6.99	-7.5	"	
1:25	9.70	300		18.3	4.09	1.22	7.02	-8.2	"	
1:30	10.47	350		18.1	4.12	1.27	7.00	-9.1	"	
Comments										
Sampling										
Depth to Water Before Sampling:										
Sample Methodology:										
Sample Name:										
Sample Date/Time:										
Sampler:										
Filtered Metals Collected: Y/N		Filter Size:								
Sample Observations										
Parameters:										

Low-Flow Groundwater Sampling: Field Data Sheet

Well Number: MW-600		Site: S. Milwaukee								
Field Staff: MB	Date: 8/19/22	Project #: 6255								
Well depth (ft bgs): 14.72	Purge equipment: Mega typhoon	Diameter 2" 0.163								
Depth to water (ft bTOC): 8.90 w/ pump / 8.76 w/o pump	Pump Intake Depth: 12'	3" 0.367								
Water Column Depth (ft):	Water quality meter: YSI	4" 0.653								
Well Diameter (in): 2"		6" 1.469								
Well Volume (gal):		8" 2.611								
Screened Interval (ft bgs):										
Field Parameters										
Time	Depth to Water (ft bgs)	Flow Rate (mL/min)	Total Volume (gal)	Temp (deg C)	Dissolved Oxygen (mg/L)	Conductivity (mS/cm)	pH (SU)	ORP (mV)	Turbidity (NTU)	Color/Odor
Stabilization	<0.3 ft	100 to 500		+/- 1 deg C	+/- 10%	+/- 3%	+/- 0.1	+/- 10 mV	+/- 10%	
11:00	8.90	500	0	18.2	9.30	7.70	7.13	-260.2	2/10	Pretty
11:05	8.73	450	.25	18.7	6.91	7.84	7.46	-33.3	2/10	..
11:10	8.69	350	.5	19.1	6.38	2.80	7.62	-45.3	2/10	..
11:15	9.20	300	.75	18.8	5.98	7.52	7.71	-49.4	2/10	..
11:20	9.21	300	1	19.5	5.49	7.67	7.78	-62.3	2/10	..
11:25	9.81	350	1.75	18.0	5.38	7.23	7.79	-85.1	2/10	..
11:30	10.21	300	2.5	18.1	4.79	7.41	7.87	-74.2	2/10	..
11:35	10.16	300	2.75	19.0	4.62	7.57	7.93	-77.4	2/10	..
11:40	10.35	300	3.00	18.8	4.51	7.61	8.02	-82.3	2/10	..
11:45	10.42	350	3.5	17.9	4.49	7.34	8.03	-81.4	2/10	..
Comments										
Sampling										
Depth to Water Before Sampling:										
Sample Methodology:										
Sample Name:										
Sample Date/Time: 8/14/22 11:50										
Sampler:										
Filtered Metals Collected: Y/N Filter Size:										
Sample Observations										
Parameters:										

Low-Flow Groundwater Sampling: Field Data Sheet

Low-Flow Groundwater Sampling: Field Data Sheet

Well Number: MW-602	Site: S. Milwaukee	
Field Staff: Mbn	Date: 8/14/23	Project #: C 255
Well depth (ft bgs): 14-66	Purge equipment:	Diameter
Depth to water (ft bTOC) 9.35 w/pump / 9.22 w/o pump	Meg Typhoon	Gal per ft
Water Column Depth (ft):	Pump Intake Depth:	2" 0.163
Well Diameter (in): 2"	12-00	3" 0.367
Well Volume (gal):	Water quality meter:	4" 0.653
Screened Interval (ft bgs):	VS	6" 1.469
		8" 2.611

Field Parameters

Comments

Sampling

Depth to Water Before Sampling:

Sample Methodology:

Sample Name:

Sample Date/Time: 8/4/22 0, 10:15

Sampler:

Filtered Metals Collected: Y/N **Filter Size:**

Sample Observations

Parameters:

Low-Flow Groundwater Sampling: Field Data Sheet