State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

Site Investigation Sample Results Notification

Form 4400-249 (R 03/14)

Notice: This form may be used to comply with the requirements of s. NR 716.14 (2), Wis. Adm. Code; however, use of this form is not required. An alternate format may be used. The rule requires that notification be provided to 1) property owners when someone else is conducting the sampling, 2) to occupants of property belonging to the responsible person, and 3) to owners and occupants of property that does not belong to the responsible person but has been affected by contamination arising on his or her property. Notification is required within 10 business days of receiving the sample results. Personal information collected will be used for program administration and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31-19.39, Wis. Stats.].

NOTE: Under s. NR 716.14, Wis. Adm. Code, the responsible party must also submit sample results and other required information to the DNR. We recommend that copies of the sample results notifications be included with that submittal, along with all attachments. Using the same format used for data presentation for a closure request may be helpful to all parties. See s. NR 716.14, Wis. Adm. Code for the full list of information to be submitted to the DNR.

Notification of Property Owners and Occupants:

This notification form has been provided to you in order to provide the results of environmental sampling that has been conducted on property that you own or occupy. Samples were collected in accordance with the methods identified in the site investigation work plan, in accordance with s. NR. 716.09 and 716.13, Wis. Adm. Code. This sampling was conducted as a result of contamination originating at the following location.

Site Information

Site Name			DNR ID # (BRRTS #)
Dane County Fire Training Areas - Darwin Rd			02-13-583366
Address	**City**	**State**	**ZIP Code**
Darwin Rd / International Ln	Madison	WI	53704

Responsible Party

The person(s) responsible for completing this environmental investigation is:

Property Owner

Dane County

Address	City	State	ZIP Code
4000 International Ln	Madison	WI	53704

Contact Person	Phone Number (include area code)
Mike Kirchner	

Person or company that collected samples

Shannon & Wilson, Inc.

Sample Results (Results Attached)

Reason for Sampling: ○ Routine ◉ Other (define) NR 716 SI

The contaminants that have been identified at this time on property that you own or occupy include:

Contaminant	In Soil? Yes	In Soil? No	In Groundwater? Yes	In Groundwater? No
Gasoline	○	◉	○	◉
Diesel or Fuel Oil	○	◉	○	◉
Solvents	○	◉	○	◉
Heavy Metals	○	◉	○	◉
Pesticides	○	◉	○	◉
Other: PFAS	◉	○	◉	○

This sampling event included sampling of a drinking water well.
○ Yes ◉ No

If yes, the sampled drinking water well had detectable contaminants.
○ Yes ○ No

Contaminants in Vapor	Yes	No
Indoor Air	○	◉
Sub-slab	○	◉
Exterior Soil Gas	○	◉

Attached are:

- A map that shows the locations from which samples were collected. (The map needs to meet the requirements of s. NR 716.15 (4), Wis. Adm. Code.)
- A data table with specific contaminant levels at each sample location and whether or not the sample results exceed state standards.
- A copy of the laboratory results.

You are not identified as the person that is responsible for this contamination. However, your cooperation is important. Property owners may become legally responsible for contamination if they do not allow access to the person that is responsible so that person may complete the environmental investigation and clean up activities.

Option for written exemption: You have the option of requesting a written liability exemption from the DNR for contamination that originated on another property, or on property that you lease. To do this, you must present an adequate environmental assessment of your property and pay a $700 fee for review of this information. If you are interested in this option, please see DNR publication # RR 589, "When Contamination Crosses a Property Line - Rights and Responsibilities of Property Owners", available at: dnr.wi.gov/files/PDF/pubs/rr/rr589.pdf.

Contact Information

Please address questions regarding this notification, or requests for additional information to the contact person listed above, or to one of the following contacts:

Environmental Consultant

Company Name	Contact Person Last Name	First Name
Shannon & Wilson, Inc.	Pagels	Corey

Address	City	State	ZIP Code
5325 Wall Street, Suite 2355	Madison	WI	53718

Phone # (inc. area code)	Email
(608) 960-7344	corey.pagels@shanwil.com

Select which agency: (●) Natural Resources ( ) Agriculture, Trade and Consumer Protection

State of Wisconsin Department of Natural Resources

Contact Person Last Name	First Name	Phone # (inc. area code)
Ales	Stephen	(608) 400-9178

Address	City	State	ZIP Code
P.O. Box 7921	Madison	WI	53703

Email

stephenm.ales@wisconsin.gov

Table 1

Soil Analytical Results
DCRA - Darwin Road
Madison, Wisconsin

DRAFT

Constituent	EPA Acronym	Non-Industrial Direct Contact RCL (1)	B-1		B-2		B-3		B-4		B-5		B-6		B-7		B-8	
			2.5 ft bgs	13 ft bgs	3 ft bgs	12 ft bgs	2.5 ft bgs	13 ft bgs	3 ft bgs	12 ft bgs	3 ft bgs	13 ft bgs	3 ft bgs	13 ft bgs	2 ft bgs	13.5 ft bgs	3 ft bgs	8 ft bgs
PFAS (ug/kg)		Date Collected:	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023
Carboxylic Acids (ug/kg)																		
Perfluorobutanoic acid [C4] (FC 23, Fluorad FC 23)	PFBA	--	0.22J B	0.091J B	0.40B	0.079J B	0.31B	0.098J B	0.24B	0.11J B	0.25B	0.091J B	0.17J B	0.11J B	0.47B	0.094J	0.17J	0.11J
Perfluoropentanoic acid [C5]	PFPeA	--	0.17J	<0.044	0.45	<0.042	0.27	<0.042	0.19J	<0.040	0.16J	<0.041	0.21J	0.061J	0.64	0.11J	0.089J	<0.044
Perfluorohexanoic acid [C6]	PFHxA	--	0.072J	<0.033	0.092J	<0.032	0.61	<0.032	0.67	<0.031	0.15J	<0.031	0.19J	0.064J	0.58	0.24	0.088J	<0.033
Perfluoroheptanoic acid [C7]	PFHpA	--	0.049J	<0.041	0.093J	<0.039	0.22J	<0.039	0.25	<0.037	<0.043	<0.038	0.19J	0.087J	0.20J	0.081J	0.040J	<0.041
Perfluorooctanoic acid [C8]	PFOA	1260	0.35	<0.057	0.88	0.22	0.66	0.093J	0.53	0.13J	0.34	0.065J	0.79	0.85	0.44	0.43	0.16J	<0.057
Perfluorononanoic acid [C9]	PFNA	--	<0.026	<0.024	0.18J	<0.023	0.079J	<0.023	0.074J	<0.022	0.038J	<0.022	0.067J	<0.024	0.91	<0.023	0.052J	<0.023
Perfluorodecanoic acid [C10]	PFDA	--	<0.057	<0.052	<0.056	<0.049	<0.058	<0.050	<0.056	<0.047	<0.055	<0.048	<0.054	<0.052	<0.059	<0.050	<0.051	<0.051
Perfluoroundecanoic acid [C11]	PFUnA	--	<0.050	<0.045	<0.049	<0.043	<0.051	<0.043	<0.049	<0.041	<0.048	<0.042	<0.047	<0.045	<0.051	<0.043	<0.044	<0.045
Perfluorododecanoic acid [C12]	PFDoA	--	<0.036	<0.032	<0.035	<0.031	<0.036	<0.031	<0.035	<0.030	<0.034	<0.030	<0.034	<0.032	<0.037	<0.031	<0.032	<0.032
Perfluorotridecanoic acid [C13]	PFTrDA	--	<0.025	<0.023	<0.025	<0.022	<0.025	<0.022	<0.025	<0.021	<0.024	<0.021	<0.024	<0.023	<0.026	<0.022	<0.022	<0.022
Perfluorotetradecanoic acid [C14]	PFTA	--	<0.044	<0.040	<0.043	<0.038	<0.045	<0.038	<0.043	<0.036	<0.042	<0.037	<0.042	<0.040	<0.045	<0.038	<0.039	<0.039
Sulfonic Acids (ug/kg)																		
Perfluorobutanesulfonic acid [C4] (FC-98)	PFBS	--	<0.045	<0.041	<0.045	<0.039	<0.046	<0.039	<0.044	<0.037	<0.043	<0.038	<0.043	<0.041	0.13J	0.050J	<0.040	<0.041
Perfluoropentanesulfonic acid [C5]	PFPeS	--	<0.044	<0.040	<0.043	<0.038	<0.045	<0.038	<0.043	<0.036	<0.042	<0.037	<0.042	<0.040	0.16J	0.079J	<0.039	<0.039
Perfluorohexanesulfonic acid [C6]	PFHxS	--	0.19J	0.042J	0.66	0.37	0.31	0.10J	0.19J	0.080J	0.18J	0.16J	2.9	2.6	2.8	2.5	0.13J	0.093J
Perfluoroheptanesulfonic acid [C7]	PFHpS	--	<0.058	<0.053	<0.058	<0.050	<0.059	<0.051	<0.057	<0.048	<0.056	<0.049	<0.055	<0.053	0.18J	0.11J	<0.052	<0.052
Perfluorooctanesulfonic acid [C8] (FC 95, Fluorad FC 95)	PFOS	1260	0.31	<0.046	2.0	0.098J	1.2	<0.044	2.6	0.22	1.5	0.65	0.34	0.16J	14	0.62I	0.99	0.061J
Perfluorononanesulfonic acid [C9]	PFNS	--	<0.034	<0.031	<0.034	<0.030	<0.035	<0.030	<0.034	<0.029	<0.033	<0.029	<0.033	<0.031	<0.035	<0.030	<0.031	<0.031
Perfluorodecanesulfonic acid [C10]	PFDS	--	<0.062	<0.056	<0.061	<0.053	<0.063	<0.054	<0.061	<0.051	<0.059	<0.052	<0.059	<0.056	<0.064	<0.054	<0.055	<0.055
Perfluorododecanesulfonic acid [C12]	PFDoS	--	<0.056	<0.051	<0.055	<0.048	<0.057	<0.049	<0.055	<0.046	<0.053	<0.047	<0.053	<0.051	<0.058F1	<0.048	<0.050	<0.050
4:2 fluorotelomersulfonic acid [C6]	4:2 FTS	--	<0.061	<0.055	<0.060	<0.052	<0.062	<0.053	<0.060	<0.050	<0.058	<0.051	<0.058	<0.055	<0.062	<0.053	<0.054	<0.054
6:2 fluorotelomersulfonic acid [C8]	6:2 FTS	--	<0.032	<0.029	<0.032	<0.028	<0.033	<0.028	<0.032	<0.027	<0.031	<0.027	<0.030	0.059J	<0.033	<0.028	<0.028	<0.029
8:2 fluorotelomersulfonic acid [C10]	8:2 FTS	--	<0.042	<0.038	<0.041	<0.036	<0.042	<0.036	<0.041	<0.034	<0.040	0.095J	<0.039	<0.038	<0.043	<0.036	<0.037	<0.037
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols (ug/kg)																		
Perfluorooctanesulfonamide [C8]	PFOSA	--	<0.039	<0.035	<0.039	<0.034	<0.040	<0.034	<0.039	<0.033	<0.038	0.068J	<0.037	<0.036	<0.040	<0.034	<0.035	<0.035
N-Methylperfluorooctanesulfonamide [C9] (Fluorad FX 12)	NMeFOSA	--	<0.058	<0.053	<0.058	<0.050	<0.059	<0.051	<0.057	<0.048	<0.056	<0.049	<0.055	<0.053	<0.060	<0.051	<0.052	<0.052
N-Ethylperfluorooctanesulfonamide [C10] (Alstar, Finitron, Fluramin, FX 12, Mirex S, Sulfluramid, Volcano)	NEtFOSA	--	<0.056	<0.051	<0.055	<0.048	<0.057	<0.049	<0.055	<0.046	<0.053	<0.047	<0.053	<0.051	<0.058	<0.048	<0.050	<0.050
N-Methylperfluorooctanesulfonamidoacetic acid [C11]	NMeFOSAA	--	<0.027	<0.025	<0.027	<0.024	<0.028	<0.024	<0.027	<0.023	<0.026	<0.023	<0.026	<0.025	<0.028	<0.024	<0.024	<0.025
N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	NEtFOSAA	--	<0.057	<0.052	<0.056	<0.049	<0.058	<0.050	<0.056	<0.047	<0.055	<0.048	<0.054	<0.052	<0.059	<0.050	<0.051	<0.051
N-Methylperfluorooctanesulfonamidoethanol [C11]	NMeFOSE	--	<0.056	<0.051	<0.055	<0.048	<0.057	<0.049	<0.055	<0.046	<0.053	<0.047	<0.053	<0.051	<0.058	<0.048	<0.050	<0.050
N-Ethylperfluorooctanesulfonamidoethanol [C12] (FC-10, Fluorad FC 10)	NEtFOSE	--	<0.033	<0.030	<0.033	<0.029	<0.034	<0.029	<0.033	<0.028	<0.032	<0.028	<0.032	<0.030	<0.034	<0.029	<0.030	<0.030
Replacement Chemicals (ug/kg)																		
Hexafluoropropylene oxide dimer acid [C6] (FRD-903, GenX)	HFPO-DA	--	<0.049	<0.044	<0.048	<0.042	<0.050	<0.042	<0.048	<0.040	<0.047	<0.041	<0.046	<0.044	<0.050	<0.042	<0.043	<0.044
4,8-dioxa-3H-perfluorononanoic acid [C7]	DONA	--	<0.046	<0.042	<0.046	<0.040	<0.047	<0.040	<0.046	<0.038	<0.044	<0.039	<0.044	<0.042	<0.048	<0.040	<0.041	<0.042
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	9Cl-PF3ONS	--	<0.042	<0.038	<0.041	<0.036	<0.042	<0.036	<0.041	<0.034	<0.040	<0.035	<0.039	<0.038	<0.043	<0.036	<0.037	<0.037
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	11Cl-PF3OUdS	--	<0.037	<0.033	<0.036	<0.032	<0.037	<0.032	<0.036	<0.031	<0.035	<0.031	<0.035	<0.033	<0.038	<0.032	<0.033	<0.033

(1) = Source: Wisconsin Department of Natural Resources NR 720 RCL Spreadsheet (updated December 2018).
RCL = Residual contaminant level.
PFAS = perfluoroalkyl and polyfluoroalkyl substances.
3 ft bgs = Soil sample collected at 3 feet below ground surface.
* = FD-1 was taken at B-9 (13'); FD-2 was taken at B-19 (2')
ug/kg = micrograms per kilogram.
-- = Standard not established.
N/A = Not applicable.
< = Less than the laboratory method detection limit (MDL).
BOLD = Sample result exceeds the Non-Industrial Direct Contact RCL.
J = Result is less than the laboratory reporting limit but greater than or equal to the laboratory MDL; the reported concentration is estimated.
B = Compound was found in the blank and sample.
F1 = Matrix spike and/or matrix spike duplicate recovery exceeds control limits.
I = Value is the estimated maximum possible concentration.

Table 1

Soil Analytical Results
DCRA - Darwin Road
Madison, Wisconsin

DRAFT

Constituent	EPA Acronym	Non-Industrial Direct Contact RCL (1)	B-9			B-10			B-11		B-12		B-13		B-14		B-15		B-16	
			3 ft bgs	13 ft bgs	13 ft bgs*	3 ft bgs	13 ft bgs	17 ft bgs	3 ft bgs	10 ft bgs	3 ft bgs	11 ft bgs	3 ft bgs	10 ft bgs	2 ft bgs	10 ft bgs	2 ft bgs	10 ft bgs	2 ft bgs	10 ft bgs
PFAS (ug/kg)		Date Collected:	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023
Carboxylic Acids (ug/kg)																				
Perfluorobutanoic acid [C4] (FC 23, Fluorad FC 23)	PFBA	--	7.2	0.47	0.47	2.0	0.39	1.2	0.26	0.14J	1.4	1.6	17	6.2	1.9	4.1	0.053J	0.75	<0.051	0.13J
Perfluoropentanoic acid [C5]	PFPeA	--	47	1.5	1.8	9.5	0.91	5.7	0.49	0.23	8.0	7.8F1	100	15	6.9	13	0.17J	4.3	0.055J	0.23J
Perfluorohexanoic acid [C6]	PFHxA	--	180	7.7	10	27	2.0	17	0.62	0.26	19	19	250	27	12	28	0.62	6.6	0.39	0.95
Perfluoroheptanoic acid [C7]	PFHpA	--	110	1.7	2.8	18	0.74	2.0	0.28	0.14J	7.4	5.9	36	0.066J	14	0.41	0.10J	5.5	0.043J	0.17J
Perfluorooctanoic acid [C8]	PFOA	1260	**1300**	2.4	3.4	360	15	3.6	1.6	2.2	28	8.0F1	700	0.17J	41	0.081J	0.18J	15	0.27	3.6
Perfluorononanoic acid [C9]	PFNA	--	0.61	<0.023	<0.022	1.8	<0.021	0.70	0.61	1.1	<0.023	<0.022	1.1	<0.024	7.3	<0.026	<0.024	0.17J	<0.025	0.39
Perfluorodecanoic acid [C10]	PFDA	--	<0.059	<0.050	<0.049	<0.052	<0.047	<0.056	<0.059	0.15J	<0.050	<0.047	0.49	<0.052	0.61	<0.056	<0.053	<0.052	<0.054	<0.057
Perfluoroundecanoic acid [C11]	PFUnA	--	<0.051	<0.044	<0.043	<0.046	<0.041	<0.049	<0.052	<0.043	<0.044	<0.042	<0.047	<0.046	0.25	<0.049	<0.046	<0.045	<0.047	<0.049
Perfluorododecanoic acid [C12]	PFDoA	--	<0.037	<0.031	<0.031	<0.033	<0.029	<0.035	<0.037	<0.031	<0.031	<0.030	0.037J	<0.033	<0.032	<0.035	<0.033	<0.032	<0.034	<0.035
Perfluorotridecanoic acid [C13]	PFTrDA	--	<0.026	<0.022	<0.021	<0.023	<0.020	<0.025	<0.026	<0.022	<0.022	<0.021	<0.024	<0.023	<0.022	<0.024	<0.023	<0.023	<0.024	<0.025
Perfluorotetradecanoic acid [C14]	PFTA	--	<0.045	<0.038	<0.038	<0.040	<0.036	<0.044	<0.045	<0.038	<0.039	<0.037	<0.041	<0.040	<0.039	<0.043	<0.041	<0.040	<0.041	<0.044
Sulfonic Acids (ug/kg)																				
Perfluorobutanesulfonic acid [C4] (FC-98)	PFBS	--	46	1.4	1.8	6.5	0.40	4.4	0.15J	0.076J	5.8	3.2	40	4.0	2.2	4.4	0.062J	1.9	<0.043	0.062J
Perfluoropentanesulfonic acid [C5]	PFPeS	--	97	2.7	4.1	11	0.41	4.6	0.20J	0.092J	4.7	3.8	45	0.12J	3.9	0.23	0.057J	3.7	<0.041	0.091J
Perfluorohexanesulfonic acid [C6]	PFHxS	--	1700	18	27	610	19	17	6.6	4.9	17	15	420	0.24	100	0.066J I	0.61	46	0.35	7.4
Perfluoroheptanesulfonic acid [C7]	PFHpS	--	2.7	<0.051	<0.050	5.2	<0.048	5.0	0.15J	0.22	<0.051	<0.048	1.4	<0.053	1.5	<0.057	<0.054	0.55	<0.055	0.21J
Perfluorooctanesulfonic acid [C8] (FC 95, Fluorad FC 95)	PFOS	1260	10	0.077J	0.074J	91	<0.042	1.8I	14	54	<0.045	<0.043	44	0.23	110	<0.050	0.063J	2.2	0.15J	11
Perfluorononanesulfonic acid [C9]	PFNS	--	<0.035	<0.030	<0.030	<0.031	<0.028	<0.034	<0.036	<0.030	<0.030	<0.029	<0.032	<0.032	0.14J	<0.034	<0.032	<0.031	<0.032	<0.034
Perfluorodecanesulfonic acid [C10]	PFDS	--	<0.063	<0.054	<0.053	<0.056	<0.050	<0.061	<0.064	<0.054	<0.054	<0.051	<0.058	<0.057	0.11J	<0.060	<0.057	<0.056	<0.058	<0.061
Perfluorododecanesulfonic acid [C12]	PFDoS	--	<0.057	<0.049	<0.048	<0.051	<0.046	<0.055	<0.058	<0.049	<0.049	<0.046	<0.053	<0.051	<0.050	<0.055	<0.052	<0.051	<0.053	<0.055
4:2 fluorotelomersulfonic acid [C6]	4:2 FTS	--	0.42	<0.053	<0.052	0.089J	<0.049	<0.060	<0.063	<0.053	<0.053	<0.050	1.7	0.38	<0.054	0.15J	<0.056	<0.055	<0.057	<0.060
6:2 fluorotelomersulfonic acid [C8]	6:2 FTS	--	62	0.42	0.67	22	3.0	0.17J	<0.033	<0.028	0.35	<0.027	110	<0.029	0.34	<0.031	<0.030	5.5	<0.030	0.070J
8:2 fluorotelomersulfonic acid [C10]	8:2 FTS	--	<0.043	<0.036	<0.036	0.71	<0.034	<0.041	<0.043	0.41	<0.037	<0.035	0.94	<0.038	2.7	<0.041	<0.039	<0.038	<0.039	0.57
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols (ug/kg)																				
Perfluorooctanesulfonamide [C8]	PFOSA	--	0.048J	<0.034	<0.034	0.34	<0.032	<0.039	<0.040	<0.034	<0.035	<0.033	8.8	<0.036	0.47	<0.038	<0.036	<0.035	<0.037	0.46
N-Methylperfluorooctanesulfonamide [C9] (Fluorad FX 12)	NMeFOSA	--	<0.060	<0.051	<0.050	<0.053	<0.048	<0.058	<0.060	<0.051	<0.051	<0.048	<0.055	<0.053	<0.052	<0.057	<0.054	<0.053	<0.055	<0.058
N-Ethylperfluorooctanesulfonamide [C10] (Alstar, Finitron, Fluramin, FX 12, Mirex S, Sulfluramid, Volcano)	NEtFOSA	--	<0.057	<0.049	<0.048	<0.051	<0.046	<0.055	<0.058	<0.049	<0.049	<0.046	<0.053	<0.051	<0.050	<0.055	<0.052	<0.051	<0.053	<0.055
N-Methylperfluorooctanesulfonamidoacetic acid [C11]	NMeFOSAA	--	<0.028	<0.024	<0.023	<0.025	<0.022	<0.027	<0.028	<0.024	<0.024	<0.023	<0.026	<0.025	<0.024	<0.027	<0.025	<0.025	<0.026	<0.027
N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	NEtFOSAA	--	<0.059	<0.050	<0.049	<0.052	<0.047	<0.056	<0.059	<0.050	<0.050	<0.047	<0.054	<0.052	<0.051	<0.056	<0.053	<0.052	<0.054	<0.057
N-Methylperfluorooctanesulfonamidoethanol [C11]	NMeFOSE	--	<0.057	<0.049	<0.048	<0.051	<0.046	<0.055	<0.058	<0.049	<0.049	<0.046	<0.053	<0.051	<0.050	<0.055	<0.052	<0.051	<0.053	<0.055
N-Ethylperfluorooctanesulfonamidoethanol [C12] (FC-10, Fluorad FC 10)	NEtFOSE	--	<0.034	<0.029	<0.029	<0.030	<0.027	<0.033	<0.034	<0.029	<0.029	<0.028	<0.031	<0.031	<0.030	<0.032	<0.031	<0.030	<0.031	<0.033
Replacement Chemicals (ug/kg)																				
Hexafluoropropylene oxide dimer acid [C6] (FRD-903, GenX)	HFPO-DA	--	<0.050	<0.043	<0.042	<0.044	<0.040	<0.048	<0.050	<0.042	<0.043	<0.041	<0.046	<0.045	<0.043	<0.048	<0.045	<0.044	<0.046	<0.048
4,8-dioxa-3H-perfluorononanoic acid [C7]	DONA	--	<0.048	<0.040	<0.040	<0.042	<0.038	<0.046	<0.048	<0.040	<0.041	<0.039	<0.044	<0.043	<0.041	<0.045	<0.043	<0.042	<0.044	<0.046
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	9Cl-PF3ONS	--	<0.043	<0.036	<0.036	<0.038	<0.034	<0.041	<0.043	<0.036	<0.037	<0.035	<0.039	<0.038	<0.037	<0.041	<0.039	<0.038	<0.039	<0.041
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	11Cl-PF3OUdS	--	<0.038	<0.032	<0.032	<0.034	<0.030	<0.036	<0.038	<0.032	<0.032	<0.031	<0.035	<0.034	<0.033	<0.036	<0.034	<0.033	<0.035	<0.037

(1) = Source: Wisconsin Department of Natural Resources NR 720 RCL Spreadsheet (updated December 2018).
RCL = Residual contaminant level.
PFAS = perfluoroalkyl and polyfluoroalkyl substances.
3 ft bgs = Soil sample collected at 3 feet below ground surface.
* = FD-1 was taken at B-9 (13'); FD-2 was taken at B-19 (2')
ug/kg = micrograms per kilogram.
-- = Standard not established.
N/A = Not applicable.
< = Less than the laboratory method detection limit (MDL).
BOLD = Sample result exceeds the Non-Industrial Direct Contact RCL.
J = Result is less than the laboratory reporting limit but greater than or equal to the laboratory MDL; the reported concentration
B = Compound was found in the blank and sample.
F1 = Matrix spike and/or matrix spike duplicate recovery exceeds control limits.
I = Value is the estimated maximum possible concentration.

Table 1

Soil Analytical Results
DCRA - Darwin Road
Madison, Wisconsin

DRAFT

Constituent	EPA Acronym	Non-Industrial Direct Contact RCL (1)	B-17		B-18			B-19			B-20		B-21		B-22		B-23	
			2 ft bgs	9 ft bgs	3 ft bgs	8 ft bgs	16 ft bgs	2 ft bgs	2 ft bgs*	5.5 ft bgs	3 ft bgs	10 ft bgs	2 ft bgs	9 ft bgs	2 ft bgs	10 ft bgs	2 ft bgs	10 ft bgs
PFAS (ug/kg)		Date Collected:	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/18/2023	04/19/2023	04/19/2023	04/19/2023	04/19/2023	04/19/2023	04/19/2023
Carboxylic Acids (ug/kg)																		
Perfluorobutanoic acid [C4] (FC 23, Fluorad FC 23)	PFBA	--	0.12J	0.25	1.4	0.13J	0.66	0.087J	0.10J	0.054J	0.25	0.064J	0.59	<0.052	1.6	3.0	0.83	0.057J
Perfluoropentanoic acid [C5]	PFPeA	--	0.22J	0.85	1.9	0.31	1.8	0.26	0.23	0.072J	0.14J	<0.044	1.4	0.058J	10	16	4.3	0.056J
Perfluorohexanoic acid [C6]	PFHxA	--	0.76	1.5	1.0	0.54	4.5	0.58	0.54	0.12J I	0.31	<0.033	1.3	0.098J I	12	12	9.8	<0.038
Perfluoroheptanoic acid [C7]	PFHpA	--	0.14J	0.77	0.80	0.75	1.1	0.38	0.36	0.21J	0.085J	<0.041	0.70	<0.043	5.1	0.77	7.3	<0.047
Perfluorooctanoic acid [C8]	PFOA	1260	1.1	14	1.3	2.6	0.25	2.2	2.2	0.57	0.39	0.31	3.3	0.17J	1.8	0.068J	45	<0.065
Perfluorononanoic acid [C9]	PFNA	--	0.077J	0.96	1.2	10	0.36	0.22J	0.29	0.28	0.10J	<0.024	1.6	0.090J	0.043J	<0.027	16	<0.027
Perfluorodecanoic acid [C10]	PFDA	--	<0.058	0.60	0.83	0.35	0.35	<0.055	<0.055	0.16J	<0.054	<0.052	0.13J	<0.054	<0.059	<0.058	1.9	<0.059
Perfluoroundecanoic acid [C11]	PFUnA	--	<0.051	0.10J	1.5	<0.043	<0.048	<0.048	<0.048	<0.048	<0.047	<0.045	<0.054	<0.047	<0.051	<0.051	0.45	<0.052
Perfluorododecanoic acid [C12]	PFDoA	--	<0.036	0.054J	0.083J	<0.031	<0.035	<0.034	<0.034	<0.034	<0.034	<0.032	<0.038	<0.034	<0.037	<0.036	0.055J	<0.037
Perfluorotridecanoic acid [C13]	PFTrDA	--	<0.026	<0.022	<0.024	<0.022	<0.024	<0.024	<0.024	<0.024	<0.024	<0.023	<0.027	<0.024	<0.026	<0.025	0.023J	<0.026
Perfluorotetradecanoic acid [C14]	PFTA	--	<0.045	<0.038	<0.041	<0.038	<0.043	<0.042	<0.042	<0.042	<0.042	<0.040	<0.047	<0.042	<0.045	<0.045	<0.040	<0.045
Sulfonic Acids (ug/kg)																		
Perfluorobutanesulfonic acid [C4] (FC-98)	PFBS	--	0.11J	0.29	0.051J	<0.039	0.27	0.054J	<0.043	<0.043	<0.043	<0.041	0.083J	<0.043	4.0	2.9	3.5	<0.047
Perfluoropentanesulfonic acid [C5]	PFPeS	--	0.14J	0.37	0.050J	0.15J	0.26	0.089J	0.091J	<0.042	<0.042	<0.040	0.12J	<0.042	3.6	0.39	6.0	<0.045
Perfluorohexanesulfonic acid [C6]	PFHxS	--	3.2	52	4.2	11	1.3	4.1F1	4.7	1.4	0.87	0.69	11	0.48	6.6	0.27	240	<0.036
Perfluoroheptanesulfonic acid [C7]	PFHpS	--	<0.060	3.1	0.15J	3.2	<0.057	0.096J	0.12J	<0.056	<0.055	<0.053	0.24J	<0.055	<0.060	<0.059	5.5	<0.060
Perfluorooctanesulfonic acid [C8] (FC 95, Fluorad FC 95)	PFOS	1260	1.5	280	73	460	160	11	8.4	29	2.5	0.88	18	0.88	0.48	<0.052	550	<0.053
Perfluorononanesulfonic acid [C9]	PFNS	--	<0.035	0.30	0.37	0.30	<0.033	<0.033	<0.033	0.11J	<0.033	<0.031	<0.037	<0.033	<0.035	<0.035	0.32	<0.036
Perfluorodecanesulfonic acid [C10]	PFDS	--	<0.063	0.17J	0.44	<0.054	<0.060	<0.059	<0.059	<0.059	<0.059	<0.056	<0.066	<0.059	<0.064	<0.063	0.19J	<0.064
Perfluorododecanesulfonic acid [C12]	PFDoS	--	<0.057	<0.049	0.13J	<0.049	<0.054	<0.054	<0.054	<0.054	<0.053	<0.051	<0.060	<0.053	<0.057	<0.057	0.082J	<0.058
4:2 fluorotelomersulfonic acid [C6]	4:2 FTS	--	<0.062	<0.053	<0.057	<0.053	<0.059	<0.058	<0.058	<0.058	<0.058	<0.055	<0.065	<0.058	<0.062	<0.062	<0.056	<0.063
6:2 fluorotelomersulfonic acid [C8]	6:2 FTS	--	<0.033	2.3	0.16J	0.65	0.21J	<0.031	<0.031	0.053J	<0.031	<0.029	<0.034	<0.030	<0.033	<0.033	0.088J	<0.033
8:2 fluorotelomersulfonic acid [C10]	8:2 FTS	--	<0.043	28	1.5	45	29	0.86	0.39	18	<0.040	<0.038	<0.045	<0.039	<0.043	<0.042	0.17J	<0.043
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols (ug/kg)																		
Perfluorooctanesulfonamide [C8]	PFOSA	--	<0.040	49	0.67	1.4	0.17J	0.090J	0.061J	0.38	<0.037	<0.036	<0.042	<0.037	<0.040	<0.040	1.0	<0.041
N-Methylperfluorooctanesulfonamide [C9] (Fluorad FX 12)	NMeFOSA	--	<0.060	0.084J	<0.055	0.056J	<0.057	<0.056	<0.056	<0.056	<0.055	<0.053	<0.063	<0.055	<0.060	<0.059	<0.053	<0.060
N-Ethylperfluorooctanesulfonamide [C10] (Alstar, Finitron, Fluramin, FX 12, Mirex S, Sulfluramid, Volcano)	NEtFOSA	--	<0.057	<0.049	<0.053	<0.049	<0.054	<0.054	<0.054	<0.054	<0.053	<0.051	<0.060	<0.053	<0.057	<0.057	<0.051	<0.058
N-Methylperfluorooctanesulfonamidoacetic acid [C11]	NMeFOSAA	--	<0.028	0.075J	<0.026	<0.024	<0.027	<0.026	<0.026	<0.026	<0.026	<0.025	<0.029	<0.026	<0.028	<0.028	<0.025	<0.028
N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	NEtFOSAA	--	<0.058	0.050J	<0.054	<0.050	<0.055	<0.055	<0.055	<0.055	<0.054	<0.052	<0.061	<0.054	<0.059	<0.058	<0.052	<0.059
N-Methylperfluorooctanesulfonamidoethanol [C11]	NMeFOSE	--	<0.057	<0.049	<0.053	<0.049	<0.054	<0.054	<0.054	<0.054	<0.053	<0.051	<0.060	<0.053	<0.057	<0.057	<0.051	<0.058
N-Ethylperfluorooctanesulfonamidoethanol [C12] (FC-10, Fluorad FC 10)	NEtFOSE	--	<0.034	<0.029	<0.031	<0.029	<0.032	<0.032	<0.032	<0.032	<0.032	<0.030	<0.036	<0.032	<0.034	<0.034	<0.031	<0.034
Replacement Chemicals (ug/kg)																		
Hexafluoropropylene oxide dimer acid [C6] (FRD-903, GenX)	HFPO-DA	--	<0.050	<0.042	<0.046	<0.042	<0.047	<0.047	<0.047	<0.047	<0.046	<0.044	<0.052	<0.046	<0.050	<0.050	<0.045	<0.050
4,8-dioxa-3H-perfluorononanoic acid [C7]	DONA	--	<0.047	<0.040	<0.044	<0.040	<0.045	<0.044	<0.045	<0.044	<0.044	<0.042	<0.050	<0.044	<0.048	<0.047	<0.042	<0.048
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	9Cl-PF3ONS	--	<0.043	<0.036	<0.039	<0.036	<0.040	<0.040	<0.040	<0.040	<0.040	<0.038	<0.045	<0.039	<0.043	<0.042	<0.038	<0.043
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	11Cl-PF3OUdS	--	<0.038	<0.032	<0.035	<0.032	<0.036	<0.035	<0.035	<0.035	<0.035	<0.033	<0.040	<0.035	<0.038	<0.038	<0.034	<0.038

(1) = Source: Wisconsin Department of Natural Resources NR 720 RCL Spreadsheet (updated December 2018).
RCL = Residual contaminant level.
PFAS = perfluoroalkyl and polyfluoroalkyl substances.
3 ft bgs = Soil sample collected at 3 feet below ground surface.
* = FD-1 was taken at B-9 (13'); FD-2 was taken at B-19 (2')
ug/kg = micrograms per kilogram.
-- = Standard not established.
N/A = Not applicable.
< = Less than the laboratory method detection limit (MDL).
BOLD = Sample result exceeds the Non-Industrial Direct Contact RCL.
J = Result is less than the laboratory reporting limit but greater than or equal to the laboratory MDL; the reported concentration
B = Compound was found in the blank and sample.
F1 = Matrix spike and/or matrix spike duplicate recovery exceeds control limits.
I = Value is the estimated maximum possible concentration.

Table 1

Soil Analytical Results
DCRA - Darwin Road
Madison, Wisconsin

DRAFT

Constituent	EPA Acronym	Non-Industrial Direct Contact RCL (1)	Equipment Blank N/A	Equipment Blank #2 N/A	Field Blank N/A
PFAS (ug/kg)		Date Collected:	04/18/2023	04/19/2023	04/18/2023
Carboxylic Acids (ug/kg)					
Perfluorobutanoic acid [C4] (FC 23, Fluorad FC 23)	PFBA	--	<2.2	<2.2	<2.2
Perfluoropentanoic acid [C5]	PFPeA	--	<0.46	<0.45	<0.44
Perfluorohexanoic acid [C6]	PFHxA	--	<0.54	<0.53	<0.53
Perfluoroheptanoic acid [C7]	PFHpA	--	<0.23	<0.23	<0.23
Perfluorooctanoic acid [C8]	PFOA	1260	<0.80	<0.78	<0.77
Perfluorononanoic acid [C9]	PFNA	--	<0.25	<0.25	<0.25
Perfluorodecanoic acid [C10]	PFDA	--	<0.29	<0.29	<0.28
Perfluoroundecanoic acid [C11]	PFUnA	--	<1.0	<1.0	<1.0
Perfluorododecanoic acid [C12]	PFDoA	--	<0.51	<0.51	<0.50
Perfluorotridecanoic acid [C13]	PFTrDA	--	<1.2	<1.2	<1.2
Perfluorotetradecanoic acid [C14]	PFTA	--	<0.68	<0.67	<0.66
Sulfonic Acids (ug/kg)					
Perfluorobutanesulfonic acid [C4] (FC-98)	PFBS	--	<0.19	<0.18	<0.18
Perfluoropentanesulfonic acid [C5]	PFPeS	--	<0.28	<0.28	<0.27
Perfluorohexanesulfonic acid [C6]	PFHxS	--	<0.53	<0.53	<0.52
Perfluoroheptanesulfonic acid [C7]	PFHpS	--	<0.18	<0.18	<0.17
Perfluorooctanesulfonic acid [C8] (FC 95, Fluorad FC 95)	PFOS	1260	<0.51	0.50J	<0.49
Perfluorononanesulfonic acid [C9]	PFNS	--	<0.35	<0.34	<0.34
Perfluorodecanesulfonic acid [C10]	PFDS	--	<0.30	<0.30	<0.29
Perfluorododecanesulfonic acid [C12]	PFDoS	--	<0.91	<0.89	<0.88
4:2 fluorotelomersulfonic acid [C6]	4:2 FTS	--	<0.22	<0.22	<0.22
6:2 fluorotelomersulfonic acid [C8]	6:2 FTS	--	<2.3	<2.3	<2.3
8:2 fluorotelomersulfonic acid [C10]	8:2 FTS	--	<0.43	<0.42	<0.42
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols (ug/kg)					
Perfluorooctanesulfonamide [C8]	PFOSA	--	<0.92	<0.90	<0.89
N-Methylperfluorooctanesulfonamide [C9] (Fluorad FX 12)	NMeFOSA	--	<0.40	<0.40	<0.39
N-Ethylperfluorooctanesulfonamide [C10] (Alstar, Finitron, Fluramin, FX 12, Mirex S, Sulfluramid, Volcano)	NEtFOSA	--	<0.81	<0.80	<0.79
N-Methylperfluorooctanesulfonamidoacetic acid [C11]	NMeFOSAA	--	<1.1	<1.1	<1.1
N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	NEtFOSAA	--	<1.2	<1.2	<1.2
N-Methylperfluorooctanesulfonamidoethanol [C11]	NMeFOSE	--	<1.3	<1.3	<1.3
N-Ethylperfluorooctanesulfonamidoethanol [C12] (FC-10, Fluorad FC 10)	NEtFOSE	--	<0.80	<0.78	<0.77
Replacement Chemicals (ug/kg)					
Hexafluoropropylene oxide dimer acid [C6] (FRD-903, GenX)	HFPO-DA	--	<1.4	<1.4	<1.4
4,8-dioxa-3H-perfluorononanoic acid [C7]	DONA	--	<0.37	<0.37	<0.36
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	9Cl-PF3ONS	--	<0.22	<0.22	<0.22
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	11Cl-PF3OUdS	--	<0.30	<0.30	<0.29

(1) = Source: Wisconsin Department of Natural Resources NR 720 RCL Spreadsheet (updated December 2018).
RCL = Residual contaminant level.
PFAS = perfluoroalkyl and polyfluoroalkyl substances.
3 ft bgs = Soil sample collected at 3 feet below ground surface.
* = FD-1 was taken at B-9 (13'); FD-2 was taken at B-19 (2')
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B = Compound was found in the blank and sample.
F1 = Matrix spike and/or matrix spike duplicate recovery exceeds control limits.
I = Value is the estimated maximum possible concentration.

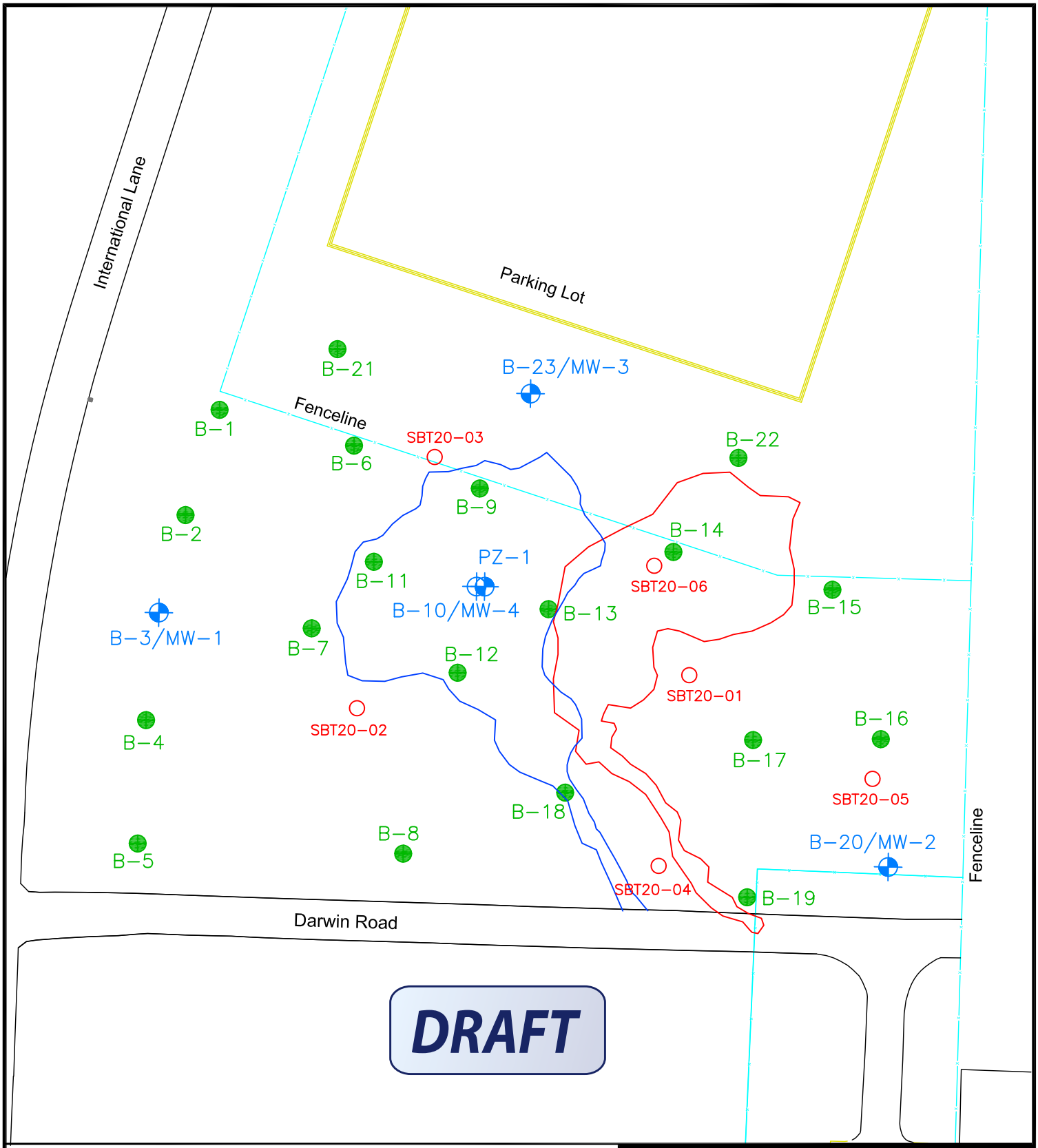
Table 2

Groundwater Analytical Results - PFAS
DCRA - Darwin Road
Madison, Wisconsin

DRAFT

Constituent	EPA Acronym	Preventative Action Limit (PAL)*	Enforcement Standard (ES)*	MW-1	MW-2	MW-2 (FIELD DUPLICATE)	MW-3	MW-4	PZ-1	TRIP BLANK	EQUIPMENT BLANK	FIELD BLANK
PFAS (ng/L)			Date:	05/02/2023	05/02/2023	05/02/2023	05/02/2023	05/02/2023	05/02/2023	05/02/2023	05/02/2023	05/02/2023
Perfluorobutanoic acid [C4] (FC 23, Fluorad FC 23)	PFBA	*2,000*	**10,000**	10	470	510	1,100	1,900	730	<2.1	<2.2	<2.2
Perfluoropentanoic acid [C5]	PFPeA	--	--	17	1,400	1,400	4,600	7,900	4,400	<0.44 F1	<0.46	0.52 J
Perfluorohexanoic acid [C6]	PFHxA	*30,000*	**150,000**	53	2,000	2,100	4,800	11,000	4,700	<0.52	<0.54	0.66 J
Perfluoroheptanoic acid [C7]	PFHpA	--	--	30	670	600	3,200	2,800	2,100	<0.22	<0.23	<0.23
Perfluorooctanoic acid [C8]	PFOA	*2*	**20**	**100**	**760**	**700**	**17,000**	**11,000**	**3,400**	<0.76	<0.80	0.87 J
Perfluorononanoic acid [C9]	PFNA	*3*	**30**	<0.25	*24*	*25*	**130 J**	**310**	**3,700**	<0.24 F1	<0.25	<0.25
Perfluorodecanoic acid [C10]	PFDA	*60*	**300**	<0.28	1.2 J	1.2 J	<28	<0.28	<0.29	<0.28	<0.29	<0.28
Perfluoroundecanoic acid [C11]	PFUnA	*600*	**3,000**	<1.0	<0.98	<1.0	<100	<100	<1.0	<0.98	<1.0	<1.0
Perfluorododecanoic acid [C12]	PFDoA	*100*	**500**	<0.50	<0.49	<0.51	<51	<0.51	<0.52	<0.49	<0.51	<0.50
Perfluorotridecanoic acid [C13]	PFTrDA	--	--	<1.2	<1.2	<1.2	<120	<1.2	<1.2	<1.2	<1.2	<1.2
Perfluorotetradecanoic acid [C14]	PFTA	*2,000*	**10,000**	<0.67	<0.65	<0.67	<67	<0.67	<0.69	<0.65	<0.68	<0.67
Perfluorobutanesulfonic acid [C4] (*FC-98*)	PFBS	*90,000*	**450,000**	6.5	1,200	1,100	1,700	3,700	1,900	<0.18	<0.19	0.24 J
Perfluoropentanesulfonic acid [C5]	PFPeS	--	--	6.4	850	860	2,000	2,300	1,900	<0.27 F1	<0.28	<0.27
Perfluorohexanesulfonic acid [C6]	PFHxS	*4*	**40**	**250**	**6,900**	**6,400**	**41,000 E**	**30,000**	**14,000**	<0.51	0.66 J	2.7
Perfluoroheptanesulfonic acid [C7]	PFHpS	--	--	0.66 J	17	17	63 J	1,400	840	<0.17 F1	<0.18	<0.17
Perfluorooctanesulfonic acid [C8] (*FC 95, Fluorad FC 95*)	PFOS	*2*	**20**	*9.0 I*	**940**	**1,000**	**280**	**2,400 I**	**29,000**	<0.48	<0.51	*2.1 I*
Perfluorononanesulfonic acid [C9]	PFNS	--	--	<0.34	<0.33	<0.34	<34	<0.34	<0.35	<0.33 F1	<0.35	<0.34
Perfluorodecanesulfonic acid [C10]	PFDS	--	--	<0.29	<0.29	<0.30	<29	<0.29	<0.30	<0.29 F1	<0.30	<0.29
Perfluorododecanesulfonic acid [C12]	PFDoS	--	--	<0.89	<0.87	<0.90	<89	<0.89	<0.91	<0.87	<0.91	<0.89
4:2 fluorotelomersulfonic acid [C6]	4:2 FTS	--	--	<0.22	<0.21	<0.22	<22	2.1	<0.23	<0.21 F1	<0.22	<0.22
6:2 fluorotelomersulfonic acid [C8]	6:2 FTS	--	--	<2.3	18	17	<230	240	300	<2.2 F1	<2.3	<2.3
8:2 fluorotelomersulfonic acid [C10]	8:2 FTS	--	--	<0.42	17	18	<42	<0.42	13	<0.41	<0.43	<0.42
Perfluorooctanesulfonamide [C8]	PFOSA	*2*	**20**	<0.90	<0.87	<0.91	<90	<0.90	<0.92	<0.88	<0.92	<0.90
N-Methylperfluorooctanesulfonamide [C9] (*Fluorad FX 12*)	NMeFOSA	--	--	<0.39	<0.38	<0.40	<40	<0.40	<0.41	<0.38	<0.40	<0.39
N-Ethylperfluorooctanesulfonamide [C10] *(Alstar, Finitron, Fluramin, FX 12, Mirex S, Sulfluramid, Volcano)*	NEtFOSA	*2*	**20**	<0.80	<0.78	<0.80	<80	<0.80	<0.82	<0.78	<0.81	<0.79
N-Methylperfluorooctanesulfonamidoacetic acid [C11]	NMeFOSAA	--	--	<1.1	<1.1	<1.1	<110	<1.1	<1.1	<1.1	<1.1	<1.1
N-Ethylperfluorooctanesulfonamidoacetic acid [C12]	NEtFOSAA	*2*	**20**	<1.2	<1.2	<1.2	<120	<1.2	<1.2	<1.2 F1	<1.2	<1.2
N-Methylperfluorooctanesulfonamidoethanol [C11]	NMeFOSE	--	--	<1.3	<1.2	<1.3	<130	<1.3	<1.3	<1.3 F1	<1.3	<1.3
N-Ethylperfluorooctanesulfonamidoethanol [C12] (*FC-10, Fluorad FC 10*)	NEtFOSE	*2*	**20**	<0.78	<0.76	<0.79	<78	<0.78	<0.80	<0.76 F1	<0.80	<0.78
Hexafluoropropylene oxide dimer acid [C6] (*FRD-903, GenX*)	HFPO-DA	*30*	**300**	<1.4	<1.3	<1.4	<140	<140	<140	<1.3	<1.4	<1.4
4,8-dioxa-3H-perfluorononanoic acid [C7]	DONA	*600*	**3,000**	<0.37	<0.36	<0.37	<37	<0.37	<0.38	<0.36 F1	<0.37	<0.37
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [C8]	9Cl-PF3ONS	--	--	<0.22	<0.21	<0.22	<22	<0.22	<0.23	<0.21 F1	<0.22	<0.22
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [C10]	11Cl-PF3OUdS	--	--	<0.29	<0.29	<0.30	<29	<0.29	<0.30	<0.29 F1	<0.30	<0.29

* = Source: Wisconsin Department of Natural Resources ch. NR 140 Wisconsin Administrative Code.
PFAS = perfluoroalkyl and polyfluoroalkyl substances.
ng/L = nanograms per liter (parts per trillion).
-- = Standard not established.
< = Less than laboratory method detection limit (MDL).
BOLD = Sample result exceeds the ch. NR 140 ES.
Italics = Sample result exceeds the ch. NR 140 PAL.
J = Result is less than the laboratory reporting limit but greater than or equal to the laboratory MDL; reported concentration is estimated.
I = Value is EMPC (estimated maximum possible concentration).
E = Result exceeded calibration range.
F1 = MS and/or MSD recovery exceeds control limits.



BASE MAP SOURCE: DCIMap, Dane County, WI Aerial, 2022

LEGEND

- Monitoring Well Location
- Piezometer Location
- Soil Boring Location
- July 2020 Soil/Groundwater Sample Location

1 - Outline taken from Envirodyne Engineers, Inc. 1989. Final Engineering Report, Contamination Evaluation Truax Field, Madison, Wisconsin

2 - Outline taken from DCIMap, Dane County, Wisconsin, Aerial, 1968 & 1974

NORTH

SCALE: 1"=80'

DARWIN ROAD PFAS INVESTIGATION
MADISON, WISCONSIN

FIGURE 2
SITE MAP

DRAWN BY: CRP | DATE: 06-05-2023

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Joey Hahn
Shannon & Wilson, Inc
5325 Wall Street, Suite 2355
Madison, Wisconsin 53718

Generated 5/15/2023 9:58:12 AM

JOB DESCRIPTION

Dane County PFAS

JOB NUMBER

500-232605-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization

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Authorized for release by
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Table of Contents

Case Narrative

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Job ID: 500-232605-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-232605-1

Comments
No additional comments.

Receipt
The samples were received on 4/21/2023 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2º C.

LCMS
Method 537 (modified): Results for sample B-9 (3') (500-232605-17) and B-10 (3') (500-232605-19) was reported from the analysis of a diluted extract due to high concentration of the target analyte. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

Method 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: B-3 (2.5') (500-232605-5). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

Method 537 (modified): The matrix spike (MS) recovery for preparation batch 320-669860 and analytical batch 320-670106 was outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 537 (modified): Due to the high concentration of Perfluorooctanesulfonic acid (PFOS), the matrix spike (MS) for preparation batch 320-669860 and analytical batch 320-670106 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Method 537 (modified): The matrix spike (MS) recoveries for preparation batch 320-669862 and analytical batch 320-670113 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte. B-7 (13.5') (500-232605-14) and B-10 (17') (500-232605-21)

Method 537 (modified): Results for sample B-10 (13') (500-232605-20) was reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

Method 537 (modified): Due to the high concentration of one or more analytes, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 320-669862 and analytical batch 320-670113 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-1 (2.5') — Lab Sample ID: 500-232605-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.22	J B	0.24	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.17	J	0.24	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.072	J	0.24	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.049	J	0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.35		0.24	0.063	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.19	J	0.24	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.31		0.24	0.051	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-1 (13') — Lab Sample ID: 500-232605-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.091	J B	0.22	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.042	J	0.22	0.031	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-2 (3') — Lab Sample ID: 500-232605-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.40	B	0.23	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.45		0.23	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.092	J	0.23	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.093	J	0.23	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.88		0.23	0.062	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.18	J	0.23	0.026	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.66		0.23	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.0		0.23	0.051	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-2 (12') — Lab Sample ID: 500-232605-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.079	J B	0.21	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.22		0.21	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.37		0.21	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.098	J	0.21	0.044	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-3 (2.5') — Lab Sample ID: 500-232605-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.31	B	0.24	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.27		0.24	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.61		0.24	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.22	J	0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.66		0.24	0.064	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.079	J	0.24	0.027	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.31		0.24	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.2		0.24	0.052	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-3 (13') — Lab Sample ID: 500-232605-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.098	J B	0.21	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.093	J	0.21	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.10	J	0.21	0.030	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-4 (3')

Lab Sample ID: 500-232605-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.24	B	0.23	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.19	J	0.23	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.67		0.23	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.25		0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.53		0.23	0.062	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.074	J	0.23	0.026	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.19	J	0.23	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.6		0.23	0.050	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-4 (12')

Lab Sample ID: 500-232605-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.11	J B	0.20	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.13	J	0.20	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.080	J	0.20	0.029	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.22		0.20	0.042	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-5 (3')

Lab Sample ID: 500-232605-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.25	B	0.23	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.16	J	0.23	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.15	J	0.23	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.34		0.23	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.038	J	0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.18	J	0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.5		0.23	0.049	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-5 (13')

Lab Sample ID: 500-232605-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.091	J B	0.20	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.065	J	0.20	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.16	J	0.20	0.029	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.65		0.20	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.068	J	0.20	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	0.095	J	0.20	0.035	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-6 (3')

Lab Sample ID: 500-232605-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.17	J B	0.23	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.21	J	0.23	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.19	J	0.23	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.19	J	0.23	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.79		0.23	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.067	J	0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.9		0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.34		0.23	0.049	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-6 (13') — Lab Sample ID: 500-232605-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.11	J B	0.22	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.061	J	0.22	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.064	J	0.22	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.087	J	0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.85		0.22	0.057	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.6		0.22	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.16	J	0.22	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.059	J	0.22	0.029	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-7 (2') — Lab Sample ID: 500-232605-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.47	B	0.24	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.64		0.24	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.58		0.24	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.20	J	0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.44		0.24	0.065	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.91		0.24	0.027	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.13	J	0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.16	J	0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.8		0.24	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.18	J	0.24	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		0.24	0.053	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-7 (13.5') — Lab Sample ID: 500-232605-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.094	J	0.21	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.11	J	0.21	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.24		0.21	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.081	J	0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.43		0.21	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.050	J	0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.079	J	0.21	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5		0.21	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.11	J	0.21	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.62	I	0.21	0.044	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-8 (3') — Lab Sample ID: 500-232605-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.17	J	0.21	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.089	J	0.21	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.088	J	0.21	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.040	J	0.21	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.16	J	0.21	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.052	J	0.21	0.023	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.13	J	0.21	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.99		0.21	0.045	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-8 (8') — Lab Sample ID: 500-232605-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.11	J	0.21	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.093	J	0.21	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.061	J	0.21	0.046	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-9 (3') — Lab Sample ID: 500-232605-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.2		0.24	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.61		0.24	0.027	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	2.7		0.24	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	10		0.24	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.048	J	0.24	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
4:2 FTS	0.42		0.24	0.062	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	47		24	5.0	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	180		24	3.8	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	110		24	4.6	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	1300		24	6.5	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS) - DL	46		24	4.6	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS) - DL	97		24	4.5	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	1700		24	3.5	ug/Kg	100	☼	537 (modified)	Total/NA
6:2 FTS - DL	62		24	3.3	ug/Kg	100	☼	537 (modified)	Total/NA

Client Sample ID: B-9 (13') — Lab Sample ID: 500-232605-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.47		0.21	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.5		0.21	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	7.7		0.21	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.7		0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.4		0.21	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.4		0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	2.7		0.21	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	18		0.21	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.077	J	0.21	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.42		0.21	0.028	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-10 (3') — Lab Sample ID: 500-232605-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.0		0.22	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	9.5		0.22	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	18		0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.8		0.22	0.024	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.5		0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	11		0.22	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	5.2		0.22	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.34		0.22	0.036	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-10 (3') (Continued) — Lab Sample ID: 500-232605-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4:2 FTS	0.089	J	0.22	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	0.71		0.22	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	27		22	3.4	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	360		22	5.7	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	610		22	3.1	ug/Kg	100	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	91		22	4.7	ug/Kg	100	☼	537 (modified)	Total/NA
6:2 FTS - DL	22		22	2.9	ug/Kg	100	☼	537 (modified)	Total/NA

Client Sample ID: B-10 (13') — Lab Sample ID: 500-232605-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.39		0.19	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.91		0.19	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.0		0.19	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.74		0.19	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	15		0.19	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.40		0.19	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.41		0.19	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	3.0		0.19	0.026	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	19		0.97	0.14	ug/Kg	5	☼	537 (modified)	Total/NA

Client Sample ID: B-10 (17') — Lab Sample ID: 500-232605-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.2		0.24	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	5.7		0.24	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	17		0.24	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.0		0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.6		0.24	0.062	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.70		0.24	0.026	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.4		0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	4.6		0.24	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	17		0.24	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	5.0		0.24	0.058	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.8	I	0.24	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.17	J	0.24	0.032	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-11 (3') — Lab Sample ID: 500-232605-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.26		0.25	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.49		0.25	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.62		0.25	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.28		0.25	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.6		0.25	0.065	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.61		0.25	0.027	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.15	J	0.25	0.047	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-11 (3') (Continued)

Lab Sample ID: 500-232605-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanesulfonic acid (PFPeS)	0.20	J	0.25	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.6		0.25	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.15	J	0.25	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	14		0.25	0.053	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
D 2216	Percent Moisture	ASTM	EET SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET SAC

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-232605-1	B-1 (2.5')	Solid	04/17/23 09:45	04/21/23 09:35
500-232605-2	B-1 (13')	Solid	04/17/23 09:50	04/21/23 09:35
500-232605-3	B-2 (3')	Solid	04/17/23 10:10	04/21/23 09:35
500-232605-4	B-2 (12')	Solid	04/17/23 10:20	04/21/23 09:35
500-232605-5	B-3 (2.5')	Solid	04/17/23 10:50	04/21/23 09:35
500-232605-6	B-3 (13')	Solid	04/17/23 11:00	04/21/23 09:35
500-232605-7	B-4 (3')	Solid	04/17/23 11:40	04/21/23 09:35
500-232605-8	B-4 (12')	Solid	04/17/23 11:45	04/21/23 09:35
500-232605-9	B-5 (3')	Solid	04/17/23 12:10	04/21/23 09:35
500-232605-10	B-5 (13')	Solid	04/17/23 12:20	04/21/23 09:35
500-232605-11	B-6 (3')	Solid	04/17/23 14:15	04/21/23 09:35
500-232605-12	B-6 (13')	Solid	04/17/23 14:30	04/21/23 09:35
500-232605-13	B-7 (2')	Solid	04/17/23 14:45	04/21/23 09:35
500-232605-14	B-7 (13.5')	Solid	04/17/23 15:00	04/21/23 09:35
500-232605-15	B-8 (3')	Solid	04/17/23 15:25	04/21/23 09:35
500-232605-16	B-8 (8')	Solid	04/17/23 15:50	04/21/23 09:35
500-232605-17	B-9 (3')	Solid	04/18/23 08:30	04/21/23 09:35
500-232605-18	B-9 (13')	Solid	04/18/23 08:40	04/21/23 09:35
500-232605-19	B-10 (3')	Solid	04/18/23 08:55	04/21/23 09:35
500-232605-20	B-10 (13')	Solid	04/18/23 09:00	04/21/23 09:35
500-232605-21	B-10 (17')	Solid	04/18/23 09:10	04/21/23 09:35
500-232605-22	B-11 (3')	Solid	04/18/23 09:35	04/21/23 09:35

Client Sample ID: B-1 (2.5')
Date Collected: 04/17/23 09:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-1
Matrix: Solid
Percent Solids: 82.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.22**	**J B**	0.24	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluoropentanoic acid (PFPeA)	**0.17**	**J**	0.24	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorohexanoic acid (PFHxA)	**0.072**	**J**	0.24	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluoroheptanoic acid (PFHpA)	**0.049**	**J**	0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorooctanoic acid (PFOA)	**0.35**		0.24	0.063	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorononanoic acid (PFNA)	<0.026		0.24	0.026	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorodecanoic acid (PFDA)	<0.057		0.24	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluoroundecanoic acid (PFUnA)	<0.050		0.24	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorododecanoic acid (PFDoA)	<0.036		0.24	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.24	0.025	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.044		0.24	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.045		0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.044		0.24	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorohexanesulfonic acid (PFHxS)	**0.19**	**J**	0.24	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.058		0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorooctanesulfonic acid (PFOS)	**0.31**		0.24	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.24	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.062		0.24	0.062	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.056		0.24	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
Perfluorooctanesulfonamide (FOSA)	<0.039		0.24	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
NEtFOSA	<0.056		0.24	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
NMeFOSA	<0.058		0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
NMeFOSAA	<0.027		0.24	0.027	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
NEtFOSAA	<0.057		0.24	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
NMeFOSE	<0.056		0.24	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
NEtFOSE	<0.033		0.24	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
4:2 FTS	<0.061		0.24	0.061	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
6:2 FTS	<0.032		0.24	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
8:2 FTS	<0.042		0.24	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.046		0.24	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
HFPO-DA (GenX)	<0.049		0.24	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
9Cl-PF3ONS	<0.042		0.24	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1
11Cl-PF3OUdS	<0.037		0.24	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 18:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*78*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C5 PFPeA	*75*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C2 PFHxA	*80*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C4 PFHpA	*79*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C4 PFOA	*76*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C5 PFNA	*79*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C2 PFDA	*74*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C2 PFUnA	*71*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C2 PFDoA	*77*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C2 PFTeDA	*52*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*
13C3 PFBS	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:43*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-1 (2.5')
Date Collected: 04/17/23 09:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-1
Matrix: Solid
Percent Solids: 82.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	80		25 - 150	04/23/23 19:00	04/25/23 18:43	1
13C4 PFOS	79		25 - 150	04/23/23 19:00	04/25/23 18:43	1
13C8 FOSA	78		10 - 150	04/23/23 19:00	04/25/23 18:43	1
d3-NMeFOSAA	56		25 - 150	04/23/23 19:00	04/25/23 18:43	1
d5-NEtFOSAA	62		25 - 150	04/23/23 19:00	04/25/23 18:43	1
d-N-MeFOSA-M	69		10 - 150	04/23/23 19:00	04/25/23 18:43	1
d-N-EtFOSA-M	71		10 - 150	04/23/23 19:00	04/25/23 18:43	1
d7-N-MeFOSE-M	68		10 - 150	04/23/23 19:00	04/25/23 18:43	1
d9-N-EtFOSE-M	68		10 - 150	04/23/23 19:00	04/25/23 18:43	1
M2-4:2 FTS	62		25 - 150	04/23/23 19:00	04/25/23 18:43	1
M2-6:2 FTS	68		25 - 150	04/23/23 19:00	04/25/23 18:43	1
M2-8:2 FTS	64		25 - 150	04/23/23 19:00	04/25/23 18:43	1
13C3 HFPO-DA	86		25 - 150	04/23/23 19:00	04/25/23 18:43	1
13C2 10:2 FTS	59		25 - 150	04/23/23 19:00	04/25/23 18:43	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-1 (13')
Date Collected: 04/17/23 09:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-2
Matrix: Solid
Percent Solids: 93.0

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.091**	**J B**	0.22	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluoropentanoic acid (PFPeA)	<0.044		0.22	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorohexanoic acid (PFHxA)	<0.033		0.22	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluoroheptanoic acid (PFHpA)	<0.041		0.22	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorooctanoic acid (PFOA)	<0.057		0.22	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorodecanoic acid (PFDA)	<0.052		0.22	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluoroundecanoic acid (PFUnA)	<0.045		0.22	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.22	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.22	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorobutanesulfonic acid (PFBS)	<0.041		0.22	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluoropentanesulfonic acid (PFPeS)	<0.040		0.22	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorohexanesulfonic acid (PFHxS)	**0.042**	**J**	0.22	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.053		0.22	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorooctanesulfonic acid (PFOS)	<0.046		0.22	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.22	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorodecanesulfonic acid (PFDS)	<0.056		0.22	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorododecanesulfonic acid (PFDoS)	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
Perfluorooctanesulfonamide (FOSA)	<0.035		0.22	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
NEtFOSA	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
NMeFOSA	<0.053		0.22	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
NEtFOSAA	<0.052		0.22	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
NMeFOSE	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
NEtFOSE	<0.030		0.22	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
4:2 FTS	<0.055		0.22	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
6:2 FTS	<0.029		0.22	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
8:2 FTS	<0.038		0.22	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.22	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
HFPO-DA (GenX)	<0.044		0.22	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1
11Cl-PF3OUdS	<0.033		0.22	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 18:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*52*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C5 PFPeA	*81*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C2 PFHxA	*88*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C4 PFHpA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C4 PFOA	*89*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C5 PFNA	*93*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C2 PFDA	*91*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C2 PFUnA	*84*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C2 PFDoA	*85*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C2 PFTeDA	*81*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*
13C3 PFBS	*79*		*25 - 150*	*04/23/23 19:00*	*04/25/23 18:54*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-1 (13')
Date Collected: 04/17/23 09:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-2
Matrix: Solid
Percent Solids: 93.0

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	87		25 - 150	04/23/23 19:00	04/25/23 18:54	1
13C4 PFOS	92		25 - 150	04/23/23 19:00	04/25/23 18:54	1
13C8 FOSA	93		10 - 150	04/23/23 19:00	04/25/23 18:54	1
d3-NMeFOSAA	85		25 - 150	04/23/23 19:00	04/25/23 18:54	1
d5-NEtFOSAA	86		25 - 150	04/23/23 19:00	04/25/23 18:54	1
d-N-MeFOSA-M	92		10 - 150	04/23/23 19:00	04/25/23 18:54	1
d-N-EtFOSA-M	87		10 - 150	04/23/23 19:00	04/25/23 18:54	1
d7-N-MeFOSE-M	77		10 - 150	04/23/23 19:00	04/25/23 18:54	1
d9-N-EtFOSE-M	70		10 - 150	04/23/23 19:00	04/25/23 18:54	1
M2-4:2 FTS	74		25 - 150	04/23/23 19:00	04/25/23 18:54	1
M2-6:2 FTS	78		25 - 150	04/23/23 19:00	04/25/23 18:54	1
M2-8:2 FTS	78		25 - 150	04/23/23 19:00	04/25/23 18:54	1
13C3 HFPO-DA	84		25 - 150	04/23/23 19:00	04/25/23 18:54	1
13C2 10:2 FTS	70		25 - 150	04/23/23 19:00	04/25/23 18:54	1

Client Sample ID: B-2 (3')
Date Collected: 04/17/23 10:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-3
Matrix: Solid
Percent Solids: 79.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.40**	**B**	0.23	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluoropentanoic acid (PFPeA)	**0.45**		0.23	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorohexanoic acid (PFHxA)	**0.092**	**J**	0.23	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluoroheptanoic acid (PFHpA)	**0.093**	**J**	0.23	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorooctanoic acid (PFOA)	**0.88**		0.23	0.062	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorononanoic acid (PFNA)	**0.18**	**J**	0.23	0.026	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.23	0.025	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorobutanesulfonic acid (PFBS)	<0.045		0.23	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorohexanesulfonic acid (PFHxS)	**0.66**		0.23	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.058		0.23	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorooctanesulfonic acid (PFOS)	**2.0**		0.23	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorodecanesulfonic acid (PFDS)	<0.061		0.23	0.061	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
Perfluorooctanesulfonamide (FOSA)	<0.039		0.23	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
NEtFOSA	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
NMeFOSA	<0.058		0.23	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
NMeFOSE	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
NEtFOSE	<0.033		0.23	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
4:2 FTS	<0.060		0.23	0.060	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
6:2 FTS	<0.032		0.23	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.046		0.23	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
HFPO-DA (GenX)	<0.048		0.23	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 19:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*65*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C5 PFPeA	*66*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C2 PFHxA	*68*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C4 PFHpA	*67*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C4 PFOA	*68*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C5 PFNA	*65*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C2 PFDA	*67*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C2 PFUnA	*63*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C2 PFDoA	*64*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C2 PFTeDA	*31*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*
13C3 PFBS	*65*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:05*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-2 (3')
Date Collected: 04/17/23 10:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-3
Matrix: Solid
Percent Solids: 79.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	70		25 - 150	04/23/23 19:00	04/25/23 19:05	1
13C4 PFOS	67		25 - 150	04/23/23 19:00	04/25/23 19:05	1
13C8 FOSA	64		10 - 150	04/23/23 19:00	04/25/23 19:05	1
d3-NMeFOSAA	40		25 - 150	04/23/23 19:00	04/25/23 19:05	1
d5-NEtFOSAA	48		25 - 150	04/23/23 19:00	04/25/23 19:05	1
d-N-MeFOSA-M	64		10 - 150	04/23/23 19:00	04/25/23 19:05	1
d-N-EtFOSA-M	63		10 - 150	04/23/23 19:00	04/25/23 19:05	1
d7-N-MeFOSE-M	65		10 - 150	04/23/23 19:00	04/25/23 19:05	1
d9-N-EtFOSE-M	65		10 - 150	04/23/23 19:00	04/25/23 19:05	1
M2-4:2 FTS	57		25 - 150	04/23/23 19:00	04/25/23 19:05	1
M2-6:2 FTS	59		25 - 150	04/23/23 19:00	04/25/23 19:05	1
M2-8:2 FTS	62		25 - 150	04/23/23 19:00	04/25/23 19:05	1
13C3 HFPO-DA	74		25 - 150	04/23/23 19:00	04/25/23 19:05	1
13C2 10:2 FTS	50		25 - 150	04/23/23 19:00	04/25/23 19:05	1

Client Sample ID: B-2 (12')
Date Collected: 04/17/23 10:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-4
Matrix: Solid
Percent Solids: 93.0

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.079**	**J B**	0.21	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluoropentanoic acid (PFPeA)	<0.042		0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorohexanoic acid (PFHxA)	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluoroheptanoic acid (PFHpA)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorooctanoic acid (PFOA)	**0.22**		0.21	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorononanoic acid (PFNA)	<0.023		0.21	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorodecanoic acid (PFDA)	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluoroundecanoic acid (PFUnA)	<0.043		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorobutanesulfonic acid (PFBS)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluoropentanesulfonic acid (PFPeS)	<0.038		0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorohexanesulfonic acid (PFHxS)	**0.37**		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorooctanesulfonic acid (PFOS)	**0.098**	**J**	0.21	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorodecanesulfonic acid (PFDS)	<0.053		0.21	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorododecanesulfonic acid (PFDoS)	<0.048		0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
Perfluorooctanesulfonamide (FOSA)	<0.034		0.21	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
NEtFOSA	<0.048		0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
NMeFOSA	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
NEtFOSAA	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
NMeFOSE	<0.048		0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
4:2 FTS	<0.052		0.21	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
6:2 FTS	<0.028		0.21	0.028	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
8:2 FTS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
HFPO-DA (GenX)	<0.042		0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 19:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C5 PFPeA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C2 PFHxA	*87*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C4 PFHpA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C4 PFOA	*87*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C5 PFNA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C2 PFDA	*82*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C2 PFUnA	*80*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C2 PFDoA	*85*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C2 PFTeDA	*78*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*
13C3 PFBS	*78*		*25 - 150*	*04/23/23 19:00*	*04/25/23 19:39*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-2 (12')
Date Collected: 04/17/23 10:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-4
Matrix: Solid
Percent Solids: 93.0

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	86		25 - 150	04/23/23 19:00	04/25/23 19:39	1
13C4 PFOS	82		25 - 150	04/23/23 19:00	04/25/23 19:39	1
13C8 FOSA	86		10 - 150	04/23/23 19:00	04/25/23 19:39	1
d3-NMeFOSAA	79		25 - 150	04/23/23 19:00	04/25/23 19:39	1
d5-NEtFOSAA	80		25 - 150	04/23/23 19:00	04/25/23 19:39	1
d-N-MeFOSA-M	73		10 - 150	04/23/23 19:00	04/25/23 19:39	1
d-N-EtFOSA-M	72		10 - 150	04/23/23 19:00	04/25/23 19:39	1
d7-N-MeFOSE-M	71		10 - 150	04/23/23 19:00	04/25/23 19:39	1
d9-N-EtFOSE-M	73		10 - 150	04/23/23 19:00	04/25/23 19:39	1
M2-4:2 FTS	71		25 - 150	04/23/23 19:00	04/25/23 19:39	1
M2-6:2 FTS	73		25 - 150	04/23/23 19:00	04/25/23 19:39	1
M2-8:2 FTS	85		25 - 150	04/23/23 19:00	04/25/23 19:39	1
13C3 HFPO-DA	84		25 - 150	04/23/23 19:00	04/25/23 19:39	1
13C2 10:2 FTS	69		25 - 150	04/23/23 19:00	04/25/23 19:39	1

Client Sample ID: B-3 (2.5')
Date Collected: 04/17/23 10:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-5
Matrix: Solid
Percent Solids: 79.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.31**	**B**	0.24	0.056	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluoropentanoic acid (PFPeA)	**0.27**		0.24	0.050	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorohexanoic acid (PFHxA)	**0.61**		0.24	0.037	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluoroheptanoic acid (PFHpA)	**0.22**	**J**	0.24	0.046	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorooctanoic acid (PFOA)	**0.66**		0.24	0.064	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorononanoic acid (PFNA)	**0.079**	**J**	0.24	0.027	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorodecanoic acid (PFDA)	<0.058		0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorododecanoic acid (PFDoA)	<0.036		0.24	0.036	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.24	0.025	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.046		0.24	0.046	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.045		0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorohexanesulfonic acid (PFHxS)	**0.31**		0.24	0.035	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.059		0.24	0.059	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorooctanesulfonic acid (PFOS)	**1.2**		0.24	0.052	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.063		0.24	0.063	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.057		0.24	0.057	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
NEtFOSA	<0.057		0.24	0.057	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
NMeFOSA	<0.059		0.24	0.059	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
NEtFOSAA	<0.058		0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
NMeFOSE	<0.057		0.24	0.057	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
8:2 FTS	<0.042		0.24	0.042	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.047		0.24	0.047	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
9Cl-PF3ONS	<0.042		0.24	0.042	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1
11Cl-PF3OUdS	<0.037		0.24	0.037	ug/Kg	☼	04/23/23 19:00	04/29/23 04:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*69*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C5 PFPeA	*68*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C2 PFHxA	*72*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C4 PFHpA	*77*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C4 PFOA	*68*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C5 PFNA	*65*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C2 PFDA	*62*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C2 PFUnA	*72*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C2 PFDoA	*70*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C2 PFTeDA	*30*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*
13C3 PFBS	*92*		*25 - 150*	*04/23/23 19:00*	*04/29/23 04:32*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-3 (2.5')
Date Collected: 04/17/23 10:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-5
Matrix: Solid
Percent Solids: 79.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	84		25 - 150	04/23/23 19:00	04/29/23 04:32	1
13C4 PFOS	70		25 - 150	04/23/23 19:00	04/29/23 04:32	1
13C8 FOSA	62		10 - 150	04/23/23 19:00	04/29/23 04:32	1
d3-NMeFOSAA	45		25 - 150	04/23/23 19:00	04/29/23 04:32	1
d5-NEtFOSAA	54		25 - 150	04/23/23 19:00	04/29/23 04:32	1
d-N-MeFOSA-M	70		10 - 150	04/23/23 19:00	04/29/23 04:32	1
d-N-EtFOSA-M	74		10 - 150	04/23/23 19:00	04/29/23 04:32	1
d7-N-MeFOSE-M	80		10 - 150	04/23/23 19:00	04/29/23 04:32	1
d9-N-EtFOSE-M	76		10 - 150	04/23/23 19:00	04/29/23 04:32	1
M2-4:2 FTS	59		25 - 150	04/23/23 19:00	04/29/23 04:32	1
M2-6:2 FTS	66		25 - 150	04/23/23 19:00	04/29/23 04:32	1
M2-8:2 FTS	56		25 - 150	04/23/23 19:00	04/29/23 04:32	1
13C3 HFPO-DA	76		25 - 150	04/23/23 19:00	04/29/23 04:32	1
13C2 10:2 FTS	47		25 - 150	04/23/23 19:00	04/29/23 04:32	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-3 (13')
Date Collected: 04/17/23 11:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-6
Matrix: Solid
Percent Solids: 93.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.098**	**J B**	0.21	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluoropentanoic acid (PFPeA)	<0.042		0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorohexanoic acid (PFHxA)	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluoroheptanoic acid (PFHpA)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorooctanoic acid (PFOA)	**0.093**	**J**	0.21	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorononanoic acid (PFNA)	<0.023		0.21	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorodecanoic acid (PFDA)	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluoroundecanoic acid (PFUnA)	<0.043		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorobutanesulfonic acid (PFBS)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluoropentanesulfonic acid (PFPeS)	<0.038		0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorohexanesulfonic acid (PFHxS)	**0.10**	**J**	0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorooctanesulfonic acid (PFOS)	<0.044		0.21	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorodecanesulfonic acid (PFDS)	<0.054		0.21	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorododecanesulfonic acid (PFDoS)	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
Perfluorooctanesulfonamide (FOSA)	<0.034		0.21	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
NEtFOSA	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
NMeFOSA	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
NEtFOSAA	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
NMeFOSE	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
6:2 FTS	<0.028		0.21	0.028	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
8:2 FTS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
HFPO-DA (GenX)	<0.042		0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 20:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*84*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C5 PFPeA	*87*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C2 PFHxA	*89*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C4 PFHpA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C4 PFOA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C5 PFNA	*88*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C2 PFDA	*84*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C2 PFUnA	*79*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C2 PFDoA	*82*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C2 PFTeDA	*84*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*
13C3 PFBS	*79*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:01*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-3 (13')
Date Collected: 04/17/23 11:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-6
Matrix: Solid
Percent Solids: 93.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	87		25 - 150	04/23/23 19:00	04/25/23 20:01	1
13C4 PFOS	94		25 - 150	04/23/23 19:00	04/25/23 20:01	1
13C8 FOSA	88		10 - 150	04/23/23 19:00	04/25/23 20:01	1
d3-NMeFOSAA	86		25 - 150	04/23/23 19:00	04/25/23 20:01	1
d5-NEtFOSAA	79		25 - 150	04/23/23 19:00	04/25/23 20:01	1
d-N-MeFOSA-M	85		10 - 150	04/23/23 19:00	04/25/23 20:01	1
d-N-EtFOSA-M	79		10 - 150	04/23/23 19:00	04/25/23 20:01	1
d7-N-MeFOSE-M	72		10 - 150	04/23/23 19:00	04/25/23 20:01	1
d9-N-EtFOSE-M	70		10 - 150	04/23/23 19:00	04/25/23 20:01	1
M2-4:2 FTS	73		25 - 150	04/23/23 19:00	04/25/23 20:01	1
M2-6:2 FTS	78		25 - 150	04/23/23 19:00	04/25/23 20:01	1
M2-8:2 FTS	80		25 - 150	04/23/23 19:00	04/25/23 20:01	1
13C3 HFPO-DA	84		25 - 150	04/23/23 19:00	04/25/23 20:01	1
13C2 10:2 FTS	65		25 - 150	04/23/23 19:00	04/25/23 20:01	1

Client Sample ID: B-4 (3')
Date Collected: 04/17/23 11:40
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-7
Matrix: Solid
Percent Solids: 80.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.24**	**B**	0.23	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluoropentanoic acid (PFPeA)	**0.19**	**J**	0.23	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorohexanoic acid (PFHxA)	**0.67**		0.23	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluoroheptanoic acid (PFHpA)	**0.25**		0.23	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorooctanoic acid (PFOA)	**0.53**		0.23	0.062	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorononanoic acid (PFNA)	**0.074**	**J**	0.23	0.026	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.23	0.025	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorohexanesulfonic acid (PFHxS)	**0.19**	**J**	0.23	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorooctanesulfonic acid (PFOS)	**2.6**		0.23	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorodecanesulfonic acid (PFDS)	<0.061		0.23	0.061	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
Perfluorooctanesulfonamide (FOSA)	<0.039		0.23	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
NEtFOSA	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
NMeFOSE	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
NEtFOSE	<0.033		0.23	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
4:2 FTS	<0.060		0.23	0.060	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
6:2 FTS	<0.032		0.23	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.046		0.23	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
HFPO-DA (GenX)	<0.048		0.23	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 20:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*67*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C5 PFPeA	*68*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C2 PFHxA	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C4 PFHpA	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C4 PFOA	*69*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C5 PFNA	*75*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C2 PFDA	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C2 PFUnA	*64*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C2 PFDoA	*65*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C2 PFTeDA	*37*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*
13C3 PFBS	*65*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:12*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-4 (3')
Date Collected: 04/17/23 11:40
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-7
Matrix: Solid
Percent Solids: 80.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	70		25 - 150	04/23/23 19:00	04/25/23 20:12	1
13C4 PFOS	73		25 - 150	04/23/23 19:00	04/25/23 20:12	1
13C8 FOSA	68		10 - 150	04/23/23 19:00	04/25/23 20:12	1
d3-NMeFOSAA	46		25 - 150	04/23/23 19:00	04/25/23 20:12	1
d5-NEtFOSAA	49		25 - 150	04/23/23 19:00	04/25/23 20:12	1
d-N-MeFOSA-M	69		10 - 150	04/23/23 19:00	04/25/23 20:12	1
d-N-EtFOSA-M	68		10 - 150	04/23/23 19:00	04/25/23 20:12	1
d7-N-MeFOSE-M	64		10 - 150	04/23/23 19:00	04/25/23 20:12	1
d9-N-EtFOSE-M	68		10 - 150	04/23/23 19:00	04/25/23 20:12	1
M2-4:2 FTS	53		25 - 150	04/23/23 19:00	04/25/23 20:12	1
M2-6:2 FTS	58		25 - 150	04/23/23 19:00	04/25/23 20:12	1
M2-8:2 FTS	62		25 - 150	04/23/23 19:00	04/25/23 20:12	1
13C3 HFPO-DA	68		25 - 150	04/23/23 19:00	04/25/23 20:12	1
13C2 10:2 FTS	52		25 - 150	04/23/23 19:00	04/25/23 20:12	1

Client Sample ID: B-4 (12')
Date Collected: 04/17/23 11:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-8
Matrix: Solid
Percent Solids: 93.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.11**	**J B**	0.20	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluoropentanoic acid (PFPeA)	<0.040		0.20	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluoroheptanoic acid (PFHpA)	<0.037		0.20	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorooctanoic acid (PFOA)	**0.13**	**J**	0.20	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorodecanoic acid (PFDA)	<0.047		0.20	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluoroundecanoic acid (PFUnA)	<0.041		0.20	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorotetradecanoic acid (PFTeA)	<0.036		0.20	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorobutanesulfonic acid (PFBS)	<0.037		0.20	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluoropentanesulfonic acid (PFPeS)	<0.036		0.20	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorohexanesulfonic acid (PFHxS)	**0.080**	**J**	0.20	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.048		0.20	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorooctanesulfonic acid (PFOS)	**0.22**		0.20	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorodecanesulfonic acid (PFDS)	<0.051		0.20	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorododecanesulfonic acid (PFDoS)	<0.046		0.20	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
NEtFOSA	<0.046		0.20	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
NMeFOSA	<0.048		0.20	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
NEtFOSAA	<0.047		0.20	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
NMeFOSE	<0.046		0.20	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
4:2 FTS	<0.050		0.20	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
8:2 FTS	<0.034		0.20	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.038		0.20	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
HFPO-DA (GenX)	<0.040		0.20	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
9Cl-PF3ONS	<0.034		0.20	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 20:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*79*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C5 PFPeA	*84*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C2 PFHxA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C4 PFHpA	*82*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C4 PFOA	*84*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C5 PFNA	*83*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C2 PFDA	*81*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C2 PFUnA	*74*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C2 PFDoA	*74*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C2 PFTeDA	*75*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*
13C3 PFBS	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:24*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-4 (12')
Date Collected: 04/17/23 11:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-8
Matrix: Solid
Percent Solids: 93.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	79		25 - 150	04/23/23 19:00	04/25/23 20:24	1
13C4 PFOS	82		25 - 150	04/23/23 19:00	04/25/23 20:24	1
13C8 FOSA	79		10 - 150	04/23/23 19:00	04/25/23 20:24	1
d3-NMeFOSAA	77		25 - 150	04/23/23 19:00	04/25/23 20:24	1
d5-NEtFOSAA	75		25 - 150	04/23/23 19:00	04/25/23 20:24	1
d-N-MeFOSA-M	78		10 - 150	04/23/23 19:00	04/25/23 20:24	1
d-N-EtFOSA-M	70		10 - 150	04/23/23 19:00	04/25/23 20:24	1
d7-N-MeFOSE-M	65		10 - 150	04/23/23 19:00	04/25/23 20:24	1
d9-N-EtFOSE-M	64		10 - 150	04/23/23 19:00	04/25/23 20:24	1
M2-4:2 FTS	68		25 - 150	04/23/23 19:00	04/25/23 20:24	1
M2-6:2 FTS	66		25 - 150	04/23/23 19:00	04/25/23 20:24	1
M2-8:2 FTS	74		25 - 150	04/23/23 19:00	04/25/23 20:24	1
13C3 HFPO-DA	78		25 - 150	04/23/23 19:00	04/25/23 20:24	1
13C2 10:2 FTS	56		25 - 150	04/23/23 19:00	04/25/23 20:24	1

Client Sample ID: B-5 (3')
Date Collected: 04/17/23 12:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-9
Matrix: Solid
Percent Solids: 83.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.25**	**B**	0.23	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluoropentanoic acid (PFPeA)	**0.16**	**J**	0.23	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorohexanoic acid (PFHxA)	**0.15**	**J**	0.23	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluoroheptanoic acid (PFHpA)	<0.043		0.23	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorooctanoic acid (PFOA)	**0.34**		0.23	0.060	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorononanoic acid (PFNA)	**0.038**	**J**	0.23	0.025	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorodecanoic acid (PFDA)	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluoroundecanoic acid (PFUnA)	<0.048		0.23	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluoropentanesulfonic acid (PFPeS)	<0.042		0.23	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorohexanesulfonic acid (PFHxS)	**0.18**	**J**	0.23	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.056		0.23	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorooctanesulfonic acid (PFOS)	**1.5**		0.23	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.23	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
Perfluorooctanesulfonamide (FOSA)	<0.038		0.23	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
NEtFOSA	<0.053		0.23	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
NMeFOSA	<0.056		0.23	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
NEtFOSAA	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
NMeFOSE	<0.053		0.23	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
4:2 FTS	<0.058		0.23	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
8:2 FTS	<0.040		0.23	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 20:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*64*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C5 PFPeA	*68*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C2 PFHxA	*71*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C4 PFHpA	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C4 PFOA	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C5 PFNA	*72*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C2 PFDA	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C2 PFUnA	*63*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C2 PFDoA	*66*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C2 PFTeDA	*41*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*
13C3 PFBS	*66*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:35*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-5 (3')
Date Collected: 04/17/23 12:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-9
Matrix: Solid
Percent Solids: 83.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	69		25 - 150	04/23/23 19:00	04/25/23 20:35	1
13C4 PFOS	71		25 - 150	04/23/23 19:00	04/25/23 20:35	1
13C8 FOSA	65		10 - 150	04/23/23 19:00	04/25/23 20:35	1
d3-NMeFOSAA	42		25 - 150	04/23/23 19:00	04/25/23 20:35	1
d5-NEtFOSAA	46		25 - 150	04/23/23 19:00	04/25/23 20:35	1
d-N-MeFOSA-M	68		10 - 150	04/23/23 19:00	04/25/23 20:35	1
d-N-EtFOSA-M	69		10 - 150	04/23/23 19:00	04/25/23 20:35	1
d7-N-MeFOSE-M	71		10 - 150	04/23/23 19:00	04/25/23 20:35	1
d9-N-EtFOSE-M	70		10 - 150	04/23/23 19:00	04/25/23 20:35	1
M2-4:2 FTS	53		25 - 150	04/23/23 19:00	04/25/23 20:35	1
M2-6:2 FTS	52		25 - 150	04/23/23 19:00	04/25/23 20:35	1
M2-8:2 FTS	66		25 - 150	04/23/23 19:00	04/25/23 20:35	1
13C3 HFPO-DA	71		25 - 150	04/23/23 19:00	04/25/23 20:35	1
13C2 10:2 FTS	51		25 - 150	04/23/23 19:00	04/25/23 20:35	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-5 (13')
Date Collected: 04/17/23 12:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-10
Matrix: Solid
Percent Solids: 92.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.091**	**J B**	0.20	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorooctanoic acid (PFOA)	**0.065**	**J**	0.20	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorohexanesulfonic acid (PFHxS)	**0.16**	**J**	0.20	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.049		0.20	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorooctanesulfonic acid (PFOS)	**0.65**		0.20	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
Perfluorooctanesulfonamide (FOSA)	**0.068**	**J**	0.20	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
8:2 FTS	**0.095**	**J**	0.20	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 20:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*88*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C5 PFPeA	*88*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C2 PFHxA	*93*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C4 PFHpA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C4 PFOA	*88*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C5 PFNA	*95*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C2 PFDA	*89*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C2 PFUnA	*82*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C2 PFDoA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*
13C2 PFTeDA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:46*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-5 (13')
Date Collected: 04/17/23 12:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-10
Matrix: Solid
Percent Solids: 92.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	83		25 - 150	04/23/23 19:00	04/25/23 20:46	1
18O2 PFHxS	87		25 - 150	04/23/23 19:00	04/25/23 20:46	1
13C4 PFOS	93		25 - 150	04/23/23 19:00	04/25/23 20:46	1
13C8 FOSA	91		10 - 150	04/23/23 19:00	04/25/23 20:46	1
d3-NMeFOSAA	85		25 - 150	04/23/23 19:00	04/25/23 20:46	1
d5-NEtFOSAA	88		25 - 150	04/23/23 19:00	04/25/23 20:46	1
d-N-MeFOSA-M	83		10 - 150	04/23/23 19:00	04/25/23 20:46	1
d-N-EtFOSA-M	82		10 - 150	04/23/23 19:00	04/25/23 20:46	1
d7-N-MeFOSE-M	75		10 - 150	04/23/23 19:00	04/25/23 20:46	1
d9-N-EtFOSE-M	75		10 - 150	04/23/23 19:00	04/25/23 20:46	1
M2-4:2 FTS	80		25 - 150	04/23/23 19:00	04/25/23 20:46	1
M2-6:2 FTS	72		25 - 150	04/23/23 19:00	04/25/23 20:46	1
M2-8:2 FTS	83		25 - 150	04/23/23 19:00	04/25/23 20:46	1
13C3 HFPO-DA	85		25 - 150	04/23/23 19:00	04/25/23 20:46	1
13C2 10:2 FTS	68		25 - 150	04/23/23 19:00	04/25/23 20:46	1

Client Sample ID: B-6 (3')
Date Collected: 04/17/23 14:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-11
Matrix: Solid
Percent Solids: 84.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.17**	**J B**	0.23	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluoropentanoic acid (PFPeA)	**0.21**	**J**	0.23	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorohexanoic acid (PFHxA)	**0.19**	**J**	0.23	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluoroheptanoic acid (PFHpA)	**0.19**	**J**	0.23	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorooctanoic acid (PFOA)	**0.79**		0.23	0.060	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorononanoic acid (PFNA)	**0.067**	**J**	0.23	0.025	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorodecanoic acid (PFDA)	<0.054		0.23	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.23	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluoropentanesulfonic acid (PFPeS)	<0.042		0.23	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorohexanesulfonic acid (PFHxS)	**2.9**		0.23	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorooctanesulfonic acid (PFOS)	**0.34**		0.23	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.23	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.23	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
NEtFOSA	<0.053		0.23	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
NMeFOSA	<0.055		0.23	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
NEtFOSAA	<0.054		0.23	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
NMeFOSE	<0.053		0.23	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
4:2 FTS	<0.058		0.23	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
6:2 FTS	<0.030		0.23	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
8:2 FTS	<0.039		0.23	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
HFPO-DA (GenX)	<0.046		0.23	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
9Cl-PF3ONS	<0.039		0.23	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 20:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*76*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C5 PFPeA	*79*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C2 PFHxA	*83*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C4 PFHpA	*78*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C4 PFOA	*82*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C5 PFNA	*83*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C2 PFDA	*76*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C2 PFUnA	*74*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C2 PFDoA	*78*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C2 PFTeDA	*68*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*
13C3 PFBS	*72*		*25 - 150*	*04/23/23 19:00*	*04/25/23 20:57*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-6 (3')
Date Collected: 04/17/23 14:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-11
Matrix: Solid
Percent Solids: 84.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	73		25 - 150	04/23/23 19:00	04/25/23 20:57	1
13C4 PFOS	78		25 - 150	04/23/23 19:00	04/25/23 20:57	1
13C8 FOSA	82		10 - 150	04/23/23 19:00	04/25/23 20:57	1
d3-NMeFOSAA	70		25 - 150	04/23/23 19:00	04/25/23 20:57	1
d5-NEtFOSAA	73		25 - 150	04/23/23 19:00	04/25/23 20:57	1
d-N-MeFOSA-M	75		10 - 150	04/23/23 19:00	04/25/23 20:57	1
d-N-EtFOSA-M	73		10 - 150	04/23/23 19:00	04/25/23 20:57	1
d7-N-MeFOSE-M	67		10 - 150	04/23/23 19:00	04/25/23 20:57	1
d9-N-EtFOSE-M	68		10 - 150	04/23/23 19:00	04/25/23 20:57	1
M2-4:2 FTS	61		25 - 150	04/23/23 19:00	04/25/23 20:57	1
M2-6:2 FTS	60		25 - 150	04/23/23 19:00	04/25/23 20:57	1
M2-8:2 FTS	64		25 - 150	04/23/23 19:00	04/25/23 20:57	1
13C3 HFPO-DA	78		25 - 150	04/23/23 19:00	04/25/23 20:57	1
13C2 10:2 FTS	55		25 - 150	04/23/23 19:00	04/25/23 20:57	1

Client Sample ID: B-6 (13')
Date Collected: 04/17/23 14:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-12
Matrix: Solid
Percent Solids: 88.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.11**	**J B**	0.22	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluoropentanoic acid (PFPeA)	**0.061**	**J**	0.22	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorohexanoic acid (PFHxA)	**0.064**	**J**	0.22	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluoroheptanoic acid (PFHpA)	**0.087**	**J**	0.22	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorooctanoic acid (PFOA)	**0.85**		0.22	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorodecanoic acid (PFDA)	<0.052		0.22	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluoroundecanoic acid (PFUnA)	<0.045		0.22	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.22	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.22	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorobutanesulfonic acid (PFBS)	<0.041		0.22	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluoropentanesulfonic acid (PFPeS)	<0.040		0.22	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorohexanesulfonic acid (PFHxS)	**2.6**		0.22	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.053		0.22	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorooctanesulfonic acid (PFOS)	**0.16**	**J**	0.22	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.22	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorodecanesulfonic acid (PFDS)	<0.056		0.22	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorododecanesulfonic acid (PFDoS)	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
Perfluorooctanesulfonamide (FOSA)	<0.036		0.22	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
NEtFOSA	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
NMeFOSA	<0.053		0.22	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
NEtFOSAA	<0.052		0.22	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
NMeFOSE	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
NEtFOSE	<0.030		0.22	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
4:2 FTS	<0.055		0.22	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
6:2 FTS	**0.059**	**J**	0.22	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
8:2 FTS	<0.038		0.22	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.22	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
HFPO-DA (GenX)	<0.044		0.22	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1
11Cl-PF3OUdS	<0.033		0.22	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 21:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*84*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C5 PFPeA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C2 PFHxA	*87*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C4 PFHpA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C4 PFOA	*89*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C5 PFNA	*93*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C2 PFDA	*83*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C2 PFUnA	*73*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C2 PFDoA	*85*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C2 PFTeDA	*80*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*
13C3 PFBS	*77*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:08*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-6 (13')
Date Collected: 04/17/23 14:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-12
Matrix: Solid
Percent Solids: 88.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	85		25 - 150	04/23/23 19:00	04/25/23 21:08	1
13C4 PFOS	90		25 - 150	04/23/23 19:00	04/25/23 21:08	1
13C8 FOSA	90		10 - 150	04/23/23 19:00	04/25/23 21:08	1
d3-NMeFOSAA	81		25 - 150	04/23/23 19:00	04/25/23 21:08	1
d5-NEtFOSAA	77		25 - 150	04/23/23 19:00	04/25/23 21:08	1
d-N-MeFOSA-M	81		10 - 150	04/23/23 19:00	04/25/23 21:08	1
d-N-EtFOSA-M	78		10 - 150	04/23/23 19:00	04/25/23 21:08	1
d7-N-MeFOSE-M	71		10 - 150	04/23/23 19:00	04/25/23 21:08	1
d9-N-EtFOSE-M	71		10 - 150	04/23/23 19:00	04/25/23 21:08	1
M2-4:2 FTS	71		25 - 150	04/23/23 19:00	04/25/23 21:08	1
M2-6:2 FTS	69		25 - 150	04/23/23 19:00	04/25/23 21:08	1
M2-8:2 FTS	76		25 - 150	04/23/23 19:00	04/25/23 21:08	1
13C3 HFPO-DA	79		25 - 150	04/23/23 19:00	04/25/23 21:08	1
13C2 10:2 FTS	60		25 - 150	04/23/23 19:00	04/25/23 21:08	1

Client Sample ID: B-7 (2')
Date Collected: 04/17/23 14:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-13
Matrix: Solid
Percent Solids: 81.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.47**	**B**	0.24	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluoropentanoic acid (PFPeA)	**0.64**		0.24	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorohexanoic acid (PFHxA)	**0.58**		0.24	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluoroheptanoic acid (PFHpA)	**0.20**	**J**	0.24	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorooctanoic acid (PFOA)	**0.44**		0.24	0.065	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorononanoic acid (PFNA)	**0.91**		0.24	0.027	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorodecanoic acid (PFDA)	<0.059		0.24	0.059	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.24	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.24	0.026	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorobutanesulfonic acid (PFBS)	**0.13**	**J**	0.24	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluoropentanesulfonic acid (PFPeS)	**0.16**	**J**	0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorohexanesulfonic acid (PFHxS)	**2.8**		0.24	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.18**	**J**	0.24	0.060	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorooctanesulfonic acid (PFOS)	**14**		0.24	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.24	0.064	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorododecanesulfonic acid (PFDoS)	<0.058	F1	0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
NEtFOSA	<0.058		0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
NMeFOSA	<0.060		0.24	0.060	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
NEtFOSAA	<0.059		0.24	0.059	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
NMeFOSE	<0.058		0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
8:2 FTS	<0.043		0.24	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.24	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
9Cl-PF3ONS	<0.043		0.24	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 21:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*71*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C5 PFPeA	*69*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C2 PFHxA	*73*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C4 PFHpA	*72*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C4 PFOA	*71*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C5 PFNA	*71*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C2 PFDA	*71*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C2 PFUnA	*64*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C2 PFDoA	*66*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*
13C2 PFTeDA	*52*		*25 - 150*	*04/23/23 19:00*	*04/25/23 21:41*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-7 (2')
Date Collected: 04/17/23 14:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-13
Matrix: Solid
Percent Solids: 81.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	67		25 - 150	04/23/23 19:00	04/25/23 21:41	1
18O2 PFHxS	72		25 - 150	04/23/23 19:00	04/25/23 21:41	1
13C4 PFOS	75		25 - 150	04/23/23 19:00	04/25/23 21:41	1
13C8 FOSA	72		10 - 150	04/23/23 19:00	04/25/23 21:41	1
d3-NMeFOSAA	51		25 - 150	04/23/23 19:00	04/25/23 21:41	1
d5-NEtFOSAA	56		25 - 150	04/23/23 19:00	04/25/23 21:41	1
d-N-MeFOSA-M	74		10 - 150	04/23/23 19:00	04/25/23 21:41	1
d-N-EtFOSA-M	73		10 - 150	04/23/23 19:00	04/25/23 21:41	1
d7-N-MeFOSE-M	70		10 - 150	04/23/23 19:00	04/25/23 21:41	1
d9-N-EtFOSE-M	68		10 - 150	04/23/23 19:00	04/25/23 21:41	1
M2-4:2 FTS	57		25 - 150	04/23/23 19:00	04/25/23 21:41	1
M2-6:2 FTS	62		25 - 150	04/23/23 19:00	04/25/23 21:41	1
M2-8:2 FTS	62		25 - 150	04/23/23 19:00	04/25/23 21:41	1
13C3 HFPO-DA	65		25 - 150	04/23/23 19:00	04/25/23 21:41	1
13C2 10:2 FTS	52		25 - 150	04/23/23 19:00	04/25/23 21:41	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-7 (13.5')

Date Collected: 04/17/23 15:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-14

Matrix: Solid
Percent Solids: 92.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.094**	**J**	0.21	0.047	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluoropentanoic acid (PFPeA)	**0.11**	**J**	0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorohexanoic acid (PFHxA)	**0.24**		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluoroheptanoic acid (PFHpA)	**0.081**	**J**	0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorooctanoic acid (PFOA)	**0.43**		0.21	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorononanoic acid (PFNA)	<0.023		0.21	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorodecanoic acid (PFDA)	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluoroundecanoic acid (PFUnA)	<0.043		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorobutanesulfonic acid (PFBS)	**0.050**	**J**	0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluoropentanesulfonic acid (PFPeS)	**0.079**	**J**	0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorohexanesulfonic acid (PFHxS)	**2.5**		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.11**	**J**	0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorooctanesulfonic acid (PFOS)	**0.62**	**I**	0.21	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorodecanesulfonic acid (PFDS)	<0.054		0.21	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorododecanesulfonic acid (PFDoS)	<0.048		0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
Perfluorooctanesulfonamide (FOSA)	<0.034		0.21	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
NEtFOSA	<0.048		0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
NMeFOSA	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
NEtFOSAA	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
NMeFOSE	<0.048		0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
6:2 FTS	<0.028		0.21	0.028	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
8:2 FTS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
HFPO-DA (GenX)	<0.042		0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 23:21	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*91*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C5 PFPeA	*88*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C2 PFHxA	*89*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C4 PFHpA	*86*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C4 PFOA	*89*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C5 PFNA	*93*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C2 PFDA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C2 PFUnA	*81*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C2 PFDoA	*85*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*
13C2 PFTeDA	*83*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:21*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-7 (13.5')
Date Collected: 04/17/23 15:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-14
Matrix: Solid
Percent Solids: 92.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	85		25 - 150	04/23/23 19:00	04/25/23 23:21	1
18O2 PFHxS	90		25 - 150	04/23/23 19:00	04/25/23 23:21	1
13C4 PFOS	98		25 - 150	04/23/23 19:00	04/25/23 23:21	1
13C8 FOSA	89		10 - 150	04/23/23 19:00	04/25/23 23:21	1
d3-NMeFOSAA	89		25 - 150	04/23/23 19:00	04/25/23 23:21	1
d5-NEtFOSAA	87		25 - 150	04/23/23 19:00	04/25/23 23:21	1
d-N-MeFOSA-M	83		10 - 150	04/23/23 19:00	04/25/23 23:21	1
d-N-EtFOSA-M	83		10 - 150	04/23/23 19:00	04/25/23 23:21	1
d7-N-MeFOSE-M	68		10 - 150	04/23/23 19:00	04/25/23 23:21	1
d9-N-EtFOSE-M	73		10 - 150	04/23/23 19:00	04/25/23 23:21	1
M2-4:2 FTS	68		25 - 150	04/23/23 19:00	04/25/23 23:21	1
M2-6:2 FTS	75		25 - 150	04/23/23 19:00	04/25/23 23:21	1
M2-8:2 FTS	90		25 - 150	04/23/23 19:00	04/25/23 23:21	1
13C3 HFPO-DA	72		25 - 150	04/23/23 19:00	04/25/23 23:21	1
13C2 10:2 FTS	69		25 - 150	04/23/23 19:00	04/25/23 23:21	1

Client Sample ID: B-8 (3')
Date Collected: 04/17/23 15:25
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-15
Matrix: Solid
Percent Solids: 89.0

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.17**	**J**	0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluoropentanoic acid (PFPeA)	**0.089**	**J**	0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorohexanoic acid (PFHxA)	**0.088**	**J**	0.21	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluoroheptanoic acid (PFHpA)	**0.040**	**J**	0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorooctanoic acid (PFOA)	**0.16**	**J**	0.21	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorononanoic acid (PFNA)	**0.052**	**J**	0.21	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorodecanoic acid (PFDA)	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluoroundecanoic acid (PFUnA)	<0.044		0.21	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.040		0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorohexanesulfonic acid (PFHxS)	**0.13**	**J**	0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.052		0.21	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorooctanesulfonic acid (PFOS)	**0.99**		0.21	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.055		0.21	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
Perfluorooctanesulfonamide (FOSA)	<0.035		0.21	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
NEtFOSA	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
NMeFOSA	<0.052		0.21	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
NEtFOSAA	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
NMeFOSE	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
NEtFOSE	<0.030		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
4:2 FTS	<0.054		0.21	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
6:2 FTS	<0.028		0.21	0.028	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
8:2 FTS	<0.037		0.21	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.041		0.21	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
HFPO-DA (GenX)	<0.043		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
9Cl-PF3ONS	<0.037		0.21	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1
11Cl-PF3OUdS	<0.033		0.21	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 23:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*78*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C5 PFPeA	*79*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C2 PFHxA	*77*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C4 PFHpA	*81*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C4 PFOA	*77*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C5 PFNA	*82*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C2 PFDA	*75*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C2 PFUnA	*70*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C2 PFDoA	*74*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C2 PFTeDA	*64*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*
13C3 PFBS	*72*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:32*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-8 (3')
Date Collected: 04/17/23 15:25
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-15
Matrix: Solid
Percent Solids: 89.0

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	80		25 - 150	04/23/23 19:00	04/25/23 23:32	1
13C4 PFOS	82		25 - 150	04/23/23 19:00	04/25/23 23:32	1
13C8 FOSA	80		10 - 150	04/23/23 19:00	04/25/23 23:32	1
d3-NMeFOSAA	68		25 - 150	04/23/23 19:00	04/25/23 23:32	1
d5-NEtFOSAA	70		25 - 150	04/23/23 19:00	04/25/23 23:32	1
d-N-MeFOSA-M	78		10 - 150	04/23/23 19:00	04/25/23 23:32	1
d-N-EtFOSA-M	77		10 - 150	04/23/23 19:00	04/25/23 23:32	1
d7-N-MeFOSE-M	73		10 - 150	04/23/23 19:00	04/25/23 23:32	1
d9-N-EtFOSE-M	70		10 - 150	04/23/23 19:00	04/25/23 23:32	1
M2-4:2 FTS	63		25 - 150	04/23/23 19:00	04/25/23 23:32	1
M2-6:2 FTS	63		25 - 150	04/23/23 19:00	04/25/23 23:32	1
M2-8:2 FTS	70		25 - 150	04/23/23 19:00	04/25/23 23:32	1
13C3 HFPO-DA	68		25 - 150	04/23/23 19:00	04/25/23 23:32	1
13C2 10:2 FTS	54		25 - 150	04/23/23 19:00	04/25/23 23:32	1

Client Sample ID: B-8 (8')
Date Collected: 04/17/23 15:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-16
Matrix: Solid
Percent Solids: 91.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.11**	**J**	0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluoropentanoic acid (PFPeA)	<0.044		0.21	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorohexanoic acid (PFHxA)	<0.033		0.21	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluoroheptanoic acid (PFHpA)	<0.041		0.21	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorooctanoic acid (PFOA)	<0.057		0.21	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorononanoic acid (PFNA)	<0.023		0.21	0.023	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorodecanoic acid (PFDA)	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluoroundecanoic acid (PFUnA)	<0.045		0.21	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorotetradecanoic acid (PFTeA)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorobutanesulfonic acid (PFBS)	<0.041		0.21	0.041	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluoropentanesulfonic acid (PFPeS)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorohexanesulfonic acid (PFHxS)	**0.093**	**J**	0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.052		0.21	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorooctanesulfonic acid (PFOS)	**0.061**	**J**	0.21	0.046	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorodecanesulfonic acid (PFDS)	<0.055		0.21	0.055	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorododecanesulfonic acid (PFDoS)	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
Perfluorooctanesulfonamide (FOSA)	<0.035		0.21	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
NEtFOSA	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
NMeFOSA	<0.052		0.21	0.052	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
NMeFOSAA	<0.025		0.21	0.025	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
NEtFOSAA	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
NMeFOSE	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
NEtFOSE	<0.030		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
4:2 FTS	<0.054		0.21	0.054	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
6:2 FTS	<0.029		0.21	0.029	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
8:2 FTS	<0.037		0.21	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
HFPO-DA (GenX)	<0.044		0.21	0.044	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
9Cl-PF3ONS	<0.037		0.21	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1
11Cl-PF3OUdS	<0.033		0.21	0.033	ug/Kg	☼	04/23/23 19:00	04/25/23 23:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C5 PFPeA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C2 PFHxA	*99*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C4 PFHpA	*92*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C4 PFOA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C5 PFNA	*101*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C2 PFDA	*94*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C2 PFUnA	*88*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C2 PFDoA	*88*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C2 PFTeDA	*90*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*
13C3 PFBS	*83*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:44*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-8 (8')
Date Collected: 04/17/23 15:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-16
Matrix: Solid
Percent Solids: 91.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		25 - 150	04/23/23 19:00	04/25/23 23:44	1
13C4 PFOS	100		25 - 150	04/23/23 19:00	04/25/23 23:44	1
13C8 FOSA	101		10 - 150	04/23/23 19:00	04/25/23 23:44	1
d3-NMeFOSAA	100		25 - 150	04/23/23 19:00	04/25/23 23:44	1
d5-NEtFOSAA	95		25 - 150	04/23/23 19:00	04/25/23 23:44	1
d-N-MeFOSA-M	91		10 - 150	04/23/23 19:00	04/25/23 23:44	1
d-N-EtFOSA-M	84		10 - 150	04/23/23 19:00	04/25/23 23:44	1
d7-N-MeFOSE-M	76		10 - 150	04/23/23 19:00	04/25/23 23:44	1
d9-N-EtFOSE-M	79		10 - 150	04/23/23 19:00	04/25/23 23:44	1
M2-4:2 FTS	78		25 - 150	04/23/23 19:00	04/25/23 23:44	1
M2-6:2 FTS	79		25 - 150	04/23/23 19:00	04/25/23 23:44	1
M2-8:2 FTS	123		25 - 150	04/23/23 19:00	04/25/23 23:44	1
13C3 HFPO-DA	73		25 - 150	04/23/23 19:00	04/25/23 23:44	1
13C2 10:2 FTS	72		25 - 150	04/23/23 19:00	04/25/23 23:44	1

Client Sample ID: B-9 (3')
Date Collected: 04/18/23 08:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-17
Matrix: Solid
Percent Solids: 76.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**7.2**		0.24	0.056	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorononanoic acid (PFNA)	**0.61**		0.24	0.027	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorodecanoic acid (PFDA)	<0.059		0.24	0.059	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.24	0.037	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.24	0.026	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluoroheptanesulfonic acid (PFHpS)	**2.7**		0.24	0.060	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorooctanesulfonic acid (PFOS)	**10**		0.24	0.053	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorodecanesulfonic acid (PFDS)	<0.063		0.24	0.063	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorododecanesulfonic acid (PFDoS)	<0.057		0.24	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
Perfluorooctanesulfonamide (FOSA)	**0.048**	**J**	0.24	0.040	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
NEtFOSA	<0.057		0.24	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
NMeFOSA	<0.060		0.24	0.060	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
NEtFOSAA	<0.059		0.24	0.059	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
NMeFOSE	<0.057		0.24	0.057	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
4:2 FTS	**0.42**		0.24	0.062	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
8:2 FTS	<0.043		0.24	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.24	0.048	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
9Cl-PF3ONS	<0.043		0.24	0.043	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	04/23/23 19:00	04/25/23 23:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*129*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C5 PFNA	*134*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C2 PFDA	*134*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C2 PFUnA	*132*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C2 PFDoA	*130*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C2 PFTeDA	*123*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C4 PFOS	*139*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C8 FOSA	*138*		*10 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
d3-NMeFOSAA	*145*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
d5-NEtFOSAA	*145*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
d-N-MeFOSA-M	*120*		*10 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
d-N-EtFOSA-M	*123*		*10 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
d7-N-MeFOSE-M	*101*		*10 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
d9-N-EtFOSE-M	*103*		*10 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
M2-4:2 FTS	*100*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
M2-8:2 FTS	*140*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C3 HFPO-DA	*105*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*
13C2 10:2 FTS	*134*		*25 - 150*	*04/23/23 19:00*	*04/25/23 23:55*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-9 (3')
Date Collected: 04/18/23 08:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-17
Matrix: Solid
Percent Solids: 76.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	47		24	5.0	ug/Kg	☼	04/23/23 19:00	04/26/23 14:39	100
Perfluorohexanoic acid (PFHxA)	180		24	3.8	ug/Kg	☼	04/23/23 19:00	04/26/23 14:39	100
Perfluoroheptanoic acid (PFHpA)	110		24	4.6	ug/Kg	☼	04/23/23 19:00	04/26/23 14:39	100
Perfluorooctanoic acid (PFOA)	1300		24	6.5	ug/Kg	☼	04/23/23 19:00	04/26/23 14:39	100
Perfluorobutanesulfonic acid (PFBS)	46		24	4.6	ug/Kg	☼	04/23/23 19:00	04/26/23 14:39	100
Perfluoropentanesulfonic acid (PFPeS)	97		24	4.5	ug/Kg	☼	04/23/23 19:00	04/26/23 14:39	100
Perfluorohexanesulfonic acid (PFHxS)	1700		24	3.5	ug/Kg	☼	04/23/23 19:00	04/26/23 14:39	100
6:2 FTS	62		24	3.3	ug/Kg	☼	04/23/23 19:00	04/26/23 14:39	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFPeA	*80*		*25 - 150*	*04/23/23 19:00*	*04/26/23 14:39*	*100*
13C2 PFHxA	*70*		*25 - 150*	*04/23/23 19:00*	*04/26/23 14:39*	*100*
13C4 PFHpA	*74*		*25 - 150*	*04/23/23 19:00*	*04/26/23 14:39*	*100*
13C4 PFOA	*73*		*25 - 150*	*04/23/23 19:00*	*04/26/23 14:39*	*100*
13C3 PFBS	*76*		*25 - 150*	*04/23/23 19:00*	*04/26/23 14:39*	*100*
18O2 PFHxS	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 14:39*	*100*
M2-6:2 FTS	*67*		*25 - 150*	*04/23/23 19:00*	*04/26/23 14:39*	*100*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-9 (13')
Date Collected: 04/18/23 08:40
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-18
Matrix: Solid
Percent Solids: 93.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.47**		0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluoropentanoic acid (PFPeA)	**1.5**		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorohexanoic acid (PFHxA)	**7.7**		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluoroheptanoic acid (PFHpA)	**1.7**		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorooctanoic acid (PFOA)	**2.4**		0.21	0.055	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorononanoic acid (PFNA)	<0.023		0.21	0.023	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorodecanoic acid (PFDA)	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluoroundecanoic acid (PFUnA)	<0.044		0.21	0.044	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorobutanesulfonic acid (PFBS)	**1.4**		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluoropentanesulfonic acid (PFPeS)	**2.7**		0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorohexanesulfonic acid (PFHxS)	**18**		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorooctanesulfonic acid (PFOS)	**0.077**	**J**	0.21	0.045	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorodecanesulfonic acid (PFDS)	<0.054		0.21	0.054	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorododecanesulfonic acid (PFDoS)	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
Perfluorooctanesulfonamide (FOSA)	<0.034		0.21	0.034	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
NEtFOSA	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
NMeFOSA	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
NEtFOSAA	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
NMeFOSE	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
6:2 FTS	**0.42**		0.21	0.028	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
8:2 FTS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
HFPO-DA (GenX)	<0.043		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/26/23 00:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*87*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C5 PFPeA	*84*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C2 PFHxA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C4 PFHpA	*90*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C4 PFOA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C5 PFNA	*95*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C2 PFDA	*90*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C2 PFUnA	*83*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C2 PFDoA	*89*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*
13C2 PFTeDA	*86*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:06*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-9 (13')
Date Collected: 04/18/23 08:40
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-18
Matrix: Solid
Percent Solids: 93.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	79		25 - 150	04/23/23 19:00	04/26/23 00:06	1
18O2 PFHxS	86		25 - 150	04/23/23 19:00	04/26/23 00:06	1
13C4 PFOS	94		25 - 150	04/23/23 19:00	04/26/23 00:06	1
13C8 FOSA	97		10 - 150	04/23/23 19:00	04/26/23 00:06	1
d3-NMeFOSAA	92		25 - 150	04/23/23 19:00	04/26/23 00:06	1
d5-NEtFOSAA	98		25 - 150	04/23/23 19:00	04/26/23 00:06	1
d-N-MeFOSA-M	91		10 - 150	04/23/23 19:00	04/26/23 00:06	1
d-N-EtFOSA-M	85		10 - 150	04/23/23 19:00	04/26/23 00:06	1
d7-N-MeFOSE-M	76		10 - 150	04/23/23 19:00	04/26/23 00:06	1
d9-N-EtFOSE-M	78		10 - 150	04/23/23 19:00	04/26/23 00:06	1
M2-4:2 FTS	67		25 - 150	04/23/23 19:00	04/26/23 00:06	1
M2-6:2 FTS	73		25 - 150	04/23/23 19:00	04/26/23 00:06	1
M2-8:2 FTS	81		25 - 150	04/23/23 19:00	04/26/23 00:06	1
13C3 HFPO-DA	71		25 - 150	04/23/23 19:00	04/26/23 00:06	1
13C2 10:2 FTS	65		25 - 150	04/23/23 19:00	04/26/23 00:06	1

Client Sample ID: B-10 (3')
Date Collected: 04/18/23 08:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-19
Matrix: Solid
Percent Solids: 87.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**2.0**		0.22	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluoropentanoic acid (PFPeA)	**9.5**		0.22	0.044	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluoroheptanoic acid (PFHpA)	**18**		0.22	0.041	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorononanoic acid (PFNA)	**1.8**		0.22	0.024	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorodecanoic acid (PFDA)	<0.052		0.22	0.052	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluoroundecanoic acid (PFUnA)	<0.046		0.22	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorododecanoic acid (PFDoA)	<0.033		0.22	0.033	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.22	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorobutanesulfonic acid (PFBS)	**6.5**		0.22	0.041	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluoropentanesulfonic acid (PFPeS)	**11**		0.22	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluoroheptanesulfonic acid (PFHpS)	**5.2**		0.22	0.053	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.22	0.031	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorodecanesulfonic acid (PFDS)	<0.056		0.22	0.056	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorododecanesulfonic acid (PFDoS)	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
Perfluorooctanesulfonamide (FOSA)	**0.34**		0.22	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
NEtFOSA	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
NMeFOSA	<0.053		0.22	0.053	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
NEtFOSAA	<0.052		0.22	0.052	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
NMeFOSE	<0.051		0.22	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
NEtFOSE	<0.030		0.22	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
4:2 FTS	**0.089**	**J**	0.22	0.055	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
8:2 FTS	**0.71**		0.22	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.22	0.042	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
HFPO-DA (GenX)	<0.044		0.22	0.044	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	04/23/23 19:00	04/26/23 00:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*125*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C5 PFPeA	*115*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C4 PFHpA	*78*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C5 PFNA	*123*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C2 PFDA	*129*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C2 PFUnA	*108*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C2 PFDoA	*116*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C2 PFTeDA	*120*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C3 PFBS	*111*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C4 PFOS	*124*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
13C8 FOSA	*134*		*10 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
d3-NMeFOSAA	*119*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
d5-NEtFOSAA	*122*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
d-N-MeFOSA-M	*128*		*10 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
d-N-EtFOSA-M	*119*		*10 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*
d7-N-MeFOSE-M	*103*		*10 - 150*	*04/23/23 19:00*	*04/26/23 00:17*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-10 (3')
Date Collected: 04/18/23 08:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-19
Matrix: Solid
Percent Solids: 87.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d9-N-EtFOSE-M	104		10 - 150	04/23/23 19:00	04/26/23 00:17	1
M2-4:2 FTS	99		25 - 150	04/23/23 19:00	04/26/23 00:17	1
M2-8:2 FTS	108		25 - 150	04/23/23 19:00	04/26/23 00:17	1
13C3 HFPO-DA	95		25 - 150	04/23/23 19:00	04/26/23 00:17	1
13C2 10:2 FTS	83		25 - 150	04/23/23 19:00	04/26/23 00:17	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	27		22	3.4	ug/Kg	☼	04/23/23 19:00	04/26/23 14:49	100
Perfluorooctanoic acid (PFOA)	360		22	5.7	ug/Kg	☼	04/23/23 19:00	04/26/23 14:49	100
Perfluorohexanesulfonic acid (PFHxS)	610		22	3.1	ug/Kg	☼	04/23/23 19:00	04/26/23 14:49	100
Perfluorooctanesulfonic acid (PFOS)	91		22	4.7	ug/Kg	☼	04/23/23 19:00	04/26/23 14:49	100
6:2 FTS	22		22	2.9	ug/Kg	☼	04/23/23 19:00	04/26/23 14:49	100

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	72		25 - 150	04/23/23 19:00	04/26/23 14:49	100
13C4 PFOA	81		25 - 150	04/23/23 19:00	04/26/23 14:49	100
18O2 PFHxS	70		25 - 150	04/23/23 19:00	04/26/23 14:49	100
13C4 PFOS	70		25 - 150	04/23/23 19:00	04/26/23 14:49	100
M2-6:2 FTS	64		25 - 150	04/23/23 19:00	04/26/23 14:49	100

Client Sample ID: B-10 (13')
Date Collected: 04/18/23 09:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-20
Matrix: Solid
Percent Solids: 93.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.39**		0.19	0.045	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluoropentanoic acid (PFPeA)	**0.91**		0.19	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorohexanoic acid (PFHxA)	**2.0**		0.19	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluoroheptanoic acid (PFHpA)	**0.74**		0.19	0.037	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorooctanoic acid (PFOA)	**15**		0.19	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorononanoic acid (PFNA)	<0.021		0.19	0.021	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorodecanoic acid (PFDA)	<0.047		0.19	0.047	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluoroundecanoic acid (PFUnA)	<0.041		0.19	0.041	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorododecanoic acid (PFDoA)	<0.029		0.19	0.029	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorotridecanoic acid (PFTrDA)	<0.020		0.19	0.020	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorotetradecanoic acid (PFTeA)	<0.036		0.19	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorobutanesulfonic acid (PFBS)	**0.40**		0.19	0.037	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluoropentanesulfonic acid (PFPeS)	**0.41**		0.19	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.048		0.19	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorooctanesulfonic acid (PFOS)	<0.042		0.19	0.042	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorononanesulfonic acid (PFNS)	<0.028		0.19	0.028	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorodecanesulfonic acid (PFDS)	<0.050		0.19	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorododecanesulfonic acid (PFDoS)	<0.046		0.19	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
Perfluorooctanesulfonamide (FOSA)	<0.032		0.19	0.032	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
NEtFOSA	<0.046		0.19	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
NMeFOSA	<0.048		0.19	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
NMeFOSAA	<0.022		0.19	0.022	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
NEtFOSAA	<0.047		0.19	0.047	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
NMeFOSE	<0.046		0.19	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
NEtFOSE	<0.027		0.19	0.027	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
4:2 FTS	<0.049		0.19	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
6:2 FTS	**3.0**		0.19	0.026	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
8:2 FTS	<0.034		0.19	0.034	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.038		0.19	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
HFPO-DA (GenX)	<0.040		0.19	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
9Cl-PF3ONS	<0.034		0.19	0.034	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1
11Cl-PF3OUdS	<0.030		0.19	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 00:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*96*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C5 PFPeA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C2 PFHxA	*97*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C4 PFHpA	*88*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C4 PFOA	*93*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C5 PFNA	*104*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C2 PFDA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C2 PFUnA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C2 PFDoA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C2 PFTeDA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C3 PFBS	*93*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*
13C4 PFOS	*107*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:28*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-10 (13')
Date Collected: 04/18/23 09:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-20
Matrix: Solid
Percent Solids: 93.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	105		10 - 150	04/23/23 19:00	04/26/23 00:28	1
d3-NMeFOSAA	99		25 - 150	04/23/23 19:00	04/26/23 00:28	1
d5-NEtFOSAA	101		25 - 150	04/23/23 19:00	04/26/23 00:28	1
d-N-MeFOSA-M	93		10 - 150	04/23/23 19:00	04/26/23 00:28	1
d-N-EtFOSA-M	94		10 - 150	04/23/23 19:00	04/26/23 00:28	1
d7-N-MeFOSE-M	81		10 - 150	04/23/23 19:00	04/26/23 00:28	1
d9-N-EtFOSE-M	82		10 - 150	04/23/23 19:00	04/26/23 00:28	1
M2-4:2 FTS	80		25 - 150	04/23/23 19:00	04/26/23 00:28	1
M2-6:2 FTS	75		25 - 150	04/23/23 19:00	04/26/23 00:28	1
M2-8:2 FTS	80		25 - 150	04/23/23 19:00	04/26/23 00:28	1
13C3 HFPO-DA	84		25 - 150	04/23/23 19:00	04/26/23 00:28	1
13C2 10:2 FTS	67		25 - 150	04/23/23 19:00	04/26/23 00:28	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	19		0.97	0.14	ug/Kg	☼	04/23/23 19:00	05/03/23 23:56	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	77		25 - 150	04/23/23 19:00	05/03/23 23:56	5

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-10 (17')
Date Collected: 04/18/23 09:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-21
Matrix: Solid
Percent Solids: 84.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.2**		0.24	0.054	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluoropentanoic acid (PFPeA)	**5.7**		0.24	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorohexanoic acid (PFHxA)	**17**		0.24	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluoroheptanoic acid (PFHpA)	**2.0**		0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorooctanoic acid (PFOA)	**3.6**		0.24	0.062	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorononanoic acid (PFNA)	**0.70**		0.24	0.026	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorodecanoic acid (PFDA)	<0.056		0.24	0.056	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.24	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.24	0.035	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.24	0.025	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorotetradecanoic acid (PFTeA)	<0.044		0.24	0.044	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorobutanesulfonic acid (PFBS)	**4.4**		0.24	0.045	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluoropentanesulfonic acid (PFPeS)	**4.6**		0.24	0.044	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorohexanesulfonic acid (PFHxS)	**17**		0.24	0.034	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluoroheptanesulfonic acid (PFHpS)	**5.0**		0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorooctanesulfonic acid (PFOS)	**1.8**	**I**	0.24	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.24	0.034	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorodecanesulfonic acid (PFDS)	<0.061		0.24	0.061	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.24	0.055	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
Perfluorooctanesulfonamide (FOSA)	<0.039		0.24	0.039	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
NEtFOSA	<0.055		0.24	0.055	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
NMeFOSA	<0.058		0.24	0.058	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
NMeFOSAA	<0.027		0.24	0.027	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
NEtFOSAA	<0.056		0.24	0.056	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
NMeFOSE	<0.055		0.24	0.055	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
NEtFOSE	<0.033		0.24	0.033	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
4:2 FTS	<0.060		0.24	0.060	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
6:2 FTS	**0.17**	**J**	0.24	0.032	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
8:2 FTS	<0.041		0.24	0.041	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.046		0.24	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
HFPO-DA (GenX)	<0.048		0.24	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
9Cl-PF3ONS	<0.041		0.24	0.041	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1
11Cl-PF3OUdS	<0.036		0.24	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 00:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C5 PFPeA	*88*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C2 PFHxA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C4 PFHpA	*88*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C4 PFOA	*88*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C5 PFNA	*97*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C2 PFDA	*92*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C2 PFUnA	*83*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C2 PFDoA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*
13C2 PFTeDA	*89*		*25 - 150*	*04/23/23 19:00*	*04/26/23 00:39*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-10 (17')
Date Collected: 04/18/23 09:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-21
Matrix: Solid
Percent Solids: 84.5

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	86		25 - 150	04/23/23 19:00	04/26/23 00:39	1
18O2 PFHxS	97		25 - 150	04/23/23 19:00	04/26/23 00:39	1
13C4 PFOS	102		25 - 150	04/23/23 19:00	04/26/23 00:39	1
13C8 FOSA	99		10 - 150	04/23/23 19:00	04/26/23 00:39	1
d3-NMeFOSAA	101		25 - 150	04/23/23 19:00	04/26/23 00:39	1
d5-NEtFOSAA	95		25 - 150	04/23/23 19:00	04/26/23 00:39	1
d-N-MeFOSA-M	90		10 - 150	04/23/23 19:00	04/26/23 00:39	1
d-N-EtFOSA-M	85		10 - 150	04/23/23 19:00	04/26/23 00:39	1
d7-N-MeFOSE-M	77		10 - 150	04/23/23 19:00	04/26/23 00:39	1
d9-N-EtFOSE-M	76		10 - 150	04/23/23 19:00	04/26/23 00:39	1
M2-4:2 FTS	78		25 - 150	04/23/23 19:00	04/26/23 00:39	1
M2-6:2 FTS	88		25 - 150	04/23/23 19:00	04/26/23 00:39	1
M2-8:2 FTS	90		25 - 150	04/23/23 19:00	04/26/23 00:39	1
13C3 HFPO-DA	71		25 - 150	04/23/23 19:00	04/26/23 00:39	1
13C2 10:2 FTS	74		25 - 150	04/23/23 19:00	04/26/23 00:39	1

Client Sample ID: B-11 (3')
Date Collected: 04/18/23 09:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-22
Matrix: Solid
Percent Solids: 81.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.26**		0.25	0.056	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluoropentanoic acid (PFPeA)	**0.49**		0.25	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorohexanoic acid (PFHxA)	**0.62**		0.25	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluoroheptanoic acid (PFHpA)	**0.28**		0.25	0.047	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorooctanoic acid (PFOA)	**1.6**		0.25	0.065	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorononanoic acid (PFNA)	**0.61**		0.25	0.027	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorodecanoic acid (PFDA)	<0.059		0.25	0.059	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluoroundecanoic acid (PFUnA)	<0.052		0.25	0.052	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.25	0.037	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.25	0.026	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.25	0.045	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorobutanesulfonic acid (PFBS)	**0.15**	**J**	0.25	0.047	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluoropentanesulfonic acid (PFPeS)	**0.20**	**J**	0.25	0.045	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorohexanesulfonic acid (PFHxS)	**6.6**		0.25	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.15**	**J**	0.25	0.060	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorooctanesulfonic acid (PFOS)	**14**		0.25	0.053	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorononanesulfonic acid (PFNS)	<0.036		0.25	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.25	0.064	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorododecanesulfonic acid (PFDoS)	<0.058		0.25	0.058	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.25	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
NEtFOSA	<0.058		0.25	0.058	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
NMeFOSA	<0.060		0.25	0.060	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
NMeFOSAA	<0.028		0.25	0.028	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
NEtFOSAA	<0.059		0.25	0.059	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
NMeFOSE	<0.058		0.25	0.058	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
NEtFOSE	<0.034		0.25	0.034	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
4:2 FTS	<0.063		0.25	0.063	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
6:2 FTS	<0.033		0.25	0.033	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
8:2 FTS	<0.043		0.25	0.043	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.25	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
HFPO-DA (GenX)	<0.050		0.25	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
9Cl-PF3ONS	<0.043		0.25	0.043	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1
11Cl-PF3OUdS	<0.038		0.25	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 01:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*69*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C5 PFPeA	*67*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C2 PFHxA	*74*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C4 PFHpA	*69*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C4 PFOA	*70*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C5 PFNA	*72*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C2 PFDA	*70*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C2 PFUnA	*69*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C2 PFDoA	*62*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*
13C2 PFTeDA	*37*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:13*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-11 (3')
Date Collected: 04/18/23 09:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-22
Matrix: Solid
Percent Solids: 81.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	71		25 - 150	04/23/23 19:00	04/26/23 01:13	1
18O2 PFHxS	81		25 - 150	04/23/23 19:00	04/26/23 01:13	1
13C4 PFOS	82		25 - 150	04/23/23 19:00	04/26/23 01:13	1
13C8 FOSA	75		10 - 150	04/23/23 19:00	04/26/23 01:13	1
d3-NMeFOSAA	52		25 - 150	04/23/23 19:00	04/26/23 01:13	1
d5-NEtFOSAA	58		25 - 150	04/23/23 19:00	04/26/23 01:13	1
d-N-MeFOSA-M	75		10 - 150	04/23/23 19:00	04/26/23 01:13	1
d-N-EtFOSA-M	66		10 - 150	04/23/23 19:00	04/26/23 01:13	1
d7-N-MeFOSE-M	69		10 - 150	04/23/23 19:00	04/26/23 01:13	1
d9-N-EtFOSE-M	67		10 - 150	04/23/23 19:00	04/26/23 01:13	1
M2-4:2 FTS	60		25 - 150	04/23/23 19:00	04/26/23 01:13	1
M2-6:2 FTS	62		25 - 150	04/23/23 19:00	04/26/23 01:13	1
M2-8:2 FTS	68		25 - 150	04/23/23 19:00	04/26/23 01:13	1
13C3 HFPO-DA	60		25 - 150	04/23/23 19:00	04/26/23 01:13	1
13C2 10:2 FTS	52		25 - 150	04/23/23 19:00	04/26/23 01:13	1

Definitions/Glossary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Qualifiers

LCMS

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

LCMS

Prep Batch: 669860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-1	B-1 (2.5')	Total/NA	Solid	SHAKE	
500-232605-2	B-1 (13')	Total/NA	Solid	SHAKE	
500-232605-3	B-2 (3')	Total/NA	Solid	SHAKE	
500-232605-4	B-2 (12')	Total/NA	Solid	SHAKE	
500-232605-5	B-3 (2.5')	Total/NA	Solid	SHAKE	
500-232605-6	B-3 (13')	Total/NA	Solid	SHAKE	
500-232605-7	B-4 (3')	Total/NA	Solid	SHAKE	
500-232605-8	B-4 (12')	Total/NA	Solid	SHAKE	
500-232605-9	B-5 (3')	Total/NA	Solid	SHAKE	
500-232605-10	B-5 (13')	Total/NA	Solid	SHAKE	
500-232605-11	B-6 (3')	Total/NA	Solid	SHAKE	
500-232605-12	B-6 (13')	Total/NA	Solid	SHAKE	
500-232605-13	B-7 (2')	Total/NA	Solid	SHAKE	
MB 320-669860/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-669860/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
500-232605-13 MS	B-7 (2')	Total/NA	Solid	SHAKE	
500-232605-13 MSD	B-7 (2')	Total/NA	Solid	SHAKE	

Prep Batch: 669862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-14	B-7 (13.5')	Total/NA	Solid	SHAKE	
500-232605-15	B-8 (3')	Total/NA	Solid	SHAKE	
500-232605-16	B-8 (8')	Total/NA	Solid	SHAKE	
500-232605-17	B-9 (3')	Total/NA	Solid	SHAKE	
500-232605-17 - DL	B-9 (3')	Total/NA	Solid	SHAKE	
500-232605-18	B-9 (13')	Total/NA	Solid	SHAKE	
500-232605-19	B-10 (3')	Total/NA	Solid	SHAKE	
500-232605-19 - DL	B-10 (3')	Total/NA	Solid	SHAKE	
500-232605-20 - DL	B-10 (13')	Total/NA	Solid	SHAKE	
500-232605-20	B-10 (13')	Total/NA	Solid	SHAKE	
500-232605-21	B-10 (17')	Total/NA	Solid	SHAKE	
500-232605-22	B-11 (3')	Total/NA	Solid	SHAKE	
MB 320-669862/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-669862/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 670106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-1	B-1 (2.5')	Total/NA	Solid	537 (modified)	669860
500-232605-2	B-1 (13')	Total/NA	Solid	537 (modified)	669860
500-232605-3	B-2 (3')	Total/NA	Solid	537 (modified)	669860
500-232605-4	B-2 (12')	Total/NA	Solid	537 (modified)	669860
500-232605-6	B-3 (13')	Total/NA	Solid	537 (modified)	669860
500-232605-7	B-4 (3')	Total/NA	Solid	537 (modified)	669860
500-232605-8	B-4 (12')	Total/NA	Solid	537 (modified)	669860
500-232605-9	B-5 (3')	Total/NA	Solid	537 (modified)	669860
500-232605-10	B-5 (13')	Total/NA	Solid	537 (modified)	669860
500-232605-11	B-6 (3')	Total/NA	Solid	537 (modified)	669860
500-232605-12	B-6 (13')	Total/NA	Solid	537 (modified)	669860
500-232605-13	B-7 (2')	Total/NA	Solid	537 (modified)	669860
LCS 320-669860/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	669860
500-232605-13 MS	B-7 (2')	Total/NA	Solid	537 (modified)	669860

LCMS (Continued)

Analysis Batch: 670106 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-13 MSD	B-7 (2')	Total/NA	Solid	537 (modified)	669860

Analysis Batch: 670113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-14	B-7 (13.5')	Total/NA	Solid	537 (modified)	669862
500-232605-15	B-8 (3')	Total/NA	Solid	537 (modified)	669862
500-232605-16	B-8 (8')	Total/NA	Solid	537 (modified)	669862
500-232605-17	B-9 (3')	Total/NA	Solid	537 (modified)	669862
500-232605-18	B-9 (13')	Total/NA	Solid	537 (modified)	669862
500-232605-19	B-10 (3')	Total/NA	Solid	537 (modified)	669862
500-232605-20	B-10 (13')	Total/NA	Solid	537 (modified)	669862
500-232605-21	B-10 (17')	Total/NA	Solid	537 (modified)	669862
500-232605-22	B-11 (3')	Total/NA	Solid	537 (modified)	669862
LCS 320-669862/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	669862

Analysis Batch: 670560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-17 - DL	B-9 (3')	Total/NA	Solid	537 (modified)	669862
500-232605-19 - DL	B-10 (3')	Total/NA	Solid	537 (modified)	669862
MB 320-669860/1-A	Method Blank	Total/NA	Solid	537 (modified)	669860
MB 320-669862/1-A	Method Blank	Total/NA	Solid	537 (modified)	669862

Analysis Batch: 671056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-5	B-3 (2.5')	Total/NA	Solid	537 (modified)	669860

Analysis Batch: 672075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-20 - DL	B-10 (13')	Total/NA	Solid	537 (modified)	669862

General Chemistry

Analysis Batch: 670360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-1	B-1 (2.5')	Total/NA	Solid	D 2216	
500-232605-2	B-1 (13')	Total/NA	Solid	D 2216	
500-232605-3	B-2 (3')	Total/NA	Solid	D 2216	
500-232605-4	B-2 (12')	Total/NA	Solid	D 2216	
500-232605-5	B-3 (2.5')	Total/NA	Solid	D 2216	
500-232605-6	B-3 (13')	Total/NA	Solid	D 2216	
500-232605-7	B-4 (3')	Total/NA	Solid	D 2216	
500-232605-8	B-4 (12')	Total/NA	Solid	D 2216	
500-232605-9	B-5 (3')	Total/NA	Solid	D 2216	
500-232605-10	B-5 (13')	Total/NA	Solid	D 2216	
500-232605-11	B-6 (3')	Total/NA	Solid	D 2216	
500-232605-12	B-6 (13')	Total/NA	Solid	D 2216	
500-232605-3 DU	B-2 (3')	Total/NA	Solid	D 2216	

Analysis Batch: 670370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-13	B-7 (2')	Total/NA	Solid	D 2216	

General Chemistry (Continued)

Analysis Batch: 670370 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-14	B-7 (13.5')	Total/NA	Solid	D 2216	
500-232605-15	B-8 (3')	Total/NA	Solid	D 2216	
500-232605-16	B-8 (8')	Total/NA	Solid	D 2216	

Analysis Batch: 670534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-17	B-9 (3')	Total/NA	Solid	D 2216	
500-232605-18	B-9 (13')	Total/NA	Solid	D 2216	
500-232605-19	B-10 (3')	Total/NA	Solid	D 2216	

Analysis Batch: 670566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-20	B-10 (13')	Total/NA	Solid	D 2216	
500-232605-21	B-10 (17')	Total/NA	Solid	D 2216	
500-232605-22	B-11 (3')	Total/NA	Solid	D 2216	

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-669860/1-A
Matrix: Solid
Analysis Batch: 670560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669860

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.0466	J	0.20	0.046	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg		04/23/23 19:00	04/26/23 13:27	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg		04/23/23 19:00	04/26/23 13:27	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*84*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C5 PFPeA	*98*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C2 PFHxA	*74*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C4 PFHpA	*98*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C4 PFOA	*88*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C5 PFNA	*87*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C2 PFDA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C2 PFUnA	*84*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C2 PFDoA	*84*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*
13C2 PFTeDA	*83*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:27*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-669860/1-A
Matrix: Solid
Analysis Batch: 670560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669860

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	92		25 - 150	04/23/23 19:00	04/26/23 13:27	1
18O2 PFHxS	75		25 - 150	04/23/23 19:00	04/26/23 13:27	1
13C4 PFOS	89		25 - 150	04/23/23 19:00	04/26/23 13:27	1
13C8 FOSA	91		10 - 150	04/23/23 19:00	04/26/23 13:27	1
d3-NMeFOSAA	87		25 - 150	04/23/23 19:00	04/26/23 13:27	1
d5-NEtFOSAA	94		25 - 150	04/23/23 19:00	04/26/23 13:27	1
d-N-MeFOSA-M	86		10 - 150	04/23/23 19:00	04/26/23 13:27	1
d-N-EtFOSA-M	89		10 - 150	04/23/23 19:00	04/26/23 13:27	1
d7-N-MeFOSE-M	83		10 - 150	04/23/23 19:00	04/26/23 13:27	1
d9-N-EtFOSE-M	79		10 - 150	04/23/23 19:00	04/26/23 13:27	1
M2-4:2 FTS	93		25 - 150	04/23/23 19:00	04/26/23 13:27	1
M2-6:2 FTS	77		25 - 150	04/23/23 19:00	04/26/23 13:27	1
M2-8:2 FTS	100		25 - 150	04/23/23 19:00	04/26/23 13:27	1
13C3 HFPO-DA	89		25 - 150	04/23/23 19:00	04/26/23 13:27	1
13C2 10:2 FTS	72		25 - 150	04/23/23 19:00	04/26/23 13:27	1

Lab Sample ID: LCS 320-669860/2-A
Matrix: Solid
Analysis Batch: 670106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669860

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.92		ug/Kg		96	60 - 135
Perfluoropentanoic acid (PFPeA)	2.00	1.95		ug/Kg		98	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	1.91		ug/Kg		95	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.21		ug/Kg		111	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.12		ug/Kg		106	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.02		ug/Kg		101	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	2.04		ug/Kg		102	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	2.09		ug/Kg		105	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.03		ug/Kg		101	60 - 135
Perfluorotridecanoic acid (PFTrDA)	2.00	2.01		ug/Kg		101	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	2.02		ug/Kg		101	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.78	1.87		ug/Kg		105	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	2.08		ug/Kg		111	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.77		ug/Kg		97	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	1.91	2.13		ug/Kg		111	60 - 135
Perfluorooctanesulfonic acid (PFOS)	1.86	1.76		ug/Kg		94	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	1.84		ug/Kg		96	60 - 135
Perfluorodecanesulfonic acid (PFDS)	1.93	1.92		ug/Kg		100	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.85		ug/Kg		95	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-669860/2-A
Matrix: Solid
Analysis Batch: 670106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669860

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonamide (FOSA)	2.00	2.02		ug/Kg		101	60 - 135
NEtFOSA	2.00	1.97		ug/Kg		98	60 - 135
NMeFOSA	2.00	2.04		ug/Kg		102	60 - 135
NMeFOSAA	2.00	2.18		ug/Kg		109	60 - 135
NEtFOSAA	2.00	2.07		ug/Kg		104	60 - 135
NMeFOSE	2.00	2.07		ug/Kg		104	60 - 135
NEtFOSE	2.00	2.15		ug/Kg		107	60 - 135
4:2 FTS	1.88	2.09		ug/Kg		111	60 - 135
6:2 FTS	1.90	1.92		ug/Kg		101	60 - 135
8:2 FTS	1.92	2.03		ug/Kg		106	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	1.89		ug/Kg		100	60 - 135
HFPO-DA (GenX)	2.00	2.32		ug/Kg		116	60 - 135
9Cl-PF3ONS	1.87	1.92		ug/Kg		103	60 - 135
11Cl-PF3OUdS	1.89	1.74		ug/Kg		92	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*89*		*25 - 150*
13C5 PFPeA	*92*		*25 - 150*
13C2 PFHxA	*95*		*25 - 150*
13C4 PFHpA	*90*		*25 - 150*
13C4 PFOA	*93*		*25 - 150*
13C5 PFNA	*94*		*25 - 150*
13C2 PFDA	*89*		*25 - 150*
13C2 PFUnA	*84*		*25 - 150*
13C2 PFDoA	*86*		*25 - 150*
13C2 PFTeDA	*81*		*25 - 150*
13C3 PFBS	*86*		*25 - 150*
18O2 PFHxS	*97*		*25 - 150*
13C4 PFOS	*97*		*25 - 150*
13C8 FOSA	*94*		*10 - 150*
d3-NMeFOSAA	*82*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*83*		*10 - 150*
d-N-EtFOSA-M	*79*		*10 - 150*
d7-N-MeFOSE-M	*75*		*10 - 150*
d9-N-EtFOSE-M	*74*		*10 - 150*
M2-4:2 FTS	*78*		*25 - 150*
M2-6:2 FTS	*85*		*25 - 150*
M2-8:2 FTS	*91*		*25 - 150*
13C3 HFPO-DA	*92*		*25 - 150*
13C2 10:2 FTS	*75*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-13 MS
Matrix: Solid
Analysis Batch: 670106

Client Sample ID: B-7 (2')
Prep Type: Total/NA
Prep Batch: 669860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	0.47	B	2.39	2.62		ug/Kg	☼	90	70 - 130
Perfluoropentanoic acid (PFPeA)	0.64		2.39	2.90		ug/Kg	☼	95	70 - 130
Perfluorohexanoic acid (PFHxA)	0.58		2.39	3.04		ug/Kg	☼	103	70 - 130
Perfluoroheptanoic acid (PFHpA)	0.20	J	2.39	2.67		ug/Kg	☼	104	70 - 130
Perfluorooctanoic acid (PFOA)	0.44		2.39	3.07		ug/Kg	☼	111	70 - 130
Perfluorononanoic acid (PFNA)	0.91		2.39	3.31		ug/Kg	☼	101	70 - 130
Perfluorodecanoic acid (PFDA)	<0.059		2.39	2.72		ug/Kg	☼	114	70 - 130
Perfluoroundecanoic acid (PFUnA)	<0.051		2.39	2.43		ug/Kg	☼	102	70 - 130
Perfluorododecanoic acid (PFDoA)	<0.037		2.39	2.29		ug/Kg	☼	96	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<0.026		2.39	2.14		ug/Kg	☼	90	70 - 130
Perfluorotetradecanoic acid (PFTeA)	<0.045		2.39	2.32		ug/Kg	☼	97	70 - 130
Perfluorobutanesulfonic acid (PFBS)	0.13	J	2.12	2.33		ug/Kg	☼	104	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	0.16	J	2.24	2.58		ug/Kg	☼	108	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.18	5.00		ug/Kg	☼	102	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	0.18	J	2.28	2.58		ug/Kg	☼	106	70 - 130
Perfluorooctanesulfonic acid (PFOS)	14		2.22	15.5	4	ug/Kg	☼	69	70 - 130
Perfluorononanesulfonic acid (PFNS)	<0.035		2.29	2.25		ug/Kg	☼	98	70 - 130
Perfluorodecanesulfonic acid (PFDS)	<0.064		2.30	2.25		ug/Kg	☼	98	70 - 130
Perfluorododecanesulfonic acid (PFDoS)	<0.058	F1	2.31	1.57	F1	ug/Kg	☼	68	70 - 130
Perfluorooctanesulfonamide (FOSA)	<0.040		2.39	2.48		ug/Kg	☼	104	70 - 130
NEtFOSA	<0.058		2.39	2.44		ug/Kg	☼	102	70 - 130
NMeFOSA	<0.060		2.39	2.61		ug/Kg	☼	109	70 - 130
NMeFOSAA	<0.028		2.39	2.35		ug/Kg	☼	98	70 - 130
NEtFOSAA	<0.059		2.39	2.33		ug/Kg	☼	98	70 - 130
NMeFOSE	<0.058		2.39	2.61		ug/Kg	☼	109	70 - 130
NEtFOSE	<0.034		2.39	2.54		ug/Kg	☼	106	70 - 130
4:2 FTS	<0.062		2.24	2.50		ug/Kg	☼	112	70 - 130
6:2 FTS	<0.033		2.27	2.32		ug/Kg	☼	102	70 - 130
8:2 FTS	<0.043		2.29	2.25		ug/Kg	☼	98	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		2.25	2.19		ug/Kg	☼	97	70 - 130
HFPO-DA (GenX)	<0.050		2.39	2.53		ug/Kg	☼	106	70 - 130
9Cl-PF3ONS	<0.043		2.23	2.24		ug/Kg	☼	100	70 - 130
11Cl-PF3OUdS	<0.038		2.25	2.21		ug/Kg	☼	98	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*74*		*25 - 150*
13C5 PFPeA	*75*		*25 - 150*
13C2 PFHxA	*76*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-13 MS
Matrix: Solid
Analysis Batch: 670106

Client Sample ID: B-7 (2')
Prep Type: Total/NA
Prep Batch: 669860

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFHpA	76		25 - 150
13C4 PFOA	73		25 - 150
13C5 PFNA	77		25 - 150
13C2 PFDA	69		25 - 150
13C2 PFUnA	69		25 - 150
13C2 PFDoA	74		25 - 150
13C2 PFTeDA	51		25 - 150
13C3 PFBS	74		25 - 150
18O2 PFHxS	79		25 - 150
13C4 PFOS	83		25 - 150
13C8 FOSA	76		10 - 150
d3-NMeFOSAA	48		25 - 150
d5-NEtFOSAA	53		25 - 150
d-N-MeFOSA-M	75		10 - 150
d-N-EtFOSA-M	80		10 - 150
d7-N-MeFOSE-M	73		10 - 150
d9-N-EtFOSE-M	75		10 - 150
M2-4:2 FTS	57		25 - 150
M2-6:2 FTS	59		25 - 150
M2-8:2 FTS	58		25 - 150
13C3 HFPO-DA	69		25 - 150
13C2 10:2 FTS	52		25 - 150

Lab Sample ID: 500-232605-13 MSD
Matrix: Solid
Analysis Batch: 670106

Client Sample ID: B-7 (2')
Prep Type: Total/NA
Prep Batch: 669860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	0.47	B	2.42	2.69		ug/Kg	☼	91	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	0.64		2.42	3.17		ug/Kg	☼	105	70 - 130	9	30
Perfluorohexanoic acid (PFHxA)	0.58		2.42	2.96		ug/Kg	☼	98	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)	0.20	J	2.42	2.91		ug/Kg	☼	112	70 - 130	9	30
Perfluorooctanoic acid (PFOA)	0.44		2.42	2.91		ug/Kg	☼	102	70 - 130	5	30
Perfluorononanoic acid (PFNA)	0.91		2.42	3.42		ug/Kg	☼	104	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<0.059		2.42	2.49		ug/Kg	☼	103	70 - 130	9	30
Perfluoroundecanoic acid (PFUnA)	<0.051		2.42	2.46		ug/Kg	☼	102	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)	<0.037		2.42	2.48		ug/Kg	☼	102	70 - 130	8	30
Perfluorotridecanoic acid (PFTrDA)	<0.026		2.42	2.29		ug/Kg	☼	94	70 - 130	6	30
Perfluorotetradecanoic acid (PFTeA)	<0.045		2.42	2.39		ug/Kg	☼	99	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)	0.13	J	2.15	2.46		ug/Kg	☼	109	70 - 130	6	30
Perfluoropentanesulfonic acid (PFPeS)	0.16	J	2.28	2.61		ug/Kg	☼	108	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.21	5.13		ug/Kg	☼	106	70 - 130	2	30
Perfluoroheptanesulfonic acid (PFHpS)	0.18	J	2.31	2.66		ug/Kg	☼	107	70 - 130	3	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-13 MSD
Matrix: Solid
Analysis Batch: 670106

Client Sample ID: B-7 (2')
Prep Type: Total/NA
Prep Batch: 669860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	14		2.25	15.7	4	ug/Kg	☼	75	70 - 130	1	30
Perfluorononanesulfonic acid (PFNS)	<0.035		2.33	2.25		ug/Kg	☼	97	70 - 130	0	30
Perfluorodecanesulfonic acid (PFDS)	<0.064		2.34	2.39		ug/Kg	☼	102	70 - 130	6	30
Perfluorododecanesulfonic acid (PFDoS)	<0.058	F1	2.35	1.78		ug/Kg	☼	76	70 - 130	12	30
Perfluorooctanesulfonamide (FOSA)	<0.040		2.42	2.60		ug/Kg	☼	107	70 - 130	5	30
NEtFOSA	<0.058		2.42	2.49		ug/Kg	☼	103	70 - 130	2	30
NMeFOSA	<0.060		2.42	2.56		ug/Kg	☼	106	70 - 130	2	30
NMeFOSAA	<0.028		2.42	2.41		ug/Kg	☼	100	70 - 130	3	30
NEtFOSAA	<0.059		2.42	2.73		ug/Kg	☼	113	70 - 130	15	30
NMeFOSE	<0.058		2.42	2.64		ug/Kg	☼	109	70 - 130	1	30
NEtFOSE	<0.034		2.42	2.72		ug/Kg	☼	112	70 - 130	7	30
4:2 FTS	<0.062		2.27	2.27		ug/Kg	☼	100	70 - 130	9	30
6:2 FTS	<0.033		2.31	2.48		ug/Kg	☼	107	70 - 130	6	30
8:2 FTS	<0.043		2.33	2.38		ug/Kg	☼	102	70 - 130	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		2.29	2.48		ug/Kg	☼	108	70 - 130	12	30
HFPO-DA (GenX)	<0.050		2.42	2.43		ug/Kg	☼	100	70 - 130	4	30
9Cl-PF3ONS	<0.043		2.26	2.29		ug/Kg	☼	101	70 - 130	2	30
11Cl-PF3OUdS	<0.038		2.29	2.32		ug/Kg	☼	101	70 - 130	5	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*70*		*25 - 150*
13C5 PFPeA	*69*		*25 - 150*
13C2 PFHxA	*71*		*25 - 150*
13C4 PFHpA	*68*		*25 - 150*
13C4 PFOA	*68*		*25 - 150*
13C5 PFNA	*70*		*25 - 150*
13C2 PFDA	*68*		*25 - 150*
13C2 PFUnA	*68*		*25 - 150*
13C2 PFDoA	*68*		*25 - 150*
13C2 PFTeDA	*44*		*25 - 150*
13C3 PFBS	*66*		*25 - 150*
18O2 PFHxS	*71*		*25 - 150*
13C4 PFOS	*72*		*25 - 150*
13C8 FOSA	*70*		*10 - 150*
d3-NMeFOSAA	*47*		*25 - 150*
d5-NEtFOSAA	*47*		*25 - 150*
d-N-MeFOSA-M	*72*		*10 - 150*
d-N-EtFOSA-M	*69*		*10 - 150*
d7-N-MeFOSE-M	*67*		*10 - 150*
d9-N-EtFOSE-M	*66*		*10 - 150*
M2-4:2 FTS	*60*		*25 - 150*
M2-6:2 FTS	*57*		*25 - 150*
M2-8:2 FTS	*58*		*25 - 150*
13C3 HFPO-DA	*65*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-13 MSD
Matrix: Solid
Analysis Batch: 670106

Client Sample ID: B-7 (2')
Prep Type: Total/NA
Prep Batch: 669860

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C2 10:2 FTS	48		25 - 150

Lab Sample ID: MB 320-669862/1-A
Matrix: Solid
Analysis Batch: 670560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.046		0.20	0.046	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg		04/23/23 19:00	04/26/23 13:47	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	94		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C5 PFPeA	107		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C2 PFHxA	90		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C4 PFHpA	91		25 - 150	04/23/23 19:00	04/26/23 13:47	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-669862/1-A
Matrix: Solid
Analysis Batch: 670560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669862

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	91		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C5 PFNA	91		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C2 PFDA	90		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C2 PFUnA	89		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C2 PFDoA	89		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C2 PFTeDA	94		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C3 PFBS	106		25 - 150	04/23/23 19:00	04/26/23 13:47	1
18O2 PFHxS	81		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C4 PFOS	95		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C8 FOSA	99		10 - 150	04/23/23 19:00	04/26/23 13:47	1
d3-NMeFOSAA	97		25 - 150	04/23/23 19:00	04/26/23 13:47	1
d5-NEtFOSAA	98		25 - 150	04/23/23 19:00	04/26/23 13:47	1
d-N-MeFOSA-M	90		10 - 150	04/23/23 19:00	04/26/23 13:47	1
d-N-EtFOSA-M	92		10 - 150	04/23/23 19:00	04/26/23 13:47	1
d7-N-MeFOSE-M	87		10 - 150	04/23/23 19:00	04/26/23 13:47	1
d9-N-EtFOSE-M	86		10 - 150	04/23/23 19:00	04/26/23 13:47	1
M2-4:2 FTS	82		25 - 150	04/23/23 19:00	04/26/23 13:47	1
M2-6:2 FTS	85		25 - 150	04/23/23 19:00	04/26/23 13:47	1
M2-8:2 FTS	97		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C3 HFPO-DA	92		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C2 10:2 FTS	81		25 - 150	04/23/23 19:00	04/26/23 13:47	1

Lab Sample ID: LCS 320-669862/2-A
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	2.03		ug/Kg		101	60 - 135
Perfluoropentanoic acid (PFPeA)	2.00	2.01		ug/Kg		100	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	1.94		ug/Kg		97	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.17		ug/Kg		109	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.10		ug/Kg		105	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.04		ug/Kg		102	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	2.10		ug/Kg		105	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	2.15		ug/Kg		107	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.02		ug/Kg		101	60 - 135
Perfluorotridecanoic acid (PFTrDA)	2.00	2.08		ug/Kg		104	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	1.98		ug/Kg		99	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.78	1.83		ug/Kg		103	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	2.08		ug/Kg		111	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.87		ug/Kg		103	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	1.91	1.85		ug/Kg		97	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-669862/2-A
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	1.86	1.76		ug/Kg		95	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	1.64		ug/Kg		85	60 - 135
Perfluorodecanesulfonic acid (PFDS)	1.93	1.77		ug/Kg		92	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.62		ug/Kg		84	60 - 135
Perfluorooctanesulfonamide (FOSA)	2.00	2.15		ug/Kg		108	60 - 135
NEtFOSA	2.00	2.11		ug/Kg		105	60 - 135
NMeFOSA	2.00	2.19		ug/Kg		109	60 - 135
NMeFOSAA	2.00	2.20		ug/Kg		110	60 - 135
NEtFOSAA	2.00	2.02		ug/Kg		101	60 - 135
NMeFOSE	2.00	2.12		ug/Kg		106	60 - 135
NEtFOSE	2.00	2.13		ug/Kg		106	60 - 135
4:2 FTS	1.88	1.98		ug/Kg		106	60 - 135
6:2 FTS	1.90	1.95		ug/Kg		102	60 - 135
8:2 FTS	1.92	2.05		ug/Kg		107	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	1.73		ug/Kg		92	60 - 135
HFPO-DA (GenX)	2.00	2.32		ug/Kg		116	60 - 135
9Cl-PF3ONS	1.87	1.70		ug/Kg		91	60 - 135
11Cl-PF3OUdS	1.89	1.69		ug/Kg		89	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*89*		*25 - 150*
13C5 PFPeA	*88*		*25 - 150*
13C2 PFHxA	*91*		*25 - 150*
13C4 PFHpA	*90*		*25 - 150*
13C4 PFOA	*90*		*25 - 150*
13C5 PFNA	*92*		*25 - 150*
13C2 PFDA	*88*		*25 - 150*
13C2 PFUnA	*80*		*25 - 150*
13C2 PFDoA	*81*		*25 - 150*
13C2 PFTeDA	*86*		*25 - 150*
13C3 PFBS	*86*		*25 - 150*
18O2 PFHxS	*93*		*25 - 150*
13C4 PFOS	*101*		*25 - 150*
13C8 FOSA	*92*		*10 - 150*
d3-NMeFOSAA	*88*		*25 - 150*
d5-NEtFOSAA	*94*		*25 - 150*
d-N-MeFOSA-M	*85*		*10 - 150*
d-N-EtFOSA-M	*79*		*10 - 150*
d7-N-MeFOSE-M	*72*		*10 - 150*
d9-N-EtFOSE-M	*74*		*10 - 150*
M2-4:2 FTS	*77*		*25 - 150*
M2-6:2 FTS	*83*		*25 - 150*
M2-8:2 FTS	*95*		*25 - 150*
13C3 HFPO-DA	*68*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-669862/2-A
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669862

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2 10:2 FTS	71		25 - 150

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-1 (2.5')
Lab Sample ID: 500-232605-1
Date Collected: 04/17/23 09:45
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-1 (2.5')
Lab Sample ID: 500-232605-1
Date Collected: 04/17/23 09:45
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 18:43

Client Sample ID: B-1 (13')
Lab Sample ID: 500-232605-2
Date Collected: 04/17/23 09:50
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-1 (13')
Lab Sample ID: 500-232605-2
Date Collected: 04/17/23 09:50
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 18:54

Client Sample ID: B-2 (3')
Lab Sample ID: 500-232605-3
Date Collected: 04/17/23 10:10
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-2 (3')
Lab Sample ID: 500-232605-3
Date Collected: 04/17/23 10:10
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 19:05

Client Sample ID: B-2 (12')
Lab Sample ID: 500-232605-4
Date Collected: 04/17/23 10:20
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-2 (12')
Lab Sample ID: 500-232605-4
Date Collected: 04/17/23 10:20
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 19:39

Client Sample ID: B-3 (2.5')
Lab Sample ID: 500-232605-5
Date Collected: 04/17/23 10:50
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-3 (2.5')
Lab Sample ID: 500-232605-5
Date Collected: 04/17/23 10:50
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	671056	RS1	EET SAC	04/29/23 04:32

Client Sample ID: B-3 (13')
Lab Sample ID: 500-232605-6
Date Collected: 04/17/23 11:00
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-3 (13')
Lab Sample ID: 500-232605-6
Date Collected: 04/17/23 11:00
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 20:01

Client Sample ID: B-4 (3')
Lab Sample ID: 500-232605-7
Date Collected: 04/17/23 11:40
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-4 (3')
Lab Sample ID: 500-232605-7
Date Collected: 04/17/23 11:40
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 20:12

Client Sample ID: B-4 (12')
Lab Sample ID: 500-232605-8
Date Collected: 04/17/23 11:45
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-4 (12')
Lab Sample ID: 500-232605-8
Date Collected: 04/17/23 11:45
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 20:24

Client Sample ID: B-5 (3')
Lab Sample ID: 500-232605-9
Date Collected: 04/17/23 12:10
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-5 (3')
Lab Sample ID: 500-232605-9
Date Collected: 04/17/23 12:10
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 20:35

Client Sample ID: B-5 (13')
Lab Sample ID: 500-232605-10
Date Collected: 04/17/23 12:20
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-5 (13')
Date Collected: 04/17/23 12:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-10
Matrix: Solid
Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 20:46

Client Sample ID: B-6 (3')
Date Collected: 04/17/23 14:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-6 (3')
Date Collected: 04/17/23 14:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-11
Matrix: Solid
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 20:57

Client Sample ID: B-6 (13')
Date Collected: 04/17/23 14:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670360	H1Z	EET SAC	04/26/23 14:06

Client Sample ID: B-6 (13')
Date Collected: 04/17/23 14:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-12
Matrix: Solid
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 21:08

Client Sample ID: B-7 (2')
Date Collected: 04/17/23 14:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670370	H1Z	EET SAC	04/26/23 15:35

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-7 (2')
Date Collected: 04/17/23 14:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-13
Matrix: Solid
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669860	PV	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670106	RS1	EET SAC	04/25/23 21:41

Client Sample ID: B-7 (13.5')
Date Collected: 04/17/23 15:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670370	H1Z	EET SAC	04/26/23 15:35

Client Sample ID: B-7 (13.5')
Date Collected: 04/17/23 15:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-14
Matrix: Solid
Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/25/23 23:21

Client Sample ID: B-8 (3')
Date Collected: 04/17/23 15:25
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670370	H1Z	EET SAC	04/26/23 15:35

Client Sample ID: B-8 (3')
Date Collected: 04/17/23 15:25
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-15
Matrix: Solid
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/25/23 23:32

Client Sample ID: B-8 (8')
Date Collected: 04/17/23 15:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670370	H1Z	EET SAC	04/26/23 15:35

Client Sample ID: B-8 (8')
Lab Sample ID: 500-232605-16
Date Collected: 04/17/23 15:50
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 91.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/25/23 23:44

Client Sample ID: B-9 (3')
Lab Sample ID: 500-232605-17
Date Collected: 04/18/23 08:30
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670534	H1Z	EET SAC	04/27/23 11:33

Client Sample ID: B-9 (3')
Lab Sample ID: 500-232605-17
Date Collected: 04/18/23 08:30
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 76.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/25/23 23:55
Total/NA	Prep	SHAKE	DL		669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)	DL	100	670560	K1S	EET SAC	04/26/23 14:39

Client Sample ID: B-9 (13')
Lab Sample ID: 500-232605-18
Date Collected: 04/18/23 08:40
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670534	H1Z	EET SAC	04/27/23 11:33

Client Sample ID: B-9 (13')
Lab Sample ID: 500-232605-18
Date Collected: 04/18/23 08:40
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/26/23 00:06

Client Sample ID: B-10 (3')
Lab Sample ID: 500-232605-19
Date Collected: 04/18/23 08:55
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670534	H1Z	EET SAC	04/27/23 11:33

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-10 (3')
Lab Sample ID: 500-232605-19
Date Collected: 04/18/23 08:55
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/26/23 00:17
Total/NA	Prep	SHAKE	DL		669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)	DL	100	670560	K1S	EET SAC	04/26/23 14:49

Client Sample ID: B-10 (13')
Lab Sample ID: 500-232605-20
Date Collected: 04/18/23 09:00
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670566	TCS	EET SAC	04/27/23 12:35

Client Sample ID: B-10 (13')
Lab Sample ID: 500-232605-20
Date Collected: 04/18/23 09:00
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE	DL		669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)	DL	5	672075	RS1	EET SAC	05/03/23 23:56
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/26/23 00:28

Client Sample ID: B-10 (17')
Lab Sample ID: 500-232605-21
Date Collected: 04/18/23 09:10
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670566	TCS	EET SAC	04/27/23 12:35

Client Sample ID: B-10 (17')
Lab Sample ID: 500-232605-21
Date Collected: 04/18/23 09:10
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/26/23 00:39

Client Sample ID: B-11 (3')
Lab Sample ID: 500-232605-22
Date Collected: 04/18/23 09:35
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670566	TCS	EET SAC	04/27/23 12:35

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Client Sample ID: B-11 (3')

Date Collected: 04/18/23 09:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-22

Matrix: Solid
Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/26/23 01:13

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Laboratory: Eurofins Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-23

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.1
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 1 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
B-1 (2.5')	4/17/23	9:45	G	Solid			X		
B-1 (13')		9:50		Solid			X		
B-2 (3')		10:10		Solid			X		
B-2 (12')		10:20		Solid			X		
B-3 (2.5')		10:50		Solid			X		
B-3 (13')		11:00		Solid			X		
B-4 (3')		11:40		Solid			X		
B-4 (12')		11:45		Solid			X		
B-5 (3')		12:10		Solid			X		
B-5 (13')		12:20		Solid			X		
B-6 (3')		14:15		Solid			X		

500-232605 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Joe Hahn	4/20/23 - 13:00	SWI via FEDEX		4/21/23 935	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2133173

Cooler Temperature(s) °C and Other Remarks: 4.2

Ver: 06/08/2021

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.2
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 2 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
B-6 (13')	4/17/23	14:30	G	Solid			X		
B-7 (2')		14:45		Solid			X		
B-7 (13.5')		15:00		Solid			X		
B-8 (3')		15:25		Solid			X		
B-8 (8')		15:50		Solid			X		
B-9 (3')	4/18/23	8:30		Solid			X		
B-9 (13')		8:40		Solid			X		
B-10 (3')		8:55		Solid			X		
B-10 (13')		9:00		Solid			X		
B-10 (17')		9:10		Solid			X		
B-11 (3')		9:35		Solid			X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Joe Hahn	4/20/23 13:00	SWI	FEDEX	4/21/23 935	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2133173 | Cooler Temperature(s) °C and Other Remarks: HR

Ver: 06/08/2021

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.3
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 3 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
B-11 (10')	4/18/23	9:45	G	Solid			X		
B-12 (3')		10:20		Solid			X		
B-12 (11')		10:30		Solid			X		
B-13 (3')		10:55		Solid			X		
B-13 (10')		11:05		Solid			X		
B-14 (2')		11:15		Solid			X		
B-14 (10')		11:35		Solid			X		
B-15 (2')		12:45		Solid			X		
B-15 (10')		12:55		Solid			X		
B-16 (2')		13:30		Solid			X		
B-16 (10')		13:40		Solid			X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Joe Hahn	4/20/23 - 13:00	SWI via FEDEX		4/21/23 935	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time:	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes Δ No | Custody Seal No.: 233123

Cooler Temperature(s) °C and Other Remarks: 4.2

Ver: 06/08/2021

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.4
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 4 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
B-17 (2')	4/18/23	13:45	G	Solid			X		
B-17 (9')		13:55		Solid			X		
B-18 (3')		14:05		Solid			X		
B-18 (8')		14:10		Solid			X		
B-18 (16')		14:15		Solid			X		
B-19 (2')		14:35		Solid			X		
B-19 (5.5')		14:45		Solid			X		
B-20 (3')		15:00		Solid			X		
B-20 (10')		15:20		Solid			X		
B-21 (2')	4/19/23	8:10		Solid			X		
B-21 (9')		8:20		Solid			X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Joe Hahn	4/20/23 13:00	SWI via FedEx		4/21/23 935	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2133173

Cooler Temperature(s) °C and Other Remarks: 4.2

Ver: 06/08/2021

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.5
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 5 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
Preservation Code:							N		
B-22 (2')	4/19/23	8:45	G	Solid			X		
B-22 (10')		8:50		Solid			X		
B-23 (2')		11:30		Solid			X		
B-23 (10')		11:45		Solid			X		
FD-1	—	—		Solid			X		
FD-2	—	—		Solid			X		
Equipment Blank	4/18/23	8:00	G	~~Solid~~ W			X		
Equipment Blank #2	4/19/23	7:45	G	~~Solid~~ W			X		
Field Blank	4/18/23	7:30	G	Water			X		
				Water					
				Water					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Joe Hahn	4/20/23-13:00	SWI YEE DCK		4/21/23 935	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 2133173
Cooler Temperature(s) °C and Other Remarks: 4.2

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Shannon & Wilson, Inc

Job Number: 500-232605-1

Login Number: 232605
List Number: 2
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento
List Creation: 04/21/23 04:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	2133173
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

500-232605 Field Sheet

Tracking # : 6374 2028 6074

Job: _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: 110 Corr. Factor: (+ / -) _____ °C

Ice ____ Wet ____ Gel ____ Other ____

Cooler Custody Seal: 2133173

Cooler ID: _____

Temp Observed: 4.2 °C Corrected: 4.2 °C

From: Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: JF Date: 4/21/23

Unpacking/Labeling The Samples	Yes	No	NA
COC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Containers are not broken or leaking?	☑	☐	☐
Sample custody seal?	☐	☐	☑
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Is the Field Sampler's name on COC?	☑	☐	☐
Samples require splitting/compositing?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: SO Date: 4/21/23

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☐	☐	☑
Log Release checked in TALS?	☐	☐	☑

Initials: SO Date: 4/21/23

WP3. 2&C

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-232605-1	B-1 (2.5')	78	75	80	79	76	79	74	71
500-232605-2	B-1 (13')	52	81	88	90	89	93	91	84
500-232605-3	B-2 (3')	65	66	68	67	68	65	67	63
500-232605-4	B-2 (12')	86	86	87	90	87	90	82	80
500-232605-5	B-3 (2.5')	69	68	72	77	68	65	62	72
500-232605-6	B-3 (13')	84	87	89	86	90	88	84	79
500-232605-7	B-4 (3')	67	68	70	70	69	75	70	64
500-232605-8	B-4 (12')	79	84	86	82	84	83	81	74
500-232605-9	B-5 (3')	64	68	71	70	70	72	70	63
500-232605-10	B-5 (13')	88	88	93	90	88	95	89	82
500-232605-11	B-6 (3')	76	79	83	78	82	83	76	74
500-232605-12	B-6 (13')	84	86	87	86	89	93	83	73
500-232605-13	B-7 (2')	71	69	73	72	71	71	71	64
500-232605-13 MS	B-7 (2')	74	75	76	76	73	77	69	69
500-232605-13 MSD	B-7 (2')	70	69	71	68	68	70	68	68
500-232605-14	B-7 (13.5')	91	88	89	86	89	93	90	81
500-232605-15	B-8 (3')	78	79	77	81	77	82	75	70
500-232605-16	B-8 (8')	95	90	99	92	90	101	94	88
500-232605-17	B-9 (3')	129					134	134	132
500-232605-17 - DL	B-9 (3')		80	70	74	73			
500-232605-18	B-9 (13')	87	84	91	90	91	95	90	83
500-232605-19	B-10 (3')	125	115		78		123	129	108
500-232605-19 - DL	B-10 (3')			72		81			
500-232605-20	B-10 (13')	96	94	97	88	93	104	94	91
500-232605-20 - DL	B-10 (13')								
500-232605-21	B-10 (17')	95	88	94	88	88	97	92	83
500-232605-22	B-11 (3')	69	67	74	69	70	72	70	69
LCS 320-669860/2-A	Lab Control Sample	89	92	95	90	93	94	89	84
LCS 320-669862/2-A	Lab Control Sample	89	88	91	90	90	92	88	80
MB 320-669860/1-A	Method Blank	84	98	74	98	88	87	91	84
MB 320-669862/1-A	Method Blank	94	107	90	91	91	91	90	89

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-232605-1	B-1 (2.5')	77	52	70	80	79	78	56	62
500-232605-2	B-1 (13')	85	81	79	87	92	93	85	86
500-232605-3	B-2 (3')	64	31	65	70	67	64	40	48
500-232605-4	B-2 (12')	85	78	78	86	82	86	79	80
500-232605-5	B-3 (2.5')	70	30	92	84	70	62	45	54
500-232605-6	B-3 (13')	82	84	79	87	94	88	86	79
500-232605-7	B-4 (3')	65	37	65	70	73	68	46	49
500-232605-8	B-4 (12')	74	75	70	79	82	79	77	75
500-232605-9	B-5 (3')	66	41	66	69	71	65	42	46
500-232605-10	B-5 (13')	86	86	83	87	93	91	85	88
500-232605-11	B-6 (3')	78	68	72	73	78	82	70	73
500-232605-12	B-6 (13')	85	80	77	85	90	90	81	77
500-232605-13	B-7 (2')	66	52	67	72	75	72	51	56
500-232605-13 MS	B-7 (2')	74	51	74	79	83	76	48	53
500-232605-13 MSD	B-7 (2')	68	44	66	71	72	70	47	47

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Job ID: 500-232605-1
Project/Site: Dane County PFAS

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Solid
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-232605-14	B-7 (13.5')	85	83	85	90	98	89	89	87
500-232605-15	B-8 (3')	74	64	72	80	82	80	68	70
500-232605-16	B-8 (8')	88	90	83	96	100	101	100	95
500-232605-17	B-9 (3')	130	123			139	138	145	145
500-232605-17 - DL	B-9 (3')			76	94				
500-232605-18	B-9 (13')	89	86	79	86	94	97	92	98
500-232605-19	B-10 (3')	116	120	111		124	134	119	122
500-232605-19 - DL	B-10 (3')				70	70			
500-232605-20	B-10 (13')	91	94	93		107	105	99	101
500-232605-20 - DL	B-10 (13')				77				
500-232605-21	B-10 (17')	91	89	86	97	102	99	101	95
500-232605-22	B-11 (3')	62	37	71	81	82	75	52	58
LCS 320-669860/2-A	Lab Control Sample	86	81	86	97	97	94	82	87
LCS 320-669862/2-A	Lab Control Sample	81	86	86	93	101	92	88	94
MB 320-669860/1-A	Method Blank	84	83	92	75	89	91	87	94
MB 320-669862/1-A	Method Blank	89	94	106	81	95	99	97	98

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-232605-1	B-1 (2.5')	69	71	68	68	62	68	64	86
500-232605-2	B-1 (13')	92	87	77	70	74	78	78	84
500-232605-3	B-2 (3')	64	63	65	65	57	59	62	74
500-232605-4	B-2 (12')	73	72	71	73	71	73	85	84
500-232605-5	B-3 (2.5')	70	74	80	76	59	66	56	76
500-232605-6	B-3 (13')	85	79	72	70	73	78	80	84
500-232605-7	B-4 (3')	69	68	64	68	53	58	62	68
500-232605-8	B-4 (12')	78	70	65	64	68	66	74	78
500-232605-9	B-5 (3')	68	69	71	70	53	52	66	71
500-232605-10	B-5 (13')	83	82	75	75	80	72	83	85
500-232605-11	B-6 (3')	75	73	67	68	61	60	64	78
500-232605-12	B-6 (13')	81	78	71	71	71	69	76	79
500-232605-13	B-7 (2')	74	73	70	68	57	62	62	65
500-232605-13 MS	B-7 (2')	75	80	73	75	57	59	58	69
500-232605-13 MSD	B-7 (2')	72	69	67	66	60	57	58	65
500-232605-14	B-7 (13.5')	83	83	68	73	68	75	90	72
500-232605-15	B-8 (3')	78	77	73	70	63	63	70	68
500-232605-16	B-8 (8')	91	84	76	79	78	79	123	73
500-232605-17	B-9 (3')	120	123	101	103	100		140	105
500-232605-17 - DL	B-9 (3')						67		
500-232605-18	B-9 (13')	91	85	76	78	67	73	81	71
500-232605-19	B-10 (3')	128	119	103	104	99		108	95
500-232605-19 - DL	B-10 (3')						64		
500-232605-20	B-10 (13')	93	94	81	82	80	75	80	84
500-232605-20 - DL	B-10 (13')								
500-232605-21	B-10 (17')	90	85	77	76	78	88	90	71
500-232605-22	B-11 (3')	75	66	69	67	60	62	68	60
LCS 320-669860/2-A	Lab Control Sample	83	79	75	74	78	85	91	92
LCS 320-669862/2-A	Lab Control Sample	85	79	72	74	77	83	95	68
MB 320-669860/1-A	Method Blank	86	89	83	79	93	77	100	89
MB 320-669862/1-A	Method Blank	90	92	87	86	82	85	97	92

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	M102FTS (25-150)								
500-232605-1	B-1 (2.5')	59								
500-232605-2	B-1 (13')	70								
500-232605-3	B-2 (3')	50								
500-232605-4	B-2 (12')	69								
500-232605-5	B-3 (2.5')	47								
500-232605-6	B-3 (13')	65								
500-232605-7	B-4 (3')	52								
500-232605-8	B-4 (12')	56								
500-232605-9	B-5 (3')	51								
500-232605-10	B-5 (13')	68								
500-232605-11	B-6 (3')	55								
500-232605-12	B-6 (13')	60								
500-232605-13	B-7 (2')	52								
500-232605-13 MS	B-7 (2')	52								
500-232605-13 MSD	B-7 (2')	48								
500-232605-14	B-7 (13.5')	69								
500-232605-15	B-8 (3')	54								
500-232605-16	B-8 (8')	72								
500-232605-17	B-9 (3')	134								
500-232605-17 - DL	B-9 (3')									
500-232605-18	B-9 (13')	65								
500-232605-19	B-10 (3')	83								
500-232605-19 - DL	B-10 (3')									
500-232605-20	B-10 (13')	67								
500-232605-20 - DL	B-10 (13')									
500-232605-21	B-10 (17')	74								
500-232605-22	B-11 (3')	52								
LCS 320-669860/2-A	Lab Control Sample	75								
LCS 320-669862/2-A	Lab Control Sample	71								
MB 320-669860/1-A	Method Blank	72								
MB 320-669862/1-A	Method Blank	81								

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-1

dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Joey Hahn
Shannon & Wilson, Inc
5325 Wall Street, Suite 2355
Madison, Wisconsin 53718

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JOB DESCRIPTION

Dane County PFAS

JOB NUMBER

500-232605-2

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

myEOL

Eurofins Chicago

Job Notes

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Authorization

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Authorized for release by
Sandie Fredrick, Project Manager II
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(920)261-1660

Table of Contents

Job ID: 500-232605-2

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-232605-2

Receipt
The samples were received on 4/21/2023 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2º C.

LCMS
Method 537 (modified): Results for sample B-11 (10') (500-232605-23) was reported from the analysis of a diluted extract due to high concentration of the target analyte. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

Method 537 (modified): The matrix spike (MS) recoveries for preparation batch 320-669862 and analytical batch 320-670113 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 537 (modified): Results for sample B-12 (3') (500-232605-24) was reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte. B-14 (10') (500-232605-29)

Method 537 (modified): The matrix spike duplicate (MSD) recoveries for preparation batch 320-673237 and analytical batch 320-673652 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 537 (modified): Due to the high concentration of Perfluorooctanesulfonic acid (PFOS), the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 320-673237 and analytical batch 320-673652 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte. B-19 (5.5') (500-232605-40) and B-21 (9') (500-232605-44)

Method 537 (modified): Results for samples B-13 (3') (500-232605-26), B-13 (10') (500-232605-27), B-14 (2') (500-232605-28), B-14 (10') (500-232605-29), B-15 (10') (500-232605-31), B-17 (9') (500-232605-35), B-18 (3') (500-232605-36), B-18 (8') (500-232605-37) and B-18 (16') (500-232605-38) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

Method 537 (modified): Results for samples B-19 (5.5') (500-232605-40), B-23 (2') (500-232605-47) and FD-1 (500-232605-54) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

Method 537 (modified): Due to the high concentration of one or more analytes, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 320-669862 and analytical batch 320-670113 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 537 (modified): The transition mass ratio for the Perfluorooctanesulfonic acid (PFOS) was below the established ratio limits. This is indicated by an "R" in the raw data. The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte. (500-233218-A-3-B MS) and (500-233218-A-3-C MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 500-232605-2 (Continued)

Laboratory: Eurofins Chicago (Continued)

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-669872.
Method:3535_PFC_28D
Matrix: Aqueous

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-11 (10') — Lab Sample ID: 500-232605-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.14	J	0.21	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.23		0.21	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.26		0.21	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.14	J	0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.2		0.21	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.1		0.21	0.023	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.15	J	0.21	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.076	J	0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.092	J	0.21	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.9		0.21	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.22		0.21	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	0.41		0.21	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	54		1.0	0.22	ug/Kg	5	☼	537 (modified)	Total/NA

Client Sample ID: B-12 (3') — Lab Sample ID: 500-232605-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.4		0.21	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	8.0		0.21	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	7.4		0.21	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	5.8		0.21	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	4.7		0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.35		0.21	0.028	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	19		1.0	0.16	ug/Kg	5	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	28		1.0	0.28	ug/Kg	5	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	17		1.0	0.15	ug/Kg	5	☼	537 (modified)	Total/NA

Client Sample ID: B-12 (11') — Lab Sample ID: 500-232605-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.6		0.20	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	7.8	F1	0.20	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	19		0.20	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.9		0.20	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	8.0	F1	0.20	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.2		0.20	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	3.8		0.20	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	15		0.20	0.029	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-13 (3') — Lab Sample ID: 500-232605-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	17		0.22	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.1		0.22	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.49		0.22	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	0.037	J	0.22	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	1.4		0.22	0.055	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-13 (3') (Continued) — Lab Sample ID: 500-232605-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonamide (FOSA)	8.8		0.22	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
4:2 FTS	1.7		0.22	0.057	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	0.94		0.22	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	100		11	2.3	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	250		11	1.7	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	36		11	2.1	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	700		11	3.0	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS) - DL	40		11	2.1	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS) - DL	45		11	2.1	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	420		11	1.6	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	44		11	2.4	ug/Kg	50	☼	537 (modified)	Total/NA
6:2 FTS - DL	110		11	1.5	ug/Kg	50	☼	537 (modified)	Total/NA

Client Sample ID: B-13 (10') — Lab Sample ID: 500-232605-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	6.2		0.22	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	15		0.22	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.066	J	0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.17	J	0.22	0.058	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.0		0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.12	J	0.22	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.24		0.22	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.23		0.22	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
4:2 FTS	0.38		0.22	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	27		1.1	0.17	ug/Kg	5	☼	537 (modified)	Total/NA

Client Sample ID: B-14 (2') — Lab Sample ID: 500-232605-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.9		0.21	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	6.9		0.21	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	12		0.21	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	14		0.21	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	7.3		0.21	0.023	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.61		0.21	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.25		0.21	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.2		0.21	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	3.9		0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	1.5		0.21	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanesulfonic acid (PFNS)	0.14	J	0.21	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.11	J	0.21	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.47		0.21	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.34		0.21	0.029	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	2.7		0.21	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	41		2.1	0.56	ug/Kg	10	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-14 (2') (Continued) — Lab Sample ID: 500-232605-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS) - DL	100		2.1	0.31	ug/Kg	10	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	110		2.1	0.45	ug/Kg	10	☼	537 (modified)	Total/NA

Client Sample ID: B-14 (10') — Lab Sample ID: 500-232605-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	4.1		0.23	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	13		0.23	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.41		0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.081	J	0.23	0.061	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.4		0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.23		0.23	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.066	J I	0.23	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
4:2 FTS	0.15	J	0.23	0.059	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	28		1.2	0.18	ug/Kg	5	☼	537 (modified)	Total/NA

Client Sample ID: B-15 (2') — Lab Sample ID: 500-232605-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.053	J	0.22	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.17	J	0.22	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.62		0.22	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.10	J	0.22	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.18	J	0.22	0.058	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.062	J	0.22	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.057	J	0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.61		0.22	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.063	J	0.22	0.047	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-15 (10') — Lab Sample ID: 500-232605-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.75		0.21	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.3		0.21	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	6.6		0.21	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.5		0.21	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	15		0.21	0.057	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.17	J	0.21	0.024	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.9		0.21	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	3.7		0.21	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.55		0.21	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2		0.21	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	5.5		0.21	0.029	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	46		1.1	0.16	ug/Kg	5	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-16 (2') — Lab Sample ID: 500-232605-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	0.055	J	0.22	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.39		0.22	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.043	J	0.22	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.27		0.22	0.059	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.35		0.22	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.15	J	0.22	0.048	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-16 (10') — Lab Sample ID: 500-232605-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.13	J	0.24	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.23	J	0.24	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.95		0.24	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.17	J	0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.6		0.24	0.062	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.39		0.24	0.026	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.062	J	0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.091	J	0.24	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	7.4		0.24	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.21	J	0.24	0.058	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	11		0.24	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.46		0.24	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.070	J	0.24	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	0.57		0.24	0.041	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-17 (2') — Lab Sample ID: 500-232605-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.12	J	0.24	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.22	J	0.24	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.76		0.24	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.14	J	0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.1		0.24	0.064	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.077	J	0.24	0.027	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.11	J	0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.14	J	0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.2		0.24	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.5		0.24	0.052	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-17 (9') — Lab Sample ID: 500-232605-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.25		0.21	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.85		0.21	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.5		0.21	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.77		0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	14		0.21	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.96		0.21	0.023	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.60		0.21	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.10	J	0.21	0.043	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: B-17 (9') (Continued) — Lab Sample ID: 500-232605-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorododecanoic acid (PFDoA)	0.054	J	0.21	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.29		0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.37		0.21	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	3.1		0.21	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanesulfonic acid (PFNS)	0.30		0.21	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.17	J	0.21	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
NMeFOSA	0.084	J	0.21	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
NMeFOSAA	0.075	J	0.21	0.024	ug/Kg	1	☼	537 (modified)	Total/NA
NEtFOSAA	0.050	J	0.21	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	2.3		0.21	0.028	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	52		4.1	0.60	ug/Kg	20	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	280		4.1	0.89	ug/Kg	20	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA) - DL	49		4.1	0.68	ug/Kg	20	☼	537 (modified)	Total/NA
8:2 FTS - DL	28		4.1	0.72	ug/Kg	20	☼	537 (modified)	Total/NA

Client Sample ID: B-18 (3') — Lab Sample ID: 500-232605-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.4		0.22	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.9		0.22	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.0		0.22	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.80		0.22	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.3		0.22	0.059	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.2		0.22	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.83		0.22	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	1.5		0.22	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	0.083	J	0.22	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.051	J	0.22	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.050	J	0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.2		0.22	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.15	J	0.22	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanesulfonic acid (PFNS)	0.37		0.22	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.44		0.22	0.058	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanesulfonic acid (PFDoS)	0.13	J	0.22	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.67		0.22	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.16	J	0.22	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	1.5		0.22	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	73		2.2	0.48	ug/Kg	10	☼	537 (modified)	Total/NA

Client Sample ID: B-18 (8') — Lab Sample ID: 500-232605-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.13	J	0.21	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.31		0.21	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.54		0.21	0.032	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-18 (8') (Continued) — Lab Sample ID: 500-232605-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.75		0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.6		0.21	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	10		0.21	0.023	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.35		0.21	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.15	J	0.21	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	11		0.21	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	3.2		0.21	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	460		10	2.2	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluorononanesulfonic acid (PFNS)	0.30		0.21	0.030	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	1.4		0.21	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
NMeFOSA	0.056	J	0.21	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.65		0.21	0.028	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	45		10	1.8	ug/Kg	50	☼	537 (modified)	Total/NA

Client Sample ID: B-18 (16') — Lab Sample ID: 500-232605-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.66		0.23	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.8		0.23	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	4.5		0.23	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.1		0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.25		0.23	0.061	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.36		0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.35		0.23	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.27		0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.26		0.23	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.3		0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.17	J	0.23	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.21	J	0.23	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	160		2.3	0.50	ug/Kg	10	☼	537 (modified)	Total/NA
8:2 FTS - DL	29		2.3	0.40	ug/Kg	10	☼	537 (modified)	Total/NA

Client Sample ID: B-19 (2') — Lab Sample ID: 500-232605-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.087	J	0.23	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.26		0.23	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.58		0.23	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.38		0.23	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.2		0.23	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.22	J	0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.054	J	0.23	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.089	J	0.23	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.1	F1	0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.096	J	0.23	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	11		0.23	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.090	J	0.23	0.038	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-19 (2') (Continued) — Lab Sample ID: 500-232605-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
8:2 FTS	0.86		0.23	0.040	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-19 (5.5') — Lab Sample ID: 500-232605-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.054	J	0.23	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.072	J	0.23	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.12	J I	0.23	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.21	J	0.23	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.57		0.23	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.28		0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.16	J	0.23	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4		0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanesulfonic acid (PFNS)	0.11	J	0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.38		0.23	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.053	J	0.23	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	18		0.23	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	29		1.1	0.24	ug/Kg	5	☼	537 (modified)	Total/NA

Client Sample ID: B-20 (3') — Lab Sample ID: 500-232605-41

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.25		0.23	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.14	J	0.23	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.31		0.23	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.085	J	0.23	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.39		0.23	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.10	J	0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.87		0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.5		0.23	0.049	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-20 (10') — Lab Sample ID: 500-232605-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.064	J	0.22	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.31		0.22	0.057	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.69		0.22	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.88		0.22	0.046	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-21 (2') — Lab Sample ID: 500-232605-43

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.59		0.26	0.059	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.4		0.26	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.3		0.26	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.70		0.26	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.3		0.26	0.068	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.6		0.26	0.028	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.13	J	0.26	0.061	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.083	J	0.26	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.12	J	0.26	0.047	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-21 (2') (Continued) — Lab Sample ID: 500-232605-43

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	11		0.26	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.24	J	0.26	0.063	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	18		0.26	0.055	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-21 (9') — Lab Sample ID: 500-232605-44

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	0.058	J	0.23	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.098	J I	0.23	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.17	J	0.23	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.090	J	0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.48		0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.88		0.23	0.049	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-22 (2') — Lab Sample ID: 500-232605-45

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.6		0.24	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	10		0.24	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	12		0.24	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.1		0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	1.8		0.24	0.065	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.043	J	0.24	0.027	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.0		0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	3.6		0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	6.6		0.24	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.48		0.24	0.053	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-22 (10') — Lab Sample ID: 500-232605-46

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.0		0.24	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	16		0.24	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	12		0.24	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.77		0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.068	J	0.24	0.064	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.9		0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.39		0.24	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.27		0.24	0.035	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: B-23 (2') — Lab Sample ID: 500-232605-47

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.83		0.22	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.3		0.22	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	9.8		0.22	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	7.3		0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	16		0.22	0.024	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.9		0.22	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.45		0.22	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	0.055	J	0.22	0.033	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: B-23 (2') (Continued) — Lab Sample ID: 500-232605-47

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorotridecanoic acid (PFTrDA)	0.023	J	0.22	0.023	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.5		0.22	0.041	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	6.0		0.22	0.040	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	5.5		0.22	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanesulfonic acid (PFNS)	0.32		0.22	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.19	J	0.22	0.057	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanesulfonic acid (PFDoS)	0.082	J	0.22	0.051	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	1.0		0.22	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.088	J	0.22	0.029	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	0.17	J	0.22	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	45		11	2.9	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	240		11	1.6	ug/Kg	50	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	550		11	2.3	ug/Kg	50	☼	537 (modified)	Total/NA

Client Sample ID: B-23 (10') — Lab Sample ID: 500-232605-48

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.057	J	0.25	0.057	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.056	J	0.25	0.050	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: Equipment Blank — Lab Sample ID: 500-232605-51

No Detections.

Client Sample ID: Equipment Blank #2 — Lab Sample ID: 500-232605-52

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	0.50	J	1.8	0.50	ng/L	1		537 (modified)	Total/NA

Client Sample ID: Field Blank — Lab Sample ID: 500-232605-53

No Detections.

Client Sample ID: FD-1 — Lab Sample ID: 500-232605-54

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.47		0.20	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.8		0.20	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	10		0.20	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.8		0.20	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	3.4		0.20	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.8		0.20	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	4.1		0.20	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.074	J	0.20	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
6:2 FTS	0.67		0.20	0.028	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	27		1.0	0.15	ug/Kg	5	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: FD-2

Lab Sample ID: 500-232605-55

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.10	J	0.23	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.23		0.23	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.54		0.23	0.035	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.36		0.23	0.043	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.2		0.23	0.061	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.29		0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.091	J	0.23	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.7		0.23	0.033	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.12	J	0.23	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	8.4		0.23	0.049	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.061	J	0.23	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
8:2 FTS	0.39		0.23	0.040	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
D 2216	Percent Moisture	ASTM	EET SAC
3535	Solid-Phase Extraction (SPE)	SW846	EET SAC
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET SAC

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-232605-23	B-11 (10')	Solid	04/18/23 09:45	04/21/23 09:35
500-232605-24	B-12 (3')	Solid	04/18/23 10:20	04/21/23 09:35
500-232605-25	B-12 (11')	Solid	04/18/23 10:30	04/21/23 09:35
500-232605-26	B-13 (3')	Solid	04/18/23 10:55	04/21/23 09:35
500-232605-27	B-13 (10')	Solid	04/18/23 11:05	04/21/23 09:35
500-232605-28	B-14 (2')	Solid	04/18/23 11:15	04/21/23 09:35
500-232605-29	B-14 (10')	Solid	04/18/23 11:35	04/21/23 09:35
500-232605-30	B-15 (2')	Solid	04/18/23 12:45	04/21/23 09:35
500-232605-31	B-15 (10')	Solid	04/18/23 12:55	04/21/23 09:35
500-232605-32	B-16 (2')	Solid	04/18/23 13:30	04/21/23 09:35
500-232605-33	B-16 (10')	Solid	04/18/23 13:40	04/21/23 09:35
500-232605-34	B-17 (2')	Solid	04/18/23 13:45	04/21/23 09:35
500-232605-35	B-17 (9')	Solid	04/18/23 13:55	04/21/23 09:35
500-232605-36	B-18 (3')	Solid	04/18/23 14:05	04/21/23 09:35
500-232605-37	B-18 (8')	Solid	04/18/23 14:10	04/21/23 09:35
500-232605-38	B-18 (16')	Solid	04/18/23 14:15	04/21/23 09:35
500-232605-39	B-19 (2')	Solid	04/18/23 14:35	04/21/23 09:35
500-232605-40	B-19 (5.5')	Solid	04/18/23 14:45	04/21/23 09:35
500-232605-41	B-20 (3')	Solid	04/18/23 15:00	04/21/23 09:35
500-232605-42	B-20 (10')	Solid	04/18/23 15:20	04/21/23 09:35
500-232605-43	B-21 (2')	Solid	04/19/23 08:10	04/21/23 09:35
500-232605-44	B-21 (9')	Solid	04/19/23 08:20	04/21/23 09:35
500-232605-45	B-22 (2')	Solid	04/19/23 08:45	04/21/23 09:35
500-232605-46	B-22 (10')	Solid	04/19/23 08:50	04/21/23 09:35
500-232605-47	B-23 (2')	Solid	04/19/23 11:30	04/21/23 09:35
500-232605-48	B-23 (10')	Solid	04/19/23 11:45	04/21/23 09:35
500-232605-51	Equipment Blank	Water	04/18/23 08:00	04/21/23 09:35
500-232605-52	Equipment Blank #2	Water	04/19/23 07:45	04/21/23 09:35
500-232605-53	Field Blank	Water	04/18/23 07:30	04/21/23 09:35
500-232605-54	FD-1	Solid	04/18/23 00:00	04/21/23 09:35
500-232605-55	FD-2	Solid	04/18/23 00:00	04/21/23 09:35

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-11 (10')
Date Collected: 04/18/23 09:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-23
Matrix: Solid
Percent Solids: 90.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.14**	**J**	0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluoropentanoic acid (PFPeA)	**0.23**		0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorohexanoic acid (PFHxA)	**0.26**		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluoroheptanoic acid (PFHpA)	**0.14**	**J**	0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorooctanoic acid (PFOA)	**2.2**		0.21	0.055	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorononanoic acid (PFNA)	**1.1**		0.21	0.023	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorodecanoic acid (PFDA)	**0.15**	**J**	0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluoroundecanoic acid (PFUnA)	<0.043		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorobutanesulfonic acid (PFBS)	**0.076**	**J**	0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluoropentanesulfonic acid (PFPeS)	**0.092**	**J**	0.21	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorohexanesulfonic acid (PFHxS)	**4.9**		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.22**		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorodecanesulfonic acid (PFDS)	<0.054		0.21	0.054	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorododecanesulfonic acid (PFDoS)	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
Perfluorooctanesulfonamide (FOSA)	<0.034		0.21	0.034	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
NEtFOSA	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
NMeFOSA	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
NEtFOSAA	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
NMeFOSE	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
6:2 FTS	<0.028		0.21	0.028	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
8:2 FTS	**0.41**		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
HFPO-DA (GenX)	<0.042		0.21	0.042	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/26/23 01:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*92*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C5 PFPeA	*93*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C2 PFHxA	*97*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C4 PFHpA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C4 PFOA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C5 PFNA	*88*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C2 PFDA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C2 PFUnA	*86*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C2 PFDoA	*89*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C2 PFTeDA	*90*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
13C3 PFBS	*85*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*
18O2 PFHxS	*95*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:24*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-11 (10')
Date Collected: 04/18/23 09:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-23
Matrix: Solid
Percent Solids: 90.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	92		25 - 150	04/23/23 19:00	04/26/23 01:24	1
13C8 FOSA	94		10 - 150	04/23/23 19:00	04/26/23 01:24	1
d3-NMeFOSAA	92		25 - 150	04/23/23 19:00	04/26/23 01:24	1
d5-NEtFOSAA	89		25 - 150	04/23/23 19:00	04/26/23 01:24	1
d-N-MeFOSA-M	93		10 - 150	04/23/23 19:00	04/26/23 01:24	1
d-N-EtFOSA-M	88		10 - 150	04/23/23 19:00	04/26/23 01:24	1
d7-N-MeFOSE-M	78		10 - 150	04/23/23 19:00	04/26/23 01:24	1
d9-N-EtFOSE-M	79		10 - 150	04/23/23 19:00	04/26/23 01:24	1
M2-4:2 FTS	76		25 - 150	04/23/23 19:00	04/26/23 01:24	1
M2-6:2 FTS	77		25 - 150	04/23/23 19:00	04/26/23 01:24	1
M2-8:2 FTS	85		25 - 150	04/23/23 19:00	04/26/23 01:24	1
13C3 HFPO-DA	74		25 - 150	04/23/23 19:00	04/26/23 01:24	1
13C2 10:2 FTS	66		25 - 150	04/23/23 19:00	04/26/23 01:24	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	54		1.0	0.22	ug/Kg	☼	04/23/23 19:00	04/26/23 14:28	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	81		25 - 150	04/23/23 19:00	04/26/23 14:28	5

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-12 (3')

Date Collected: 04/18/23 10:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-24

Matrix: Solid
Percent Solids: 87.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.4**		0.21	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluoropentanoic acid (PFPeA)	**8.0**		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluoroheptanoic acid (PFHpA)	**7.4**		0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorononanoic acid (PFNA)	<0.023		0.21	0.023	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorodecanoic acid (PFDA)	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluoroundecanoic acid (PFUnA)	<0.044		0.21	0.044	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorotetradecanoic acid (PFTeA)	<0.039		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorobutanesulfonic acid (PFBS)	**5.8**		0.21	0.040	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluoropentanesulfonic acid (PFPeS)	**4.7**		0.21	0.039	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorooctanesulfonic acid (PFOS)	<0.045		0.21	0.045	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.21	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorodecanesulfonic acid (PFDS)	<0.054		0.21	0.054	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorododecanesulfonic acid (PFDoS)	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
Perfluorooctanesulfonamide (FOSA)	<0.035		0.21	0.035	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
NEtFOSA	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
NMeFOSA	<0.051		0.21	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
NEtFOSAA	<0.050		0.21	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
NMeFOSE	<0.049		0.21	0.049	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
6:2 FTS	**0.35**		0.21	0.028	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
8:2 FTS	<0.037		0.21	0.037	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.041		0.21	0.041	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
HFPO-DA (GenX)	<0.043		0.21	0.043	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
9Cl-PF3ONS	<0.037		0.21	0.037	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	04/23/23 19:00	04/26/23 01:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*78*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C5 PFPeA	*83*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C4 PFHpA	*77*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C5 PFNA	*86*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C2 PFDA	*81*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C2 PFUnA	*76*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C2 PFDoA	*69*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C2 PFTeDA	*63*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C3 PFBS	*75*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C4 PFOS	*82*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
13C8 FOSA	*87*		*10 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
d3-NMeFOSAA	*75*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
d5-NEtFOSAA	*77*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*
d-N-MeFOSA-M	*83*		*10 - 150*	*04/23/23 19:00*	*04/26/23 01:35*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-12 (3')
Date Collected: 04/18/23 10:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-24
Matrix: Solid
Percent Solids: 87.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d-N-EtFOSA-M	78		10 - 150	04/23/23 19:00	04/26/23 01:35	1
d7-N-MeFOSE-M	69		10 - 150	04/23/23 19:00	04/26/23 01:35	1
d9-N-EtFOSE-M	67		10 - 150	04/23/23 19:00	04/26/23 01:35	1
M2-4:2 FTS	62		25 - 150	04/23/23 19:00	04/26/23 01:35	1
M2-6:2 FTS	58		25 - 150	04/23/23 19:00	04/26/23 01:35	1
M2-8:2 FTS	73		25 - 150	04/23/23 19:00	04/26/23 01:35	1
13C3 HFPO-DA	65		25 - 150	04/23/23 19:00	04/26/23 01:35	1
13C2 10:2 FTS	51		25 - 150	04/23/23 19:00	04/26/23 01:35	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	19		1.0	0.16	ug/Kg	☼	04/23/23 19:00	05/03/23 00:38	5
Perfluorooctanoic acid (PFOA)	28		1.0	0.28	ug/Kg	☼	04/23/23 19:00	05/03/23 00:38	5
Perfluorohexanesulfonic acid (PFHxS)	17		1.0	0.15	ug/Kg	☼	04/23/23 19:00	05/03/23 00:38	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	95		25 - 150	04/23/23 19:00	05/03/23 00:38	5
13C4 PFOA	82		25 - 150	04/23/23 19:00	05/03/23 00:38	5
18O2 PFHxS	93		25 - 150	04/23/23 19:00	05/03/23 00:38	5

Client Sample ID: B-12 (11')
Date Collected: 04/18/23 10:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-25
Matrix: Solid
Percent Solids: 94.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.6**		0.20	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluoropentanoic acid (PFPeA)	**7.8**	**F1**	0.20	0.041	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorohexanoic acid (PFHxA)	**19**		0.20	0.031	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluoroheptanoic acid (PFHpA)	**5.9**		0.20	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorooctanoic acid (PFOA)	**8.0**	**F1**	0.20	0.052	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorodecanoic acid (PFDA)	<0.047		0.20	0.047	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorobutanesulfonic acid (PFBS)	**3.2**		0.20	0.038	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluoropentanesulfonic acid (PFPeS)	**3.8**		0.20	0.037	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorohexanesulfonic acid (PFHxS)	**15**		0.20	0.029	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.048		0.20	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorodecanesulfonic acid (PFDS)	<0.051		0.20	0.051	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorododecanesulfonic acid (PFDoS)	<0.046		0.20	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
NEtFOSA	<0.046		0.20	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
NMeFOSA	<0.048		0.20	0.048	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
NEtFOSAA	<0.047		0.20	0.047	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
NMeFOSE	<0.046		0.20	0.046	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
4:2 FTS	<0.050		0.20	0.050	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg	☼	04/23/23 19:00	04/26/23 01:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C5 PFPeA	*89*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C2 PFHxA	*90*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C4 PFHpA	*87*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C4 PFOA	*96*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C5 PFNA	*99*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C2 PFDA	*92*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C2 PFUnA	*88*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C2 PFDoA	*89*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C2 PFTeDA	*87*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*
13C3 PFBS	*90*		*25 - 150*	*04/23/23 19:00*	*04/26/23 01:46*	*1*

Client Sample ID: B-12 (11')
Date Collected: 04/18/23 10:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-25
Matrix: Solid
Percent Solids: 94.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	95		25 - 150	04/23/23 19:00	04/26/23 01:46	1
13C4 PFOS	102		25 - 150	04/23/23 19:00	04/26/23 01:46	1
13C8 FOSA	103		10 - 150	04/23/23 19:00	04/26/23 01:46	1
d3-NMeFOSAA	96		25 - 150	04/23/23 19:00	04/26/23 01:46	1
d5-NEtFOSAA	102		25 - 150	04/23/23 19:00	04/26/23 01:46	1
d-N-MeFOSA-M	94		10 - 150	04/23/23 19:00	04/26/23 01:46	1
d-N-EtFOSA-M	88		10 - 150	04/23/23 19:00	04/26/23 01:46	1
d7-N-MeFOSE-M	79		10 - 150	04/23/23 19:00	04/26/23 01:46	1
d9-N-EtFOSE-M	79		10 - 150	04/23/23 19:00	04/26/23 01:46	1
M2-4:2 FTS	77		25 - 150	04/23/23 19:00	04/26/23 01:46	1
M2-6:2 FTS	78		25 - 150	04/23/23 19:00	04/26/23 01:46	1
M2-8:2 FTS	88		25 - 150	04/23/23 19:00	04/26/23 01:46	1
13C3 HFPO-DA	71		25 - 150	04/23/23 19:00	04/26/23 01:46	1
13C2 10:2 FTS	67		25 - 150	04/23/23 19:00	04/26/23 01:46	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-13 (3')
Date Collected: 04/18/23 10:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-26
Matrix: Solid
Percent Solids: 83.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**17**		0.22	0.052	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorononanoic acid (PFNA)	**1.1**		0.22	0.025	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorodecanoic acid (PFDA)	**0.49**		0.22	0.054	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.22	0.047	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorododecanoic acid (PFDoA)	**0.037**	**J**	0.22	0.034	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.22	0.024	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluoroheptanesulfonic acid (PFHpS)	**1.4**		0.22	0.055	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.058		0.22	0.058	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
Perfluorooctanesulfonamide (FOSA)	**8.8**		0.22	0.037	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
NEtFOSA	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
NMeFOSA	<0.055		0.22	0.055	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
NMeFOSAA	<0.026		0.22	0.026	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
NEtFOSAA	<0.054		0.22	0.054	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
NMeFOSE	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
4:2 FTS	**1.7**		0.22	0.057	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
8:2 FTS	**0.94**		0.22	0.039	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.22	0.044	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
HFPO-DA (GenX)	<0.046		0.22	0.046	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
9Cl-PF3ONS	<0.039		0.22	0.039	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1
11Cl-PF3OUdS	<0.035		0.22	0.035	ug/Kg	☼	05/09/23 05:07	05/12/23 18:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*135*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C5 PFNA	*119*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C2 PFDA	*122*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C2 PFUnA	*119*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C2 PFDoA	*107*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C2 PFTeDA	*112*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C4 PFOS	*124*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C8 FOSA	*120*		*10 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
d3-NMeFOSAA	*122*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
d5-NEtFOSAA	*126*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
d-N-MeFOSA-M	*92*		*10 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
d-N-EtFOSA-M	*88*		*10 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
d7-N-MeFOSE-M	*101*		*10 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
d9-N-EtFOSE-M	*108*		*10 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
M2-4:2 FTS	*62*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
M2-8:2 FTS	*84*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C3 HFPO-DA	*125*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*
13C2 10:2 FTS	*105*		*25 - 150*	*05/09/23 05:07*	*05/12/23 18:32*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-13 (3')
Date Collected: 04/18/23 10:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-26
Matrix: Solid
Percent Solids: 83.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	100		11	2.3	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50
Perfluorohexanoic acid (PFHxA)	250		11	1.7	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50
Perfluoroheptanoic acid (PFHpA)	36		11	2.1	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50
Perfluorooctanoic acid (PFOA)	700		11	3.0	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50
Perfluorobutanesulfonic acid (PFBS)	40		11	2.1	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50
Perfluoropentanesulfonic acid (PFPeS)	45		11	2.1	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50
Perfluorohexanesulfonic acid (PFHxS)	420		11	1.6	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50
Perfluorooctanesulfonic acid (PFOS)	44		11	2.4	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50
6:2 FTS	110		11	1.5	ug/Kg	☼	05/09/23 05:07	05/11/23 19:45	50

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFPeA	*66*		*25 - 150*	*05/09/23 05:07*	*05/11/23 19:45*	*50*
13C2 PFHxA	*75*		*25 - 150*	*05/09/23 05:07*	*05/11/23 19:45*	*50*
13C4 PFHpA	*75*		*25 - 150*	*05/09/23 05:07*	*05/11/23 19:45*	*50*
13C4 PFOA	*76*		*25 - 150*	*05/09/23 05:07*	*05/11/23 19:45*	*50*
13C3 PFBS	*65*		*25 - 150*	*05/09/23 05:07*	*05/11/23 19:45*	*50*
18O2 PFHxS	*76*		*25 - 150*	*05/09/23 05:07*	*05/11/23 19:45*	*50*
13C4 PFOS	*62*		*25 - 150*	*05/09/23 05:07*	*05/11/23 19:45*	*50*
M2-6:2 FTS	*51*		*25 - 150*	*05/09/23 05:07*	*05/11/23 19:45*	*50*

Client Sample ID: B-13 (10')
Date Collected: 04/18/23 11:05
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-27
Matrix: Solid
Percent Solids: 86.2

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**6.2**		0.22	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluoropentanoic acid (PFPeA)	**15**		0.22	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluoroheptanoic acid (PFHpA)	**0.066**	**J**	0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorooctanoic acid (PFOA)	**0.17**	**J**	0.22	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorodecanoic acid (PFDA)	<0.052		0.22	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluoroundecanoic acid (PFUnA)	<0.046		0.22	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorododecanoic acid (PFDoA)	<0.033		0.22	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.22	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorobutanesulfonic acid (PFBS)	**4.0**		0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluoropentanesulfonic acid (PFPeS)	**0.12**	**J**	0.22	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorohexanesulfonic acid (PFHxS)	**0.24**		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorooctanesulfonic acid (PFOS)	**0.23**		0.22	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorodecanesulfonic acid (PFDS)	<0.057		0.22	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorododecanesulfonic acid (PFDoS)	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
Perfluorooctanesulfonamide (FOSA)	<0.036		0.22	0.036	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
NEtFOSA	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
NMeFOSA	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
NEtFOSAA	<0.052		0.22	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
NMeFOSE	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
4:2 FTS	**0.38**		0.22	0.056	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
6:2 FTS	<0.029		0.22	0.029	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
8:2 FTS	<0.038		0.22	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		0.22	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
HFPO-DA (GenX)	<0.045		0.22	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 08:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C5 PFPeA	*103*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C4 PFHpA	*94*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C4 PFOA	*88*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C5 PFNA	*95*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C2 PFDA	*90*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C2 PFUnA	*91*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C2 PFDoA	*90*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C2 PFTeDA	*96*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
13C3 PFBS	*101*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*
18O2 PFHxS	*88*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:41*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-13 (10')
Date Collected: 04/18/23 11:05
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-27
Matrix: Solid
Percent Solids: 86.2

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	92		25 - 150	05/09/23 05:07	05/11/23 08:41	1
13C8 FOSA	106		10 - 150	05/09/23 05:07	05/11/23 08:41	1
d3-NMeFOSAA	100		25 - 150	05/09/23 05:07	05/11/23 08:41	1
d5-NEtFOSAA	102		25 - 150	05/09/23 05:07	05/11/23 08:41	1
d-N-MeFOSA-M	80		10 - 150	05/09/23 05:07	05/11/23 08:41	1
d-N-EtFOSA-M	81		10 - 150	05/09/23 05:07	05/11/23 08:41	1
d7-N-MeFOSE-M	89		10 - 150	05/09/23 05:07	05/11/23 08:41	1
d9-N-EtFOSE-M	91		10 - 150	05/09/23 05:07	05/11/23 08:41	1
M2-4:2 FTS	62		25 - 150	05/09/23 05:07	05/11/23 08:41	1
M2-6:2 FTS	59		25 - 150	05/09/23 05:07	05/11/23 08:41	1
M2-8:2 FTS	65		25 - 150	05/09/23 05:07	05/11/23 08:41	1
13C3 HFPO-DA	91		25 - 150	05/09/23 05:07	05/11/23 08:41	1
13C2 10:2 FTS	73		25 - 150	05/09/23 05:07	05/11/23 08:41	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	27		1.1	0.17	ug/Kg	☼	05/09/23 05:07	05/11/23 18:13	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	101		25 - 150	05/09/23 05:07	05/11/23 18:13	5

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-14 (2')
Date Collected: 04/18/23 11:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-28
Matrix: Solid
Percent Solids: 87.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.9**		0.21	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluoropentanoic acid (PFPeA)	**6.9**		0.21	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorohexanoic acid (PFHxA)	**12**		0.21	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluoroheptanoic acid (PFHpA)	**14**		0.21	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorononanoic acid (PFNA)	**7.3**		0.21	0.023	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorodecanoic acid (PFDA)	**0.61**		0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluoroundecanoic acid (PFUnA)	**0.25**		0.21	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.21	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorotetradecanoic acid (PFTeA)	<0.039		0.21	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorobutanesulfonic acid (PFBS)	**2.2**		0.21	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluoropentanesulfonic acid (PFPeS)	**3.9**		0.21	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluoroheptanesulfonic acid (PFHpS)	**1.5**		0.21	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorononanesulfonic acid (PFNS)	**0.14**	**J**	0.21	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorodecanesulfonic acid (PFDS)	**0.11**	**J**	0.21	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorododecanesulfonic acid (PFDoS)	<0.050		0.21	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
Perfluorooctanesulfonamide (FOSA)	**0.47**		0.21	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
NEtFOSA	<0.050		0.21	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
NMeFOSA	<0.052		0.21	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
NEtFOSAA	<0.051		0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
NMeFOSE	<0.050		0.21	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
NEtFOSE	<0.030		0.21	0.030	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
4:2 FTS	<0.054		0.21	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
6:2 FTS	**0.34**		0.21	0.029	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
8:2 FTS	**2.7**		0.21	0.037	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.041		0.21	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
HFPO-DA (GenX)	<0.043		0.21	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
9Cl-PF3ONS	<0.037		0.21	0.037	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1
11Cl-PF3OUdS	<0.033		0.21	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 08:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C5 PFPeA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C2 PFHxA	*95*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C4 PFHpA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C5 PFNA	*89*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C2 PFDA	*88*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C2 PFUnA	*88*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C2 PFDoA	*82*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C2 PFTeDA	*88*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C3 PFBS	*92*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*
13C4 PFOS	*103*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:51*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-14 (2')
Date Collected: 04/18/23 11:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-28
Matrix: Solid
Percent Solids: 87.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	96		10 - 150	05/09/23 05:07	05/11/23 08:51	1
d3-NMeFOSAA	108		25 - 150	05/09/23 05:07	05/11/23 08:51	1
d5-NEtFOSAA	108		25 - 150	05/09/23 05:07	05/11/23 08:51	1
d-N-MeFOSA-M	79		10 - 150	05/09/23 05:07	05/11/23 08:51	1
d-N-EtFOSA-M	77		10 - 150	05/09/23 05:07	05/11/23 08:51	1
d7-N-MeFOSE-M	80		10 - 150	05/09/23 05:07	05/11/23 08:51	1
d9-N-EtFOSE-M	82		10 - 150	05/09/23 05:07	05/11/23 08:51	1
M2-4:2 FTS	60		25 - 150	05/09/23 05:07	05/11/23 08:51	1
M2-6:2 FTS	57		25 - 150	05/09/23 05:07	05/11/23 08:51	1
M2-8:2 FTS	73		25 - 150	05/09/23 05:07	05/11/23 08:51	1
13C3 HFPO-DA	87		25 - 150	05/09/23 05:07	05/11/23 08:51	1
13C2 10:2 FTS	71		25 - 150	05/09/23 05:07	05/11/23 08:51	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	41		2.1	0.56	ug/Kg	☼	05/09/23 05:07	05/11/23 19:04	10
Perfluorohexanesulfonic acid (PFHxS)	100		2.1	0.31	ug/Kg	☼	05/09/23 05:07	05/11/23 19:04	10
Perfluorooctanesulfonic acid (PFOS)	110		2.1	0.45	ug/Kg	☼	05/09/23 05:07	05/11/23 19:04	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	101		25 - 150	05/09/23 05:07	05/11/23 19:04	10
18O2 PFHxS	99		25 - 150	05/09/23 05:07	05/11/23 19:04	10
13C4 PFOS	104		25 - 150	05/09/23 05:07	05/11/23 19:04	10

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-14 (10')
Date Collected: 04/18/23 11:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-29
Matrix: Solid
Percent Solids: 85.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**4.1**		0.23	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluoropentanoic acid (PFPeA)	**13**		0.23	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluoroheptanoic acid (PFHpA)	**0.41**		0.23	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorooctanoic acid (PFOA)	**0.081**	**J**	0.23	0.061	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorononanoic acid (PFNA)	<0.026		0.23	0.026	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorobutanesulfonic acid (PFBS)	**4.4**		0.23	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluoropentanesulfonic acid (PFPeS)	**0.23**		0.23	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorohexanesulfonic acid (PFHxS)	**0.066**	**J I**	0.23	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorooctanesulfonic acid (PFOS)	<0.050		0.23	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorodecanesulfonic acid (PFDS)	<0.060		0.23	0.060	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
Perfluorooctanesulfonamide (FOSA)	<0.038		0.23	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
NEtFOSA	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
NMeFOSE	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
4:2 FTS	**0.15**	**J**	0.23	0.059	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
HFPO-DA (GenX)	<0.048		0.23	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	05/09/23 05:07	05/11/23 09:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*108*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C5 PFPeA	*110*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C4 PFHpA	*106*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C4 PFOA	*101*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C5 PFNA	*105*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C2 PFDA	*106*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C2 PFUnA	*104*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C2 PFDoA	*98*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C2 PFTeDA	*109*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C3 PFBS	*112*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
18O2 PFHxS	*99*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*
13C4 PFOS	*105*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:01*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-14 (10')
Date Collected: 04/18/23 11:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-29
Matrix: Solid
Percent Solids: 85.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	114		10 - 150	05/09/23 05:07	05/11/23 09:01	1
d3-NMeFOSAA	115		25 - 150	05/09/23 05:07	05/11/23 09:01	1
d5-NEtFOSAA	123		25 - 150	05/09/23 05:07	05/11/23 09:01	1
d-N-MeFOSA-M	99		10 - 150	05/09/23 05:07	05/11/23 09:01	1
d-N-EtFOSA-M	93		10 - 150	05/09/23 05:07	05/11/23 09:01	1
d7-N-MeFOSE-M	97		10 - 150	05/09/23 05:07	05/11/23 09:01	1
d9-N-EtFOSE-M	97		10 - 150	05/09/23 05:07	05/11/23 09:01	1
M2-4:2 FTS	72		25 - 150	05/09/23 05:07	05/11/23 09:01	1
M2-6:2 FTS	67		25 - 150	05/09/23 05:07	05/11/23 09:01	1
M2-8:2 FTS	74		25 - 150	05/09/23 05:07	05/11/23 09:01	1
13C3 HFPO-DA	100		25 - 150	05/09/23 05:07	05/11/23 09:01	1
13C2 10:2 FTS	87		25 - 150	05/09/23 05:07	05/11/23 09:01	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	28		1.2	0.18	ug/Kg	☼	05/09/23 05:07	05/11/23 18:23	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFHxA	111		25 - 150	05/09/23 05:07	05/11/23 18:23	5

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-15 (2')

Date Collected: 04/18/23 12:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-30

Matrix: Solid
Percent Solids: 82.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.053**	**J**	0.22	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluoropentanoic acid (PFPeA)	**0.17**	**J**	0.22	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorohexanoic acid (PFHxA)	**0.62**		0.22	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluoroheptanoic acid (PFHpA)	**0.10**	**J**	0.22	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorooctanoic acid (PFOA)	**0.18**	**J**	0.22	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorodecanoic acid (PFDA)	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluoroundecanoic acid (PFUnA)	<0.046		0.22	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorododecanoic acid (PFDoA)	<0.033		0.22	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorobutanesulfonic acid (PFBS)	**0.062**	**J**	0.22	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluoropentanesulfonic acid (PFPeS)	**0.057**	**J**	0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorohexanesulfonic acid (PFHxS)	**0.61**		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.054		0.22	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorooctanesulfonic acid (PFOS)	**0.063**	**J**	0.22	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorodecanesulfonic acid (PFDS)	<0.057		0.22	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorododecanesulfonic acid (PFDoS)	<0.052		0.22	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
Perfluorooctanesulfonamide (FOSA)	<0.036		0.22	0.036	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
NEtFOSA	<0.052		0.22	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
NMeFOSA	<0.054		0.22	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
NEtFOSAA	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
NMeFOSE	<0.052		0.22	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
4:2 FTS	<0.056		0.22	0.056	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
6:2 FTS	<0.030		0.22	0.030	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
8:2 FTS	<0.039		0.22	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		0.22	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
HFPO-DA (GenX)	<0.045		0.22	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
9Cl-PF3ONS	<0.039		0.22	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 09:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*106*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C5 PFPeA	*103*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C2 PFHxA	*102*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C4 PFHpA	*113*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C4 PFOA	*104*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C5 PFNA	*108*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C2 PFDA	*106*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C2 PFUnA	*107*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C2 PFDoA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*
13C2 PFTeDA	*102*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:12*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-15 (2')
Date Collected: 04/18/23 12:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-30
Matrix: Solid
Percent Solids: 82.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	100		25 - 150	05/09/23 05:07	05/11/23 09:12	1
18O2 PFHxS	100		25 - 150	05/09/23 05:07	05/11/23 09:12	1
13C4 PFOS	107		25 - 150	05/09/23 05:07	05/11/23 09:12	1
13C8 FOSA	116		10 - 150	05/09/23 05:07	05/11/23 09:12	1
d3-NMeFOSAA	132		25 - 150	05/09/23 05:07	05/11/23 09:12	1
d5-NEtFOSAA	126		25 - 150	05/09/23 05:07	05/11/23 09:12	1
d-N-MeFOSA-M	83		10 - 150	05/09/23 05:07	05/11/23 09:12	1
d-N-EtFOSA-M	83		10 - 150	05/09/23 05:07	05/11/23 09:12	1
d7-N-MeFOSE-M	97		10 - 150	05/09/23 05:07	05/11/23 09:12	1
d9-N-EtFOSE-M	97		10 - 150	05/09/23 05:07	05/11/23 09:12	1
M2-4:2 FTS	67		25 - 150	05/09/23 05:07	05/11/23 09:12	1
M2-6:2 FTS	70		25 - 150	05/09/23 05:07	05/11/23 09:12	1
M2-8:2 FTS	73		25 - 150	05/09/23 05:07	05/11/23 09:12	1
13C3 HFPO-DA	104		25 - 150	05/09/23 05:07	05/11/23 09:12	1
13C2 10:2 FTS	87		25 - 150	05/09/23 05:07	05/11/23 09:12	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-15 (10')
Date Collected: 04/18/23 12:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-31
Matrix: Solid
Percent Solids: 85.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.75**		0.21	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluoropentanoic acid (PFPeA)	**4.3**		0.21	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorohexanoic acid (PFHxA)	**6.6**		0.21	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluoroheptanoic acid (PFHpA)	**5.5**		0.21	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorooctanoic acid (PFOA)	**15**		0.21	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorononanoic acid (PFNA)	**0.17**	**J**	0.21	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorodecanoic acid (PFDA)	<0.052		0.21	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluoroundecanoic acid (PFUnA)	<0.045		0.21	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.21	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.21	0.023	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.21	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorobutanesulfonic acid (PFBS)	**1.9**		0.21	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluoropentanesulfonic acid (PFPeS)	**3.7**		0.21	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.55**		0.21	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorooctanesulfonic acid (PFOS)	**2.2**		0.21	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.21	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorodecanesulfonic acid (PFDS)	<0.056		0.21	0.056	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorododecanesulfonic acid (PFDoS)	<0.051		0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
Perfluorooctanesulfonamide (FOSA)	<0.035		0.21	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
NEtFOSA	<0.051		0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
NMeFOSA	<0.053		0.21	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
NMeFOSAA	<0.025		0.21	0.025	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
NEtFOSAA	<0.052		0.21	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
NMeFOSE	<0.051		0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
NEtFOSE	<0.030		0.21	0.030	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
4:2 FTS	<0.055		0.21	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
6:2 FTS	**5.5**		0.21	0.029	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
8:2 FTS	<0.038		0.21	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.21	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
HFPO-DA (GenX)	<0.044		0.21	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
9Cl-PF3ONS	<0.038		0.21	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1
11Cl-PF3OUdS	<0.033		0.21	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 09:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*81*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C5 PFPeA	*84*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C2 PFHxA	*90*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C4 PFHpA	*92*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C4 PFOA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C5 PFNA	*84*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C2 PFDA	*80*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C2 PFUnA	*75*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C2 PFDoA	*73*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C2 PFTeDA	*86*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C3 PFBS	*84*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*
13C4 PFOS	*82*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:22*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-15 (10')
Date Collected: 04/18/23 12:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-31
Matrix: Solid
Percent Solids: 85.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	85		10 - 150	05/09/23 05:07	05/11/23 09:22	1
d3-NMeFOSAA	98		25 - 150	05/09/23 05:07	05/11/23 09:22	1
d5-NEtFOSAA	93		25 - 150	05/09/23 05:07	05/11/23 09:22	1
d-N-MeFOSA-M	69		10 - 150	05/09/23 05:07	05/11/23 09:22	1
d-N-EtFOSA-M	65		10 - 150	05/09/23 05:07	05/11/23 09:22	1
d7-N-MeFOSE-M	72		10 - 150	05/09/23 05:07	05/11/23 09:22	1
d9-N-EtFOSE-M	66		10 - 150	05/09/23 05:07	05/11/23 09:22	1
M2-4:2 FTS	57		25 - 150	05/09/23 05:07	05/11/23 09:22	1
M2-6:2 FTS	60		25 - 150	05/09/23 05:07	05/11/23 09:22	1
M2-8:2 FTS	59		25 - 150	05/09/23 05:07	05/11/23 09:22	1
13C3 HFPO-DA	83		25 - 150	05/09/23 05:07	05/11/23 09:22	1
13C2 10:2 FTS	62		25 - 150	05/09/23 05:07	05/11/23 09:22	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	46		1.1	0.16	ug/Kg	☼	05/09/23 05:07	05/11/23 18:33	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	99		25 - 150	05/09/23 05:07	05/11/23 18:33	5

Client Sample ID: B-16 (2')

Date Collected: 04/18/23 13:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-32

Matrix: Solid
Percent Solids: 84.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluoropentanoic acid (PFPeA)	**0.055**	**J**	0.22	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorohexanoic acid (PFHxA)	**0.39**		0.22	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluoroheptanoic acid (PFHpA)	**0.043**	**J**	0.22	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorooctanoic acid (PFOA)	**0.27**		0.22	0.059	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorononanoic acid (PFNA)	<0.025		0.22	0.025	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorodecanoic acid (PFDA)	<0.054		0.22	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.22	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.22	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.22	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.22	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.041		0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorohexanesulfonic acid (PFHxS)	**0.35**		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.055		0.22	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorooctanesulfonic acid (PFOS)	**0.15**	**J**	0.22	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.058		0.22	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.22	0.037	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
NEtFOSA	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
NMeFOSA	<0.055		0.22	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
NMeFOSAA	<0.026		0.22	0.026	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
NEtFOSAA	<0.054		0.22	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
NMeFOSE	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
4:2 FTS	<0.057		0.22	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
6:2 FTS	<0.030		0.22	0.030	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
8:2 FTS	<0.039		0.22	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.22	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
HFPO-DA (GenX)	<0.046		0.22	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
9Cl-PF3ONS	<0.039		0.22	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1
11Cl-PF3OUdS	<0.035		0.22	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 09:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C5 PFPeA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C2 PFHxA	*94*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C4 PFHpA	*98*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C4 PFOA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C5 PFNA	*99*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C2 PFDA	*96*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C2 PFUnA	*91*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C2 PFDoA	*85*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C2 PFTeDA	*90*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*
13C3 PFBS	*92*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:32*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-16 (2')
Date Collected: 04/18/23 13:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-32
Matrix: Solid
Percent Solids: 84.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	90		25 - 150	05/09/23 05:07	05/11/23 09:32	1
13C4 PFOS	96		25 - 150	05/09/23 05:07	05/11/23 09:32	1
13C8 FOSA	101		10 - 150	05/09/23 05:07	05/11/23 09:32	1
d3-NMeFOSAA	98		25 - 150	05/09/23 05:07	05/11/23 09:32	1
d5-NEtFOSAA	99		25 - 150	05/09/23 05:07	05/11/23 09:32	1
d-N-MeFOSA-M	73		10 - 150	05/09/23 05:07	05/11/23 09:32	1
d-N-EtFOSA-M	74		10 - 150	05/09/23 05:07	05/11/23 09:32	1
d7-N-MeFOSE-M	85		10 - 150	05/09/23 05:07	05/11/23 09:32	1
d9-N-EtFOSE-M	83		10 - 150	05/09/23 05:07	05/11/23 09:32	1
M2-4:2 FTS	57		25 - 150	05/09/23 05:07	05/11/23 09:32	1
M2-6:2 FTS	59		25 - 150	05/09/23 05:07	05/11/23 09:32	1
M2-8:2 FTS	65		25 - 150	05/09/23 05:07	05/11/23 09:32	1
13C3 HFPO-DA	96		25 - 150	05/09/23 05:07	05/11/23 09:32	1
13C2 10:2 FTS	66		25 - 150	05/09/23 05:07	05/11/23 09:32	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-16 (10')

Date Collected: 04/18/23 13:40
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-33

Matrix: Solid
Percent Solids: 78.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.13**	**J**	0.24	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluoropentanoic acid (PFPeA)	**0.23**	**J**	0.24	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorohexanoic acid (PFHxA)	**0.95**		0.24	0.037	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluoroheptanoic acid (PFHpA)	**0.17**	**J**	0.24	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorooctanoic acid (PFOA)	**3.6**		0.24	0.062	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorononanoic acid (PFNA)	**0.39**		0.24	0.026	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorodecanoic acid (PFDA)	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.24	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.24	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.24	0.025	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorotetradecanoic acid (PFTeA)	<0.044		0.24	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorobutanesulfonic acid (PFBS)	**0.062**	**J**	0.24	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluoropentanesulfonic acid (PFPeS)	**0.091**	**J**	0.24	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorohexanesulfonic acid (PFHxS)	**7.4**		0.24	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.21**	**J**	0.24	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorooctanesulfonic acid (PFOS)	**11**		0.24	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.24	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorodecanesulfonic acid (PFDS)	<0.061		0.24	0.061	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.24	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
Perfluorooctanesulfonamide (FOSA)	**0.46**		0.24	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
NEtFOSA	<0.055		0.24	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
NMeFOSA	<0.058		0.24	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
NMeFOSAA	<0.027		0.24	0.027	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
NEtFOSAA	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
NMeFOSE	<0.055		0.24	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
NEtFOSE	<0.033		0.24	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
4:2 FTS	<0.060		0.24	0.060	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
6:2 FTS	**0.070**	**J**	0.24	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
8:2 FTS	**0.57**		0.24	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.046		0.24	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
HFPO-DA (GenX)	<0.048		0.24	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
9Cl-PF3ONS	<0.041		0.24	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1
11Cl-PF3OUdS	<0.037		0.24	0.037	ug/Kg	☼	05/09/23 05:07	05/11/23 09:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*86*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*
13C5 PFPeA	*81*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*
13C2 PFHxA	*84*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*
13C4 PFHpA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*
13C4 PFOA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*
13C5 PFNA	*89*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*
13C2 PFDA	*89*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*
13C2 PFUnA	*87*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*
13C2 PFDoA	*81*		*25 - 150*	*05/09/23 05:07*	*05/11/23 09:42*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-16 (10')
Date Collected: 04/18/23 13:40
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-33
Matrix: Solid
Percent Solids: 78.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFTeDA	86		25 - 150	05/09/23 05:07	05/11/23 09:42	1
13C3 PFBS	82		25 - 150	05/09/23 05:07	05/11/23 09:42	1
18O2 PFHxS	94		25 - 150	05/09/23 05:07	05/11/23 09:42	1
13C4 PFOS	97		25 - 150	05/09/23 05:07	05/11/23 09:42	1
13C8 FOSA	95		10 - 150	05/09/23 05:07	05/11/23 09:42	1
d3-NMeFOSAA	93		25 - 150	05/09/23 05:07	05/11/23 09:42	1
d5-NEtFOSAA	104		25 - 150	05/09/23 05:07	05/11/23 09:42	1
d-N-MeFOSA-M	65		10 - 150	05/09/23 05:07	05/11/23 09:42	1
d-N-EtFOSA-M	64		10 - 150	05/09/23 05:07	05/11/23 09:42	1
d7-N-MeFOSE-M	79		10 - 150	05/09/23 05:07	05/11/23 09:42	1
d9-N-EtFOSE-M	78		10 - 150	05/09/23 05:07	05/11/23 09:42	1
M2-4:2 FTS	55		25 - 150	05/09/23 05:07	05/11/23 09:42	1
M2-6:2 FTS	58		25 - 150	05/09/23 05:07	05/11/23 09:42	1
M2-8:2 FTS	63		25 - 150	05/09/23 05:07	05/11/23 09:42	1
13C3 HFPO-DA	87		25 - 150	05/09/23 05:07	05/11/23 09:42	1
13C2 10:2 FTS	68		25 - 150	05/09/23 05:07	05/11/23 09:42	1

Client Sample ID: B-17 (2')
Date Collected: 04/18/23 13:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-34
Matrix: Solid
Percent Solids: 82.2

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.12**	**J**	0.24	0.056	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluoropentanoic acid (PFPeA)	**0.22**	**J**	0.24	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorohexanoic acid (PFHxA)	**0.76**		0.24	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluoroheptanoic acid (PFHpA)	**0.14**	**J**	0.24	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorooctanoic acid (PFOA)	**1.1**		0.24	0.064	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorononanoic acid (PFNA)	**0.077**	**J**	0.24	0.027	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorodecanoic acid (PFDA)	<0.058		0.24	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorododecanoic acid (PFDoA)	<0.036		0.24	0.036	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.24	0.026	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorobutanesulfonic acid (PFBS)	**0.11**	**J**	0.24	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluoropentanesulfonic acid (PFPeS)	**0.14**	**J**	0.24	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorohexanesulfonic acid (PFHxS)	**3.2**		0.24	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.060		0.24	0.060	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorooctanesulfonic acid (PFOS)	**1.5**		0.24	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorodecanesulfonic acid (PFDS)	<0.063		0.24	0.063	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorododecanesulfonic acid (PFDoS)	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
NEtFOSA	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
NMeFOSA	<0.060		0.24	0.060	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
NEtFOSAA	<0.058		0.24	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
NMeFOSE	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
8:2 FTS	<0.043		0.24	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.047		0.24	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
9Cl-PF3ONS	<0.043		0.24	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 10:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C5 PFPeA	*98*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C2 PFHxA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C4 PFHpA	*101*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C4 PFOA	*94*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C5 PFNA	*100*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C2 PFDA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C2 PFUnA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C2 PFDoA	*83*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*
13C2 PFTeDA	*90*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:13*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-17 (2')
Date Collected: 04/18/23 13:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-34
Matrix: Solid
Percent Solids: 82.2

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	90		25 - 150	05/09/23 05:07	05/11/23 10:13	1
18O2 PFHxS	95		25 - 150	05/09/23 05:07	05/11/23 10:13	1
13C4 PFOS	94		25 - 150	05/09/23 05:07	05/11/23 10:13	1
13C8 FOSA	103		10 - 150	05/09/23 05:07	05/11/23 10:13	1
d3-NMeFOSAA	99		25 - 150	05/09/23 05:07	05/11/23 10:13	1
d5-NEtFOSAA	106		25 - 150	05/09/23 05:07	05/11/23 10:13	1
d-N-MeFOSA-M	82		10 - 150	05/09/23 05:07	05/11/23 10:13	1
d-N-EtFOSA-M	82		10 - 150	05/09/23 05:07	05/11/23 10:13	1
d7-N-MeFOSE-M	83		10 - 150	05/09/23 05:07	05/11/23 10:13	1
d9-N-EtFOSE-M	88		10 - 150	05/09/23 05:07	05/11/23 10:13	1
M2-4:2 FTS	61		25 - 150	05/09/23 05:07	05/11/23 10:13	1
M2-6:2 FTS	58		25 - 150	05/09/23 05:07	05/11/23 10:13	1
M2-8:2 FTS	59		25 - 150	05/09/23 05:07	05/11/23 10:13	1
13C3 HFPO-DA	99		25 - 150	05/09/23 05:07	05/11/23 10:13	1
13C2 10:2 FTS	69		25 - 150	05/09/23 05:07	05/11/23 10:13	1

Client Sample ID: B-17 (9')
Date Collected: 04/18/23 13:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-35
Matrix: Solid
Percent Solids: 89.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.25**		0.21	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluoropentanoic acid (PFPeA)	**0.85**		0.21	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorohexanoic acid (PFHxA)	**1.5**		0.21	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluoroheptanoic acid (PFHpA)	**0.77**		0.21	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorooctanoic acid (PFOA)	**14**		0.21	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorononanoic acid (PFNA)	**0.96**		0.21	0.023	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorodecanoic acid (PFDA)	**0.60**		0.21	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluoroundecanoic acid (PFUnA)	**0.10**	**J**	0.21	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorododecanoic acid (PFDoA)	**0.054**	**J**	0.21	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorobutanesulfonic acid (PFBS)	**0.29**		0.21	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluoropentanesulfonic acid (PFPeS)	**0.37**		0.21	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluoroheptanesulfonic acid (PFHpS)	**3.1**		0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorononanesulfonic acid (PFNS)	**0.30**		0.21	0.030	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorodecanesulfonic acid (PFDS)	**0.17**	**J**	0.21	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
Perfluorododecanesulfonic acid (PFDoS)	<0.049		0.21	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
NEtFOSA	<0.049		0.21	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
NMeFOSA	**0.084**	**J**	0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
NMeFOSAA	**0.075**	**J**	0.21	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
NEtFOSAA	**0.050**	**J**	0.21	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
NMeFOSE	<0.049		0.21	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
6:2 FTS	**2.3**		0.21	0.028	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.21	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
HFPO-DA (GenX)	<0.042		0.21	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 10:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*88*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C5 PFPeA	*88*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C2 PFHxA	*86*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C4 PFHpA	*94*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C4 PFOA	*94*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C5 PFNA	*70*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C2 PFDA	*81*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C2 PFUnA	*73*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C2 PFDoA	*71*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C2 PFTeDA	*71*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C3 PFBS	*83*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*
13C4 PFOS	*77*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:23*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-17 (9')
Date Collected: 04/18/23 13:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-35
Matrix: Solid
Percent Solids: 89.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d3-NMeFOSAA	84		25 - 150	05/09/23 05:07	05/11/23 10:23	1
d5-NEtFOSAA	89		25 - 150	05/09/23 05:07	05/11/23 10:23	1
d-N-MeFOSA-M	69		10 - 150	05/09/23 05:07	05/11/23 10:23	1
d-N-EtFOSA-M	62		10 - 150	05/09/23 05:07	05/11/23 10:23	1
d7-N-MeFOSE-M	71		10 - 150	05/09/23 05:07	05/11/23 10:23	1
d9-N-EtFOSE-M	72		10 - 150	05/09/23 05:07	05/11/23 10:23	1
M2-4:2 FTS	50		25 - 150	05/09/23 05:07	05/11/23 10:23	1
M2-6:2 FTS	49		25 - 150	05/09/23 05:07	05/11/23 10:23	1
13C3 HFPO-DA	87		25 - 150	05/09/23 05:07	05/11/23 10:23	1
13C2 10:2 FTS	53		25 - 150	05/09/23 05:07	05/11/23 10:23	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	52		4.1	0.60	ug/Kg	☼	05/09/23 05:07	05/11/23 19:34	20
Perfluorooctanesulfonic acid (PFOS)	280		4.1	0.89	ug/Kg	☼	05/09/23 05:07	05/11/23 19:34	20
Perfluorooctanesulfonamide (FOSA)	49		4.1	0.68	ug/Kg	☼	05/09/23 05:07	05/11/23 19:34	20
8:2 FTS	28		4.1	0.72	ug/Kg	☼	05/09/23 05:07	05/11/23 19:34	20

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	94		25 - 150	05/09/23 05:07	05/11/23 19:34	20
18O2 PFHxS	79		25 - 150	05/09/23 05:07	05/11/23 19:34	20
13C4 PFOS	83		25 - 150	05/09/23 05:07	05/11/23 19:34	20
13C8 FOSA	96		10 - 150	05/09/23 05:07	05/11/23 19:34	20
M2-8:2 FTS	51		25 - 150	05/09/23 05:07	05/11/23 19:34	20

Client Sample ID: B-18 (3')

Date Collected: 04/18/23 14:05
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-36

Matrix: Solid
Percent Solids: 82.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.4**		0.22	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluoropentanoic acid (PFPeA)	**1.9**		0.22	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorohexanoic acid (PFHxA)	**1.0**		0.22	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluoroheptanoic acid (PFHpA)	**0.80**		0.22	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorooctanoic acid (PFOA)	**1.3**		0.22	0.059	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorononanoic acid (PFNA)	**1.2**		0.22	0.025	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorodecanoic acid (PFDA)	**0.83**		0.22	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluoroundecanoic acid (PFUnA)	**1.5**		0.22	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorododecanoic acid (PFDoA)	**0.083**	**J**	0.22	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.22	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorobutanesulfonic acid (PFBS)	**0.051**	**J**	0.22	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluoropentanesulfonic acid (PFPeS)	**0.050**	**J**	0.22	0.041	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorohexanesulfonic acid (PFHxS)	**4.2**		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.15**	**J**	0.22	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorononanesulfonic acid (PFNS)	**0.37**		0.22	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorodecanesulfonic acid (PFDS)	**0.44**		0.22	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorododecanesulfonic acid (PFDoS)	**0.13**	**J**	0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
Perfluorooctanesulfonamide (FOSA)	**0.67**		0.22	0.037	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
NEtFOSA	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
NMeFOSA	<0.055		0.22	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
NMeFOSAA	<0.026		0.22	0.026	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
NEtFOSAA	<0.054		0.22	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
NMeFOSE	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
4:2 FTS	<0.057		0.22	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
6:2 FTS	**0.16**	**J**	0.22	0.030	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
8:2 FTS	**1.5**		0.22	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.22	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
HFPO-DA (GenX)	<0.046		0.22	0.046	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
9Cl-PF3ONS	<0.039		0.22	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1
11Cl-PF3OUdS	<0.035		0.22	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 10:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*73*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:33*	*1*
13C5 PFPeA	*89*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:33*	*1*
13C2 PFHxA	*90*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:33*	*1*
13C4 PFHpA	*98*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:33*	*1*
13C4 PFOA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:33*	*1*
13C5 PFNA	*90*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:33*	*1*
13C2 PFDA	*91*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:33*	*1*
13C2 PFUnA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:33*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-18 (3')
Date Collected: 04/18/23 14:05
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-36
Matrix: Solid
Percent Solids: 82.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	91		25 - 150	05/09/23 05:07	05/11/23 10:33	1
13C2 PFTeDA	81		25 - 150	05/09/23 05:07	05/11/23 10:33	1
13C3 PFBS	88		25 - 150	05/09/23 05:07	05/11/23 10:33	1
18O2 PFHxS	89		25 - 150	05/09/23 05:07	05/11/23 10:33	1
13C4 PFOS	103		25 - 150	05/09/23 05:07	05/11/23 10:33	1
13C8 FOSA	114		10 - 150	05/09/23 05:07	05/11/23 10:33	1
d3-NMeFOSAA	112		25 - 150	05/09/23 05:07	05/11/23 10:33	1
d5-NEtFOSAA	116		25 - 150	05/09/23 05:07	05/11/23 10:33	1
d-N-MeFOSA-M	108		10 - 150	05/09/23 05:07	05/11/23 10:33	1
d-N-EtFOSA-M	102		10 - 150	05/09/23 05:07	05/11/23 10:33	1
d7-N-MeFOSE-M	79		10 - 150	05/09/23 05:07	05/11/23 10:33	1
d9-N-EtFOSE-M	83		10 - 150	05/09/23 05:07	05/11/23 10:33	1
M2-4:2 FTS	58		25 - 150	05/09/23 05:07	05/11/23 10:33	1
M2-6:2 FTS	65		25 - 150	05/09/23 05:07	05/11/23 10:33	1
M2-8:2 FTS	77		25 - 150	05/09/23 05:07	05/11/23 10:33	1
13C3 HFPO-DA	90		25 - 150	05/09/23 05:07	05/11/23 10:33	1
13C2 10:2 FTS	106		25 - 150	05/09/23 05:07	05/11/23 10:33	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	73		2.2	0.48	ug/Kg	☼	05/09/23 05:07	05/11/23 19:14	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	91		25 - 150	05/09/23 05:07	05/11/23 19:14	10

Client Sample ID: B-18 (8')
Date Collected: 04/18/23 14:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-37
Matrix: Solid
Percent Solids: 92.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.13**	**J**	0.21	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluoropentanoic acid (PFPeA)	**0.31**		0.21	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorohexanoic acid (PFHxA)	**0.54**		0.21	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluoroheptanoic acid (PFHpA)	**0.75**		0.21	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorooctanoic acid (PFOA)	**2.6**		0.21	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorononanoic acid (PFNA)	**10**		0.21	0.023	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorodecanoic acid (PFDA)	**0.35**		0.21	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluoroundecanoic acid (PFUnA)	<0.043		0.21	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.039		0.21	0.039	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluoropentanesulfonic acid (PFPeS)	**0.15**	**J**	0.21	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorohexanesulfonic acid (PFHxS)	**11**		0.21	0.030	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluoroheptanesulfonic acid (PFHpS)	**3.2**		0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorooctanesulfonic acid (PFOS)	**460**		10	2.2	ug/Kg	☼	05/09/23 05:07	05/11/23 19:55	50
Perfluorononanesulfonic acid (PFNS)	**0.30**		0.21	0.030	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.054		0.21	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.049		0.21	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
Perfluorooctanesulfonamide (FOSA)	**1.4**		0.21	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
NEtFOSA	<0.049		0.21	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
NMeFOSA	**0.056**	**J**	0.21	0.051	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
NEtFOSAA	<0.050		0.21	0.050	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
NMeFOSE	<0.049		0.21	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
6:2 FTS	**0.65**		0.21	0.028	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
8:2 FTS	**45**		10	1.8	ug/Kg	☼	05/09/23 05:07	05/11/23 19:55	50
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.21	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
HFPO-DA (GenX)	<0.042		0.21	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 10:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*100*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*
13C5 PFPeA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*
13C2 PFHxA	*98*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*
13C4 PFHpA	*109*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*
13C4 PFOA	*106*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*
13C5 PFNA	*82*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*
13C2 PFDA	*105*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*
13C2 PFUnA	*101*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*
13C2 PFDoA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:43*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-18 (8')
Date Collected: 04/18/23 14:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-37
Matrix: Solid
Percent Solids: 92.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFTeDA	96		25 - 150	05/09/23 05:07	05/11/23 10:43	1
13C3 PFBS	91		25 - 150	05/09/23 05:07	05/11/23 10:43	1
18O2 PFHxS	109		25 - 150	05/09/23 05:07	05/11/23 10:43	1
13C4 PFOS	84		25 - 150	05/09/23 05:07	05/11/23 10:43	1
13C4 PFOS	118		25 - 150	05/09/23 05:07	05/11/23 19:55	50
13C8 FOSA	112		10 - 150	05/09/23 05:07	05/11/23 10:43	1
d3-NMeFOSAA	119		25 - 150	05/09/23 05:07	05/11/23 10:43	1
d5-NEtFOSAA	128		25 - 150	05/09/23 05:07	05/11/23 10:43	1
d-N-MeFOSA-M	79		10 - 150	05/09/23 05:07	05/11/23 10:43	1
d-N-EtFOSA-M	78		10 - 150	05/09/23 05:07	05/11/23 10:43	1
d7-N-MeFOSE-M	96		10 - 150	05/09/23 05:07	05/11/23 10:43	1
d9-N-EtFOSE-M	95		10 - 150	05/09/23 05:07	05/11/23 10:43	1
M2-4:2 FTS	61		25 - 150	05/09/23 05:07	05/11/23 10:43	1
M2-6:2 FTS	70		25 - 150	05/09/23 05:07	05/11/23 10:43	1
M2-8:2 FTS	81		25 - 150	05/09/23 05:07	05/11/23 10:43	1
M2-8:2 FTS	81		25 - 150	05/09/23 05:07	05/11/23 19:55	50
13C3 HFPO-DA	100		25 - 150	05/09/23 05:07	05/11/23 10:43	1
13C2 10:2 FTS	79		25 - 150	05/09/23 05:07	05/11/23 10:43	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-18 (16')
Date Collected: 04/18/23 14:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-38
Matrix: Solid
Percent Solids: 80.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.66**		0.23	0.053	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluoropentanoic acid (PFPeA)	**1.8**		0.23	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorohexanoic acid (PFHxA)	**4.5**		0.23	0.036	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluoroheptanoic acid (PFHpA)	**1.1**		0.23	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorooctanoic acid (PFOA)	**0.25**		0.23	0.061	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorononanoic acid (PFNA)	**0.36**		0.23	0.025	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorodecanoic acid (PFDA)	**0.35**		0.23	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluoroundecanoic acid (PFUnA)	<0.048		0.23	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorobutanesulfonic acid (PFBS)	**0.27**		0.23	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluoropentanesulfonic acid (PFPeS)	**0.26**		0.23	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorohexanesulfonic acid (PFHxS)	**1.3**		0.23	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorodecanesulfonic acid (PFDS)	<0.060		0.23	0.060	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
Perfluorooctanesulfonamide (FOSA)	**0.17**	**J**	0.23	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
NEtFOSAA	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
4:2 FTS	<0.059		0.23	0.059	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
6:2 FTS	**0.21**	**J**	0.23	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	05/09/23 05:07	05/11/23 10:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*109*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C5 PFPeA	*109*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C2 PFHxA	*112*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C4 PFHpA	*113*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C4 PFOA	*104*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C5 PFNA	*91*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C2 PFDA	*108*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C2 PFUnA	*99*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C2 PFDoA	*89*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C2 PFTeDA	*90*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
13C3 PFBS	*105*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*
18O2 PFHxS	*104*		*25 - 150*	*05/09/23 05:07*	*05/11/23 10:53*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-18 (16')
Date Collected: 04/18/23 14:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-38
Matrix: Solid
Percent Solids: 80.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	103		25 - 150	05/09/23 05:07	05/11/23 10:53	1
13C8 FOSA	115		10 - 150	05/09/23 05:07	05/11/23 10:53	1
d3-NMeFOSAA	125		25 - 150	05/09/23 05:07	05/11/23 10:53	1
d5-NEtFOSAA	120		25 - 150	05/09/23 05:07	05/11/23 10:53	1
d-N-MeFOSA-M	77		10 - 150	05/09/23 05:07	05/11/23 10:53	1
d-N-EtFOSA-M	77		10 - 150	05/09/23 05:07	05/11/23 10:53	1
d7-N-MeFOSE-M	91		10 - 150	05/09/23 05:07	05/11/23 10:53	1
d9-N-EtFOSE-M	88		10 - 150	05/09/23 05:07	05/11/23 10:53	1
M2-4:2 FTS	73		25 - 150	05/09/23 05:07	05/11/23 10:53	1
M2-6:2 FTS	70		25 - 150	05/09/23 05:07	05/11/23 10:53	1
M2-8:2 FTS	88		25 - 150	05/09/23 05:07	05/11/23 10:53	1
13C3 HFPO-DA	106		25 - 150	05/09/23 05:07	05/11/23 10:53	1
13C2 10:2 FTS	78		25 - 150	05/09/23 05:07	05/11/23 10:53	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	160		2.3	0.50	ug/Kg	☼	05/09/23 05:07	05/11/23 19:24	10
8:2 FTS	29		2.3	0.40	ug/Kg	☼	05/09/23 05:07	05/11/23 19:24	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	125		25 - 150	05/09/23 05:07	05/11/23 19:24	10
M2-8:2 FTS	83		25 - 150	05/09/23 05:07	05/11/23 19:24	10

Client Sample ID: B-19 (2')

Date Collected: 04/18/23 14:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-39

Matrix: Solid
Percent Solids: 80.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.087**	**J**	0.23	0.052	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluoropentanoic acid (PFPeA)	**0.26**		0.23	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorohexanoic acid (PFHxA)	**0.58**		0.23	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluoroheptanoic acid (PFHpA)	**0.38**		0.23	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorooctanoic acid (PFOA)	**2.2**		0.23	0.060	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorononanoic acid (PFNA)	**0.22**	**J**	0.23	0.025	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorodecanoic acid (PFDA)	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluoroundecanoic acid (PFUnA)	<0.048		0.23	0.048	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorobutanesulfonic acid (PFBS)	**0.054**	**J**	0.23	0.043	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluoropentanesulfonic acid (PFPeS)	**0.089**	**J**	0.23	0.042	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorohexanesulfonic acid (PFHxS)	**4.1**	**F1**	0.23	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.096**	**J**	0.23	0.056	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorooctanesulfonic acid (PFOS)	**11**		0.23	0.049	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
Perfluorooctanesulfonamide (FOSA)	**0.090**	**J**	0.23	0.038	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
NMeFOSA	<0.056		0.23	0.056	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
NEtFOSAA	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
4:2 FTS	<0.058		0.23	0.058	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
8:2 FTS	**0.86**		0.23	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	05/09/23 05:07	05/11/23 11:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*
13C5 PFPeA	*95*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*
13C2 PFHxA	*92*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*
13C4 PFHpA	*106*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*
13C4 PFOA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*
13C5 PFNA	*101*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*
13C2 PFDA	*93*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*
13C2 PFUnA	*89*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*
13C2 PFDoA	*83*		*25 - 150*	*05/09/23 05:07*	*05/11/23 11:03*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-19 (2')
Date Collected: 04/18/23 14:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-39
Matrix: Solid
Percent Solids: 80.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFTeDA	88		25 - 150	05/09/23 05:07	05/11/23 11:03	1
13C3 PFBS	93		25 - 150	05/09/23 05:07	05/11/23 11:03	1
18O2 PFHxS	102		25 - 150	05/09/23 05:07	05/11/23 11:03	1
13C4 PFOS	106		25 - 150	05/09/23 05:07	05/11/23 11:03	1
13C8 FOSA	104		10 - 150	05/09/23 05:07	05/11/23 11:03	1
d3-NMeFOSAA	93		25 - 150	05/09/23 05:07	05/11/23 11:03	1
d5-NEtFOSAA	93		25 - 150	05/09/23 05:07	05/11/23 11:03	1
d-N-MeFOSA-M	77		10 - 150	05/09/23 05:07	05/11/23 11:03	1
d-N-EtFOSA-M	76		10 - 150	05/09/23 05:07	05/11/23 11:03	1
d7-N-MeFOSE-M	86		10 - 150	05/09/23 05:07	05/11/23 11:03	1
d9-N-EtFOSE-M	86		10 - 150	05/09/23 05:07	05/11/23 11:03	1
M2-4:2 FTS	62		25 - 150	05/09/23 05:07	05/11/23 11:03	1
M2-6:2 FTS	61		25 - 150	05/09/23 05:07	05/11/23 11:03	1
M2-8:2 FTS	62		25 - 150	05/09/23 05:07	05/11/23 11:03	1
13C3 HFPO-DA	97		25 - 150	05/09/23 05:07	05/11/23 11:03	1
13C2 10:2 FTS	66		25 - 150	05/09/23 05:07	05/11/23 11:03	1

Client Sample ID: B-19 (5.5')
Date Collected: 04/18/23 14:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-40
Matrix: Solid
Percent Solids: 81.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.054**	**J**	0.23	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluoropentanoic acid (PFPeA)	**0.072**	**J**	0.23	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorohexanoic acid (PFHxA)	**0.12**	**J I**	0.23	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluoroheptanoic acid (PFHpA)	**0.21**	**J**	0.23	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorooctanoic acid (PFOA)	**0.57**		0.23	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorononanoic acid (PFNA)	**0.28**		0.23	0.025	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorodecanoic acid (PFDA)	**0.16**	**J**	0.23	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluoroundecanoic acid (PFUnA)	<0.048		0.23	0.048	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluoropentanesulfonic acid (PFPeS)	<0.042		0.23	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorohexanesulfonic acid (PFHxS)	**1.4**		0.23	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.056		0.23	0.056	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorononanesulfonic acid (PFNS)	**0.11**	**J**	0.23	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
Perfluorooctanesulfonamide (FOSA)	**0.38**		0.23	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
NMeFOSA	<0.056		0.23	0.056	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
NEtFOSAA	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
4:2 FTS	<0.058		0.23	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
6:2 FTS	**0.053**	**J**	0.23	0.031	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
8:2 FTS	**18**		0.23	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 12:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C5 PFPeA	*98*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C2 PFHxA	*98*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C4 PFHpA	*105*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C4 PFOA	*103*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C5 PFNA	*106*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C2 PFDA	*109*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C2 PFUnA	*109*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C2 PFDoA	*103*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C2 PFTeDA	*106*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*
13C3 PFBS	*95*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:35*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-19 (5.5')
Date Collected: 04/18/23 14:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-40
Matrix: Solid
Percent Solids: 81.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	100		25 - 150	05/09/23 05:14	05/11/23 12:35	1
13C4 PFOS	120		25 - 150	05/09/23 05:14	05/11/23 12:35	1
13C8 FOSA	116		10 - 150	05/09/23 05:14	05/11/23 12:35	1
d3-NMeFOSAA	128		25 - 150	05/09/23 05:14	05/11/23 12:35	1
d5-NEtFOSAA	130		25 - 150	05/09/23 05:14	05/11/23 12:35	1
d-N-MeFOSA-M	83		10 - 150	05/09/23 05:14	05/11/23 12:35	1
d-N-EtFOSA-M	81		10 - 150	05/09/23 05:14	05/11/23 12:35	1
d7-N-MeFOSE-M	91		10 - 150	05/09/23 05:14	05/11/23 12:35	1
d9-N-EtFOSE-M	95		10 - 150	05/09/23 05:14	05/11/23 12:35	1
M2-4:2 FTS	64		25 - 150	05/09/23 05:14	05/11/23 12:35	1
M2-6:2 FTS	62		25 - 150	05/09/23 05:14	05/11/23 12:35	1
M2-8:2 FTS	78		25 - 150	05/09/23 05:14	05/11/23 12:35	1
13C3 HFPO-DA	104		25 - 150	05/09/23 05:14	05/11/23 12:35	1
13C2 10:2 FTS	88		25 - 150	05/09/23 05:14	05/11/23 12:35	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	29		1.1	0.24	ug/Kg	☼	05/09/23 05:14	05/12/23 19:03	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	98		25 - 150	05/09/23 05:14	05/12/23 19:03	5

Client Sample ID: B-20 (3')

Date Collected: 04/18/23 15:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-41

Matrix: Solid
Percent Solids: 82.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.25**		0.23	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluoropentanoic acid (PFPeA)	**0.14**	**J**	0.23	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorohexanoic acid (PFHxA)	**0.31**		0.23	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluoroheptanoic acid (PFHpA)	**0.085**	**J**	0.23	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorooctanoic acid (PFOA)	**0.39**		0.23	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorononanoic acid (PFNA)	**0.10**	**J**	0.23	0.025	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorodecanoic acid (PFDA)	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.23	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluoropentanesulfonic acid (PFPeS)	<0.042		0.23	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorohexanesulfonic acid (PFHxS)	**0.87**		0.23	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorooctanesulfonic acid (PFOS)	**2.5**		0.23	0.049	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.23	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.23	0.037	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
NEtFOSA	<0.053		0.23	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
NMeFOSA	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
NEtFOSAA	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
NMeFOSE	<0.053		0.23	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
4:2 FTS	<0.058		0.23	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
8:2 FTS	<0.040		0.23	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
HFPO-DA (GenX)	<0.046		0.23	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 12:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*96*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C5 PFPeA	*93*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C2 PFHxA	*90*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C4 PFHpA	*100*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C4 PFOA	*89*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C5 PFNA	*95*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C2 PFDA	*93*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C2 PFUnA	*96*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C2 PFDoA	*86*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C2 PFTeDA	*85*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*
13C3 PFBS	*89*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:45*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-20 (3')
Date Collected: 04/18/23 15:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-41
Matrix: Solid
Percent Solids: 82.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	85		25 - 150	05/09/23 05:14	05/11/23 12:45	1
13C4 PFOS	95		25 - 150	05/09/23 05:14	05/11/23 12:45	1
13C8 FOSA	95		10 - 150	05/09/23 05:14	05/11/23 12:45	1
d3-NMeFOSAA	100		25 - 150	05/09/23 05:14	05/11/23 12:45	1
d5-NEtFOSAA	100		25 - 150	05/09/23 05:14	05/11/23 12:45	1
d-N-MeFOSA-M	87		10 - 150	05/09/23 05:14	05/11/23 12:45	1
d-N-EtFOSA-M	84		10 - 150	05/09/23 05:14	05/11/23 12:45	1
d7-N-MeFOSE-M	83		10 - 150	05/09/23 05:14	05/11/23 12:45	1
d9-N-EtFOSE-M	85		10 - 150	05/09/23 05:14	05/11/23 12:45	1
M2-4:2 FTS	58		25 - 150	05/09/23 05:14	05/11/23 12:45	1
M2-6:2 FTS	59		25 - 150	05/09/23 05:14	05/11/23 12:45	1
M2-8:2 FTS	68		25 - 150	05/09/23 05:14	05/11/23 12:45	1
13C3 HFPO-DA	92		25 - 150	05/09/23 05:14	05/11/23 12:45	1
13C2 10:2 FTS	70		25 - 150	05/09/23 05:14	05/11/23 12:45	1

Client Sample ID: B-20 (10')
Date Collected: 04/18/23 15:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-42
Matrix: Solid
Percent Solids: 87.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.064**	**J**	0.22	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluoropentanoic acid (PFPeA)	<0.044		0.22	0.044	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorohexanoic acid (PFHxA)	<0.033		0.22	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluoroheptanoic acid (PFHpA)	<0.041		0.22	0.041	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorooctanoic acid (PFOA)	**0.31**		0.22	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorodecanoic acid (PFDA)	<0.052		0.22	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluoroundecanoic acid (PFUnA)	<0.045		0.22	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.22	0.032	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.22	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorobutanesulfonic acid (PFBS)	<0.041		0.22	0.041	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.040		0.22	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorohexanesulfonic acid (PFHxS)	**0.69**		0.22	0.031	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorooctanesulfonic acid (PFOS)	**0.88**		0.22	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.22	0.031	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorodecanesulfonic acid (PFDS)	<0.056		0.22	0.056	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorododecanesulfonic acid (PFDoS)	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
Perfluorooctanesulfonamide (FOSA)	<0.036		0.22	0.036	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
NEtFOSA	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
NMeFOSA	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
NEtFOSAA	<0.052		0.22	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
NMeFOSE	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
NEtFOSE	<0.030		0.22	0.030	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
4:2 FTS	<0.055		0.22	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
6:2 FTS	<0.029		0.22	0.029	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
8:2 FTS	<0.038		0.22	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.22	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
HFPO-DA (GenX)	<0.044		0.22	0.044	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1
11Cl-PF3OUdS	<0.033		0.22	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 12:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*61*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C5 PFPeA	*59*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C2 PFHxA	*61*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C4 PFHpA	*63*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C4 PFOA	*61*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C5 PFNA	*61*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C2 PFDA	*60*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C2 PFUnA	*57*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C2 PFDoA	*58*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C2 PFTeDA	*62*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*
13C3 PFBS	*57*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:55*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-20 (10')
Date Collected: 04/18/23 15:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-42
Matrix: Solid
Percent Solids: 87.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	57		25 - 150	05/09/23 05:14	05/11/23 12:55	1
13C4 PFOS	59		25 - 150	05/09/23 05:14	05/11/23 12:55	1
13C8 FOSA	66		10 - 150	05/09/23 05:14	05/11/23 12:55	1
d3-NMeFOSAA	74		25 - 150	05/09/23 05:14	05/11/23 12:55	1
d5-NEtFOSAA	73		25 - 150	05/09/23 05:14	05/11/23 12:55	1
d-N-MeFOSA-M	43		10 - 150	05/09/23 05:14	05/11/23 12:55	1
d-N-EtFOSA-M	43		10 - 150	05/09/23 05:14	05/11/23 12:55	1
d7-N-MeFOSE-M	57		10 - 150	05/09/23 05:14	05/11/23 12:55	1
d9-N-EtFOSE-M	58		10 - 150	05/09/23 05:14	05/11/23 12:55	1
M2-4:2 FTS	37		25 - 150	05/09/23 05:14	05/11/23 12:55	1
M2-6:2 FTS	38		25 - 150	05/09/23 05:14	05/11/23 12:55	1
M2-8:2 FTS	44		25 - 150	05/09/23 05:14	05/11/23 12:55	1
13C3 HFPO-DA	62		25 - 150	05/09/23 05:14	05/11/23 12:55	1
13C2 10:2 FTS	46		25 - 150	05/09/23 05:14	05/11/23 12:55	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-21 (2')
Date Collected: 04/19/23 08:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-43
Matrix: Solid
Percent Solids: 74.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.59**		0.26	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluoropentanoic acid (PFPeA)	**1.4**		0.26	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorohexanoic acid (PFHxA)	**1.3**		0.26	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluoroheptanoic acid (PFHpA)	**0.70**		0.26	0.049	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorooctanoic acid (PFOA)	**3.3**		0.26	0.068	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorononanoic acid (PFNA)	**1.6**		0.26	0.028	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorodecanoic acid (PFDA)	**0.13**	**J**	0.26	0.061	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluoroundecanoic acid (PFUnA)	<0.054		0.26	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorododecanoic acid (PFDoA)	<0.038		0.26	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorotridecanoic acid (PFTrDA)	<0.027		0.26	0.027	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorotetradecanoic acid (PFTeA)	<0.047		0.26	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorobutanesulfonic acid (PFBS)	**0.083**	**J**	0.26	0.049	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluoropentanesulfonic acid (PFPeS)	**0.12**	**J**	0.26	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorohexanesulfonic acid (PFHxS)	**11**		0.26	0.037	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.24**	**J**	0.26	0.063	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorooctanesulfonic acid (PFOS)	**18**		0.26	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorononanesulfonic acid (PFNS)	<0.037		0.26	0.037	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorodecanesulfonic acid (PFDS)	<0.066		0.26	0.066	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorododecanesulfonic acid (PFDoS)	<0.060		0.26	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
Perfluorooctanesulfonamide (FOSA)	<0.042		0.26	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
NEtFOSA	<0.060		0.26	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
NMeFOSA	<0.063		0.26	0.063	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
NMeFOSAA	<0.029		0.26	0.029	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
NEtFOSAA	<0.061		0.26	0.061	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
NMeFOSE	<0.060		0.26	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
NEtFOSE	<0.036		0.26	0.036	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
4:2 FTS	<0.065		0.26	0.065	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
6:2 FTS	<0.034		0.26	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
8:2 FTS	<0.045		0.26	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.050		0.26	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
HFPO-DA (GenX)	<0.052		0.26	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
9Cl-PF3ONS	<0.045		0.26	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1
11Cl-PF3OUdS	<0.040		0.26	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 13:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C5 PFPeA	*92*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C2 PFHxA	*95*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C4 PFHpA	*99*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C4 PFOA	*94*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C5 PFNA	*90*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C2 PFDA	*89*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C2 PFUnA	*89*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C2 PFDoA	*79*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*
13C2 PFTeDA	*75*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:06*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-21 (2')
Date Collected: 04/19/23 08:10
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-43
Matrix: Solid
Percent Solids: 74.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	86		25 - 150	05/09/23 05:14	05/11/23 13:06	1
18O2 PFHxS	96		25 - 150	05/09/23 05:14	05/11/23 13:06	1
13C4 PFOS	97		25 - 150	05/09/23 05:14	05/11/23 13:06	1
13C8 FOSA	91		10 - 150	05/09/23 05:14	05/11/23 13:06	1
d3-NMeFOSAA	103		25 - 150	05/09/23 05:14	05/11/23 13:06	1
d5-NEtFOSAA	105		25 - 150	05/09/23 05:14	05/11/23 13:06	1
d-N-MeFOSA-M	78		10 - 150	05/09/23 05:14	05/11/23 13:06	1
d-N-EtFOSA-M	80		10 - 150	05/09/23 05:14	05/11/23 13:06	1
d7-N-MeFOSE-M	78		10 - 150	05/09/23 05:14	05/11/23 13:06	1
d9-N-EtFOSE-M	76		10 - 150	05/09/23 05:14	05/11/23 13:06	1
M2-4:2 FTS	58		25 - 150	05/09/23 05:14	05/11/23 13:06	1
M2-6:2 FTS	61		25 - 150	05/09/23 05:14	05/11/23 13:06	1
M2-8:2 FTS	64		25 - 150	05/09/23 05:14	05/11/23 13:06	1
13C3 HFPO-DA	91		25 - 150	05/09/23 05:14	05/11/23 13:06	1
13C2 10:2 FTS	60		25 - 150	05/09/23 05:14	05/11/23 13:06	1

Client Sample ID: B-21 (9')
Date Collected: 04/19/23 08:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-44
Matrix: Solid
Percent Solids: 81.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.052		0.23	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluoropentanoic acid (PFPeA)	**0.058**	**J**	0.23	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorohexanoic acid (PFHxA)	**0.098**	**J I**	0.23	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluoroheptanoic acid (PFHpA)	<0.043		0.23	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorooctanoic acid (PFOA)	**0.17**	**J**	0.23	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorononanoic acid (PFNA)	**0.090**	**J**	0.23	0.025	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorodecanoic acid (PFDA)	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.23	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluoropentanesulfonic acid (PFPeS)	<0.042		0.23	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorohexanesulfonic acid (PFHxS)	**0.48**		0.23	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorooctanesulfonic acid (PFOS)	**0.88**		0.23	0.049	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.23	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.23	0.037	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
NEtFOSA	<0.053		0.23	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
NMeFOSA	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
NEtFOSAA	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
NMeFOSE	<0.053		0.23	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
4:2 FTS	<0.058		0.23	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
6:2 FTS	<0.030		0.23	0.030	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
8:2 FTS	<0.039		0.23	0.039	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
HFPO-DA (GenX)	<0.046		0.23	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
9Cl-PF3ONS	<0.039		0.23	0.039	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 13:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*94*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C5 PFPeA	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C2 PFHxA	*92*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C4 PFHpA	*101*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C4 PFOA	*93*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C5 PFNA	*93*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C2 PFDA	*84*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C2 PFUnA	*82*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C2 PFDoA	*83*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C2 PFTeDA	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*
13C3 PFBS	*96*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:16*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-21 (9')
Date Collected: 04/19/23 08:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-44
Matrix: Solid
Percent Solids: 81.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	95		25 - 150	05/09/23 05:14	05/11/23 13:16	1
13C4 PFOS	86		25 - 150	05/09/23 05:14	05/11/23 13:16	1
13C8 FOSA	97		10 - 150	05/09/23 05:14	05/11/23 13:16	1
d3-NMeFOSAA	93		25 - 150	05/09/23 05:14	05/11/23 13:16	1
d5-NEtFOSAA	95		25 - 150	05/09/23 05:14	05/11/23 13:16	1
d-N-MeFOSA-M	77		10 - 150	05/09/23 05:14	05/11/23 13:16	1
d-N-EtFOSA-M	75		10 - 150	05/09/23 05:14	05/11/23 13:16	1
d7-N-MeFOSE-M	86		10 - 150	05/09/23 05:14	05/11/23 13:16	1
d9-N-EtFOSE-M	87		10 - 150	05/09/23 05:14	05/11/23 13:16	1
M2-4:2 FTS	61		25 - 150	05/09/23 05:14	05/11/23 13:16	1
M2-6:2 FTS	59		25 - 150	05/09/23 05:14	05/11/23 13:16	1
M2-8:2 FTS	55		25 - 150	05/09/23 05:14	05/11/23 13:16	1
13C3 HFPO-DA	97		25 - 150	05/09/23 05:14	05/11/23 13:16	1
13C2 10:2 FTS	68		25 - 150	05/09/23 05:14	05/11/23 13:16	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-22 (2')

Date Collected: 04/19/23 08:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-45

Matrix: Solid
Percent Solids: 78.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.6**		0.24	0.056	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluoropentanoic acid (PFPeA)	**10**		0.24	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorohexanoic acid (PFHxA)	**12**		0.24	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluoroheptanoic acid (PFHpA)	**5.1**		0.24	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorooctanoic acid (PFOA)	**1.8**		0.24	0.065	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorononanoic acid (PFNA)	**0.043**	**J**	0.24	0.027	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorodecanoic acid (PFDA)	<0.059		0.24	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.24	0.037	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.24	0.026	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorobutanesulfonic acid (PFBS)	**4.0**		0.24	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluoropentanesulfonic acid (PFPeS)	**3.6**		0.24	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorohexanesulfonic acid (PFHxS)	**6.6**		0.24	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.060		0.24	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorooctanesulfonic acid (PFOS)	**0.48**		0.24	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.24	0.064	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorododecanesulfonic acid (PFDoS)	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
NEtFOSA	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
NMeFOSA	<0.060		0.24	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
NEtFOSAA	<0.059		0.24	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
NMeFOSE	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
8:2 FTS	<0.043		0.24	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.24	0.048	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
9Cl-PF3ONS	<0.043		0.24	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 13:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*104*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C5 PFPeA	*109*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C2 PFHxA	*112*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C4 PFHpA	*115*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C4 PFOA	*99*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C5 PFNA	*102*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C2 PFDA	*102*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C2 PFUnA	*101*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C2 PFDoA	*92*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*
13C2 PFTeDA	*96*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:26*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-22 (2')
Date Collected: 04/19/23 08:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-45
Matrix: Solid
Percent Solids: 78.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	105		25 - 150	05/09/23 05:14	05/11/23 13:26	1
18O2 PFHxS	103		25 - 150	05/09/23 05:14	05/11/23 13:26	1
13C4 PFOS	98		25 - 150	05/09/23 05:14	05/11/23 13:26	1
13C8 FOSA	104		10 - 150	05/09/23 05:14	05/11/23 13:26	1
d3-NMeFOSAA	113		25 - 150	05/09/23 05:14	05/11/23 13:26	1
d5-NEtFOSAA	118		25 - 150	05/09/23 05:14	05/11/23 13:26	1
d-N-MeFOSA-M	79		10 - 150	05/09/23 05:14	05/11/23 13:26	1
d-N-EtFOSA-M	81		10 - 150	05/09/23 05:14	05/11/23 13:26	1
d7-N-MeFOSE-M	88		10 - 150	05/09/23 05:14	05/11/23 13:26	1
d9-N-EtFOSE-M	92		10 - 150	05/09/23 05:14	05/11/23 13:26	1
M2-4:2 FTS	68		25 - 150	05/09/23 05:14	05/11/23 13:26	1
M2-6:2 FTS	65		25 - 150	05/09/23 05:14	05/11/23 13:26	1
M2-8:2 FTS	69		25 - 150	05/09/23 05:14	05/11/23 13:26	1
13C3 HFPO-DA	106		25 - 150	05/09/23 05:14	05/11/23 13:26	1
13C2 10:2 FTS	72		25 - 150	05/09/23 05:14	05/11/23 13:26	1

Client Sample ID: B-22 (10')
Date Collected: 04/19/23 08:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-46
Matrix: Solid
Percent Solids: 76.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**3.0**		0.24	0.056	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluoropentanoic acid (PFPeA)	**16**		0.24	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorohexanoic acid (PFHxA)	**12**		0.24	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluoroheptanoic acid (PFHpA)	**0.77**		0.24	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorooctanoic acid (PFOA)	**0.068**	**J**	0.24	0.064	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorononanoic acid (PFNA)	<0.027		0.24	0.027	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorodecanoic acid (PFDA)	<0.058		0.24	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorododecanoic acid (PFDoA)	<0.036		0.24	0.036	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.24	0.025	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorobutanesulfonic acid (PFBS)	**2.9**		0.24	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluoropentanesulfonic acid (PFPeS)	**0.39**		0.24	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorohexanesulfonic acid (PFHxS)	**0.27**		0.24	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.059		0.24	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorooctanesulfonic acid (PFOS)	<0.052		0.24	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorodecanesulfonic acid (PFDS)	<0.063		0.24	0.063	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorododecanesulfonic acid (PFDoS)	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
NEtFOSA	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
NMeFOSA	<0.059		0.24	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
NEtFOSAA	<0.058		0.24	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
NMeFOSE	<0.057		0.24	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
8:2 FTS	<0.042		0.24	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.047		0.24	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
9Cl-PF3ONS	<0.042		0.24	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 13:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C5 PFPeA	*106*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C2 PFHxA	*108*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C4 PFHpA	*104*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C4 PFOA	*95*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C5 PFNA	*97*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C2 PFDA	*103*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C2 PFUnA	*105*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C2 PFDoA	*95*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C2 PFTeDA	*101*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*
13C3 PFBS	*103*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:36*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-22 (10')
Date Collected: 04/19/23 08:50
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-46
Matrix: Solid
Percent Solids: 76.3

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	97		25 - 150	05/09/23 05:14	05/11/23 13:36	1
13C4 PFOS	98		25 - 150	05/09/23 05:14	05/11/23 13:36	1
13C8 FOSA	103		10 - 150	05/09/23 05:14	05/11/23 13:36	1
d3-NMeFOSAA	112		25 - 150	05/09/23 05:14	05/11/23 13:36	1
d5-NEtFOSAA	114		25 - 150	05/09/23 05:14	05/11/23 13:36	1
d-N-MeFOSA-M	84		10 - 150	05/09/23 05:14	05/11/23 13:36	1
d-N-EtFOSA-M	86		10 - 150	05/09/23 05:14	05/11/23 13:36	1
d7-N-MeFOSE-M	89		10 - 150	05/09/23 05:14	05/11/23 13:36	1
d9-N-EtFOSE-M	91		10 - 150	05/09/23 05:14	05/11/23 13:36	1
M2-4:2 FTS	66		25 - 150	05/09/23 05:14	05/11/23 13:36	1
M2-6:2 FTS	62		25 - 150	05/09/23 05:14	05/11/23 13:36	1
M2-8:2 FTS	77		25 - 150	05/09/23 05:14	05/11/23 13:36	1
13C3 HFPO-DA	104		25 - 150	05/09/23 05:14	05/11/23 13:36	1
13C2 10:2 FTS	79		25 - 150	05/09/23 05:14	05/11/23 13:36	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-23 (2')
Date Collected: 04/19/23 11:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-47
Matrix: Solid
Percent Solids: 84.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.83**		0.22	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluoropentanoic acid (PFPeA)	**4.3**		0.22	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorohexanoic acid (PFHxA)	**9.8**		0.22	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluoroheptanoic acid (PFHpA)	**7.3**		0.22	0.041	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorononanoic acid (PFNA)	**16**		0.22	0.024	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorodecanoic acid (PFDA)	**1.9**		0.22	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluoroundecanoic acid (PFUnA)	**0.45**		0.22	0.046	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorododecanoic acid (PFDoA)	**0.055**	**J**	0.22	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorotridecanoic acid (PFTrDA)	**0.023**	**J**	0.22	0.023	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.22	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorobutanesulfonic acid (PFBS)	**3.5**		0.22	0.041	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluoropentanesulfonic acid (PFPeS)	**6.0**		0.22	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluoroheptanesulfonic acid (PFHpS)	**5.5**		0.22	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorononanesulfonic acid (PFNS)	**0.32**		0.22	0.032	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorodecanesulfonic acid (PFDS)	**0.19**	**J**	0.22	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorododecanesulfonic acid (PFDoS)	**0.082**	**J**	0.22	0.051	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
Perfluorooctanesulfonamide (FOSA)	**1.0**		0.22	0.036	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
NEtFOSA	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
NMeFOSA	<0.053		0.22	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
NEtFOSAA	<0.052		0.22	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
NMeFOSE	<0.051		0.22	0.051	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
4:2 FTS	<0.056		0.22	0.056	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
6:2 FTS	**0.088**	**J**	0.22	0.029	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
8:2 FTS	**0.17**	**J**	0.22	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.22	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
HFPO-DA (GenX)	<0.045		0.22	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 13:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*88*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C5 PFPeA	*94*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C2 PFHxA	*97*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C4 PFHpA	*90*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C5 PFNA	*75*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C2 PFDA	*92*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C2 PFUnA	*90*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C2 PFDoA	*82*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C2 PFTeDA	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*
13C3 PFBS	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 13:46*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-23 (2')
Date Collected: 04/19/23 11:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-47
Matrix: Solid
Percent Solids: 84.7

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	78		25 - 150	05/09/23 05:14	05/11/23 13:46	1
13C8 FOSA	99		10 - 150	05/09/23 05:14	05/11/23 13:46	1
d3-NMeFOSAA	94		25 - 150	05/09/23 05:14	05/11/23 13:46	1
d5-NEtFOSAA	102		25 - 150	05/09/23 05:14	05/11/23 13:46	1
d-N-MeFOSA-M	88		10 - 150	05/09/23 05:14	05/11/23 13:46	1
d-N-EtFOSA-M	87		10 - 150	05/09/23 05:14	05/11/23 13:46	1
d7-N-MeFOSE-M	85		10 - 150	05/09/23 05:14	05/11/23 13:46	1
d9-N-EtFOSE-M	85		10 - 150	05/09/23 05:14	05/11/23 13:46	1
M2-4:2 FTS	60		25 - 150	05/09/23 05:14	05/11/23 13:46	1
M2-6:2 FTS	58		25 - 150	05/09/23 05:14	05/11/23 13:46	1
M2-8:2 FTS	72		25 - 150	05/09/23 05:14	05/11/23 13:46	1
13C3 HFPO-DA	91		25 - 150	05/09/23 05:14	05/11/23 13:46	1
13C2 10:2 FTS	68		25 - 150	05/09/23 05:14	05/11/23 13:46	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	45		11	2.9	ug/Kg	☼	05/09/23 05:14	05/12/23 19:23	50
Perfluorohexanesulfonic acid (PFHxS)	240		11	1.6	ug/Kg	☼	05/09/23 05:14	05/12/23 19:23	50
Perfluorooctanesulfonic acid (PFOS)	550		11	2.3	ug/Kg	☼	05/09/23 05:14	05/12/23 19:23	50

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	93		25 - 150	05/09/23 05:14	05/12/23 19:23	50
18O2 PFHxS	80		25 - 150	05/09/23 05:14	05/12/23 19:23	50
13C4 PFOS	83		25 - 150	05/09/23 05:14	05/12/23 19:23	50

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-23 (10')
Date Collected: 04/19/23 11:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-48
Matrix: Solid
Percent Solids: 80.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.057**	**J**	0.25	0.057	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluoropentanoic acid (PFPeA)	**0.056**	**J**	0.25	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorohexanoic acid (PFHxA)	<0.038		0.25	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluoroheptanoic acid (PFHpA)	<0.047		0.25	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorooctanoic acid (PFOA)	<0.065		0.25	0.065	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorononanoic acid (PFNA)	<0.027		0.25	0.027	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorodecanoic acid (PFDA)	<0.059		0.25	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluoroundecanoic acid (PFUnA)	<0.052		0.25	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.25	0.037	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.25	0.026	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.25	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorobutanesulfonic acid (PFBS)	<0.047		0.25	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluoropentanesulfonic acid (PFPeS)	<0.045		0.25	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorohexanesulfonic acid (PFHxS)	<0.036		0.25	0.036	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.060		0.25	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorooctanesulfonic acid (PFOS)	<0.053		0.25	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorononanesulfonic acid (PFNS)	<0.036		0.25	0.036	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.25	0.064	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorododecanesulfonic acid (PFDoS)	<0.058		0.25	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
Perfluorooctanesulfonamide (FOSA)	<0.041		0.25	0.041	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
NEtFOSA	<0.058		0.25	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
NMeFOSA	<0.060		0.25	0.060	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
NMeFOSAA	<0.028		0.25	0.028	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
NEtFOSAA	<0.059		0.25	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
NMeFOSE	<0.058		0.25	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
NEtFOSE	<0.034		0.25	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
4:2 FTS	<0.063		0.25	0.063	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
6:2 FTS	<0.033		0.25	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
8:2 FTS	<0.043		0.25	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.25	0.048	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
HFPO-DA (GenX)	<0.050		0.25	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
9Cl-PF3ONS	<0.043		0.25	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1
11Cl-PF3OUdS	<0.038		0.25	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 14:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C5 PFPeA	*95*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C2 PFHxA	*94*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C4 PFHpA	*98*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C4 PFOA	*94*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C5 PFNA	*97*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C2 PFDA	*93*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C2 PFUnA	*95*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C2 PFDoA	*92*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C2 PFTeDA	*97*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
13C3 PFBS	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*
18O2 PFHxS	*92*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:18*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-23 (10')
Date Collected: 04/19/23 11:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-48
Matrix: Solid
Percent Solids: 80.4

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	95		25 - 150	05/09/23 05:14	05/11/23 14:18	1
13C8 FOSA	105		10 - 150	05/09/23 05:14	05/11/23 14:18	1
d3-NMeFOSAA	96		25 - 150	05/09/23 05:14	05/11/23 14:18	1
d5-NEtFOSAA	94		25 - 150	05/09/23 05:14	05/11/23 14:18	1
d-N-MeFOSA-M	75		10 - 150	05/09/23 05:14	05/11/23 14:18	1
d-N-EtFOSA-M	78		10 - 150	05/09/23 05:14	05/11/23 14:18	1
d7-N-MeFOSE-M	86		10 - 150	05/09/23 05:14	05/11/23 14:18	1
d9-N-EtFOSE-M	91		10 - 150	05/09/23 05:14	05/11/23 14:18	1
M2-4:2 FTS	62		25 - 150	05/09/23 05:14	05/11/23 14:18	1
M2-6:2 FTS	60		25 - 150	05/09/23 05:14	05/11/23 14:18	1
M2-8:2 FTS	60		25 - 150	05/09/23 05:14	05/11/23 14:18	1
13C3 HFPO-DA	97		25 - 150	05/09/23 05:14	05/11/23 14:18	1
13C2 10:2 FTS	70		25 - 150	05/09/23 05:14	05/11/23 14:18	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: Equipment Blank

Date Collected: 04/18/23 08:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-51

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.7	2.2	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluoropentanoic acid (PFPeA)	<0.46		1.9	0.46	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorooctanoic acid (PFOA)	<0.80		1.9	0.80	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.18		1.9	0.18	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorododecanesulfonic acid (PFDoS)	<0.91		1.9	0.91	ng/L		04/25/23 06:45	04/27/23 13:26	1
Perfluorooctanesulfonamide (FOSA)	<0.92		1.9	0.92	ng/L		04/25/23 06:45	04/27/23 13:26	1
NEtFOSA	<0.81		1.9	0.81	ng/L		04/25/23 06:45	04/27/23 13:26	1
NMeFOSA	<0.40		1.9	0.40	ng/L		04/25/23 06:45	04/27/23 13:26	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		04/25/23 06:45	04/27/23 13:26	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		04/25/23 06:45	04/27/23 13:26	1
NMeFOSE	<1.3		3.7	1.3	ng/L		04/25/23 06:45	04/27/23 13:26	1
NEtFOSE	<0.80		1.9	0.80	ng/L		04/25/23 06:45	04/27/23 13:26	1
4:2 FTS	<0.22		1.9	0.22	ng/L		04/25/23 06:45	04/27/23 13:26	1
6:2 FTS	<2.3		4.7	2.3	ng/L		04/25/23 06:45	04/27/23 13:26	1
8:2 FTS	<0.43		1.9	0.43	ng/L		04/25/23 06:45	04/27/23 13:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		04/25/23 06:45	04/27/23 13:26	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		04/25/23 06:45	04/27/23 13:26	1
9Cl-PF3ONS	<0.22		1.9	0.22	ng/L		04/25/23 06:45	04/27/23 13:26	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		04/25/23 06:45	04/27/23 13:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*100*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C5 PFPeA	*102*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C2 PFHxA	*102*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C4 PFHpA	*106*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C4 PFOA	*103*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C5 PFNA	*100*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C2 PFDA	*112*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C2 PFUnA	*101*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C2 PFDoA	*98*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C2 PFTeDA	*107*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
13C3 PFBS	*92*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*
18O2 PFHxS	*91*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:26*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: Equipment Blank
Date Collected: 04/18/23 08:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-51
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	92		25 - 150	04/25/23 06:45	04/27/23 13:26	1
13C8 FOSA	97		10 - 150	04/25/23 06:45	04/27/23 13:26	1
d3-NMeFOSAA	99		25 - 150	04/25/23 06:45	04/27/23 13:26	1
d5-NEtFOSAA	99		25 - 150	04/25/23 06:45	04/27/23 13:26	1
d-N-MeFOSA-M	86		10 - 150	04/25/23 06:45	04/27/23 13:26	1
d-N-EtFOSA-M	80		10 - 150	04/25/23 06:45	04/27/23 13:26	1
d7-N-MeFOSE-M	90		10 - 150	04/25/23 06:45	04/27/23 13:26	1
d9-N-EtFOSE-M	90		10 - 150	04/25/23 06:45	04/27/23 13:26	1
M2-4:2 FTS	91		25 - 150	04/25/23 06:45	04/27/23 13:26	1
M2-6:2 FTS	95		25 - 150	04/25/23 06:45	04/27/23 13:26	1
M2-8:2 FTS	99		25 - 150	04/25/23 06:45	04/27/23 13:26	1
13C3 HFPO-DA	96		25 - 150	04/25/23 06:45	04/27/23 13:26	1
13C2 10:2 FTS	104		25 - 150	04/25/23 06:45	04/27/23 13:26	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: Equipment Blank #2

Date Collected: 04/19/23 07:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-52
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.6	2.2	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.8	0.45	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorohexanoic acid (PFHxA)	<0.53		1.8	0.53	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorooctanoic acid (PFOA)	<0.78		1.8	0.78	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorodecanoic acid (PFDA)	<0.29		1.8	0.29	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.8	0.51	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.8	0.28	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.8	0.53	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.18		1.8	0.18	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorooctanesulfonic acid (PFOS)	**0.50**	**J**	1.8	0.50	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.8	0.30	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorododecanesulfonic acid (PFDoS)	<0.89		1.8	0.89	ng/L		04/25/23 06:45	04/27/23 13:36	1
Perfluorooctanesulfonamide (FOSA)	<0.90		1.8	0.90	ng/L		04/25/23 06:45	04/27/23 13:36	1
NEtFOSA	<0.80		1.8	0.80	ng/L		04/25/23 06:45	04/27/23 13:36	1
NMeFOSA	<0.40		1.8	0.40	ng/L		04/25/23 06:45	04/27/23 13:36	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		04/25/23 06:45	04/27/23 13:36	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		04/25/23 06:45	04/27/23 13:36	1
NMeFOSE	<1.3		3.7	1.3	ng/L		04/25/23 06:45	04/27/23 13:36	1
NEtFOSE	<0.78		1.8	0.78	ng/L		04/25/23 06:45	04/27/23 13:36	1
4:2 FTS	<0.22		1.8	0.22	ng/L		04/25/23 06:45	04/27/23 13:36	1
6:2 FTS	<2.3		4.6	2.3	ng/L		04/25/23 06:45	04/27/23 13:36	1
8:2 FTS	<0.42		1.8	0.42	ng/L		04/25/23 06:45	04/27/23 13:36	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		04/25/23 06:45	04/27/23 13:36	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		04/25/23 06:45	04/27/23 13:36	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		04/25/23 06:45	04/27/23 13:36	1
11Cl-PF3OUdS	<0.30		1.8	0.30	ng/L		04/25/23 06:45	04/27/23 13:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C5 PFPeA	*107*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C2 PFHxA	*106*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C4 PFHpA	*106*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C4 PFOA	*104*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C5 PFNA	*104*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C2 PFDA	*110*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C2 PFUnA	*101*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C2 PFDoA	*100*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C2 PFTeDA	*109*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*
13C3 PFBS	*92*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:36*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: Equipment Blank #2
Date Collected: 04/19/23 07:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-52
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	94		25 - 150	04/25/23 06:45	04/27/23 13:36	1
13C4 PFOS	92		25 - 150	04/25/23 06:45	04/27/23 13:36	1
13C8 FOSA	97		10 - 150	04/25/23 06:45	04/27/23 13:36	1
d3-NMeFOSAA	97		25 - 150	04/25/23 06:45	04/27/23 13:36	1
d5-NEtFOSAA	105		25 - 150	04/25/23 06:45	04/27/23 13:36	1
d-N-MeFOSA-M	79		10 - 150	04/25/23 06:45	04/27/23 13:36	1
d-N-EtFOSA-M	71		10 - 150	04/25/23 06:45	04/27/23 13:36	1
d7-N-MeFOSE-M	85		10 - 150	04/25/23 06:45	04/27/23 13:36	1
d9-N-EtFOSE-M	89		10 - 150	04/25/23 06:45	04/27/23 13:36	1
M2-4:2 FTS	98		25 - 150	04/25/23 06:45	04/27/23 13:36	1
M2-6:2 FTS	93		25 - 150	04/25/23 06:45	04/27/23 13:36	1
M2-8:2 FTS	102		25 - 150	04/25/23 06:45	04/27/23 13:36	1
13C3 HFPO-DA	103		25 - 150	04/25/23 06:45	04/27/23 13:36	1
13C2 10:2 FTS	107		25 - 150	04/25/23 06:45	04/27/23 13:36	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: Field Blank

Date Collected: 04/18/23 07:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-53

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.5	2.2	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluoropentanoic acid (PFPeA)	<0.44		1.8	0.44	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorohexanoic acid (PFHxA)	<0.53		1.8	0.53	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorooctanoic acid (PFOA)	<0.77		1.8	0.77	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		04/25/23 06:45	04/27/23 13:46	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		04/25/23 06:45	04/27/23 13:46	1
NEtFOSA	<0.79		1.8	0.79	ng/L		04/25/23 06:45	04/27/23 13:46	1
NMeFOSA	<0.39		1.8	0.39	ng/L		04/25/23 06:45	04/27/23 13:46	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		04/25/23 06:45	04/27/23 13:46	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		04/25/23 06:45	04/27/23 13:46	1
NMeFOSE	<1.3		3.6	1.3	ng/L		04/25/23 06:45	04/27/23 13:46	1
NEtFOSE	<0.77		1.8	0.77	ng/L		04/25/23 06:45	04/27/23 13:46	1
4:2 FTS	<0.22		1.8	0.22	ng/L		04/25/23 06:45	04/27/23 13:46	1
6:2 FTS	<2.3		4.5	2.3	ng/L		04/25/23 06:45	04/27/23 13:46	1
8:2 FTS	<0.42		1.8	0.42	ng/L		04/25/23 06:45	04/27/23 13:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		04/25/23 06:45	04/27/23 13:46	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		04/25/23 06:45	04/27/23 13:46	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		04/25/23 06:45	04/27/23 13:46	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		04/25/23 06:45	04/27/23 13:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*102*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C5 PFPeA	*101*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C2 PFHxA	*102*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C4 PFHpA	*101*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C4 PFOA	*104*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C5 PFNA	*101*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C2 PFDA	*112*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C2 PFUnA	*99*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C2 PFDoA	*97*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C2 PFTeDA	*101*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
13C3 PFBS	*93*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*
18O2 PFHxS	*87*		*25 - 150*	*04/25/23 06:45*	*04/27/23 13:46*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: Field Blank
Date Collected: 04/18/23 07:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-53
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	89		25 - 150	04/25/23 06:45	04/27/23 13:46	1
13C8 FOSA	93		10 - 150	04/25/23 06:45	04/27/23 13:46	1
d3-NMeFOSAA	97		25 - 150	04/25/23 06:45	04/27/23 13:46	1
d5-NEtFOSAA	97		25 - 150	04/25/23 06:45	04/27/23 13:46	1
d-N-MeFOSA-M	88		10 - 150	04/25/23 06:45	04/27/23 13:46	1
d-N-EtFOSA-M	80		10 - 150	04/25/23 06:45	04/27/23 13:46	1
d7-N-MeFOSE-M	89		10 - 150	04/25/23 06:45	04/27/23 13:46	1
d9-N-EtFOSE-M	89		10 - 150	04/25/23 06:45	04/27/23 13:46	1
M2-4:2 FTS	102		25 - 150	04/25/23 06:45	04/27/23 13:46	1
M2-6:2 FTS	100		25 - 150	04/25/23 06:45	04/27/23 13:46	1
M2-8:2 FTS	95		25 - 150	04/25/23 06:45	04/27/23 13:46	1
13C3 HFPO-DA	99		25 - 150	04/25/23 06:45	04/27/23 13:46	1
13C2 10:2 FTS	101		25 - 150	04/25/23 06:45	04/27/23 13:46	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: FD-1
Date Collected: 04/18/23 00:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-54
Matrix: Solid
Percent Solids: 93.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.47**		0.20	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluoropentanoic acid (PFPeA)	**1.8**		0.20	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorohexanoic acid (PFHxA)	**10**		0.20	0.032	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluoroheptanoic acid (PFHpA)	**2.8**		0.20	0.039	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorooctanoic acid (PFOA)	**3.4**		0.20	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorodecanoic acid (PFDA)	<0.049		0.20	0.049	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluoroundecanoic acid (PFUnA)	<0.043		0.20	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.20	0.031	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.20	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorobutanesulfonic acid (PFBS)	**1.8**		0.20	0.039	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluoropentanesulfonic acid (PFPeS)	**4.1**		0.20	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.050		0.20	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorooctanesulfonic acid (PFOS)	**0.074**	**J**	0.20	0.044	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.20	0.030	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorodecanesulfonic acid (PFDS)	<0.053		0.20	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorododecanesulfonic acid (PFDoS)	<0.048		0.20	0.048	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
Perfluorooctanesulfonamide (FOSA)	<0.034		0.20	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
NEtFOSA	<0.048		0.20	0.048	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
NMeFOSA	<0.050		0.20	0.050	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
NEtFOSAA	<0.049		0.20	0.049	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
NMeFOSE	<0.048		0.20	0.048	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
NEtFOSE	<0.029		0.20	0.029	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
4:2 FTS	<0.052		0.20	0.052	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
6:2 FTS	**0.67**		0.20	0.028	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
8:2 FTS	<0.036		0.20	0.036	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.20	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
HFPO-DA (GenX)	<0.042		0.20	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
9Cl-PF3ONS	<0.036		0.20	0.036	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1
11Cl-PF3OUdS	<0.032		0.20	0.032	ug/Kg	☼	05/09/23 05:14	05/11/23 14:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*106*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C5 PFPeA	*105*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C2 PFHxA	*117*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C4 PFHpA	*117*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C4 PFOA	*107*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C5 PFNA	*107*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C2 PFDA	*111*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C2 PFUnA	*115*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C2 PFDoA	*111*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C2 PFTeDA	*112*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C3 PFBS	*106*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*
13C4 PFOS	*105*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:28*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: FD-1
Date Collected: 04/18/23 00:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-54
Matrix: Solid
Percent Solids: 93.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	123		10 - 150	05/09/23 05:14	05/11/23 14:28	1
d3-NMeFOSAA	135		25 - 150	05/09/23 05:14	05/11/23 14:28	1
d5-NEtFOSAA	143		25 - 150	05/09/23 05:14	05/11/23 14:28	1
d-N-MeFOSA-M	95		10 - 150	05/09/23 05:14	05/11/23 14:28	1
d-N-EtFOSA-M	91		10 - 150	05/09/23 05:14	05/11/23 14:28	1
d7-N-MeFOSE-M	99		10 - 150	05/09/23 05:14	05/11/23 14:28	1
d9-N-EtFOSE-M	102		10 - 150	05/09/23 05:14	05/11/23 14:28	1
M2-4:2 FTS	69		25 - 150	05/09/23 05:14	05/11/23 14:28	1
M2-6:2 FTS	68		25 - 150	05/09/23 05:14	05/11/23 14:28	1
M2-8:2 FTS	73		25 - 150	05/09/23 05:14	05/11/23 14:28	1
13C3 HFPO-DA	100		25 - 150	05/09/23 05:14	05/11/23 14:28	1
13C2 10:2 FTS	91		25 - 150	05/09/23 05:14	05/11/23 14:28	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	27		1.0	0.15	ug/Kg	☼	05/09/23 05:14	05/12/23 19:13	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	102		25 - 150	05/09/23 05:14	05/12/23 19:13	5

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: FD-2

Date Collected: 04/18/23 00:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-55

Matrix: Solid
Percent Solids: 80.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.10**	**J**	0.23	0.053	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluoropentanoic acid (PFPeA)	**0.23**		0.23	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorohexanoic acid (PFHxA)	**0.54**		0.23	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluoroheptanoic acid (PFHpA)	**0.36**		0.23	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorooctanoic acid (PFOA)	**2.2**		0.23	0.061	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorononanoic acid (PFNA)	**0.29**		0.23	0.025	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorodecanoic acid (PFDA)	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluoroundecanoic acid (PFUnA)	<0.048		0.23	0.048	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluoropentanesulfonic acid (PFPeS)	**0.091**	**J**	0.23	0.042	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorohexanesulfonic acid (PFHxS)	**4.7**		0.23	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.12**	**J**	0.23	0.056	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorooctanesulfonic acid (PFOS)	**8.4**		0.23	0.049	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
Perfluorooctanesulfonamide (FOSA)	**0.061**	**J**	0.23	0.038	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
NMeFOSA	<0.056		0.23	0.056	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
NEtFOSAA	<0.055		0.23	0.055	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
4:2 FTS	<0.058		0.23	0.058	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
8:2 FTS	**0.39**		0.23	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	05/09/23 05:14	05/11/23 14:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C5 PFPeA	*88*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C2 PFHxA	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C4 PFHpA	*100*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C4 PFOA	*93*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C5 PFNA	*92*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C2 PFDA	*89*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C2 PFUnA	*91*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C2 PFDoA	*86*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*
13C2 PFTeDA	*88*		*25 - 150*	*05/09/23 05:14*	*05/11/23 14:38*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: FD-2
Date Collected: 04/18/23 00:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-55
Matrix: Solid
Percent Solids: 80.6

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	91		25 - 150	05/09/23 05:14	05/11/23 14:38	1
18O2 PFHxS	93		25 - 150	05/09/23 05:14	05/11/23 14:38	1
13C4 PFOS	98		25 - 150	05/09/23 05:14	05/11/23 14:38	1
13C8 FOSA	103		10 - 150	05/09/23 05:14	05/11/23 14:38	1
d3-NMeFOSAA	95		25 - 150	05/09/23 05:14	05/11/23 14:38	1
d5-NEtFOSAA	102		25 - 150	05/09/23 05:14	05/11/23 14:38	1
d-N-MeFOSA-M	85		10 - 150	05/09/23 05:14	05/11/23 14:38	1
d-N-EtFOSA-M	80		10 - 150	05/09/23 05:14	05/11/23 14:38	1
d7-N-MeFOSE-M	83		10 - 150	05/09/23 05:14	05/11/23 14:38	1
d9-N-EtFOSE-M	87		10 - 150	05/09/23 05:14	05/11/23 14:38	1
M2-4:2 FTS	59		25 - 150	05/09/23 05:14	05/11/23 14:38	1
M2-6:2 FTS	59		25 - 150	05/09/23 05:14	05/11/23 14:38	1
M2-8:2 FTS	64		25 - 150	05/09/23 05:14	05/11/23 14:38	1
13C3 HFPO-DA	90		25 - 150	05/09/23 05:14	05/11/23 14:38	1
13C2 10:2 FTS	78		25 - 150	05/09/23 05:14	05/11/23 14:38	1

Definitions/Glossary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Qualifiers

LCMS

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

LCMS

Prep Batch: 669862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-23	B-11 (10')	Total/NA	Solid	SHAKE	
500-232605-23 - DL	B-11 (10')	Total/NA	Solid	SHAKE	
500-232605-24	B-12 (3')	Total/NA	Solid	SHAKE	
500-232605-24 - DL	B-12 (3')	Total/NA	Solid	SHAKE	
500-232605-25	B-12 (11')	Total/NA	Solid	SHAKE	
MB 320-669862/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-669862/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
500-232605-25 MS	B-12 (11')	Total/NA	Solid	SHAKE	
500-232605-25 MSD	B-12 (11')	Total/NA	Solid	SHAKE	

Prep Batch: 669872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-51	Equipment Blank	Total/NA	Water	3535	
500-232605-52	Equipment Blank #2	Total/NA	Water	3535	
500-232605-53	Field Blank	Total/NA	Water	3535	
MB 320-669872/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-669872/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-669872/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 670113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-23	B-11 (10')	Total/NA	Solid	537 (modified)	669862
500-232605-24	B-12 (3')	Total/NA	Solid	537 (modified)	669862
500-232605-25	B-12 (11')	Total/NA	Solid	537 (modified)	669862
LCS 320-669862/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	669862
500-232605-25 MS	B-12 (11')	Total/NA	Solid	537 (modified)	669862
500-232605-25 MSD	B-12 (11')	Total/NA	Solid	537 (modified)	669862

Analysis Batch: 670228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-669872/1-A	Method Blank	Total/NA	Water	537 (modified)	669872
LCS 320-669872/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	669872
LCSD 320-669872/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	669872

Analysis Batch: 670371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-51	Equipment Blank	Total/NA	Water	537 (modified)	669872
500-232605-52	Equipment Blank #2	Total/NA	Water	537 (modified)	669872
500-232605-53	Field Blank	Total/NA	Water	537 (modified)	669872

Analysis Batch: 670560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-23 - DL	B-11 (10')	Total/NA	Solid	537 (modified)	669862
MB 320-669862/1-A	Method Blank	Total/NA	Solid	537 (modified)	669862

Analysis Batch: 671783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-24 - DL	B-12 (3')	Total/NA	Solid	537 (modified)	669862

LCMS

Prep Batch: 673237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-26 - DL	B-13 (3')	Total/NA	Solid	SHAKE	
500-232605-26	B-13 (3')	Total/NA	Solid	SHAKE	
500-232605-27 - DL	B-13 (10')	Total/NA	Solid	SHAKE	
500-232605-27	B-13 (10')	Total/NA	Solid	SHAKE	
500-232605-28	B-14 (2')	Total/NA	Solid	SHAKE	
500-232605-28 - DL	B-14 (2')	Total/NA	Solid	SHAKE	
500-232605-29 - DL	B-14 (10')	Total/NA	Solid	SHAKE	
500-232605-29	B-14 (10')	Total/NA	Solid	SHAKE	
500-232605-30	B-15 (2')	Total/NA	Solid	SHAKE	
500-232605-31	B-15 (10')	Total/NA	Solid	SHAKE	
500-232605-31 - DL	B-15 (10')	Total/NA	Solid	SHAKE	
500-232605-32	B-16 (2')	Total/NA	Solid	SHAKE	
500-232605-33	B-16 (10')	Total/NA	Solid	SHAKE	
500-232605-34	B-17 (2')	Total/NA	Solid	SHAKE	
500-232605-35 - DL	B-17 (9')	Total/NA	Solid	SHAKE	
500-232605-35	B-17 (9')	Total/NA	Solid	SHAKE	
500-232605-36	B-18 (3')	Total/NA	Solid	SHAKE	
500-232605-36 - DL	B-18 (3')	Total/NA	Solid	SHAKE	
500-232605-37	B-18 (8')	Total/NA	Solid	SHAKE	
500-232605-38 - DL	B-18 (16')	Total/NA	Solid	SHAKE	
500-232605-38	B-18 (16')	Total/NA	Solid	SHAKE	
500-232605-39	B-19 (2')	Total/NA	Solid	SHAKE	
MB 320-673237/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-673237/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
500-232605-39 MS	B-19 (2')	Total/NA	Solid	SHAKE	
500-232605-39 MSD	B-19 (2')	Total/NA	Solid	SHAKE	

Prep Batch: 673238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-40	B-19 (5.5')	Total/NA	Solid	SHAKE	
500-232605-40 - DL	B-19 (5.5')	Total/NA	Solid	SHAKE	
500-232605-41	B-20 (3')	Total/NA	Solid	SHAKE	
500-232605-42	B-20 (10')	Total/NA	Solid	SHAKE	
500-232605-43	B-21 (2')	Total/NA	Solid	SHAKE	
500-232605-44	B-21 (9')	Total/NA	Solid	SHAKE	
500-232605-45	B-22 (2')	Total/NA	Solid	SHAKE	
500-232605-46	B-22 (10')	Total/NA	Solid	SHAKE	
500-232605-47	B-23 (2')	Total/NA	Solid	SHAKE	
500-232605-47 - DL	B-23 (2')	Total/NA	Solid	SHAKE	
500-232605-48	B-23 (10')	Total/NA	Solid	SHAKE	
500-232605-54	FD-1	Total/NA	Solid	SHAKE	
500-232605-54 - DL	FD-1	Total/NA	Solid	SHAKE	
500-232605-55	FD-2	Total/NA	Solid	SHAKE	
MB 320-673238/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-673238/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 673652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-27	B-13 (10')	Total/NA	Solid	537 (modified)	673237
500-232605-28	B-14 (2')	Total/NA	Solid	537 (modified)	673237
500-232605-29	B-14 (10')	Total/NA	Solid	537 (modified)	673237

LCMS (Continued)

Analysis Batch: 673652 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-30	B-15 (2')	Total/NA	Solid	537 (modified)	673237
500-232605-31	B-15 (10')	Total/NA	Solid	537 (modified)	673237
500-232605-32	B-16 (2')	Total/NA	Solid	537 (modified)	673237
500-232605-33	B-16 (10')	Total/NA	Solid	537 (modified)	673237
500-232605-34	B-17 (2')	Total/NA	Solid	537 (modified)	673237
500-232605-35	B-17 (9')	Total/NA	Solid	537 (modified)	673237
500-232605-36	B-18 (3')	Total/NA	Solid	537 (modified)	673237
500-232605-37	B-18 (8')	Total/NA	Solid	537 (modified)	673237
500-232605-38	B-18 (16')	Total/NA	Solid	537 (modified)	673237
500-232605-39	B-19 (2')	Total/NA	Solid	537 (modified)	673237
MB 320-673237/1-A	Method Blank	Total/NA	Solid	537 (modified)	673237
LCS 320-673237/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	673237
500-232605-39 MS	B-19 (2')	Total/NA	Solid	537 (modified)	673237
500-232605-39 MSD	B-19 (2')	Total/NA	Solid	537 (modified)	673237

Analysis Batch: 673658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-40	B-19 (5.5')	Total/NA	Solid	537 (modified)	673238
500-232605-41	B-20 (3')	Total/NA	Solid	537 (modified)	673238
500-232605-42	B-20 (10')	Total/NA	Solid	537 (modified)	673238
500-232605-43	B-21 (2')	Total/NA	Solid	537 (modified)	673238
500-232605-44	B-21 (9')	Total/NA	Solid	537 (modified)	673238
500-232605-45	B-22 (2')	Total/NA	Solid	537 (modified)	673238
500-232605-46	B-22 (10')	Total/NA	Solid	537 (modified)	673238
500-232605-47	B-23 (2')	Total/NA	Solid	537 (modified)	673238
500-232605-48	B-23 (10')	Total/NA	Solid	537 (modified)	673238
500-232605-54	FD-1	Total/NA	Solid	537 (modified)	673238
500-232605-55	FD-2	Total/NA	Solid	537 (modified)	673238
MB 320-673238/1-A	Method Blank	Total/NA	Solid	537 (modified)	673238
LCS 320-673238/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	673238

Analysis Batch: 673927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-26 - DL	B-13 (3')	Total/NA	Solid	537 (modified)	673237
500-232605-27 - DL	B-13 (10')	Total/NA	Solid	537 (modified)	673237
500-232605-28 - DL	B-14 (2')	Total/NA	Solid	537 (modified)	673237
500-232605-29 - DL	B-14 (10')	Total/NA	Solid	537 (modified)	673237
500-232605-31 - DL	B-15 (10')	Total/NA	Solid	537 (modified)	673237
500-232605-35 - DL	B-17 (9')	Total/NA	Solid	537 (modified)	673237
500-232605-36 - DL	B-18 (3')	Total/NA	Solid	537 (modified)	673237
500-232605-37	B-18 (8')	Total/NA	Solid	537 (modified)	673237
500-232605-38 - DL	B-18 (16')	Total/NA	Solid	537 (modified)	673237

Analysis Batch: 674357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-26	B-13 (3')	Total/NA	Solid	537 (modified)	673237
500-232605-40 - DL	B-19 (5.5')	Total/NA	Solid	537 (modified)	673238
500-232605-47 - DL	B-23 (2')	Total/NA	Solid	537 (modified)	673238
500-232605-54 - DL	FD-1	Total/NA	Solid	537 (modified)	673238

General Chemistry

Analysis Batch: 670023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-23	B-11 (10')	Total/NA	Solid	D 2216	
500-232605-24	B-12 (3')	Total/NA	Solid	D 2216	
500-232605-25	B-12 (11')	Total/NA	Solid	D 2216	
500-232605-26	B-13 (3')	Total/NA	Solid	D 2216	
500-232605-27	B-13 (10')	Total/NA	Solid	D 2216	
500-232605-28	B-14 (2')	Total/NA	Solid	D 2216	
500-232605-29	B-14 (10')	Total/NA	Solid	D 2216	
500-232605-30	B-15 (2')	Total/NA	Solid	D 2216	
500-232605-31	B-15 (10')	Total/NA	Solid	D 2216	
500-232605-32	B-16 (2')	Total/NA	Solid	D 2216	
500-232605-33	B-16 (10')	Total/NA	Solid	D 2216	
500-232605-34	B-17 (2')	Total/NA	Solid	D 2216	
500-232605-35	B-17 (9')	Total/NA	Solid	D 2216	
500-232605-36	B-18 (3')	Total/NA	Solid	D 2216	
500-232605-37	B-18 (8')	Total/NA	Solid	D 2216	
500-232605-38	B-18 (16')	Total/NA	Solid	D 2216	
500-232605-39	B-19 (2')	Total/NA	Solid	D 2216	

Analysis Batch: 670134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-40	B-19 (5.5')	Total/NA	Solid	D 2216	
500-232605-41	B-20 (3')	Total/NA	Solid	D 2216	
500-232605-42	B-20 (10')	Total/NA	Solid	D 2216	
500-232605-43	B-21 (2')	Total/NA	Solid	D 2216	
500-232605-44	B-21 (9')	Total/NA	Solid	D 2216	
500-232605-45	B-22 (2')	Total/NA	Solid	D 2216	
500-232605-46	B-22 (10')	Total/NA	Solid	D 2216	
500-232605-47	B-23 (2')	Total/NA	Solid	D 2216	
500-232605-48	B-23 (10')	Total/NA	Solid	D 2216	
500-232605-40 DU	B-19 (5.5')	Total/NA	Solid	D 2216	

Analysis Batch: 670534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-232605-54	FD-1	Total/NA	Solid	D 2216	
500-232605-55	FD-2	Total/NA	Solid	D 2216	
500-232605-55 DU	FD-2	Total/NA	Solid	D 2216	

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-669862/1-A
Matrix: Solid
Analysis Batch: 670560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.046		0.20	0.046	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg		04/23/23 19:00	04/26/23 13:47	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg		04/23/23 19:00	04/26/23 13:47	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C5 PFPeA	*107*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C2 PFHxA	*90*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C4 PFHpA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C4 PFOA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C5 PFNA	*91*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C2 PFDA	*90*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C2 PFUnA	*89*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C2 PFDoA	*89*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*
13C2 PFTeDA	*94*		*25 - 150*	*04/23/23 19:00*	*04/26/23 13:47*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-669862/1-A
Matrix: Solid
Analysis Batch: 670560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669862

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	106		25 - 150	04/23/23 19:00	04/26/23 13:47	1
18O2 PFHxS	81		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C4 PFOS	95		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C8 FOSA	99		10 - 150	04/23/23 19:00	04/26/23 13:47	1
d3-NMeFOSAA	97		25 - 150	04/23/23 19:00	04/26/23 13:47	1
d5-NEtFOSAA	98		25 - 150	04/23/23 19:00	04/26/23 13:47	1
d-N-MeFOSA-M	90		10 - 150	04/23/23 19:00	04/26/23 13:47	1
d-N-EtFOSA-M	92		10 - 150	04/23/23 19:00	04/26/23 13:47	1
d7-N-MeFOSE-M	87		10 - 150	04/23/23 19:00	04/26/23 13:47	1
d9-N-EtFOSE-M	86		10 - 150	04/23/23 19:00	04/26/23 13:47	1
M2-4:2 FTS	82		25 - 150	04/23/23 19:00	04/26/23 13:47	1
M2-6:2 FTS	85		25 - 150	04/23/23 19:00	04/26/23 13:47	1
M2-8:2 FTS	97		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C3 HFPO-DA	92		25 - 150	04/23/23 19:00	04/26/23 13:47	1
13C2 10:2 FTS	81		25 - 150	04/23/23 19:00	04/26/23 13:47	1

Lab Sample ID: LCS 320-669862/2-A
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	2.03		ug/Kg		101	60 - 135
Perfluoropentanoic acid (PFPeA)	2.00	2.01		ug/Kg		100	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	1.94		ug/Kg		97	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.17		ug/Kg		109	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.10		ug/Kg		105	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.04		ug/Kg		102	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	2.10		ug/Kg		105	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	2.15		ug/Kg		107	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.02		ug/Kg		101	60 - 135
Perfluorotridecanoic acid (PFTrDA)	2.00	2.08		ug/Kg		104	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	1.98		ug/Kg		99	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.78	1.83		ug/Kg		103	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	2.08		ug/Kg		111	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.87		ug/Kg		103	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	1.91	1.85		ug/Kg		97	60 - 135
Perfluorooctanesulfonic acid (PFOS)	1.86	1.76		ug/Kg		95	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	1.64		ug/Kg		85	60 - 135
Perfluorodecanesulfonic acid (PFDS)	1.93	1.77		ug/Kg		92	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.62		ug/Kg		84	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-669862/2-A
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonamide (FOSA)	2.00	2.15		ug/Kg		108	60 - 135
NEtFOSA	2.00	2.11		ug/Kg		105	60 - 135
NMeFOSA	2.00	2.19		ug/Kg		109	60 - 135
NMeFOSAA	2.00	2.20		ug/Kg		110	60 - 135
NEtFOSAA	2.00	2.02		ug/Kg		101	60 - 135
NMeFOSE	2.00	2.12		ug/Kg		106	60 - 135
NEtFOSE	2.00	2.13		ug/Kg		106	60 - 135
4:2 FTS	1.88	1.98		ug/Kg		106	60 - 135
6:2 FTS	1.90	1.95		ug/Kg		102	60 - 135
8:2 FTS	1.92	2.05		ug/Kg		107	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	1.73		ug/Kg		92	60 - 135
HFPO-DA (GenX)	2.00	2.32		ug/Kg		116	60 - 135
9Cl-PF3ONS	1.87	1.70		ug/Kg		91	60 - 135
11Cl-PF3OUdS	1.89	1.69		ug/Kg		89	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*89*		*25 - 150*
13C5 PFPeA	*88*		*25 - 150*
13C2 PFHxA	*91*		*25 - 150*
13C4 PFHpA	*90*		*25 - 150*
13C4 PFOA	*90*		*25 - 150*
13C5 PFNA	*92*		*25 - 150*
13C2 PFDA	*88*		*25 - 150*
13C2 PFUnA	*80*		*25 - 150*
13C2 PFDoA	*81*		*25 - 150*
13C2 PFTeDA	*86*		*25 - 150*
13C3 PFBS	*86*		*25 - 150*
18O2 PFHxS	*93*		*25 - 150*
13C4 PFOS	*101*		*25 - 150*
13C8 FOSA	*92*		*10 - 150*
d3-NMeFOSAA	*88*		*25 - 150*
d5-NEtFOSAA	*94*		*25 - 150*
d-N-MeFOSA-M	*85*		*10 - 150*
d-N-EtFOSA-M	*79*		*10 - 150*
d7-N-MeFOSE-M	*72*		*10 - 150*
d9-N-EtFOSE-M	*74*		*10 - 150*
M2-4:2 FTS	*77*		*25 - 150*
M2-6:2 FTS	*83*		*25 - 150*
M2-8:2 FTS	*95*		*25 - 150*
13C3 HFPO-DA	*68*		*25 - 150*
13C2 10:2 FTS	*71*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-25 MS
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: B-12 (11')
Prep Type: Total/NA
Prep Batch: 669862

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	1.6		2.12	3.85		ug/Kg	☼	107	70 - 130
Perfluoropentanoic acid (PFPeA)	7.8	F1	2.12	10.5	F1	ug/Kg	☼	132	70 - 130
Perfluorohexanoic acid (PFHxA)	19		2.12	20.8	4	ug/Kg	☼	107	70 - 130
Perfluoroheptanoic acid (PFHpA)	5.9		2.12	8.32		ug/Kg	☼	114	70 - 130
Perfluorooctanoic acid (PFOA)	8.0	F1	2.12	11.9	F1	ug/Kg	☼	183	70 - 130
Perfluorononanoic acid (PFNA)	<0.022		2.12	2.23		ug/Kg	☼	105	70 - 130
Perfluorodecanoic acid (PFDA)	<0.047		2.12	2.29		ug/Kg	☼	108	70 - 130
Perfluoroundecanoic acid (PFUnA)	<0.042		2.12	2.18		ug/Kg	☼	103	70 - 130
Perfluorododecanoic acid (PFDoA)	<0.030		2.12	2.21		ug/Kg	☼	104	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<0.021		2.12	2.34		ug/Kg	☼	111	70 - 130
Perfluorotetradecanoic acid (PFTeA)	<0.037		2.12	2.21		ug/Kg	☼	104	70 - 130
Perfluorobutanesulfonic acid (PFBS)	3.2		1.88	5.65		ug/Kg	☼	128	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	3.8		1.99	6.04		ug/Kg	☼	112	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	15		1.93	18.7	4	ug/Kg	☼	201	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<0.048		2.02	2.19		ug/Kg	☼	108	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<0.043		1.97	1.90		ug/Kg	☼	96	70 - 130
Perfluorononanesulfonic acid (PFNS)	<0.029		2.04	1.98		ug/Kg	☼	97	70 - 130
Perfluorodecanesulfonic acid (PFDS)	<0.051		2.04	2.07		ug/Kg	☼	101	70 - 130
Perfluorododecanesulfonic acid (PFDoS)	<0.046		2.05	1.96		ug/Kg	☼	95	70 - 130
Perfluorooctanesulfonamide (FOSA)	<0.033		2.12	2.15		ug/Kg	☼	102	70 - 130
NEtFOSA	<0.046		2.12	2.12		ug/Kg	☼	100	70 - 130
NMeFOSA	<0.048		2.12	2.38		ug/Kg	☼	112	70 - 130
NMeFOSAA	<0.023		2.12	2.25		ug/Kg	☼	106	70 - 130
NEtFOSAA	<0.047		2.12	2.39		ug/Kg	☼	113	70 - 130
NMeFOSE	<0.046		2.12	2.24		ug/Kg	☼	106	70 - 130
NEtFOSE	<0.028		2.12	2.27		ug/Kg	☼	107	70 - 130
4:2 FTS	<0.050		1.99	2.14		ug/Kg	☼	108	70 - 130
6:2 FTS	<0.027		2.01	2.04		ug/Kg	☼	101	70 - 130
8:2 FTS	<0.035		2.03	2.28		ug/Kg	☼	112	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		2.00	2.15		ug/Kg	☼	108	70 - 130
HFPO-DA (GenX)	<0.041		2.12	2.42		ug/Kg	☼	114	70 - 130
9Cl-PF3ONS	<0.035		1.98	1.91		ug/Kg	☼	97	70 - 130
11Cl-PF3OUdS	<0.031		2.00	1.96		ug/Kg	☼	98	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*93*		*25 - 150*
13C5 PFPeA	*88*		*25 - 150*
13C2 PFHxA	*92*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-25 MS
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: B-12 (11')
Prep Type: Total/NA
Prep Batch: 669862

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFHpA	92		25 - 150
13C4 PFOA	91		25 - 150
13C5 PFNA	91		25 - 150
13C2 PFDA	88		25 - 150
13C2 PFUnA	83		25 - 150
13C2 PFDoA	78		25 - 150
13C2 PFTeDA	84		25 - 150
13C3 PFBS	84		25 - 150
18O2 PFHxS	91		25 - 150
13C4 PFOS	91		25 - 150
13C8 FOSA	94		10 - 150
d3-NMeFOSAA	88		25 - 150
d5-NEtFOSAA	84		25 - 150
d-N-MeFOSA-M	85		10 - 150
d-N-EtFOSA-M	88		10 - 150
d7-N-MeFOSE-M	76		10 - 150
d9-N-EtFOSE-M	76		10 - 150
M2-4:2 FTS	75		25 - 150
M2-6:2 FTS	80		25 - 150
M2-8:2 FTS	82		25 - 150
13C3 HFPO-DA	72		25 - 150
13C2 10:2 FTS	61		25 - 150

Lab Sample ID: 500-232605-25 MSD
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: B-12 (11')
Prep Type: Total/NA
Prep Batch: 669862

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	1.6		2.08	3.61		ug/Kg	☼	97	70 - 130	6	30
Perfluoropentanoic acid (PFPeA)	7.8	F1	2.08	9.71		ug/Kg	☼	94	70 - 130	8	30
Perfluorohexanoic acid (PFHxA)	19		2.08	18.2	4	ug/Kg	☼	-21	70 - 130	14	30
Perfluoroheptanoic acid (PFHpA)	5.9		2.08	7.47		ug/Kg	☼	75	70 - 130	11	30
Perfluorooctanoic acid (PFOA)	8.0	F1	2.08	10.1		ug/Kg	☼	97	70 - 130	17	30
Perfluorononanoic acid (PFNA)	<0.022		2.08	2.06		ug/Kg	☼	99	70 - 130	8	30
Perfluorodecanoic acid (PFDA)	<0.047		2.08	2.37		ug/Kg	☼	114	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)	<0.042		2.08	2.35		ug/Kg	☼	113	70 - 130	7	30
Perfluorododecanoic acid (PFDoA)	<0.030		2.08	2.15		ug/Kg	☼	103	70 - 130	3	30
Perfluorotridecanoic acid (PFTrDA)	<0.021		2.08	2.11		ug/Kg	☼	101	70 - 130	10	30
Perfluorotetradecanoic acid (PFTeA)	<0.037		2.08	2.14		ug/Kg	☼	103	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)	3.2		1.85	5.11		ug/Kg	☼	101	70 - 130	10	30
Perfluoropentanesulfonic acid (PFPeS)	3.8		1.96	5.37		ug/Kg	☼	79	70 - 130	12	30
Perfluorohexanesulfonic acid (PFHxS)	15		1.90	15.1	4	ug/Kg	☼	16	70 - 130	21	30
Perfluoroheptanesulfonic acid (PFHpS)	<0.048		1.99	1.99		ug/Kg	☼	100	70 - 130	9	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-25 MSD
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: B-12 (11')
Prep Type: Total/NA
Prep Batch: 669862

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	<0.043		1.94	1.78		ug/Kg	☼	92	70 - 130	6	30
Perfluorononanesulfonic acid (PFNS)	<0.029		2.00	1.86		ug/Kg	☼	93	70 - 130	7	30
Perfluorodecanesulfonic acid (PFDS)	<0.051		2.01	1.85		ug/Kg	☼	92	70 - 130	11	30
Perfluorododecanesulfonic acid (PFDoS)	<0.046		2.02	1.88		ug/Kg	☼	93	70 - 130	4	30
Perfluorooctanesulfonamide (FOSA)	<0.033		2.08	2.23		ug/Kg	☼	107	70 - 130	4	30
NEtFOSA	<0.046		2.08	2.18		ug/Kg	☼	105	70 - 130	3	30
NMeFOSA	<0.048		2.08	2.31		ug/Kg	☼	111	70 - 130	3	30
NMeFOSAA	<0.023		2.08	2.03		ug/Kg	☼	97	70 - 130	11	30
NEtFOSAA	<0.047		2.08	2.33		ug/Kg	☼	112	70 - 130	2	30
NMeFOSE	<0.046		2.08	2.28		ug/Kg	☼	109	70 - 130	2	30
NEtFOSE	<0.028		2.08	2.29		ug/Kg	☼	110	70 - 130	1	30
4:2 FTS	<0.050		1.95	2.17		ug/Kg	☼	111	70 - 130	1	30
6:2 FTS	<0.027		1.98	2.04		ug/Kg	☼	103	70 - 130	0	30
8:2 FTS	<0.035		2.00	2.08		ug/Kg	☼	104	70 - 130	9	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		1.97	2.00		ug/Kg	☼	102	70 - 130	7	30
HFPO-DA (GenX)	<0.041		2.08	2.26		ug/Kg	☼	109	70 - 130	7	30
9Cl-PF3ONS	<0.035		1.95	1.81		ug/Kg	☼	93	70 - 130	5	30
11Cl-PF3OUdS	<0.031		1.97	1.84		ug/Kg	☼	94	70 - 130	6	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*89*		*25 - 150*
13C5 PFPeA	*84*		*25 - 150*
13C2 PFHxA	*85*		*25 - 150*
13C4 PFHpA	*84*		*25 - 150*
13C4 PFOA	*85*		*25 - 150*
13C5 PFNA	*94*		*25 - 150*
13C2 PFDA	*81*		*25 - 150*
13C2 PFUnA	*75*		*25 - 150*
13C2 PFDoA	*80*		*25 - 150*
13C2 PFTeDA	*83*		*25 - 150*
13C3 PFBS	*82*		*25 - 150*
18O2 PFHxS	*89*		*25 - 150*
13C4 PFOS	*96*		*25 - 150*
13C8 FOSA	*90*		*10 - 150*
d3-NMeFOSAA	*90*		*25 - 150*
d5-NEtFOSAA	*82*		*25 - 150*
d-N-MeFOSA-M	*87*		*10 - 150*
d-N-EtFOSA-M	*86*		*10 - 150*
d7-N-MeFOSE-M	*73*		*10 - 150*
d9-N-EtFOSE-M	*71*		*10 - 150*
M2-4:2 FTS	*74*		*25 - 150*
M2-6:2 FTS	*77*		*25 - 150*
M2-8:2 FTS	*85*		*25 - 150*
13C3 HFPO-DA	*71*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-25 MSD
Matrix: Solid
Analysis Batch: 670113

Client Sample ID: B-12 (11')
Prep Type: Total/NA
Prep Batch: 669862

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C2 10:2 FTS	*60*		*25 - 150*

Lab Sample ID: MB 320-669872/1-A
Matrix: Water
Analysis Batch: 670228

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669872

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.19		2.0	0.19	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		04/25/23 06:45	04/26/23 11:32	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		04/25/23 06:45	04/26/23 11:32	1
NEtFOSA	<0.87		2.0	0.87	ng/L		04/25/23 06:45	04/26/23 11:32	1
NMeFOSA	<0.43		2.0	0.43	ng/L		04/25/23 06:45	04/26/23 11:32	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		04/25/23 06:45	04/26/23 11:32	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		04/25/23 06:45	04/26/23 11:32	1
NMeFOSE	<1.4		4.0	1.4	ng/L		04/25/23 06:45	04/26/23 11:32	1
NEtFOSE	<0.85		2.0	0.85	ng/L		04/25/23 06:45	04/26/23 11:32	1
4:2 FTS	<0.24		2.0	0.24	ng/L		04/25/23 06:45	04/26/23 11:32	1
6:2 FTS	<2.5		5.0	2.5	ng/L		04/25/23 06:45	04/26/23 11:32	1
8:2 FTS	<0.46		2.0	0.46	ng/L		04/25/23 06:45	04/26/23 11:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		04/25/23 06:45	04/26/23 11:32	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		04/25/23 06:45	04/26/23 11:32	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		04/25/23 06:45	04/26/23 11:32	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		04/25/23 06:45	04/26/23 11:32	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	*89*		*25 - 150*	*04/25/23 06:45*	*04/26/23 11:32*	*1*
13C5 PFPeA	*93*		*25 - 150*	*04/25/23 06:45*	*04/26/23 11:32*	*1*
13C2 PFHxA	*94*		*25 - 150*	*04/25/23 06:45*	*04/26/23 11:32*	*1*
13C4 PFHpA	*92*		*25 - 150*	*04/25/23 06:45*	*04/26/23 11:32*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-669872/1-A
Matrix: Water
Analysis Batch: 670228

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669872

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	93		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C5 PFNA	93		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C2 PFDA	102		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C2 PFUnA	94		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C2 PFDoA	94		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C2 PFTeDA	93		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C3 PFBS	84		25 - 150	04/25/23 06:45	04/26/23 11:32	1
18O2 PFHxS	85		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C4 PFOS	87		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C8 FOSA	87		10 - 150	04/25/23 06:45	04/26/23 11:32	1
d3-NMeFOSAA	98		25 - 150	04/25/23 06:45	04/26/23 11:32	1
d5-NEtFOSAA	96		25 - 150	04/25/23 06:45	04/26/23 11:32	1
d-N-MeFOSA-M	81		10 - 150	04/25/23 06:45	04/26/23 11:32	1
d-N-EtFOSA-M	77		10 - 150	04/25/23 06:45	04/26/23 11:32	1
d7-N-MeFOSE-M	82		10 - 150	04/25/23 06:45	04/26/23 11:32	1
d9-N-EtFOSE-M	80		10 - 150	04/25/23 06:45	04/26/23 11:32	1
M2-4:2 FTS	91		25 - 150	04/25/23 06:45	04/26/23 11:32	1
M2-6:2 FTS	85		25 - 150	04/25/23 06:45	04/26/23 11:32	1
M2-8:2 FTS	94		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C3 HFPO-DA	85		25 - 150	04/25/23 06:45	04/26/23 11:32	1
13C2 10:2 FTS	93		25 - 150	04/25/23 06:45	04/26/23 11:32	1

Lab Sample ID: LCS 320-669872/2-A
Matrix: Water
Analysis Batch: 670228

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	40.0	42.5		ng/L		106	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	41.7		ng/L		104	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	39.2		ng/L		98	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	42.8		ng/L		107	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	41.9		ng/L		105	60 - 135
Perfluorononanoic acid (PFNA)	40.0	44.2		ng/L		110	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	44.9		ng/L		112	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	43.2		ng/L		108	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	44.5		ng/L		111	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	41.6		ng/L		104	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	37.6		ng/L		94	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.5	37.4		ng/L		105	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.6	44.9		ng/L		119	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.5	38.4		ng/L		105	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	38.2	42.2		ng/L		111	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-669872/2-A
Matrix: Water
Analysis Batch: 670228

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669872

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	37.2	38.5		ng/L		103	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.5	43.6		ng/L		113	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	41.4		ng/L		107	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.8	34.2		ng/L		88	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	46.9		ng/L		117	60 - 135
NEtFOSA	40.0	44.5		ng/L		111	60 - 135
NMeFOSA	40.0	41.4		ng/L		103	60 - 135
NMeFOSAA	40.0	43.5		ng/L		109	60 - 135
NEtFOSAA	40.0	38.6		ng/L		96	60 - 135
NMeFOSE	40.0	43.9		ng/L		110	60 - 135
NEtFOSE	40.0	44.8		ng/L		112	60 - 135
4:2 FTS	37.5	43.7		ng/L		116	60 - 135
6:2 FTS	38.1	44.6		ng/L		117	60 - 135
8:2 FTS	38.4	42.1		ng/L		110	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	50.1		ng/L		133	60 - 135
HFPO-DA (GenX)	40.0	43.1		ng/L		108	60 - 135
9Cl-PF3ONS	37.4	43.8		ng/L		117	60 - 135
11Cl-PF3OUdS	37.8	44.3		ng/L		117	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*96*		*25 - 150*
13C5 PFPeA	*98*		*25 - 150*
13C2 PFHxA	*97*		*25 - 150*
13C4 PFHpA	*101*		*25 - 150*
13C4 PFOA	*102*		*25 - 150*
13C5 PFNA	*96*		*25 - 150*
13C2 PFDA	*106*		*25 - 150*
13C2 PFUnA	*98*		*25 - 150*
13C2 PFDoA	*96*		*25 - 150*
13C2 PFTeDA	*100*		*25 - 150*
13C3 PFBS	*89*		*25 - 150*
18O2 PFHxS	*91*		*25 - 150*
13C4 PFOS	*88*		*25 - 150*
13C8 FOSA	*83*		*10 - 150*
d3-NMeFOSAA	*92*		*25 - 150*
d5-NEtFOSAA	*96*		*25 - 150*
d-N-MeFOSA-M	*70*		*10 - 150*
d-N-EtFOSA-M	*67*		*10 - 150*
d7-N-MeFOSE-M	*78*		*10 - 150*
d9-N-EtFOSE-M	*77*		*10 - 150*
M2-4:2 FTS	*98*		*25 - 150*
M2-6:2 FTS	*96*		*25 - 150*
M2-8:2 FTS	*99*		*25 - 150*
13C3 HFPO-DA	*89*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-669872/2-A
Matrix: Water
Analysis Batch: 670228

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669872

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2 10:2 FTS	96		25 - 150

Lab Sample ID: LCSD 320-669872/3-A
Matrix: Water
Analysis Batch: 670228

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 669872

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	42.1		ng/L		105	60 - 135	1	30
Perfluoropentanoic acid (PFPeA)			40.0	43.9		ng/L		110	60 - 135	5	30
Perfluorohexanoic acid (PFHxA)			40.0	40.2		ng/L		101	60 - 135	3	30
Perfluoroheptanoic acid (PFHpA)			40.0	41.4		ng/L		104	60 - 135	3	30
Perfluorooctanoic acid (PFOA)			40.0	41.4		ng/L		104	60 - 135	1	30
Perfluorononanoic acid (PFNA)			40.0	45.0		ng/L		112	60 - 135	2	30
Perfluorodecanoic acid (PFDA)			40.0	45.6		ng/L		114	60 - 135	1	30
Perfluoroundecanoic acid (PFUnA)			40.0	44.1		ng/L		110	60 - 135	2	30
Perfluorododecanoic acid (PFDoA)			40.0	42.3		ng/L		106	60 - 135	5	30
Perfluorotridecanoic acid (PFTrDA)			40.0	42.5		ng/L		106	60 - 135	2	30
Perfluorotetradecanoic acid (PFTeA)			40.0	37.1		ng/L		93	60 - 135	1	30
Perfluorobutanesulfonic acid (PFBS)			35.5	37.3		ng/L		105	60 - 135	0	30
Perfluoropentanesulfonic acid (PFPeS)			37.6	45.3		ng/L		120	60 - 135	1	30
Perfluorohexanesulfonic acid (PFHxS)			36.5	38.7		ng/L		106	60 - 135	1	30
Perfluoroheptanesulfonic acid (PFHpS)			38.2	41.2		ng/L		108	60 - 135	3	30
Perfluorooctanesulfonic acid (PFOS)			37.2	36.7		ng/L		99	60 - 135	5	30
Perfluorononanesulfonic acid (PFNS)			38.5	40.6		ng/L		105	60 - 135	7	30
Perfluorodecanesulfonic acid (PFDS)			38.6	39.1		ng/L		101	60 - 135	6	30
Perfluorododecanesulfonic acid (PFDoS)			38.8	35.7		ng/L		92	60 - 135	4	30
Perfluorooctanesulfonamide (FOSA)			40.0	44.1		ng/L		110	60 - 135	6	30
NEtFOSA			40.0	48.2		ng/L		121	60 - 135	8	30
NMeFOSA			40.0	43.0		ng/L		108	60 - 135	4	30
NMeFOSAA			40.0	43.0		ng/L		107	60 - 135	1	30
NEtFOSAA			40.0	41.6		ng/L		104	60 - 135	7	30
NMeFOSE			40.0	43.2		ng/L		108	60 - 135	2	30
NEtFOSE			40.0	42.2		ng/L		105	60 - 135	6	30
4:2 FTS			37.5	44.3		ng/L		118	60 - 135	2	30
6:2 FTS			38.1	42.6		ng/L		112	60 - 135	5	30
8:2 FTS			38.4	41.1		ng/L		107	60 - 135	3	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			37.8	50.2		ng/L		133	60 - 135	0	30
HFPO-DA (GenX)			40.0	42.1		ng/L		105	60 - 135	2	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-669872/3-A
Matrix: Water
Analysis Batch: 670228

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 669872

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
9Cl-PF3ONS			37.4	42.2		ng/L		113	60 - 135	4	30
11Cl-PF3OUdS			37.8	44.4		ng/L		117	60 - 135	0	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*102*		*25 - 150*
13C5 PFPeA	*98*		*25 - 150*
13C2 PFHxA	*97*		*25 - 150*
13C4 PFHpA	*106*		*25 - 150*
13C4 PFOA	*102*		*25 - 150*
13C5 PFNA	*97*		*25 - 150*
13C2 PFDA	*109*		*25 - 150*
13C2 PFUnA	*98*		*25 - 150*
13C2 PFDoA	*102*		*25 - 150*
13C2 PFTeDA	*106*		*25 - 150*
13C3 PFBS	*90*		*25 - 150*
18O2 PFHxS	*93*		*25 - 150*
13C4 PFOS	*91*		*25 - 150*
13C8 FOSA	*90*		*10 - 150*
d3-NMeFOSAA	*93*		*25 - 150*
d5-NEtFOSAA	*96*		*25 - 150*
d-N-MeFOSA-M	*79*		*10 - 150*
d-N-EtFOSA-M	*71*		*10 - 150*
d7-N-MeFOSE-M	*87*		*10 - 150*
d9-N-EtFOSE-M	*88*		*10 - 150*
M2-4:2 FTS	*98*		*25 - 150*
M2-6:2 FTS	*96*		*25 - 150*
M2-8:2 FTS	*102*		*25 - 150*
13C3 HFPO-DA	*91*		*25 - 150*
13C2 10:2 FTS	*102*		*25 - 150*

Lab Sample ID: MB 320-673237/1-A
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.046		0.20	0.046	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		05/09/23 05:07	05/11/23 08:11	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-673237/1-A
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg		05/09/23 05:07	05/11/23 08:11	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg		05/09/23 05:07	05/11/23 08:11	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C5 PFPeA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C2 PFHxA	*99*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C4 PFHpA	*108*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C4 PFOA	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C5 PFNA	*104*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C2 PFDA	*101*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C2 PFUnA	*100*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C2 PFDoA	*92*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C2 PFTeDA	*106*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C3 PFBS	*96*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
18O2 PFHxS	*97*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C4 PFOS	*105*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C8 FOSA	*111*		*10 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
d3-NMeFOSAA	*132*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
d5-NEtFOSAA	*134*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
d-N-MeFOSA-M	*63*		*10 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
d-N-EtFOSA-M	*58*		*10 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
d7-N-MeFOSE-M	*88*		*10 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
d9-N-EtFOSE-M	*85*		*10 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
M2-4:2 FTS	*68*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
M2-6:2 FTS	*63*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
M2-8:2 FTS	*73*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*
13C3 HFPO-DA	*100*		*25 - 150*	*05/09/23 05:07*	*05/11/23 08:11*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-673237/1-A
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673237

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 10:2 FTS	81		25 - 150	05/09/23 05:07	05/11/23 08:11	1

Lab Sample ID: LCS 320-673237/2-A
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	2.26		ug/Kg		113	60 - 135
Perfluoropentanoic acid (PFPeA)	2.00	2.09		ug/Kg		105	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	2.40		ug/Kg		120	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.20		ug/Kg		110	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.24		ug/Kg		112	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.22		ug/Kg		111	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	2.31		ug/Kg		115	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	2.04		ug/Kg		102	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.22		ug/Kg		111	60 - 135
Perfluorotridecanoic acid (PFTrDA)	2.00	2.39		ug/Kg		119	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	1.91		ug/Kg		96	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.78	1.96		ug/Kg		110	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	2.15		ug/Kg		114	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	2.02		ug/Kg		111	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	1.91	2.03		ug/Kg		106	60 - 135
Perfluorooctanesulfonic acid (PFOS)	1.86	1.94		ug/Kg		104	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	2.18		ug/Kg		113	60 - 135
Perfluorodecanesulfonic acid (PFDS)	1.93	2.13		ug/Kg		110	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	2.17		ug/Kg		112	60 - 135
Perfluorooctanesulfonamide (FOSA)	2.00	2.20		ug/Kg		110	60 - 135
NEtFOSA	2.00	2.07		ug/Kg		104	60 - 135
NMeFOSA	2.00	1.81		ug/Kg		90	60 - 135
NMeFOSAA	2.00	2.10		ug/Kg		105	60 - 135
NEtFOSAA	2.00	2.18		ug/Kg		109	60 - 135
NMeFOSE	2.00	2.10		ug/Kg		105	60 - 135
NEtFOSE	2.00	2.26		ug/Kg		113	60 - 135
4:2 FTS	1.88	2.24		ug/Kg		119	60 - 135
6:2 FTS	1.90	2.12		ug/Kg		112	60 - 135
8:2 FTS	1.92	2.18		ug/Kg		113	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	2.22		ug/Kg		117	60 - 135
HFPO-DA (GenX)	2.00	2.03		ug/Kg		102	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-673237/2-A
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673237

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
9Cl-PF3ONS			1.87	2.17		ug/Kg		116	60 - 135		
11Cl-PF3OUdS			1.89	2.16		ug/Kg		114	60 - 135		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*105*		*25 - 150*
13C5 PFPeA	*103*		*25 - 150*
13C2 PFHxA	*100*		*25 - 150*
13C4 PFHpA	*113*		*25 - 150*
13C4 PFOA	*105*		*25 - 150*
13C5 PFNA	*104*		*25 - 150*
13C2 PFDA	*108*		*25 - 150*
13C2 PFUnA	*113*		*25 - 150*
13C2 PFDoA	*113*		*25 - 150*
13C2 PFTeDA	*122*		*25 - 150*
13C3 PFBS	*104*		*25 - 150*
18O2 PFHxS	*105*		*25 - 150*
13C4 PFOS	*111*		*25 - 150*
13C8 FOSA	*133*		*10 - 150*
d3-NMeFOSAA	*143*		*25 - 150*
d5-NEtFOSAA	*146*		*25 - 150*
d-N-MeFOSA-M	*90*		*10 - 150*
d-N-EtFOSA-M	*82*		*10 - 150*
d7-N-MeFOSE-M	*104*		*10 - 150*
d9-N-EtFOSE-M	*104*		*10 - 150*
M2-4:2 FTS	*70*		*25 - 150*
M2-6:2 FTS	*74*		*25 - 150*
M2-8:2 FTS	*82*		*25 - 150*
13C3 HFPO-DA	*103*		*25 - 150*
13C2 10:2 FTS	*98*		*25 - 150*

Lab Sample ID: 500-232605-39 MS
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: B-19 (2')
Prep Type: Total/NA
Prep Batch: 673237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	0.087	J	2.28	2.60		ug/Kg	☼	110	70 - 130
Perfluoropentanoic acid (PFPeA)	0.26		2.28	2.64		ug/Kg	☼	104	70 - 130
Perfluorohexanoic acid (PFHxA)	0.58		2.28	3.08		ug/Kg	☼	110	70 - 130
Perfluoroheptanoic acid (PFHpA)	0.38		2.28	2.72		ug/Kg	☼	103	70 - 130
Perfluorooctanoic acid (PFOA)	2.2		2.28	4.29		ug/Kg	☼	91	70 - 130
Perfluorononanoic acid (PFNA)	0.22	J	2.28	2.66		ug/Kg	☼	107	70 - 130
Perfluorodecanoic acid (PFDA)	<0.055		2.28	2.40		ug/Kg	☼	105	70 - 130
Perfluoroundecanoic acid (PFUnA)	<0.048		2.28	2.39		ug/Kg	☼	105	70 - 130
Perfluorododecanoic acid (PFDoA)	<0.034		2.28	2.51		ug/Kg	☼	110	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<0.024		2.28	2.64		ug/Kg	☼	115	70 - 130
Perfluorotetradecanoic acid (PFTeA)	<0.042		2.28	2.28		ug/Kg	☼	100	70 - 130

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-39 MS
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: B-19 (2')
Prep Type: Total/NA
Prep Batch: 673237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid (PFBS)	0.054	J	2.03	2.25		ug/Kg	☼	108	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	0.089	J	2.15	2.46		ug/Kg	☼	111	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	4.1	F1	2.08	6.36		ug/Kg	☼	106	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	0.096	J	2.18	2.42		ug/Kg	☼	107	70 - 130
Perfluorooctanesulfonic acid (PFOS)	11		2.12	12.3	4	ug/Kg	☼	79	70 - 130
Perfluorononanesulfonic acid (PFNS)	<0.033		2.20	2.07		ug/Kg	☼	94	70 - 130
Perfluorodecanesulfonic acid (PFDS)	<0.059		2.20	1.95		ug/Kg	☼	89	70 - 130
Perfluorododecanesulfonic acid (PFDoS)	<0.054		2.21	2.01		ug/Kg	☼	91	70 - 130
Perfluorooctanesulfonamide (FOSA)	0.090	J	2.28	2.53		ug/Kg	☼	107	70 - 130
NEtFOSA	<0.054		2.28	2.36		ug/Kg	☼	103	70 - 130
NMeFOSA	<0.056		2.28	2.26		ug/Kg	☼	99	70 - 130
NMeFOSAA	<0.026		2.28	2.41		ug/Kg	☼	106	70 - 130
NEtFOSAA	<0.055		2.28	2.35		ug/Kg	☼	103	70 - 130
NMeFOSE	<0.054		2.28	2.31		ug/Kg	☼	101	70 - 130
NEtFOSE	<0.032		2.28	2.59		ug/Kg	☼	114	70 - 130
4:2 FTS	<0.058		2.14	2.55		ug/Kg	☼	119	70 - 130
6:2 FTS	<0.031		2.17	2.44		ug/Kg	☼	112	70 - 130
8:2 FTS	0.86		2.19	3.22		ug/Kg	☼	108	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		2.15	2.58		ug/Kg	☼	120	70 - 130
HFPO-DA (GenX)	<0.047		2.28	2.37		ug/Kg	☼	104	70 - 130
9Cl-PF3ONS	<0.040		2.13	2.31		ug/Kg	☼	108	70 - 130
11Cl-PF3OUdS	<0.035		2.15	1.92		ug/Kg	☼	89	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*97*		*25 - 150*
13C5 PFPeA	*91*		*25 - 150*
13C2 PFHxA	*92*		*25 - 150*
13C4 PFHpA	*99*		*25 - 150*
13C4 PFOA	*96*		*25 - 150*
13C5 PFNA	*93*		*25 - 150*
13C2 PFDA	*88*		*25 - 150*
13C2 PFUnA	*83*		*25 - 150*
13C2 PFDoA	*80*		*25 - 150*
13C2 PFTeDA	*85*		*25 - 150*
13C3 PFBS	*91*		*25 - 150*
18O2 PFHxS	*92*		*25 - 150*
13C4 PFOS	*92*		*25 - 150*
13C8 FOSA	*102*		*10 - 150*
d3-NMeFOSAA	*87*		*25 - 150*
d5-NEtFOSAA	*85*		*25 - 150*
d-N-MeFOSA-M	*76*		*10 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-39 MS
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: B-19 (2')
Prep Type: Total/NA
Prep Batch: 673237

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
d-N-EtFOSA-M	77		10 - 150
d7-N-MeFOSE-M	84		10 - 150
d9-N-EtFOSE-M	82		10 - 150
M2-4:2 FTS	56		25 - 150
M2-6:2 FTS	60		25 - 150
M2-8:2 FTS	60		25 - 150
13C3 HFPO-DA	94		25 - 150
13C2 10:2 FTS	67		25 - 150

Lab Sample ID: 500-232605-39 MSD
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: B-19 (2')
Prep Type: Total/NA
Prep Batch: 673237

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	0.087	J	2.30	2.67		ug/Kg	☼	112	70 - 130	3	30
Perfluoropentanoic acid (PFPeA)	0.26		2.30	2.86		ug/Kg	☼	113	70 - 130	8	30
Perfluorohexanoic acid (PFHxA)	0.58		2.30	3.10		ug/Kg	☼	110	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)	0.38		2.30	2.97		ug/Kg	☼	113	70 - 130	9	30
Perfluorooctanoic acid (PFOA)	2.2		2.30	4.07		ug/Kg	☼	81	70 - 130	5	30
Perfluorononanoic acid (PFNA)	0.22	J	2.30	2.81		ug/Kg	☼	113	70 - 130	6	30
Perfluorodecanoic acid (PFDA)	<0.055		2.30	2.70		ug/Kg	☼	117	70 - 130	12	30
Perfluoroundecanoic acid (PFUnA)	<0.048		2.30	2.54		ug/Kg	☼	111	70 - 130	6	30
Perfluorododecanoic acid (PFDoA)	<0.034		2.30	2.79		ug/Kg	☼	121	70 - 130	11	30
Perfluorotridecanoic acid (PFTrDA)	<0.024		2.30	2.75		ug/Kg	☼	120	70 - 130	4	30
Perfluorotetradecanoic acid (PFTeA)	<0.042		2.30	2.39		ug/Kg	☼	104	70 - 130	4	30
Perfluorobutanesulfonic acid (PFBS)	0.054	J	2.04	2.28		ug/Kg	☼	109	70 - 130	1	30
Perfluoropentanesulfonic acid (PFPeS)	0.089	J	2.16	2.59		ug/Kg	☼	116	70 - 130	5	30
Perfluorohexanesulfonic acid (PFHxS)	4.1	F1	2.10	5.44	F1	ug/Kg	☼	62	70 - 130	16	30
Perfluoroheptanesulfonic acid (PFHpS)	0.096	J	2.19	2.35		ug/Kg	☼	103	70 - 130	3	30
Perfluorooctanesulfonic acid (PFOS)	11		2.14	10.9	4	ug/Kg	☼	15	70 - 130	12	30
Perfluorononanesulfonic acid (PFNS)	<0.033		2.21	2.14		ug/Kg	☼	97	70 - 130	4	30
Perfluorodecanesulfonic acid (PFDS)	<0.059		2.22	2.04		ug/Kg	☼	92	70 - 130	5	30
Perfluorododecanesulfonic acid (PFDoS)	<0.054		2.23	2.05		ug/Kg	☼	92	70 - 130	2	30
Perfluorooctanesulfonamide (FOSA)	0.090	J	2.30	2.78		ug/Kg	☼	117	70 - 130	9	30
NEtFOSA	<0.054		2.30	2.56		ug/Kg	☼	111	70 - 130	8	30
NMeFOSA	<0.056		2.30	2.32		ug/Kg	☼	101	70 - 130	3	30
NMeFOSAA	<0.026		2.30	2.71		ug/Kg	☼	118	70 - 130	12	30
NEtFOSAA	<0.055		2.30	2.55		ug/Kg	☼	111	70 - 130	8	30
NMeFOSE	<0.054		2.30	2.59		ug/Kg	☼	113	70 - 130	11	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-232605-39 MSD
Matrix: Solid
Analysis Batch: 673652

Client Sample ID: B-19 (2')
Prep Type: Total/NA
Prep Batch: 673237

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
NEtFOSE	<0.032		2.30	2.56		ug/Kg	☼	111	70 - 130	1	30
4:2 FTS	<0.058		2.16	2.56		ug/Kg	☼	118	70 - 130	0	30
6:2 FTS	<0.031		2.19	2.67		ug/Kg	☼	122	70 - 130	9	30
8:2 FTS	0.86		2.21	3.43		ug/Kg	☼	116	70 - 130	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		2.17	2.54		ug/Kg	☼	117	70 - 130	2	30
HFPO-DA (GenX)	<0.047		2.30	2.49		ug/Kg	☼	108	70 - 130	5	30
9Cl-PF3ONS	<0.040		2.15	2.35		ug/Kg	☼	109	70 - 130	2	30
11Cl-PF3OUdS	<0.035		2.17	2.07		ug/Kg	☼	95	70 - 130	8	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*101*		*25 - 150*
13C5 PFPeA	*94*		*25 - 150*
13C2 PFHxA	*99*		*25 - 150*
13C4 PFHpA	*102*		*25 - 150*
13C4 PFOA	*102*		*25 - 150*
13C5 PFNA	*99*		*25 - 150*
13C2 PFDA	*96*		*25 - 150*
13C2 PFUnA	*92*		*25 - 150*
13C2 PFDoA	*89*		*25 - 150*
13C2 PFTeDA	*95*		*25 - 150*
13C3 PFBS	*97*		*25 - 150*
18O2 PFHxS	*102*		*25 - 150*
13C4 PFOS	*107*		*25 - 150*
13C8 FOSA	*102*		*10 - 150*
d3-NMeFOSAA	*101*		*25 - 150*
d5-NEtFOSAA	*108*		*25 - 150*
d-N-MeFOSA-M	*85*		*10 - 150*
d-N-EtFOSA-M	*78*		*10 - 150*
d7-N-MeFOSE-M	*84*		*10 - 150*
d9-N-EtFOSE-M	*85*		*10 - 150*
M2-4:2 FTS	*63*		*25 - 150*
M2-6:2 FTS	*63*		*25 - 150*
M2-8:2 FTS	*67*		*25 - 150*
13C3 HFPO-DA	*99*		*25 - 150*
13C2 10:2 FTS	*78*		*25 - 150*

Lab Sample ID: MB 320-673238/1-A
Matrix: Solid
Analysis Batch: 673658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.046		0.20	0.046	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		05/09/23 05:14	05/11/23 12:15	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-673238/1-A
Matrix: Solid
Analysis Batch: 673658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg		05/09/23 05:14	05/11/23 12:15	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg		05/09/23 05:14	05/11/23 12:15	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*96*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C5 PFPeA	*96*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C2 PFHxA	*97*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C4 PFHpA	*103*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C4 PFOA	*93*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C5 PFNA	*99*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C2 PFDA	*97*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C2 PFUnA	*102*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C2 PFDoA	*100*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C2 PFTeDA	*101*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C3 PFBS	*96*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
18O2 PFHxS	*94*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C4 PFOS	*101*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
13C8 FOSA	*112*		*10 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
d3-NMeFOSAA	*126*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
d5-NEtFOSAA	*125*		*25 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
d-N-MeFOSA-M	*81*		*10 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*
d-N-EtFOSA-M	*77*		*10 - 150*	*05/09/23 05:14*	*05/11/23 12:15*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-673238/1-A
Matrix: Solid
Analysis Batch: 673658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673238

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
d7-N-MeFOSE-M	96		10 - 150	05/09/23 05:14	05/11/23 12:15	1
d9-N-EtFOSE-M	88		10 - 150	05/09/23 05:14	05/11/23 12:15	1
M2-4:2 FTS	67		25 - 150	05/09/23 05:14	05/11/23 12:15	1
M2-6:2 FTS	63		25 - 150	05/09/23 05:14	05/11/23 12:15	1
M2-8:2 FTS	74		25 - 150	05/09/23 05:14	05/11/23 12:15	1
13C3 HFPO-DA	96		25 - 150	05/09/23 05:14	05/11/23 12:15	1
13C2 10:2 FTS	92		25 - 150	05/09/23 05:14	05/11/23 12:15	1

Lab Sample ID: LCS 320-673238/2-A
Matrix: Solid
Analysis Batch: 673658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	2.22		ug/Kg		111	60 - 135
Perfluoropentanoic acid (PFPeA)	2.00	2.27		ug/Kg		113	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	2.34		ug/Kg		117	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.21		ug/Kg		111	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.17		ug/Kg		109	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.20		ug/Kg		110	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	2.22		ug/Kg		111	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	2.16		ug/Kg		108	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.23		ug/Kg		112	60 - 135
Perfluorotridecanoic acid (PFTrDA)	2.00	2.37		ug/Kg		119	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	2.05		ug/Kg		103	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.78	2.08		ug/Kg		117	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	2.20		ug/Kg		117	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	2.01		ug/Kg		110	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	1.91	2.04		ug/Kg		107	60 - 135
Perfluorooctanesulfonic acid (PFOS)	1.86	1.95		ug/Kg		105	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	2.03		ug/Kg		106	60 - 135
Perfluorodecanesulfonic acid (PFDS)	1.93	1.92		ug/Kg		100	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.83		ug/Kg		94	60 - 135
Perfluorooctanesulfonamide (FOSA)	2.00	2.24		ug/Kg		112	60 - 135
NEtFOSA	2.00	2.18		ug/Kg		109	60 - 135
NMeFOSA	2.00	2.06		ug/Kg		103	60 - 135
NMeFOSAA	2.00	2.26		ug/Kg		113	60 - 135
NEtFOSAA	2.00	2.12		ug/Kg		106	60 - 135
NMeFOSE	2.00	2.11		ug/Kg		106	60 - 135
NEtFOSE	2.00	2.22		ug/Kg		111	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-673238/2-A
Matrix: Solid
Analysis Batch: 673658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673238

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
4:2 FTS			1.88	2.37		ug/Kg		126	60 - 135		
6:2 FTS			1.90	2.10		ug/Kg		111	60 - 135		
8:2 FTS			1.92	2.05		ug/Kg		107	60 - 135		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			1.89	2.38		ug/Kg		126	60 - 135		
HFPO-DA (GenX)			2.00	2.27		ug/Kg		113	60 - 135		
9Cl-PF3ONS			1.87	2.18		ug/Kg		117	60 - 135		
11Cl-PF3OUdS			1.89	1.84		ug/Kg		97	60 - 135		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*108*		*25 - 150*
13C5 PFPeA	*100*		*25 - 150*
13C2 PFHxA	*102*		*25 - 150*
13C4 PFHpA	*110*		*25 - 150*
13C4 PFOA	*105*		*25 - 150*
13C5 PFNA	*103*		*25 - 150*
13C2 PFDA	*101*		*25 - 150*
13C2 PFUnA	*95*		*25 - 150*
13C2 PFDoA	*94*		*25 - 150*
13C2 PFTeDA	*101*		*25 - 150*
13C3 PFBS	*102*		*25 - 150*
18O2 PFHxS	*101*		*25 - 150*
13C4 PFOS	*103*		*25 - 150*
13C8 FOSA	*110*		*10 - 150*
d3-NMeFOSAA	*116*		*25 - 150*
d5-NEtFOSAA	*121*		*25 - 150*
d-N-MeFOSA-M	*84*		*10 - 150*
d-N-EtFOSA-M	*78*		*10 - 150*
d7-N-MeFOSE-M	*90*		*10 - 150*
d9-N-EtFOSE-M	*90*		*10 - 150*
M2-4:2 FTS	*69*		*25 - 150*
M2-6:2 FTS	*74*		*25 - 150*
M2-8:2 FTS	*75*		*25 - 150*
13C3 HFPO-DA	*99*		*25 - 150*
13C2 10:2 FTS	*76*		*25 - 150*

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-11 (10')
Date Collected: 04/18/23 09:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-11 (10')
Date Collected: 04/18/23 09:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-23
Matrix: Solid
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/26/23 01:24
Total/NA	Prep	SHAKE	DL		669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)	DL	5	670560	K1S	EET SAC	04/26/23 14:28

Client Sample ID: B-12 (3')
Date Collected: 04/18/23 10:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-12 (3')
Date Collected: 04/18/23 10:20
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-24
Matrix: Solid
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/26/23 01:35
Total/NA	Prep	SHAKE	DL		669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)	DL	5	671783	RS1	EET SAC	05/03/23 00:38

Client Sample ID: B-12 (11')
Date Collected: 04/18/23 10:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-12 (11')
Date Collected: 04/18/23 10:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-25
Matrix: Solid
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			669862	FX	EET SAC	04/23/23 19:00
Total/NA	Analysis	537 (modified)		1	670113	RS1	EET SAC	04/26/23 01:46

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-13 (3')
Date Collected: 04/18/23 10:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-13 (3')
Date Collected: 04/18/23 10:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-26
Matrix: Solid
Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE	DL		673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)	DL	50	673927	K1S	EET SAC	05/11/23 19:45
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	674357	D1R	EET SAC	05/12/23 18:32

Client Sample ID: B-13 (10')
Date Collected: 04/18/23 11:05
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-13 (10')
Date Collected: 04/18/23 11:05
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-27
Matrix: Solid
Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 08:41
Total/NA	Prep	SHAKE	DL		673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)	DL	5	673927	K1S	EET SAC	05/11/23 18:13

Client Sample ID: B-14 (2')
Date Collected: 04/18/23 11:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-14 (2')
Date Collected: 04/18/23 11:15
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-28
Matrix: Solid
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 08:51
Total/NA	Prep	SHAKE	DL		673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)	DL	10	673927	K1S	EET SAC	05/11/23 19:04

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-14 (10')
Date Collected: 04/18/23 11:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-14 (10')
Date Collected: 04/18/23 11:35
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-29
Matrix: Solid
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 09:01
Total/NA	Prep	SHAKE	DL		673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)	DL	5	673927	K1S	EET SAC	05/11/23 18:23

Client Sample ID: B-15 (2')
Date Collected: 04/18/23 12:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-15 (2')
Date Collected: 04/18/23 12:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-30
Matrix: Solid
Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 09:12

Client Sample ID: B-15 (10')
Date Collected: 04/18/23 12:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-31
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-15 (10')
Date Collected: 04/18/23 12:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-31
Matrix: Solid
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 09:22
Total/NA	Prep	SHAKE	DL		673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)	DL	5	673927	K1S	EET SAC	05/11/23 18:33

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-16 (2')
Date Collected: 04/18/23 13:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-16 (2')
Date Collected: 04/18/23 13:30
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-32
Matrix: Solid
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 09:32

Client Sample ID: B-16 (10')
Date Collected: 04/18/23 13:40
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-33
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-16 (10')
Date Collected: 04/18/23 13:40
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-33
Matrix: Solid
Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 09:42

Client Sample ID: B-17 (2')
Date Collected: 04/18/23 13:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-34
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-17 (2')
Date Collected: 04/18/23 13:45
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-34
Matrix: Solid
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 10:13

Client Sample ID: B-17 (9')
Date Collected: 04/18/23 13:55
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-35
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-17 (9')
Lab Sample ID: 500-232605-35
Date Collected: 04/18/23 13:55
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 10:23
Total/NA	Prep	SHAKE	DL		673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)	DL	20	673927	K1S	EET SAC	05/11/23 19:34

Client Sample ID: B-18 (3')
Lab Sample ID: 500-232605-36
Date Collected: 04/18/23 14:05
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-18 (3')
Lab Sample ID: 500-232605-36
Date Collected: 04/18/23 14:05
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 10:33
Total/NA	Prep	SHAKE	DL		673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)	DL	10	673927	K1S	EET SAC	05/11/23 19:14

Client Sample ID: B-18 (8')
Lab Sample ID: 500-232605-37
Date Collected: 04/18/23 14:10
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-18 (8')
Lab Sample ID: 500-232605-37
Date Collected: 04/18/23 14:10
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 10:43
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		50	673927	K1S	EET SAC	05/11/23 19:55

Client Sample ID: B-18 (16')
Lab Sample ID: 500-232605-38
Date Collected: 04/18/23 14:15
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-18 (16')
Lab Sample ID: 500-232605-38
Date Collected: 04/18/23 14:15
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 10:53
Total/NA	Prep	SHAKE	DL		673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)	DL	10	673927	K1S	EET SAC	05/11/23 19:24

Client Sample ID: B-19 (2')
Lab Sample ID: 500-232605-39
Date Collected: 04/18/23 14:35
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670023	H1Z	EET SAC	04/25/23 13:02

Client Sample ID: B-19 (2')
Lab Sample ID: 500-232605-39
Date Collected: 04/18/23 14:35
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673237	EJR	EET SAC	05/09/23 05:07
Total/NA	Analysis	537 (modified)		1	673652	K1S	EET SAC	05/11/23 11:03

Client Sample ID: B-19 (5.5')
Lab Sample ID: 500-232605-40
Date Collected: 04/18/23 14:45
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Client Sample ID: B-19 (5.5')
Lab Sample ID: 500-232605-40
Date Collected: 04/18/23 14:45
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 12:35
Total/NA	Prep	SHAKE	DL		673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)	DL	5	674357	D1R	EET SAC	05/12/23 19:03

Client Sample ID: B-20 (3')
Lab Sample ID: 500-232605-41
Date Collected: 04/18/23 15:00
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-20 (3')
Lab Sample ID: 500-232605-41
Date Collected: 04/18/23 15:00
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 12:45

Client Sample ID: B-20 (10')
Lab Sample ID: 500-232605-42
Date Collected: 04/18/23 15:20
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Client Sample ID: B-20 (10')
Lab Sample ID: 500-232605-42
Date Collected: 04/18/23 15:20
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 12:55

Client Sample ID: B-21 (2')
Lab Sample ID: 500-232605-43
Date Collected: 04/19/23 08:10
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Client Sample ID: B-21 (2')
Lab Sample ID: 500-232605-43
Date Collected: 04/19/23 08:10
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 74.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 13:06

Client Sample ID: B-21 (9')
Lab Sample ID: 500-232605-44
Date Collected: 04/19/23 08:20
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-21 (9')
Lab Sample ID: 500-232605-44
Date Collected: 04/19/23 08:20
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 13:16

Client Sample ID: B-22 (2')
Lab Sample ID: 500-232605-45
Date Collected: 04/19/23 08:45
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Client Sample ID: B-22 (2')
Lab Sample ID: 500-232605-45
Date Collected: 04/19/23 08:45
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 13:26

Client Sample ID: B-22 (10')
Lab Sample ID: 500-232605-46
Date Collected: 04/19/23 08:50
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Client Sample ID: B-22 (10')
Lab Sample ID: 500-232605-46
Date Collected: 04/19/23 08:50
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 13:36

Client Sample ID: B-23 (2')
Lab Sample ID: 500-232605-47
Date Collected: 04/19/23 11:30
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: B-23 (2')
Lab Sample ID: 500-232605-47
Date Collected: 04/19/23 11:30
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 13:46
Total/NA	Prep	SHAKE	DL		673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)	DL	50	674357	D1R	EET SAC	05/12/23 19:23

Client Sample ID: B-23 (10')
Lab Sample ID: 500-232605-48
Date Collected: 04/19/23 11:45
Matrix: Solid
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670134	H1Z	EET SAC	04/25/23 16:51

Client Sample ID: B-23 (10')
Lab Sample ID: 500-232605-48
Date Collected: 04/19/23 11:45
Matrix: Solid
Date Received: 04/21/23 09:35
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 14:18

Client Sample ID: Equipment Blank
Lab Sample ID: 500-232605-51
Date Collected: 04/18/23 08:00
Matrix: Water
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			669872	EJR	EET SAC	04/25/23 06:45
Total/NA	Analysis	537 (modified)		1	670371	S1M	EET SAC	04/27/23 13:26

Client Sample ID: Equipment Blank #2
Lab Sample ID: 500-232605-52
Date Collected: 04/19/23 07:45
Matrix: Water
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			669872	EJR	EET SAC	04/25/23 06:45
Total/NA	Analysis	537 (modified)		1	670371	S1M	EET SAC	04/27/23 13:36

Client Sample ID: Field Blank
Lab Sample ID: 500-232605-53
Date Collected: 04/18/23 07:30
Matrix: Water
Date Received: 04/21/23 09:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			669872	EJR	EET SAC	04/25/23 06:45
Total/NA	Analysis	537 (modified)		1	670371	S1M	EET SAC	04/27/23 13:46

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Client Sample ID: FD-1
Date Collected: 04/18/23 00:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-54
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670534	H1Z	EET SAC	04/27/23 11:33

Client Sample ID: FD-1
Date Collected: 04/18/23 00:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-54
Matrix: Solid
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 14:28
Total/NA	Prep	SHAKE	DL		673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)	DL	5	674357	D1R	EET SAC	05/12/23 19:13

Client Sample ID: FD-2
Date Collected: 04/18/23 00:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-55
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	D 2216		1	670534	H1Z	EET SAC	04/27/23 11:33

Client Sample ID: FD-2
Date Collected: 04/18/23 00:00
Date Received: 04/21/23 09:35

Lab Sample ID: 500-232605-55
Matrix: Solid
Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			673238	EJR	EET SAC	05/09/23 05:14
Total/NA	Analysis	537 (modified)		1	673658	K1S	EET SAC	05/11/23 14:38

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Laboratory: Eurofins Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-23

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.1
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 1 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
B-1 (2.5')	4/17/23	9:45	G	Solid			X		
B-1 (13')		9:50		Solid			X		
B-2 (3')		10:10		Solid			X		
B-2 (12')		10:20		Solid			X		
B-3 (2.5')		10:50		Solid			X		
B-3 (13')		11:00		Solid			X		
B-4 (3')		11:40		Solid			X		
B-4 (12')		11:45		Solid			X		
B-5 (3')		12:10		Solid			X		
B-5 (13')		12:20		Solid			X		
B-6 (3')		14:15		Solid			X		

500-232605 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Joe Hahn	4/20/23 - 13:00	SWI via FEDEX		4/21/23 935	
2						
3						

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 2133173
Cooler Temperature(s) °C and Other Remarks: 4.2

Ver: 06/08/2021

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.2
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 2 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
B-6 (13')	4/17/23	14:30	G	Solid			X		
B-7 (2')		14:45		Solid			X		
B-7 (13.5')		15:00		Solid			X		
B-8 (3')		15:25		Solid			X		
B-8 (8')		15:50		Solid			X		
B-9 (3')	4/18/23	8:30		Solid			X		
B-9 (13')		8:40		Solid			X		
B-10 (3')		8:55		Solid			X		
B-10 (13')		9:00		Solid			X		
B-10 (17')		9:10		Solid			X		
B-11 (3')		9:35		Solid			X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Joe Hahn	4/20/23 - 13:00	SWI	FEDEX	4/21/23 935	
2						
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2133173

Cooler Temperature(s) °C and Other Remarks: HR

Ver: 06/08/2021

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.3
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 3 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
B-11 (10')	4/18/23	9:45	G	Solid			X		
B-12 (3')		10:20		Solid			X		
B-12 (11')		10:30		Solid			X		
B-13 (3')		10:55		Solid			X		
B-13 (10')		11:05		Solid			X		
B-14 (2')		11:15		Solid			X		
B-14 (10')		11:35		Solid			X		
B-15 (2')		12:45		Solid			X		
B-15 (10')		12:55		Solid			X		
B-16 (2')		13:30		Solid			X		
B-16 (10')		13:40		Solid			X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Joe Hahn	4/20/23 - 13:00	SWI via FEDEX		4/21/23 935	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time:	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 233123

Cooler Temperature(s) °C and Other Remarks: 4.2

Ver: 06/08/2021

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.4
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 4 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
B-17 (2')	4/18/23	13:45	G	Solid			X		
B-17 (9')		13:55		Solid			X		
B-18 (3')		14:05		Solid			X		
B-18 (8')		14:10		Solid			X		
B-18 (16')		14:15		Solid			X		
B-19 (2')		14:35		Solid			X		
B-19 (5.5')		14:45		Solid			X		
B-20 (3')		15:00		Solid			X		
B-20 (10')		15:20		Solid			X		
B-21 (2')	4/19/23	8:10		Solid			X		
B-21 (9')		8:20		Solid			X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Joe Hahn	4/20/23 13:00	SWI via FedEx		4/21/23 935	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2133173

Cooler Temperature(s) °C and Other Remarks: 4.2

Ver: 06/08/2021

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.5
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 5 of 7
Company: Shannon & Wilson, Inc	PWSID:			Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-960-7215	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
Preservation Code:							N		
B-22 (2')	4/19/23	8:45	G	Solid			X		
B-22 (10')		8:50		Solid			X		
B-23 (2')		11:30		Solid			X		
B-23 (10')		11:45		Solid			X		
FD-1	—	—		Solid			X		
FD-2	—	—		Solid			X		
Equipment Blank	4/18/23	8:00	G	~~Solid~~ W			X		
Equipment Blank #2	4/19/23	7:45	G	~~Solid~~ W			X		
Field Blank	4/18/23	7:30	G	Water			X		
				Water					
				Water					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Joe Hahn	4/20/23-13:00	SWI YEE DCK		4/21/23 935	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: 2133173
Cooler Temperature(s) °C and Other Remarks: 4.2

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Shannon & Wilson, Inc

Job Number: 500-232605-2

Login Number: 232605
List Number: 2
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento
List Creation: 04/21/23 04:37 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	2133173
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-232605-23	B-11 (10')	92	93	97	94	94	88	94	86
500-232605-23 - DL	B-11 (10')								
500-232605-24	B-12 (3')	78	83		77		86	81	76
500-232605-24 - DL	B-12 (3')			95		82			
500-232605-25	B-12 (11')	93	89	90	87	96	99	92	88
500-232605-25 MS	B-12 (11')	93	88	92	92	91	91	88	83
500-232605-25 MSD	B-12 (11')	89	84	85	84	85	94	81	75
500-232605-26 - DL	B-13 (3')		66	75	75	76			
500-232605-26	B-13 (3')	135					119	122	119
500-232605-27	B-13 (10')	103	103		94	88	95	90	91
500-232605-27 - DL	B-13 (10')			101					
500-232605-28	B-14 (2')	89	93	95	97		89	88	88
500-232605-28 - DL	B-14 (2')					101			
500-232605-29	B-14 (10')	108	110		106	101	105	106	104
500-232605-29 - DL	B-14 (10')			111					
500-232605-30	B-15 (2')	106	103	102	113	104	108	106	107
500-232605-31	B-15 (10')	81	84	90	92	93	84	80	75
500-232605-31 - DL	B-15 (10')								
500-232605-32	B-16 (2')	97	93	94	98	93	99	96	91
500-232605-33	B-16 (10')	86	81	84	93	93	89	89	87
500-232605-34	B-17 (2')	97	98	93	101	94	100	93	93
500-232605-35	B-17 (9')	88	88	86	94	94	70	81	73
500-232605-35 - DL	B-17 (9')					94			
500-232605-36	B-18 (3')	73	89	90	98	93	90	91	93
500-232605-36 - DL	B-18 (3')								
500-232605-37	B-18 (8')	100	97	98	109	106	82	105	101
500-232605-37	B-18 (8')								
500-232605-38	B-18 (16')	109	109	112	113	104	91	108	99
500-232605-38 - DL	B-18 (16')								
500-232605-39	B-19 (2')	98	95	92	106	97	101	93	89
500-232605-39 MS	B-19 (2')	97	91	92	99	96	93	88	83
500-232605-39 MSD	B-19 (2')	101	94	99	102	102	99	96	92
500-232605-40	B-19 (5.5')	103	98	98	105	103	106	109	109
500-232605-40 - DL	B-19 (5.5')								
500-232605-41	B-20 (3')	96	93	90	100	89	95	93	96
500-232605-42	B-20 (10')	61	59	61	63	61	61	60	57
500-232605-43	B-21 (2')	91	92	95	99	94	90	89	89
500-232605-44	B-21 (9')	94	91	92	101	93	93	84	82
500-232605-45	B-22 (2')	104	109	112	115	99	102	102	101
500-232605-46	B-22 (10')	102	106	108	104	95	97	103	105
500-232605-47	B-23 (2')	88	94	97	90		75	92	90
500-232605-47 - DL	B-23 (2')					93			
500-232605-48	B-23 (10')	93	95	94	98	94	97	93	95
500-232605-54	FD-1	106	105	117	117	107	107	111	115
500-232605-54 - DL	FD-1								
500-232605-55	FD-2	91	88	91	100	93	92	89	91
LCS 320-669862/2-A	Lab Control Sample	89	88	91	90	90	92	88	80
LCS 320-673237/2-A	Lab Control Sample	105	103	100	113	105	104	108	113
LCS 320-673238/2-A	Lab Control Sample	108	100	102	110	105	103	101	95

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Job ID: 500-232605-2
Project/Site: Dane County PFAS

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Solid
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
MB 320-669862/1-A	Method Blank	94	107	90	91	91	91	90	89
MB 320-673237/1-A	Method Blank	103	97	99	108	97	104	101	100
MB 320-673238/1-A	Method Blank	96	96	97	103	93	99	97	102

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-232605-23	B-11 (10')	89	90	85	95	92	94	92	89
500-232605-23 - DL	B-11 (10')					81			
500-232605-24	B-12 (3')	69	63	75		82	87	75	77
500-232605-24 - DL	B-12 (3')				93				
500-232605-25	B-12 (11')	89	87	90	95	102	103	96	102
500-232605-25 MS	B-12 (11')	78	84	84	91	91	94	88	84
500-232605-25 MSD	B-12 (11')	80	83	82	89	96	90	90	82
500-232605-26 - DL	B-13 (3')			65	76	62			
500-232605-26	B-13 (3')	107	112			124	120	122	126
500-232605-27	B-13 (10')	90	96	101	88	92	106	100	102
500-232605-27 - DL	B-13 (10')								
500-232605-28	B-14 (2')	82	88	92		103	96	108	108
500-232605-28 - DL	B-14 (2')				99	104			
500-232605-29	B-14 (10')	98	109	112	99	105	114	115	123
500-232605-29 - DL	B-14 (10')								
500-232605-30	B-15 (2')	97	102	100	100	107	116	132	126
500-232605-31	B-15 (10')	73	86	84		82	85	98	93
500-232605-31 - DL	B-15 (10')				99				
500-232605-32	B-16 (2')	85	90	92	90	96	101	98	99
500-232605-33	B-16 (10')	81	86	82	94	97	95	93	104
500-232605-34	B-17 (2')	83	90	90	95	94	103	99	106
500-232605-35	B-17 (9')	71	71	83		77		84	89
500-232605-35 - DL	B-17 (9')				79	83	96		
500-232605-36	B-18 (3')	91	81	88	89	103	114	112	116
500-232605-36 - DL	B-18 (3')					91			
500-232605-37	B-18 (8')	97	96	91	109	84	112	119	128
500-232605-37	B-18 (8')					118			
500-232605-38	B-18 (16')	89	90	105	104	103	115	125	120
500-232605-38 - DL	B-18 (16')					125			
500-232605-39	B-19 (2')	83	88	93	102	106	104	93	93
500-232605-39 MS	B-19 (2')	80	85	91	92	92	102	87	85
500-232605-39 MSD	B-19 (2')	89	95	97	102	107	102	101	108
500-232605-40	B-19 (5.5')	103	106	95	100	120	116	128	130
500-232605-40 - DL	B-19 (5.5')					98			
500-232605-41	B-20 (3')	86	85	89	85	95	95	100	100
500-232605-42	B-20 (10')	58	62	57	57	59	66	74	73
500-232605-43	B-21 (2')	79	75	86	96	97	91	103	105
500-232605-44	B-21 (9')	83	91	96	95	86	97	93	95
500-232605-45	B-22 (2')	92	96	105	103	98	104	113	118
500-232605-46	B-22 (10')	95	101	103	97	98	103	112	114
500-232605-47	B-23 (2')	82	91	91		78	99	94	102
500-232605-47 - DL	B-23 (2')				80	83			
500-232605-48	B-23 (10')	92	97	91	92	95	105	96	94
500-232605-54	FD-1	111	112	106		105	123	135	143

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Job ID: 500-232605-2
Project/Site: Dane County PFAS

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Solid
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-232605-54 - DL	FD-1				102				
500-232605-55	FD-2	86	88	91	93	98	103	95	102
LCS 320-669862/2-A	Lab Control Sample	81	86	86	93	101	92	88	94
LCS 320-673237/2-A	Lab Control Sample	113	122	104	105	111	133	143	146
LCS 320-673238/2-A	Lab Control Sample	94	101	102	101	103	110	116	121
MB 320-669862/1-A	Method Blank	89	94	106	81	95	99	97	98
MB 320-673237/1-A	Method Blank	92	106	96	97	105	111	132	134
MB 320-673238/1-A	Method Blank	100	101	96	94	101	112	126	125

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-232605-23	B-11 (10')	93	88	78	79	76	77	85	74
500-232605-23 - DL	B-11 (10')								
500-232605-24	B-12 (3')	83	78	69	67	62	58	73	65
500-232605-24 - DL	B-12 (3')								
500-232605-25	B-12 (11')	94	88	79	79	77	78	88	71
500-232605-25 MS	B-12 (11')	85	88	76	76	75	80	82	72
500-232605-25 MSD	B-12 (11')	87	86	73	71	74	77	85	71
500-232605-26 - DL	B-13 (3')						51		
500-232605-26	B-13 (3')	92	88	101	108	62		84	125
500-232605-27	B-13 (10')	80	81	89	91	62	59	65	91
500-232605-27 - DL	B-13 (10')								
500-232605-28	B-14 (2')	79	77	80	82	60	57	73	87
500-232605-28 - DL	B-14 (2')								
500-232605-29	B-14 (10')	99	93	97	97	72	67	74	100
500-232605-29 - DL	B-14 (10')								
500-232605-30	B-15 (2')	83	83	97	97	67	70	73	104
500-232605-31	B-15 (10')	69	65	72	66	57	60	59	83
500-232605-31 - DL	B-15 (10')								
500-232605-32	B-16 (2')	73	74	85	83	57	59	65	96
500-232605-33	B-16 (10')	65	64	79	78	55	58	63	87
500-232605-34	B-17 (2')	82	82	83	88	61	58	59	99
500-232605-35	B-17 (9')	69	62	71	72	50	49		87
500-232605-35 - DL	B-17 (9')							51	
500-232605-36	B-18 (3')	108	102	79	83	58	65	77	90
500-232605-36 - DL	B-18 (3')								
500-232605-37	B-18 (8')	79	78	96	95	61	70	81	100
500-232605-37	B-18 (8')							81	
500-232605-38	B-18 (16')	77	77	91	88	73	70	88	106
500-232605-38 - DL	B-18 (16')							83	
500-232605-39	B-19 (2')	77	76	86	86	62	61	62	97
500-232605-39 MS	B-19 (2')	76	77	84	82	56	60	60	94
500-232605-39 MSD	B-19 (2')	85	78	84	85	63	63	67	99
500-232605-40	B-19 (5.5')	83	81	91	95	64	62	78	104
500-232605-40 - DL	B-19 (5.5')								
500-232605-41	B-20 (3')	87	84	83	85	58	59	68	92
500-232605-42	B-20 (10')	43	43	57	58	37	38	44	62
500-232605-43	B-21 (2')	78	80	78	76	58	61	64	91
500-232605-44	B-21 (9')	77	75	86	87	61	59	55	97
500-232605-45	B-22 (2')	79	81	88	92	68	65	69	106

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-232605-46	B-22 (10')	84	86	89	91	66	62	77	104
500-232605-47	B-23 (2')	88	87	85	85	60	58	72	91
500-232605-47 - DL	B-23 (2')								
500-232605-48	B-23 (10')	75	78	86	91	62	60	60	97
500-232605-54	FD-1	95	91	99	102	69	68	73	100
500-232605-54 - DL	FD-1								
500-232605-55	FD-2	85	80	83	87	59	59	64	90
LCS 320-669862/2-A	Lab Control Sample	85	79	72	74	77	83	95	68
LCS 320-673237/2-A	Lab Control Sample	90	82	104	104	70	74	82	103
LCS 320-673238/2-A	Lab Control Sample	84	78	90	90	69	74	75	99
MB 320-669862/1-A	Method Blank	90	92	87	86	82	85	97	92
MB 320-673237/1-A	Method Blank	63	58	88	85	68	63	73	100
MB 320-673238/1-A	Method Blank	81	77	96	88	67	63	74	96

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M102FTS (25-150)							
500-232605-23	B-11 (10')	66							
500-232605-23 - DL	B-11 (10')								
500-232605-24	B-12 (3')	51							
500-232605-24 - DL	B-12 (3')								
500-232605-25	B-12 (11')	67							
500-232605-25 MS	B-12 (11')	61							
500-232605-25 MSD	B-12 (11')	60							
500-232605-26 - DL	B-13 (3')								
500-232605-26	B-13 (3')	105							
500-232605-27	B-13 (10')	73							
500-232605-27 - DL	B-13 (10')								
500-232605-28	B-14 (2')	71							
500-232605-28 - DL	B-14 (2')								
500-232605-29	B-14 (10')	87							
500-232605-29 - DL	B-14 (10')								
500-232605-30	B-15 (2')	87							
500-232605-31	B-15 (10')	62							
500-232605-31 - DL	B-15 (10')								
500-232605-32	B-16 (2')	66							
500-232605-33	B-16 (10')	68							
500-232605-34	B-17 (2')	69							
500-232605-35	B-17 (9')	53							
500-232605-35 - DL	B-17 (9')								
500-232605-36	B-18 (3')	106							
500-232605-36 - DL	B-18 (3')								
500-232605-37	B-18 (8')	79							
500-232605-37	B-18 (8')								
500-232605-38	B-18 (16')	78							
500-232605-38 - DL	B-18 (16')								
500-232605-39	B-19 (2')	66							
500-232605-39 MS	B-19 (2')	67							
500-232605-39 MSD	B-19 (2')	78							
500-232605-40	B-19 (5.5')	88							
500-232605-40 - DL	B-19 (5.5')								

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Job ID: 500-232605-2
Project/Site: Dane County PFAS

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Solid
Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	M102FTS (25-150)						
500-232605-41	B-20 (3')	70						
500-232605-42	B-20 (10')	46						
500-232605-43	B-21 (2')	60						
500-232605-44	B-21 (9')	68						
500-232605-45	B-22 (2')	72						
500-232605-46	B-22 (10')	79						
500-232605-47	B-23 (2')	68						
500-232605-47 - DL	B-23 (2')							
500-232605-48	B-23 (10')	70						
500-232605-54	FD-1	91						
500-232605-54 - DL	FD-1							
500-232605-55	FD-2	78						
LCS 320-669862/2-A	Lab Control Sample	71						
LCS 320-673237/2-A	Lab Control Sample	98						
LCS 320-673238/2-A	Lab Control Sample	76						
MB 320-669862/1-A	Method Blank	81						
MB 320-673237/1-A	Method Blank	81						
MB 320-673238/1-A	Method Blank	92						

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Job ID: 500-232605-2
Project/Site: Dane County PFAS

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-232605-51	Equipment Blank	100	102	102	106	103	100	112	101
500-232605-52	Equipment Blank #2	103	107	106	106	104	104	110	101
500-232605-53	Field Blank	102	101	102	101	104	101	112	99
LCS 320-669872/2-A	Lab Control Sample	96	98	97	101	102	96	106	98
LCSD 320-669872/3-A	Lab Control Sample Dup	102	98	97	106	102	97	109	98
MB 320-669872/1-A	Method Blank	89	93	94	92	93	93	102	94

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-232605-51	Equipment Blank	98	107	92	91	92	97	99	99
500-232605-52	Equipment Blank #2	100	109	92	94	92	97	97	105
500-232605-53	Field Blank	97	101	93	87	89	93	97	97
LCS 320-669872/2-A	Lab Control Sample	96	100	89	91	88	83	92	96
LCSD 320-669872/3-A	Lab Control Sample Dup	102	106	90	93	91	90	93	96
MB 320-669872/1-A	Method Blank	94	93	84	85	87	87	98	96

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-232605-51	Equipment Blank	86	80	90	90	91	95	99	96
500-232605-52	Equipment Blank #2	79	71	85	89	98	93	102	103
500-232605-53	Field Blank	88	80	89	89	102	100	95	99
LCS 320-669872/2-A	Lab Control Sample	70	67	78	77	98	96	99	89
LCSD 320-669872/3-A	Lab Control Sample Dup	79	71	87	88	98	96	102	91
MB 320-669872/1-A	Method Blank	81	77	82	80	91	85	94	85

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	M102FTS (25-150)
500-232605-51	Equipment Blank	104
500-232605-52	Equipment Blank #2	107
500-232605-53	Field Blank	101
LCS 320-669872/2-A	Lab Control Sample	96
LCSD 320-669872/3-A	Lab Control Sample Dup	102
MB 320-669872/1-A	Method Blank	93

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-232605-2

d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS

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ANALYTICAL REPORT

PREPARED FOR

Attn: Corey Pagels
Shannon & Wilson, Inc
5325 Wall Street, Suite 2355
Madison, Wisconsin 53718

Generated 6/6/2023 9:12:00 AM

JOB DESCRIPTION

Dane County PFAS

JOB NUMBER

500-233239-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

myEOL

Job Notes

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Table of Contents

Job ID: 500-233239-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-233239-1

Receipt
The samples were received on 5/4/2023 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3º C.

LCMS
Method 537 (modified): Results for samples MW-2 (500-233239-2), MW-4 (500-233239-4), PZ-1 (500-233239-5) and FIELD DUPLICATE (500-233239-9) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

Method 537 (modified): The continuing calibration verification (CCV) associated with batch 320-676252 recovered above the upper control limit for 11Cl-PF3OUdS and NEtFOSE. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported: MW-1 (500-233239-1), MW-2 (500-233239-2), MW-4 (500-233239-4), PZ-1 (500-233239-5) and (CCV 320-676252/9).

Method 537 (modified): The continuing calibration verification (CCV) associated with batch 320-676474 recovered above the upper control limit for 11Cl-PF3OUdS and/or 4,8-Dioxa-3H-perfluorononanoic acid (ADONA). The sample associated with this CCV was non-detects for the affected analytes; therefore, the data have been reported: MW-3 (500-233239-3), (CCV 320-676474/1) and (CCV 320-676474/8).

Method 537 (modified): Results for sample MW-3 (500-233239-3) were reported from the analysis of a diluted extract due to high concentration and matrix interference of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte: MW-4 (500-233239-4).

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte: MW-1 (500-233239-1) and FIELD BLANK (500-233239-8).

Method 537 (modified): The laboratory control sample (LCS) for preparation batch 320-674233 and analytical batch 320-677091 recovered outside control limits for the following analyte: NEtFOSE. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 537 (modified): The continuing calibration verification (CCV) associated with batch 320-677091 recovered above the upper control limit for NEtFOSE and 11Cl-PF3OUdS. The sample associated with this CCV was non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TRIP BLANK (500-233239-6) and (CCV 320-677091/1).

Method 537 (modified): The continuing calibration verification (CCV) associated with batch 320-677091 recovered above the upper control limit for 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) and 11Cl-PF3OUdS. The samples associated with this CCV was non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TRIP BLANK (500-233239-6) and (CCV 320-677091/8).

Method 537 (modified): The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-674233 and analytical batch 320-677091 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 537 (modified): The low level continuing calibration verification (CCVL) associated with batch 320-677076 recovered above the upper control limit for NEtFOSE. The sample associated with this CCV was non-detect for the affected analyte; therefore, the data have been reported: TRIP BLANK (500-233239-6) and (CCVL 320-677076/2).

Job ID: 500-233239-1 (Continued)

Laboratory: Eurofins Chicago (Continued)

Method 537 (modified): The continuing calibration verification (CCV) associated with batch 320-677076 recovered above the upper control limit for NEtFOSE, 4,8-Dioxa-3H-perfluorononanoic acid (ADONA), 9Cl-PF3ONS and 11Cl-PF3OUdS. The sample associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: TRIP BLANK (500-233239-6) and (CCVIS 320-677076/3).

Method 537 (modified): The concentration of one or more analytes associated with the following sample exceeded the instrument calibration range: MW-3 (500-233239-3). This analyte has been qualified; however, the peak did not saturate the instrument detector. Historical data indicate that for the isotope dilution method, dilution and re-analysis will not produce significantly different results from those reported above the calibration range. The client was contacted and gave permission to report.

Method 537 (modified): The following field blank (FB) sample was re-extracted outside of holding time due to detections above the reporting limit (RL) for Perfluorohexanesulfonic acid (PFHxS) and Perfluorooctanesulfonic acid (PFOS): FIELD BLANK (500-233239-8). Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3535: The following sample was received in a 1L bottle: TRIP BLANK (500-233239-6). The sample was transferred into new 250 mL bottle and was used to create a matrix sample and matrix sample duplicate. After transferring into a new container, the samples were fortified with IDA and then extracted.
preparation batch 320-674233
Method: 3535_PFC_28D
Matrix: Aqueous

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-679359.
Method: 3535_PFC_28D
Matrix: Aqueous

Method 3535: The following sample was re-prepared outside of preparation holding time due to needing to confirm the sample results: FIELD BLANK (500-233239-8).
preparation batch 320-679359
Method: 3535_PFC_28D
Matrix: Aqueous

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-1 — Lab Sample ID: 500-233239-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	10		4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	17		1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	53		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	30		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	100		1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	6.5		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	6.4		1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	250		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.66	J	1.8	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.0	I	1.8	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 500-233239-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorononanoic acid (PFNA)	24		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.2	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	17		1.8	0.17	ng/L	1		537 (modified)	Total/NA
6:2 FTS	18		4.5	2.2	ng/L	1		537 (modified)	Total/NA
8:2 FTS	17		1.8	0.41	ng/L	1		537 (modified)	Total/NA
Perfluorobutanoic acid (PFBA) - DL	470		220	110	ng/L	50		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	1400		89	22	ng/L	50		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	2000		89	26	ng/L	50		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	670		89	11	ng/L	50		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	760		89	38	ng/L	50		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS) - DL	1200		89	8.9	ng/L	50		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS) - DL	850		89	13	ng/L	50		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	6900		89	25	ng/L	50		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	940		89	24	ng/L	50		537 (modified)	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 500-233239-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1100		460	220	ng/L	100		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4600		180	45	ng/L	100		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	4800		180	53	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	3200		180	23	ng/L	100		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	17000		180	78	ng/L	100		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	130	J	180	25	ng/L	100		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1700		180	18	ng/L	100		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	2000		180	28	ng/L	100		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	41000	E	180	52	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	63	J	180	17	ng/L	100		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	280		180	50	ng/L	100		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-4 — Lab Sample ID: 500-233239-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorononanoic acid (PFNA)	310		1.8	0.25	ng/L	1		537 (modified)	Total/NA
4:2 FTS	2.1		1.8	0.22	ng/L	1		537 (modified)	Total/NA
6:2 FTS	240		4.6	2.3	ng/L	1		537 (modified)	Total/NA
Perfluorobutanoic acid (PFBA) - DL	1900		460	220	ng/L	100		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	7900		180	45	ng/L	100		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	11000		180	53	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	2800		180	23	ng/L	100		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	11000		180	78	ng/L	100		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS) - DL	3700		180	18	ng/L	100		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS) - DL	2300		180	28	ng/L	100		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	30000		180	52	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS) - DL	1400		180	17	ng/L	100		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	2400	I	180	50	ng/L	100		537 (modified)	Total/NA

Client Sample ID: PZ-1 — Lab Sample ID: 500-233239-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
6:2 FTS	300		4.7	2.4	ng/L	1		537 (modified)	Total/NA
8:2 FTS	13		1.9	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorobutanoic acid (PFBA) - DL	730		470	230	ng/L	100		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	4400		190	46	ng/L	100		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	4700		190	55	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	2100		190	24	ng/L	100		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	3400		190	80	ng/L	100		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA) - DL	3700		190	25	ng/L	100		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS) - DL	1900		190	19	ng/L	100		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS) - DL	1900		190	28	ng/L	100		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	14000		190	54	ng/L	100		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS) - DL	840		190	18	ng/L	100		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	29000		190	51	ng/L	100		537 (modified)	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 500-233239-6

No Detections.

Client Sample ID: EQUIPMENT BLANK — Lab Sample ID: 500-233239-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.66	J	1.9	0.53	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FIELD BLANK — Lab Sample ID: 500-233239-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	0.52	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.66	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.87	J	1.8	0.78	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FIELD BLANK (Continued)

Lab Sample ID: 500-233239-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	0.24	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.7		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1	I	1.8	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FIELD DUPLICATE

Lab Sample ID: 500-233239-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorononanoic acid (PFNA)	25		1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	1.2	J	1.8	0.29	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	17		1.8	0.18	ng/L	1		537 (modified)	Total/NA
6:2 FTS	17		4.6	2.3	ng/L	1		537 (modified)	Total/NA
8:2 FTS	18		1.8	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorobutanoic acid (PFBA) - DL	510		230	110	ng/L	50		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	1400		92	23	ng/L	50		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	2100		92	27	ng/L	50		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA) - DL	600		92	12	ng/L	50		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	700		92	39	ng/L	50		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS) - DL	1100		92	9.2	ng/L	50		537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS) - DL	860		92	14	ng/L	50		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS) - DL	6400		92	26	ng/L	50		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS) - DL	1000		92	25	ng/L	50		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
3535	Solid-Phase Extraction (SPE)	SW846	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-233239-1	MW-1	Water	05/02/23 11:45	05/04/23 09:40
500-233239-2	MW-2	Water	05/02/23 14:00	05/04/23 09:40
500-233239-3	MW-3	Water	05/02/23 17:20	05/04/23 09:40
500-233239-4	MW-4	Water	05/02/23 15:35	05/04/23 09:40
500-233239-5	PZ-1	Water	05/02/23 10:10	05/04/23 09:40
500-233239-6	TRIP BLANK	Water	05/02/23 00:00	05/04/23 09:40
500-233239-7	EQUIPMENT BLANK	Water	05/02/23 12:45	05/04/23 09:40
500-233239-8	FIELD BLANK	Water	05/02/23 07:30	05/04/23 09:40
500-233239-9	FIELD DUPLICATE	Water	05/02/23 00:00	05/04/23 09:40

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-1

Date Collected: 05/02/23 11:45
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-1

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**10**		4.6	2.2	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluoropentanoic acid (PFPeA)	**17**		1.8	0.45	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorohexanoic acid (PFHxA)	**53**		1.8	0.53	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluoroheptanoic acid (PFHpA)	**30**		1.8	0.23	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorooctanoic acid (PFOA)	**100**		1.8	0.78	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorobutanesulfonic acid (PFBS)	**6.5**		1.8	0.18	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluoropentanesulfonic acid (PFPeS)	**6.4**		1.8	0.27	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorohexanesulfonic acid (PFHxS)	**250**		1.8	0.52	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.66**	**J**	1.8	0.17	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorooctanesulfonic acid (PFOS)	**9.0**	**I**	1.8	0.49	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorododecanesulfonic acid (PFDoS)	<0.89		1.8	0.89	ng/L		05/12/23 05:41	05/20/23 01:41	1
Perfluorooctanesulfonamide (FOSA)	<0.90		1.8	0.90	ng/L		05/12/23 05:41	05/20/23 01:41	1
NEtFOSA	<0.80		1.8	0.80	ng/L		05/12/23 05:41	05/20/23 01:41	1
NMeFOSA	<0.39		1.8	0.39	ng/L		05/12/23 05:41	05/20/23 01:41	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		05/12/23 05:41	05/20/23 01:41	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		05/12/23 05:41	05/20/23 01:41	1
NMeFOSE	<1.3		3.7	1.3	ng/L		05/12/23 05:41	05/20/23 01:41	1
NEtFOSE	<0.78	*+	1.8	0.78	ng/L		05/12/23 05:41	05/20/23 01:41	1
4:2 FTS	<0.22		1.8	0.22	ng/L		05/12/23 05:41	05/20/23 01:41	1
6:2 FTS	<2.3		4.6	2.3	ng/L		05/12/23 05:41	05/20/23 01:41	1
8:2 FTS	<0.42		1.8	0.42	ng/L		05/12/23 05:41	05/20/23 01:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		05/12/23 05:41	05/20/23 01:41	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		05/12/23 05:41	05/20/23 01:41	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		05/12/23 05:41	05/20/23 01:41	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		05/12/23 05:41	05/20/23 01:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*96*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C5 PFPeA	*83*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C2 PFHxA	*99*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C4 PFHpA	*106*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C4 PFOA	*100*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C5 PFNA	*83*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C2 PFDA	*80*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C2 PFUnA	*108*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C2 PFDoA	*101*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*
13C2 PFTeDA	*84*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:41*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-1
Date Collected: 05/02/23 11:45
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-1
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	92		25 - 150	05/12/23 05:41	05/20/23 01:41	1
18O2 PFHxS	104		25 - 150	05/12/23 05:41	05/20/23 01:41	1
13C4 PFOS	84		25 - 150	05/12/23 05:41	05/20/23 01:41	1
13C8 FOSA	88		10 - 150	05/12/23 05:41	05/20/23 01:41	1
d3-NMeFOSAA	91		25 - 150	05/12/23 05:41	05/20/23 01:41	1
d5-NEtFOSAA	90		25 - 150	05/12/23 05:41	05/20/23 01:41	1
d-N-MeFOSA-M	84		10 - 150	05/12/23 05:41	05/20/23 01:41	1
d-N-EtFOSA-M	84		10 - 150	05/12/23 05:41	05/20/23 01:41	1
d7-N-MeFOSE-M	76		10 - 150	05/12/23 05:41	05/20/23 01:41	1
d9-N-EtFOSE-M	70		10 - 150	05/12/23 05:41	05/20/23 01:41	1
M2-4:2 FTS	86		25 - 150	05/12/23 05:41	05/20/23 01:41	1
M2-6:2 FTS	78		25 - 150	05/12/23 05:41	05/20/23 01:41	1
M2-8:2 FTS	78		25 - 150	05/12/23 05:41	05/20/23 01:41	1
13C3 HFPO-DA	92		25 - 150	05/12/23 05:41	05/20/23 01:41	1
13C2 10:2 FTS	82		25 - 150	05/12/23 05:41	05/20/23 01:41	1

Client Sample ID: MW-2
Date Collected: 05/02/23 14:00
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-2
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**24**		1.8	0.24	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluorodecanoic acid (PFDA)	**1.2**	**J**	1.8	0.28	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluoroundecanoic acid (PFUnA)	<0.98		1.8	0.98	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluorotetradecanoic acid (PFTeA)	<0.65		1.8	0.65	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluoroheptanesulfonic acid (PFHpS)	**17**		1.8	0.17	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		05/12/23 05:41	05/20/23 01:51	1
Perfluorooctanesulfonamide (FOSA)	<0.87		1.8	0.87	ng/L		05/12/23 05:41	05/20/23 01:51	1
NEtFOSA	<0.78		1.8	0.78	ng/L		05/12/23 05:41	05/20/23 01:51	1
NMeFOSA	<0.38		1.8	0.38	ng/L		05/12/23 05:41	05/20/23 01:51	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		05/12/23 05:41	05/20/23 01:51	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		05/12/23 05:41	05/20/23 01:51	1
NMeFOSE	<1.2		3.6	1.2	ng/L		05/12/23 05:41	05/20/23 01:51	1
NEtFOSE	<0.76	*+	1.8	0.76	ng/L		05/12/23 05:41	05/20/23 01:51	1
4:2 FTS	<0.21		1.8	0.21	ng/L		05/12/23 05:41	05/20/23 01:51	1
6:2 FTS	**18**		4.5	2.2	ng/L		05/12/23 05:41	05/20/23 01:51	1
8:2 FTS	**17**		1.8	0.41	ng/L		05/12/23 05:41	05/20/23 01:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		05/12/23 05:41	05/20/23 01:51	1
HFPO-DA (GenX)	<1.3		3.6	1.3	ng/L		05/12/23 05:41	05/20/23 01:51	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		05/12/23 05:41	05/20/23 01:51	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		05/12/23 05:41	05/20/23 01:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*98*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
13C2 PFDA	*86*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
13C2 PFUnA	*106*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
13C2 PFDoA	*82*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
13C2 PFTeDA	*76*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
13C4 PFOS	*92*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
13C8 FOSA	*89*		*10 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
d3-NMeFOSAA	*90*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
d5-NEtFOSAA	*91*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
d-N-MeFOSA-M	*80*		*10 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
d-N-EtFOSA-M	*79*		*10 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
d7-N-MeFOSE-M	*80*		*10 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
d9-N-EtFOSE-M	*61*		*10 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
M2-4:2 FTS	*80*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
M2-6:2 FTS	*80*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
M2-8:2 FTS	*89*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
13C3 HFPO-DA	*117*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*
13C2 10:2 FTS	*95*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:51*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**470**		220	110	ng/L		05/12/23 05:41	05/21/23 02:34	50

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-2
Date Collected: 05/02/23 14:00
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-2
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	1400		89	22	ng/L		05/12/23 05:41	05/21/23 02:34	50
Perfluorohexanoic acid (PFHxA)	2000		89	26	ng/L		05/12/23 05:41	05/21/23 02:34	50
Perfluoroheptanoic acid (PFHpA)	670		89	11	ng/L		05/12/23 05:41	05/21/23 02:34	50
Perfluorooctanoic acid (PFOA)	760		89	38	ng/L		05/12/23 05:41	05/21/23 02:34	50
Perfluorobutanesulfonic acid (PFBS)	1200		89	8.9	ng/L		05/12/23 05:41	05/21/23 02:34	50
Perfluoropentanesulfonic acid (PFPeS)	850		89	13	ng/L		05/12/23 05:41	05/21/23 02:34	50
Perfluorohexanesulfonic acid (PFHxS)	6900		89	25	ng/L		05/12/23 05:41	05/21/23 02:34	50
Perfluorooctanesulfonic acid (PFOS)	940		89	24	ng/L		05/12/23 05:41	05/21/23 02:34	50

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*86*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:34*	*50*
13C5 PFPeA	*79*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:34*	*50*
13C2 PFHxA	*106*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:34*	*50*
13C4 PFHpA	*100*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:34*	*50*
13C4 PFOA	*97*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:34*	*50*
13C3 PFBS	*90*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:34*	*50*
18O2 PFHxS	*104*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:34*	*50*
13C4 PFOS	*90*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:34*	*50*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-3
Date Collected: 05/02/23 17:20
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-3
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1100**		460	220	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluoropentanoic acid (PFPeA)	**4600**		180	45	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorohexanoic acid (PFHxA)	**4800**		180	53	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluoroheptanoic acid (PFHpA)	**3200**		180	23	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorooctanoic acid (PFOA)	**17000**		180	78	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorononanoic acid (PFNA)	**130**	**J**	180	25	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorodecanoic acid (PFDA)	<28		180	28	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluoroundecanoic acid (PFUnA)	<100		180	100	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorododecanoic acid (PFDoA)	<51		180	51	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorotridecanoic acid (PFTrDA)	<120		180	120	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorotetradecanoic acid (PFTeA)	<67		180	67	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorobutanesulfonic acid (PFBS)	**1700**		180	18	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluoropentanesulfonic acid (PFPeS)	**2000**		180	28	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorohexanesulfonic acid (PFHxS)	**41000**	**E**	180	52	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluoroheptanesulfonic acid (PFHpS)	**63**	**J**	180	17	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorooctanesulfonic acid (PFOS)	**280**		180	50	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorononanesulfonic acid (PFNS)	<34		180	34	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorodecanesulfonic acid (PFDS)	<29		180	29	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorododecanesulfonic acid (PFDoS)	<89		180	89	ng/L		05/12/23 05:41	05/21/23 02:54	100
Perfluorooctanesulfonamide (FOSA)	<90		180	90	ng/L		05/12/23 05:41	05/21/23 02:54	100
NEtFOSA	<80		180	80	ng/L		05/12/23 05:41	05/21/23 02:54	100
NMeFOSA	<40		180	40	ng/L		05/12/23 05:41	05/21/23 02:54	100
NMeFOSAA	<110		460	110	ng/L		05/12/23 05:41	05/21/23 02:54	100
NEtFOSAA	<120		460	120	ng/L		05/12/23 05:41	05/21/23 02:54	100
NMeFOSE	<130		370	130	ng/L		05/12/23 05:41	05/21/23 02:54	100
NEtFOSE	<78	*+	180	78	ng/L		05/12/23 05:41	05/21/23 02:54	100
4:2 FTS	<22		180	22	ng/L		05/12/23 05:41	05/21/23 02:54	100
6:2 FTS	<230		460	230	ng/L		05/12/23 05:41	05/21/23 02:54	100
8:2 FTS	<42		180	42	ng/L		05/12/23 05:41	05/21/23 02:54	100
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<37		180	37	ng/L		05/12/23 05:41	05/21/23 02:54	100
HFPO-DA (GenX)	<140		370	140	ng/L		05/12/23 05:41	05/21/23 02:54	100
9Cl-PF3ONS	<22		180	22	ng/L		05/12/23 05:41	05/21/23 02:54	100
11Cl-PF3OUdS	<29		180	29	ng/L		05/12/23 05:41	05/21/23 02:54	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*64*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C5 PFPeA	*53*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C2 PFHxA	*78*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C4 PFHpA	*77*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C4 PFOA	*73*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C5 PFNA	*58*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C2 PFDA	*59*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C2 PFUnA	*75*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C2 PFDoA	*61*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*
13C2 PFTeDA	*59*		*25 - 150*	*05/12/23 05:41*	*05/21/23 02:54*	*100*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-3
Date Collected: 05/02/23 17:20
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-3
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	67		25 - 150	05/12/23 05:41	05/21/23 02:54	100
18O2 PFHxS	138		25 - 150	05/12/23 05:41	05/21/23 02:54	100
13C4 PFOS	57		25 - 150	05/12/23 05:41	05/21/23 02:54	100
13C8 FOSA	54		10 - 150	05/12/23 05:41	05/21/23 02:54	100
d3-NMeFOSAA	69		25 - 150	05/12/23 05:41	05/21/23 02:54	100
d5-NEtFOSAA	67		25 - 150	05/12/23 05:41	05/21/23 02:54	100
d-N-MeFOSA-M	55		10 - 150	05/12/23 05:41	05/21/23 02:54	100
d-N-EtFOSA-M	59		10 - 150	05/12/23 05:41	05/21/23 02:54	100
d7-N-MeFOSE-M	50		10 - 150	05/12/23 05:41	05/21/23 02:54	100
d9-N-EtFOSE-M	44		10 - 150	05/12/23 05:41	05/21/23 02:54	100
M2-4:2 FTS	59		25 - 150	05/12/23 05:41	05/21/23 02:54	100
M2-6:2 FTS	45		25 - 150	05/12/23 05:41	05/21/23 02:54	100
M2-8:2 FTS	65		25 - 150	05/12/23 05:41	05/21/23 02:54	100
13C3 HFPO-DA	73		25 - 150	05/12/23 05:41	05/21/23 02:54	100
13C2 10:2 FTS	59		25 - 150	05/12/23 05:41	05/21/23 02:54	100

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-4

Date Collected: 05/02/23 15:35
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-4

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**310**		1.8	0.25	ng/L		05/12/23 05:41	05/20/23 02:12	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		05/12/23 05:41	05/20/23 02:12	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.8	0.51	ng/L		05/12/23 05:41	05/20/23 02:12	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		05/12/23 05:41	05/20/23 02:12	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		05/12/23 05:41	05/20/23 02:12	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		05/12/23 05:41	05/20/23 02:12	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		05/12/23 05:41	05/20/23 02:12	1
Perfluorododecanesulfonic acid (PFDoS)	<0.89		1.8	0.89	ng/L		05/12/23 05:41	05/20/23 02:12	1
Perfluorooctanesulfonamide (FOSA)	<0.90		1.8	0.90	ng/L		05/12/23 05:41	05/20/23 02:12	1
NEtFOSA	<0.80		1.8	0.80	ng/L		05/12/23 05:41	05/20/23 02:12	1
NMeFOSA	<0.40		1.8	0.40	ng/L		05/12/23 05:41	05/20/23 02:12	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		05/12/23 05:41	05/20/23 02:12	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		05/12/23 05:41	05/20/23 02:12	1
NMeFOSE	<1.3		3.7	1.3	ng/L		05/12/23 05:41	05/20/23 02:12	1
NEtFOSE	<0.78	*+	1.8	0.78	ng/L		05/12/23 05:41	05/20/23 02:12	1
4:2 FTS	**2.1**		1.8	0.22	ng/L		05/12/23 05:41	05/20/23 02:12	1
6:2 FTS	**240**		4.6	2.3	ng/L		05/12/23 05:41	05/20/23 02:12	1
8:2 FTS	<0.42		1.8	0.42	ng/L		05/12/23 05:41	05/20/23 02:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		05/12/23 05:41	05/20/23 02:12	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		05/12/23 05:41	05/20/23 02:12	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		05/12/23 05:41	05/20/23 02:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*145*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
13C2 PFDA	*126*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
13C2 PFDoA	*143*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
13C2 PFTeDA	*127*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
13C4 PFOS	*137*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
13C8 FOSA	*128*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
d3-NMeFOSAA	*145*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
d5-NEtFOSAA	*138*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
d-N-MeFOSA-M	*115*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
d-N-EtFOSA-M	*113*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
d7-N-MeFOSE-M	*121*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
d9-N-EtFOSE-M	*98*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
M2-4:2 FTS	*78*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
M2-6:2 FTS	*71*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
M2-8:2 FTS	*114*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*
13C2 10:2 FTS	*125*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:12*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1900**		460	220	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluoropentanoic acid (PFPeA)	**7900**		180	45	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluorohexanoic acid (PFHxA)	**11000**		180	53	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluoroheptanoic acid (PFHpA)	**2800**		180	23	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluorooctanoic acid (PFOA)	**11000**		180	78	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluoroundecanoic acid (PFUnA)	<100		180	100	ng/L		05/12/23 05:41	05/21/23 03:04	100

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-4
Date Collected: 05/02/23 15:35
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-4
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	3700		180	18	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluoropentanesulfonic acid (PFPeS)	2300		180	28	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluorohexanesulfonic acid (PFHxS)	30000		180	52	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluoroheptanesulfonic acid (PFHpS)	1400		180	17	ng/L		05/12/23 05:41	05/21/23 03:04	100
Perfluorooctanesulfonic acid (PFOS)	2400	I	180	50	ng/L		05/12/23 05:41	05/21/23 03:04	100
HFPO-DA (GenX)	<140		370	140	ng/L		05/12/23 05:41	05/21/23 03:04	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*84*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
13C5 PFPeA	*73*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
13C2 PFHxA	*108*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
13C4 PFHpA	*114*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
13C4 PFOA	*91*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
13C2 PFUnA	*85*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
13C3 PFBS	*99*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
18O2 PFHxS	*134*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
13C4 PFOS	*99*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*
13C3 HFPO-DA	*87*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:04*	*100*

Client Sample ID: PZ-1

Date Collected: 05/02/23 10:10
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-5

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		05/12/23 05:41	05/20/23 02:22	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		05/12/23 05:41	05/20/23 02:22	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		05/12/23 05:41	05/20/23 02:22	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		05/12/23 05:41	05/20/23 02:22	1
Perfluorotetradecanoic acid (PFTeA)	<0.69		1.9	0.69	ng/L		05/12/23 05:41	05/20/23 02:22	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		05/12/23 05:41	05/20/23 02:22	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		05/12/23 05:41	05/20/23 02:22	1
Perfluorododecanesulfonic acid (PFDoS)	<0.91		1.9	0.91	ng/L		05/12/23 05:41	05/20/23 02:22	1
Perfluorooctanesulfonamide (FOSA)	<0.92		1.9	0.92	ng/L		05/12/23 05:41	05/20/23 02:22	1
NEtFOSA	<0.82		1.9	0.82	ng/L		05/12/23 05:41	05/20/23 02:22	1
NMeFOSA	<0.41		1.9	0.41	ng/L		05/12/23 05:41	05/20/23 02:22	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		05/12/23 05:41	05/20/23 02:22	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		05/12/23 05:41	05/20/23 02:22	1
NMeFOSE	<1.3		3.8	1.3	ng/L		05/12/23 05:41	05/20/23 02:22	1
NEtFOSE	<0.80	*+	1.9	0.80	ng/L		05/12/23 05:41	05/20/23 02:22	1
4:2 FTS	<0.23		1.9	0.23	ng/L		05/12/23 05:41	05/20/23 02:22	1
6:2 FTS	**300**		4.7	2.4	ng/L		05/12/23 05:41	05/20/23 02:22	1
8:2 FTS	**13**		1.9	0.43	ng/L		05/12/23 05:41	05/20/23 02:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.38		1.9	0.38	ng/L		05/12/23 05:41	05/20/23 02:22	1
9Cl-PF3ONS	<0.23		1.9	0.23	ng/L		05/12/23 05:41	05/20/23 02:22	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		05/12/23 05:41	05/20/23 02:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*85*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
13C2 PFDA	*109*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
13C2 PFUnA	*125*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
13C2 PFDoA	*130*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
13C2 PFTeDA	*93*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
13C4 PFOS	*84*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
13C8 FOSA	*116*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
d3-NMeFOSAA	*120*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
d5-NEtFOSAA	*118*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
d-N-MeFOSA-M	*100*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
d-N-EtFOSA-M	*102*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
d7-N-MeFOSE-M	*96*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
d9-N-EtFOSE-M	*82*		*10 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
M2-4:2 FTS	*85*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
M2-6:2 FTS	*74*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
M2-8:2 FTS	*98*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*
13C2 10:2 FTS	*108*		*25 - 150*	*05/12/23 05:41*	*05/20/23 02:22*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**730**		470	230	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluoropentanoic acid (PFPeA)	**4400**		190	46	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluorohexanoic acid (PFHxA)	**4700**		190	55	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluoroheptanoic acid (PFHpA)	**2100**		190	24	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluorooctanoic acid (PFOA)	**3400**		190	80	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluorononanoic acid (PFNA)	**3700**		190	25	ng/L		05/12/23 05:41	05/21/23 03:15	100

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: PZ-1
Date Collected: 05/02/23 10:10
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-5
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	1900		190	19	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluoropentanesulfonic acid (PFPeS)	1900		190	28	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluorohexanesulfonic acid (PFHxS)	14000		190	54	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluoroheptanesulfonic acid (PFHpS)	840		190	18	ng/L		05/12/23 05:41	05/21/23 03:15	100
Perfluorooctanesulfonic acid (PFOS)	29000		190	51	ng/L		05/12/23 05:41	05/21/23 03:15	100
HFPO-DA (GenX)	<140		380	140	ng/L		05/12/23 05:41	05/21/23 03:15	100

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*82*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*
13C5 PFPeA	*67*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*
13C2 PFHxA	*103*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*
13C4 PFHpA	*100*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*
13C4 PFOA	*87*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*
13C3 PFBS	*85*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*
18O2 PFHxS	*99*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*
13C4 PFOS	*76*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*
13C3 HFPO-DA	*79*		*25 - 150*	*05/12/23 05:41*	*05/21/23 03:15*	*100*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: TRIP BLANK

Date Collected: 05/02/23 00:00
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-6

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.1		4.5	2.1	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluoropentanoic acid (PFPeA)	<0.44	F1	1.8	0.44	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorohexanoic acid (PFHxA)	<0.52		1.8	0.52	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.8	0.22	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorooctanoic acid (PFOA)	<0.76		1.8	0.76	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorononanoic acid (PFNA)	<0.24	F1	1.8	0.24	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluoroundecanoic acid (PFUnA)	<0.98		1.8	0.98	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.65		1.8	0.65	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27	F1	1.8	0.27	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17	F1	1.8	0.17	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorononanesulfonic acid (PFNS)	<0.33	F1	1.8	0.33	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.29	F1	1.8	0.29	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		05/12/23 05:41	05/24/23 05:27	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		05/12/23 05:41	05/24/23 05:27	1
NEtFOSA	<0.78		1.8	0.78	ng/L		05/12/23 05:41	05/24/23 05:27	1
NMeFOSA	<0.38		1.8	0.38	ng/L		05/12/23 05:41	05/24/23 05:27	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		05/12/23 05:41	05/24/23 05:27	1
NEtFOSAA	<1.2	F1	4.5	1.2	ng/L		05/12/23 05:41	05/24/23 05:27	1
NMeFOSE	<1.3	F1	3.6	1.3	ng/L		05/12/23 05:41	05/24/23 05:27	1
NEtFOSE	<0.76	F1 *+	1.8	0.76	ng/L		05/12/23 05:41	05/24/23 05:27	1
4:2 FTS	<0.21	F1	1.8	0.21	ng/L		05/12/23 05:41	05/24/23 05:27	1
6:2 FTS	<2.2	F1	4.5	2.2	ng/L		05/12/23 05:41	05/24/23 05:27	1
8:2 FTS	<0.41		1.8	0.41	ng/L		05/12/23 05:41	05/24/23 05:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36	F1	1.8	0.36	ng/L		05/12/23 05:41	05/24/23 05:27	1
HFPO-DA (GenX)	<1.3		3.6	1.3	ng/L		05/12/23 05:41	05/24/23 05:27	1
9Cl-PF3ONS	<0.21	F1	1.8	0.21	ng/L		05/12/23 05:41	05/24/23 05:27	1
11Cl-PF3OUdS	<0.29	F1	1.8	0.29	ng/L		05/12/23 05:41	05/24/23 05:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*82*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C5 PFPeA	*71*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C2 PFHxA	*99*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C4 PFHpA	*113*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C4 PFOA	*99*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C5 PFNA	*84*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C2 PFDA	*85*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C2 PFUnA	*106*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C2 PFDoA	*96*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C2 PFTeDA	*85*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
13C3 PFBS	*85*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*
18O2 PFHxS	*102*		*25 - 150*	*05/12/23 05:41*	*05/24/23 05:27*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: TRIP BLANK
Date Collected: 05/02/23 00:00
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-6
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	83		25 - 150	05/12/23 05:41	05/24/23 05:27	1
13C8 FOSA	78		10 - 150	05/12/23 05:41	05/24/23 05:27	1
d3-NMeFOSAA	97		25 - 150	05/12/23 05:41	05/24/23 05:27	1
d5-NEtFOSAA	89		25 - 150	05/12/23 05:41	05/24/23 05:27	1
d-N-MeFOSA-M	75		10 - 150	05/12/23 05:41	05/24/23 05:27	1
d-N-EtFOSA-M	79		10 - 150	05/12/23 05:41	05/24/23 05:27	1
d7-N-MeFOSE-M	80		10 - 150	05/12/23 05:41	05/24/23 05:27	1
d9-N-EtFOSE-M	58		10 - 150	05/12/23 05:41	05/24/23 05:27	1
M2-4:2 FTS	93		25 - 150	05/12/23 05:41	05/24/23 05:27	1
M2-6:2 FTS	80		25 - 150	05/12/23 05:41	05/24/23 05:27	1
M2-8:2 FTS	65		25 - 150	05/12/23 05:41	05/24/23 05:27	1
13C3 HFPO-DA	103		25 - 150	05/12/23 05:41	05/24/23 05:27	1
13C2 10:2 FTS	93		25 - 150	05/12/23 05:41	05/24/23 05:27	1

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 500-233239-7

Date Collected: 05/02/23 12:45
Date Received: 05/04/23 09:40

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.7	2.2	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluoropentanoic acid (PFPeA)	<0.46		1.9	0.46	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorooctanoic acid (PFOA)	<0.80		1.9	0.80	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorohexanesulfonic acid (PFHxS)	**0.66**	**J**	1.9	0.53	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.18		1.9	0.18	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorododecanesulfonic acid (PFDoS)	<0.91		1.9	0.91	ng/L		05/12/23 05:41	05/20/23 03:24	1
Perfluorooctanesulfonamide (FOSA)	<0.92		1.9	0.92	ng/L		05/12/23 05:41	05/20/23 03:24	1
NEtFOSA	<0.81		1.9	0.81	ng/L		05/12/23 05:41	05/20/23 03:24	1
NMeFOSA	<0.40		1.9	0.40	ng/L		05/12/23 05:41	05/20/23 03:24	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		05/12/23 05:41	05/20/23 03:24	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		05/12/23 05:41	05/20/23 03:24	1
NMeFOSE	<1.3		3.7	1.3	ng/L		05/12/23 05:41	05/20/23 03:24	1
NEtFOSE	<0.80	*+	1.9	0.80	ng/L		05/12/23 05:41	05/20/23 03:24	1
4:2 FTS	<0.22		1.9	0.22	ng/L		05/12/23 05:41	05/20/23 03:24	1
6:2 FTS	<2.3		4.7	2.3	ng/L		05/12/23 05:41	05/20/23 03:24	1
8:2 FTS	<0.43		1.9	0.43	ng/L		05/12/23 05:41	05/20/23 03:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		05/12/23 05:41	05/20/23 03:24	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		05/12/23 05:41	05/20/23 03:24	1
9Cl-PF3ONS	<0.22		1.9	0.22	ng/L		05/12/23 05:41	05/20/23 03:24	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		05/12/23 05:41	05/20/23 03:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C5 PFPeA	*81*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C2 PFHxA	*108*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C4 PFHpA	*113*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C4 PFOA	*104*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C5 PFNA	*92*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C2 PFDA	*90*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C2 PFUnA	*115*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C2 PFDoA	*102*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C2 PFTeDA	*99*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*
13C3 PFBS	*97*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:24*	*1*

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: EQUIPMENT BLANK
Date Collected: 05/02/23 12:45
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-7
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	105		25 - 150	05/12/23 05:41	05/20/23 03:24	1
13C4 PFOS	96		25 - 150	05/12/23 05:41	05/20/23 03:24	1
13C8 FOSA	88		10 - 150	05/12/23 05:41	05/20/23 03:24	1
d3-NMeFOSAA	96		25 - 150	05/12/23 05:41	05/20/23 03:24	1
d5-NEtFOSAA	103		25 - 150	05/12/23 05:41	05/20/23 03:24	1
d-N-MeFOSA-M	78		10 - 150	05/12/23 05:41	05/20/23 03:24	1
d-N-EtFOSA-M	80		10 - 150	05/12/23 05:41	05/20/23 03:24	1
d7-N-MeFOSE-M	88		10 - 150	05/12/23 05:41	05/20/23 03:24	1
d9-N-EtFOSE-M	70		10 - 150	05/12/23 05:41	05/20/23 03:24	1
M2-4:2 FTS	88		25 - 150	05/12/23 05:41	05/20/23 03:24	1
M2-6:2 FTS	72		25 - 150	05/12/23 05:41	05/20/23 03:24	1
M2-8:2 FTS	85		25 - 150	05/12/23 05:41	05/20/23 03:24	1
13C3 HFPO-DA	99		25 - 150	05/12/23 05:41	05/20/23 03:24	1
13C2 10:2 FTS	86		25 - 150	05/12/23 05:41	05/20/23 03:24	1

Client Sample ID: FIELD BLANK

Lab Sample ID: 500-233239-8

Date Collected: 05/02/23 07:30

Matrix: Water

Date Received: 05/04/23 09:40

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.6	2.2	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluoropentanoic acid (PFPeA)	**0.52**	**J**	1.8	0.45	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorohexanoic acid (PFHxA)	**0.66**	**J**	1.8	0.53	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorooctanoic acid (PFOA)	**0.87**	**J**	1.8	0.78	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorobutanesulfonic acid (PFBS)	**0.24**	**J**	1.8	0.18	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorohexanesulfonic acid (PFHxS)	**2.7**		1.8	0.52	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorooctanesulfonic acid (PFOS)	**2.1**	**I**	1.8	0.49	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorododecanesulfonic acid (PFDoS)	<0.89		1.8	0.89	ng/L		05/12/23 05:41	05/20/23 03:34	1
Perfluorooctanesulfonamide (FOSA)	<0.90		1.8	0.90	ng/L		05/12/23 05:41	05/20/23 03:34	1
NEtFOSA	<0.79		1.8	0.79	ng/L		05/12/23 05:41	05/20/23 03:34	1
NMeFOSA	<0.39		1.8	0.39	ng/L		05/12/23 05:41	05/20/23 03:34	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		05/12/23 05:41	05/20/23 03:34	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		05/12/23 05:41	05/20/23 03:34	1
NMeFOSE	<1.3		3.7	1.3	ng/L		05/12/23 05:41	05/20/23 03:34	1
NEtFOSE	<0.78	*+	1.8	0.78	ng/L		05/12/23 05:41	05/20/23 03:34	1
4:2 FTS	<0.22		1.8	0.22	ng/L		05/12/23 05:41	05/20/23 03:34	1
6:2 FTS	<2.3		4.6	2.3	ng/L		05/12/23 05:41	05/20/23 03:34	1
8:2 FTS	<0.42		1.8	0.42	ng/L		05/12/23 05:41	05/20/23 03:34	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		05/12/23 05:41	05/20/23 03:34	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		05/12/23 05:41	05/20/23 03:34	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		05/12/23 05:41	05/20/23 03:34	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		05/12/23 05:41	05/20/23 03:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*96*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C5 PFPeA	*85*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C2 PFHxA	*110*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C4 PFHpA	*117*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C4 PFOA	*103*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C5 PFNA	*92*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C2 PFDA	*89*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C2 PFUnA	*113*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C2 PFDoA	*104*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*
13C2 PFTeDA	*105*		*25 - 150*	*05/12/23 05:41*	*05/20/23 03:34*	*1*

Client Sample ID: FIELD BLANK
Date Collected: 05/02/23 07:30
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-8
Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	104		25 - 150	05/12/23 05:41	05/20/23 03:34	1
18O2 PFHxS	105		25 - 150	05/12/23 05:41	05/20/23 03:34	1
13C4 PFOS	100		25 - 150	05/12/23 05:41	05/20/23 03:34	1
13C8 FOSA	94		10 - 150	05/12/23 05:41	05/20/23 03:34	1
d3-NMeFOSAA	104		25 - 150	05/12/23 05:41	05/20/23 03:34	1
d5-NEtFOSAA	112		25 - 150	05/12/23 05:41	05/20/23 03:34	1
d-N-MeFOSA-M	87		10 - 150	05/12/23 05:41	05/20/23 03:34	1
d-N-EtFOSA-M	91		10 - 150	05/12/23 05:41	05/20/23 03:34	1
d7-N-MeFOSE-M	91		10 - 150	05/12/23 05:41	05/20/23 03:34	1
d9-N-EtFOSE-M	75		10 - 150	05/12/23 05:41	05/20/23 03:34	1
M2-4:2 FTS	83		25 - 150	05/12/23 05:41	05/20/23 03:34	1
M2-6:2 FTS	76		25 - 150	05/12/23 05:41	05/20/23 03:34	1
M2-8:2 FTS	81		25 - 150	05/12/23 05:41	05/20/23 03:34	1
13C3 HFPO-DA	102		25 - 150	05/12/23 05:41	05/20/23 03:34	1
13C2 10:2 FTS	95		25 - 150	05/12/23 05:41	05/20/23 03:34	1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - RE

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	98		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C5 PFPeA	99		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C2 PFHxA	95		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C4 PFHpA	103		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C4 PFOA	98		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C5 PFNA	103		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C2 PFDA	98		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C2 PFUnA	89		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C2 PFDoA	84		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C2 PFTeDA	83		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C3 PFBS	95		25 - 150	06/01/23 04:42	06/02/23 19:29	1
18O2 PFHxS	99		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C4 PFOS	97		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C8 FOSA	97		10 - 150	06/01/23 04:42	06/02/23 19:29	1
d3-NMeFOSAA	85		25 - 150	06/01/23 04:42	06/02/23 19:29	1
d5-NEtFOSAA	82		25 - 150	06/01/23 04:42	06/02/23 19:29	1
d-N-MeFOSA-M	79		10 - 150	06/01/23 04:42	06/02/23 19:29	1
d-N-EtFOSA-M	74		10 - 150	06/01/23 04:42	06/02/23 19:29	1
d7-N-MeFOSE-M	80		10 - 150	06/01/23 04:42	06/02/23 19:29	1
d9-N-EtFOSE-M	81		10 - 150	06/01/23 04:42	06/02/23 19:29	1
M2-4:2 FTS	70		25 - 150	06/01/23 04:42	06/02/23 19:29	1
M2-6:2 FTS	75		25 - 150	06/01/23 04:42	06/02/23 19:29	1
M2-8:2 FTS	87		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C3 HFPO-DA	108		25 - 150	06/01/23 04:42	06/02/23 19:29	1
13C2 10:2 FTS	100		25 - 150	06/01/23 04:42	06/02/23 19:29	1

Client Sample ID: FIELD DUPLICATE

Date Collected: 05/02/23 00:00
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-9

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**25**		1.8	0.25	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluorodecanoic acid (PFDA)	**1.2**	**J**	1.8	0.29	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.8	0.51	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluoroheptanesulfonic acid (PFHpS)	**17**		1.8	0.18	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.8	0.30	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.8	0.90	ng/L		05/12/23 05:43	05/20/23 03:44	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.8	0.91	ng/L		05/12/23 05:43	05/20/23 03:44	1
NEtFOSA	<0.80		1.8	0.80	ng/L		05/12/23 05:43	05/20/23 03:44	1
NMeFOSA	<0.40		1.8	0.40	ng/L		05/12/23 05:43	05/20/23 03:44	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		05/12/23 05:43	05/20/23 03:44	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		05/12/23 05:43	05/20/23 03:44	1
NMeFOSE	<1.3		3.7	1.3	ng/L		05/12/23 05:43	05/20/23 03:44	1
NEtFOSE	<0.79	*+	1.8	0.79	ng/L		05/12/23 05:43	05/20/23 03:44	1
4:2 FTS	<0.22		1.8	0.22	ng/L		05/12/23 05:43	05/20/23 03:44	1
6:2 FTS	**17**		4.6	2.3	ng/L		05/12/23 05:43	05/20/23 03:44	1
8:2 FTS	**18**		1.8	0.42	ng/L		05/12/23 05:43	05/20/23 03:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		05/12/23 05:43	05/20/23 03:44	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		05/12/23 05:43	05/20/23 03:44	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		05/12/23 05:43	05/20/23 03:44	1
11Cl-PF3OUdS	<0.30		1.8	0.30	ng/L		05/12/23 05:43	05/20/23 03:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*100*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
13C2 PFDA	*89*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
13C2 PFUnA	*114*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
13C2 PFDoA	*96*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
13C2 PFTeDA	*80*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
13C4 PFOS	*93*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
13C8 FOSA	*94*		*10 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
d3-NMeFOSAA	*101*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
d5-NEtFOSAA	*104*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
d-N-MeFOSA-M	*87*		*10 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
d-N-EtFOSA-M	*78*		*10 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
d7-N-MeFOSE-M	*85*		*10 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
d9-N-EtFOSE-M	*64*		*10 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
M2-4:2 FTS	*77*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
M2-6:2 FTS	*81*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
M2-8:2 FTS	*87*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
13C3 HFPO-DA	*125*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*
13C2 10:2 FTS	*85*		*25 - 150*	*05/12/23 05:43*	*05/20/23 03:44*	*1*

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**510**		230	110	ng/L		05/12/23 05:43	05/21/23 02:44	50

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: FIELD DUPLICATE

Date Collected: 05/02/23 00:00
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-9

Matrix: Water

Method: EPA 537 (modified) - Fluorinated Alkyl Substances - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	1400		92	23	ng/L		05/12/23 05:43	05/21/23 02:44	50
Perfluorohexanoic acid (PFHxA)	2100		92	27	ng/L		05/12/23 05:43	05/21/23 02:44	50
Perfluoroheptanoic acid (PFHpA)	600		92	12	ng/L		05/12/23 05:43	05/21/23 02:44	50
Perfluorooctanoic acid (PFOA)	700		92	39	ng/L		05/12/23 05:43	05/21/23 02:44	50
Perfluorobutanesulfonic acid (PFBS)	1100		92	9.2	ng/L		05/12/23 05:43	05/21/23 02:44	50
Perfluoropentanesulfonic acid (PFPeS)	860		92	14	ng/L		05/12/23 05:43	05/21/23 02:44	50
Perfluorohexanesulfonic acid (PFHxS)	6400		92	26	ng/L		05/12/23 05:43	05/21/23 02:44	50
Perfluorooctanesulfonic acid (PFOS)	1000		92	25	ng/L		05/12/23 05:43	05/21/23 02:44	50

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89*		*25 - 150*	*05/12/23 05:43*	*05/21/23 02:44*	*50*
13C5 PFPeA	*81*		*25 - 150*	*05/12/23 05:43*	*05/21/23 02:44*	*50*
13C2 PFHxA	*111*		*25 - 150*	*05/12/23 05:43*	*05/21/23 02:44*	*50*
13C4 PFHpA	*112*		*25 - 150*	*05/12/23 05:43*	*05/21/23 02:44*	*50*
13C4 PFOA	*108*		*25 - 150*	*05/12/23 05:43*	*05/21/23 02:44*	*50*
13C3 PFBS	*103*		*25 - 150*	*05/12/23 05:43*	*05/21/23 02:44*	*50*
18O2 PFHxS	*114*		*25 - 150*	*05/12/23 05:43*	*05/21/23 02:44*	*50*
13C4 PFOS	*91*		*25 - 150*	*05/12/23 05:43*	*05/21/23 02:44*	*50*

Definitions/Glossary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

LCMS

Prep Batch: 674233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233239-1	MW-1	Total/NA	Water	3535	
500-233239-2	MW-2	Total/NA	Water	3535	
500-233239-2 - DL	MW-2	Total/NA	Water	3535	
500-233239-3	MW-3	Total/NA	Water	3535	
500-233239-4 - DL	MW-4	Total/NA	Water	3535	
500-233239-4	MW-4	Total/NA	Water	3535	
500-233239-5 - DL	PZ-1	Total/NA	Water	3535	
500-233239-5	PZ-1	Total/NA	Water	3535	
500-233239-6	TRIP BLANK	Total/NA	Water	3535	
500-233239-7	EQUIPMENT BLANK	Total/NA	Water	3535	
500-233239-8	FIELD BLANK	Total/NA	Water	3535	
500-233239-9	FIELD DUPLICATE	Total/NA	Water	3535	
500-233239-9 - DL	FIELD DUPLICATE	Total/NA	Water	3535	
MB 320-674233/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-674233/2-A	Lab Control Sample	Total/NA	Water	3535	
500-233239-6 MS	TRIP BLANK	Total/NA	Water	3535	
500-233239-6 MSD	TRIP BLANK	Total/NA	Water	3535	

Analysis Batch: 676252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233239-1	MW-1	Total/NA	Water	537 (modified)	674233
500-233239-2	MW-2	Total/NA	Water	537 (modified)	674233
500-233239-4	MW-4	Total/NA	Water	537 (modified)	674233
500-233239-5	PZ-1	Total/NA	Water	537 (modified)	674233
500-233239-7	EQUIPMENT BLANK	Total/NA	Water	537 (modified)	674233
500-233239-8	FIELD BLANK	Total/NA	Water	537 (modified)	674233
500-233239-9	FIELD DUPLICATE	Total/NA	Water	537 (modified)	674233
MB 320-674233/1-A	Method Blank	Total/NA	Water	537 (modified)	674233

Analysis Batch: 676474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233239-2 - DL	MW-2	Total/NA	Water	537 (modified)	674233
500-233239-3	MW-3	Total/NA	Water	537 (modified)	674233
500-233239-4 - DL	MW-4	Total/NA	Water	537 (modified)	674233
500-233239-5 - DL	PZ-1	Total/NA	Water	537 (modified)	674233
500-233239-9 - DL	FIELD DUPLICATE	Total/NA	Water	537 (modified)	674233

Analysis Batch: 677091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233239-6	TRIP BLANK	Total/NA	Water	537 (modified)	674233
LCS 320-674233/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	674233
500-233239-6 MS	TRIP BLANK	Total/NA	Water	537 (modified)	674233
500-233239-6 MSD	TRIP BLANK	Total/NA	Water	537 (modified)	674233

Prep Batch: 679359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233239-8 - RE	FIELD BLANK	Total/NA	Water	3535	
MB 320-679359/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-679359/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-679359/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

LCMS

Analysis Batch: 679893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-233239-8 - RE	FIELD BLANK	Total/NA	Water	537 (modified)	679359
MB 320-679359/1-A	Method Blank	Total/NA	Water	537 (modified)	679359
LCS 320-679359/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	679359
LCSD 320-679359/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	679359

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-674233/1-A
Matrix: Water
Analysis Batch: 676252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674233

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.19		2.0	0.19	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		05/12/23 05:41	05/20/23 01:21	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		05/12/23 05:41	05/20/23 01:21	1
NEtFOSA	<0.87		2.0	0.87	ng/L		05/12/23 05:41	05/20/23 01:21	1
NMeFOSA	<0.43		2.0	0.43	ng/L		05/12/23 05:41	05/20/23 01:21	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		05/12/23 05:41	05/20/23 01:21	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		05/12/23 05:41	05/20/23 01:21	1
NMeFOSE	<1.4		4.0	1.4	ng/L		05/12/23 05:41	05/20/23 01:21	1
NEtFOSE	<0.85		2.0	0.85	ng/L		05/12/23 05:41	05/20/23 01:21	1
4:2 FTS	<0.24		2.0	0.24	ng/L		05/12/23 05:41	05/20/23 01:21	1
6:2 FTS	<2.5		5.0	2.5	ng/L		05/12/23 05:41	05/20/23 01:21	1
8:2 FTS	<0.46		2.0	0.46	ng/L		05/12/23 05:41	05/20/23 01:21	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		05/12/23 05:41	05/20/23 01:21	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		05/12/23 05:41	05/20/23 01:21	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		05/12/23 05:41	05/20/23 01:21	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		05/12/23 05:41	05/20/23 01:21	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C5 PFPeA	*90*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C2 PFHxA	*109*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C4 PFHpA	*117*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C4 PFOA	*102*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C5 PFNA	*88*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C2 PFDA	*85*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C2 PFUnA	*111*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C2 PFDoA	*116*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*
13C2 PFTeDA	*94*		*25 - 150*	*05/12/23 05:41*	*05/20/23 01:21*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-674233/1-A
Matrix: Water
Analysis Batch: 676252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674233

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	102		25 - 150	05/12/23 05:41	05/20/23 01:21	1
18O2 PFHxS	103		25 - 150	05/12/23 05:41	05/20/23 01:21	1
13C4 PFOS	90		25 - 150	05/12/23 05:41	05/20/23 01:21	1
13C8 FOSA	89		10 - 150	05/12/23 05:41	05/20/23 01:21	1
d3-NMeFOSAA	106		25 - 150	05/12/23 05:41	05/20/23 01:21	1
d5-NEtFOSAA	108		25 - 150	05/12/23 05:41	05/20/23 01:21	1
d-N-MeFOSA-M	75		10 - 150	05/12/23 05:41	05/20/23 01:21	1
d-N-EtFOSA-M	77		10 - 150	05/12/23 05:41	05/20/23 01:21	1
d7-N-MeFOSE-M	86		10 - 150	05/12/23 05:41	05/20/23 01:21	1
d9-N-EtFOSE-M	67		10 - 150	05/12/23 05:41	05/20/23 01:21	1
M2-4:2 FTS	85		25 - 150	05/12/23 05:41	05/20/23 01:21	1
M2-6:2 FTS	73		25 - 150	05/12/23 05:41	05/20/23 01:21	1
M2-8:2 FTS	77		25 - 150	05/12/23 05:41	05/20/23 01:21	1
13C3 HFPO-DA	93		25 - 150	05/12/23 05:41	05/20/23 01:21	1
13C2 10:2 FTS	90		25 - 150	05/12/23 05:41	05/20/23 01:21	1

Lab Sample ID: LCS 320-674233/2-A
Matrix: Water
Analysis Batch: 677091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674233

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	40.0	42.6		ng/L		106	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	51.5		ng/L		129	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	40.3		ng/L		101	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	40.6		ng/L		101	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	42.4		ng/L		106	60 - 135
Perfluorononanoic acid (PFNA)	40.0	49.7		ng/L		124	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	45.1		ng/L		113	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	46.0		ng/L		115	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	40.5		ng/L		101	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	37.3		ng/L		93	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	43.1		ng/L		108	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.5	39.2		ng/L		110	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.6	48.4		ng/L		129	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.5	41.4		ng/L		114	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	38.2	46.0		ng/L		121	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.2	39.7		ng/L		107	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.5	46.2		ng/L		120	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	44.9		ng/L		116	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.8	41.4		ng/L		107	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-674233/2-A
Matrix: Water
Analysis Batch: 677091

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674233

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonamide (FOSA)	40.0	46.1		ng/L		115	60 - 135
NEtFOSA	40.0	47.3		ng/L		118	60 - 135
NMeFOSA	40.0	42.8		ng/L		107	60 - 135
NMeFOSAA	40.0	49.4		ng/L		123	60 - 135
NEtFOSAA	40.0	52.4		ng/L		131	60 - 135
NMeFOSE	40.0	49.5		ng/L		124	60 - 135
NEtFOSE	40.0	68.6	*+	ng/L		172	60 - 135
4:2 FTS	37.5	45.5		ng/L		121	60 - 135
6:2 FTS	38.1	47.7		ng/L		125	60 - 135
8:2 FTS	38.4	41.2		ng/L		107	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	47.7		ng/L		126	60 - 135
HFPO-DA (GenX)	40.0	43.0		ng/L		107	60 - 135
9Cl-PF3ONS	37.4	45.4		ng/L		122	60 - 135
11Cl-PF3OUdS	37.8	48.6		ng/L		129	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*92*		*25 - 150*
13C5 PFPeA	*69*		*25 - 150*
13C2 PFHxA	*103*		*25 - 150*
13C4 PFHpA	*120*		*25 - 150*
13C4 PFOA	*106*		*25 - 150*
13C5 PFNA	*95*		*25 - 150*
13C2 PFDA	*87*		*25 - 150*
13C2 PFUnA	*100*		*25 - 150*
13C2 PFDoA	*116*		*25 - 150*
13C2 PFTeDA	*93*		*25 - 150*
13C3 PFBS	*92*		*25 - 150*
18O2 PFHxS	*96*		*25 - 150*
13C4 PFOS	*94*		*25 - 150*
13C8 FOSA	*83*		*10 - 150*
d3-NMeFOSAA	*101*		*25 - 150*
d5-NEtFOSAA	*88*		*25 - 150*
d-N-MeFOSA-M	*80*		*10 - 150*
d-N-EtFOSA-M	*77*		*10 - 150*
d7-N-MeFOSE-M	*81*		*10 - 150*
d9-N-EtFOSE-M	*53*		*10 - 150*
M2-4:2 FTS	*101*		*25 - 150*
M2-6:2 FTS	*82*		*25 - 150*
M2-8:2 FTS	*81*		*25 - 150*
13C3 HFPO-DA	*111*		*25 - 150*
13C2 10:2 FTS	*92*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-233239-6 MS
Matrix: Water
Analysis Batch: 677091

Client Sample ID: TRIP BLANK
Prep Type: Total/NA
Prep Batch: 674233

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	<2.1		35.8	38.5		ng/L		107	70 - 130
Perfluoropentanoic acid (PFPeA)	<0.44	F1	35.8	51.7	F1	ng/L		144	70 - 130
Perfluorohexanoic acid (PFHxA)	<0.52		35.8	39.4		ng/L		110	70 - 130
Perfluoroheptanoic acid (PFHpA)	<0.22		35.8	38.7		ng/L		108	70 - 130
Perfluorooctanoic acid (PFOA)	<0.76		35.8	42.4		ng/L		118	70 - 130
Perfluorononanoic acid (PFNA)	<0.24	F1	35.8	47.5	F1	ng/L		133	70 - 130
Perfluorodecanoic acid (PFDA)	<0.28		35.8	40.0		ng/L		112	70 - 130
Perfluoroundecanoic acid (PFUnA)	<0.98		35.8	44.0		ng/L		123	70 - 130
Perfluorododecanoic acid (PFDoA)	<0.49		35.8	39.9		ng/L		111	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<1.2		35.8	35.9		ng/L		100	70 - 130
Perfluorotetradecanoic acid (PFTeA)	<0.65		35.8	39.6		ng/L		110	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<0.18		31.8	37.7		ng/L		118	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<0.27	F1	33.7	46.4	F1	ng/L		138	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<0.51		32.7	36.5		ng/L		112	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<0.17	F1	34.2	43.0		ng/L		126	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<0.48		33.3	36.1		ng/L		108	70 - 130
Perfluorononanesulfonic acid (PFNS)	<0.33	F1	34.5	42.7		ng/L		124	70 - 130
Perfluorodecanesulfonic acid (PFDS)	<0.29	F1	34.5	47.5	F1	ng/L		138	70 - 130
Perfluorododecanesulfonic acid (PFDoS)	<0.87		34.7	38.8		ng/L		112	70 - 130
Perfluorooctanesulfonamide (FOSA)	<0.88		35.8	42.6		ng/L		119	70 - 130
NEtFOSA	<0.78		35.8	40.0		ng/L		112	70 - 130
NMeFOSA	<0.38		35.8	39.4		ng/L		110	70 - 130
NMeFOSAA	<1.1		35.8	40.9		ng/L		114	70 - 130
NEtFOSAA	<1.2	F1	35.8	41.0		ng/L		115	70 - 130
NMeFOSE	<1.3	F1	35.8	43.2		ng/L		121	70 - 130
NEtFOSE	<0.76	F1 *+	35.8	52.7	F1	ng/L		147	70 - 130
4:2 FTS	<0.21	F1	33.6	44.9	F1	ng/L		134	70 - 130
6:2 FTS	<2.2	F1	34.1	42.5		ng/L		125	70 - 130
8:2 FTS	<0.41		34.4	40.2		ng/L		117	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36	F1	33.8	51.8	F1	ng/L		153	70 - 130
HFPO-DA (GenX)	<1.3		35.8	40.1		ng/L		112	70 - 130
9Cl-PF3ONS	<0.21	F1	33.5	44.2	F1	ng/L		132	70 - 130
11Cl-PF3OUdS	<0.29	F1	33.8	51.3	F1	ng/L		152	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*88*		*25 - 150*
13C5 PFPeA	*70*		*25 - 150*
13C2 PFHxA	*106*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-233239-6 MS
Matrix: Water
Analysis Batch: 677091

Client Sample ID: TRIP BLANK
Prep Type: Total/NA
Prep Batch: 674233

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFHpA	123		25 - 150
13C4 PFOA	102		25 - 150
13C5 PFNA	88		25 - 150
13C2 PFDA	92		25 - 150
13C2 PFUnA	102		25 - 150
13C2 PFDoA	107		25 - 150
13C2 PFTeDA	91		25 - 150
13C3 PFBS	91		25 - 150
18O2 PFHxS	100		25 - 150
13C4 PFOS	90		25 - 150
13C8 FOSA	81		10 - 150
d3-NMeFOSAA	103		25 - 150
d5-NEtFOSAA	99		25 - 150
d-N-MeFOSA-M	79		10 - 150
d-N-EtFOSA-M	79		10 - 150
d7-N-MeFOSE-M	82		10 - 150
d9-N-EtFOSE-M	62		10 - 150
M2-4:2 FTS	94		25 - 150
M2-6:2 FTS	83		25 - 150
M2-8:2 FTS	80		25 - 150
13C3 HFPO-DA	110		25 - 150
13C2 10:2 FTS	97		25 - 150

Lab Sample ID: 500-233239-6 MSD
Matrix: Water
Analysis Batch: 677091

Client Sample ID: TRIP BLANK
Prep Type: Total/NA
Prep Batch: 674233

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	<2.1		35.9	38.8		ng/L		108	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	<0.44	F1	35.9	51.4	F1	ng/L		143	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<0.52		35.9	39.3		ng/L		110	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)	<0.22		35.9	42.1		ng/L		117	70 - 130	8	30
Perfluorooctanoic acid (PFOA)	<0.76		35.9	41.3		ng/L		115	70 - 130	3	30
Perfluorononanoic acid (PFNA)	<0.24	F1	35.9	47.8	F1	ng/L		133	70 - 130	0	30
Perfluorodecanoic acid (PFDA)	<0.28		35.9	42.1		ng/L		117	70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)	<0.98		35.9	40.3		ng/L		112	70 - 130	9	30
Perfluorododecanoic acid (PFDoA)	<0.49		35.9	43.2		ng/L		120	70 - 130	8	30
Perfluorotridecanoic acid (PFTrDA)	<1.2		35.9	44.4		ng/L		124	70 - 130	21	30
Perfluorotetradecanoic acid (PFTeA)	<0.65		35.9	40.1		ng/L		112	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<0.18		31.9	37.3		ng/L		117	70 - 130	1	30
Perfluoropentanesulfonic acid (PFPeS)	<0.27	F1	33.7	47.6	F1	ng/L		141	70 - 130	3	30
Perfluorohexanesulfonic acid (PFHxS)	<0.51		32.7	36.7		ng/L		112	70 - 130	0	30
Perfluoroheptanesulfonic acid (PFHpS)	<0.17	F1	34.2	47.0	F1	ng/L		137	70 - 130	9	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-233239-6 MSD
Matrix: Water
Analysis Batch: 677091

Client Sample ID: TRIP BLANK
Prep Type: Total/NA
Prep Batch: 674233

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	<0.48		33.4	38.3		ng/L		115	70 - 130	6	30
Perfluorononanesulfonic acid (PFNS)	<0.33	F1	34.5	45.2	F1	ng/L		131	70 - 130	6	30
Perfluorodecanesulfonic acid (PFDS)	<0.29	F1	34.6	44.6		ng/L		129	70 - 130	6	30
Perfluorododecanesulfonic acid (PFDoS)	<0.87		34.8	39.1		ng/L		112	70 - 130	1	30
Perfluorooctanesulfonamide (FOSA)	<0.88		35.9	41.6		ng/L		116	70 - 130	3	30
NEtFOSA	<0.78		35.9	37.7		ng/L		105	70 - 130	6	30
NMeFOSA	<0.38		35.9	35.8		ng/L		100	70 - 130	10	30
NMeFOSAA	<1.1		35.9	43.3		ng/L		121	70 - 130	6	30
NEtFOSAA	<1.2	F1	35.9	48.0	F1	ng/L		134	70 - 130	16	30
NMeFOSE	<1.3	F1	35.9	48.0	F1	ng/L		134	70 - 130	10	30
NEtFOSE	<0.76	F1 *+	35.9	56.3	F1	ng/L		157	70 - 130	7	30
4:2 FTS	<0.21	F1	33.7	41.7		ng/L		124	70 - 130	7	30
6:2 FTS	<2.2	F1	34.2	44.6	F1	ng/L		131	70 - 130	5	30
8:2 FTS	<0.41		34.5	38.1		ng/L		110	70 - 130	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36	F1	33.9	55.1	F1	ng/L		163	70 - 130	6	30
HFPO-DA (GenX)	<1.3		35.9	40.5		ng/L		113	70 - 130	1	30
9Cl-PF3ONS	<0.21	F1	33.5	45.8	F1	ng/L		137	70 - 130	4	30
11Cl-PF3OUdS	<0.29	F1	33.9	49.7	F1	ng/L		147	70 - 130	3	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*85*		*25 - 150*
13C5 PFPeA	*58*		*25 - 150*
13C2 PFHxA	*98*		*25 - 150*
13C4 PFHpA	*102*		*25 - 150*
13C4 PFOA	*100*		*25 - 150*
13C5 PFNA	*87*		*25 - 150*
13C2 PFDA	*84*		*25 - 150*
13C2 PFUnA	*89*		*25 - 150*
13C2 PFDoA	*86*		*25 - 150*
13C2 PFTeDA	*88*		*25 - 150*
13C3 PFBS	*82*		*25 - 150*
18O2 PFHxS	*94*		*25 - 150*
13C4 PFOS	*79*		*25 - 150*
13C8 FOSA	*78*		*10 - 150*
d3-NMeFOSAA	*91*		*25 - 150*
d5-NEtFOSAA	*78*		*25 - 150*
d-N-MeFOSA-M	*76*		*10 - 150*
d-N-EtFOSA-M	*77*		*10 - 150*
d7-N-MeFOSE-M	*69*		*10 - 150*
d9-N-EtFOSE-M	*55*		*10 - 150*
M2-4:2 FTS	*89*		*25 - 150*
M2-6:2 FTS	*69*		*25 - 150*
M2-8:2 FTS	*70*		*25 - 150*
13C3 HFPO-DA	*100*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: 500-233239-6 MSD
Matrix: Water
Analysis Batch: 677091

Client Sample ID: TRIP BLANK
Prep Type: Total/NA
Prep Batch: 674233

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C2 10:2 FTS	95		25 - 150

Lab Sample ID: MB 320-679359/1-A
Matrix: Water
Analysis Batch: 679893

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.19		2.0	0.19	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		06/01/23 04:42	06/02/23 18:58	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		06/01/23 04:42	06/02/23 18:58	1
NEtFOSA	<0.87		2.0	0.87	ng/L		06/01/23 04:42	06/02/23 18:58	1
NMeFOSA	<0.43		2.0	0.43	ng/L		06/01/23 04:42	06/02/23 18:58	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		06/01/23 04:42	06/02/23 18:58	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		06/01/23 04:42	06/02/23 18:58	1
NMeFOSE	<1.4		4.0	1.4	ng/L		06/01/23 04:42	06/02/23 18:58	1
NEtFOSE	<0.85		2.0	0.85	ng/L		06/01/23 04:42	06/02/23 18:58	1
4:2 FTS	<0.24		2.0	0.24	ng/L		06/01/23 04:42	06/02/23 18:58	1
6:2 FTS	<2.5		5.0	2.5	ng/L		06/01/23 04:42	06/02/23 18:58	1
8:2 FTS	<0.46		2.0	0.46	ng/L		06/01/23 04:42	06/02/23 18:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		06/01/23 04:42	06/02/23 18:58	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		06/01/23 04:42	06/02/23 18:58	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		06/01/23 04:42	06/02/23 18:58	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		06/01/23 04:42	06/02/23 18:58	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	98		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C5 PFPeA	99		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C2 PFHxA	92		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C4 PFHpA	102		25 - 150	06/01/23 04:42	06/02/23 18:58	1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: MB 320-679359/1-A
Matrix: Water
Analysis Batch: 679893

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679359

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	96		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C5 PFNA	103		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C2 PFDA	98		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C2 PFUnA	92		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C2 PFDoA	88		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C2 PFTeDA	85		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C3 PFBS	98		25 - 150	06/01/23 04:42	06/02/23 18:58	1
18O2 PFHxS	98		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C4 PFOS	101		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C8 FOSA	106		10 - 150	06/01/23 04:42	06/02/23 18:58	1
d3-NMeFOSAA	87		25 - 150	06/01/23 04:42	06/02/23 18:58	1
d5-NEtFOSAA	94		25 - 150	06/01/23 04:42	06/02/23 18:58	1
d-N-MeFOSA-M	84		10 - 150	06/01/23 04:42	06/02/23 18:58	1
d-N-EtFOSA-M	81		10 - 150	06/01/23 04:42	06/02/23 18:58	1
d7-N-MeFOSE-M	83		10 - 150	06/01/23 04:42	06/02/23 18:58	1
d9-N-EtFOSE-M	85		10 - 150	06/01/23 04:42	06/02/23 18:58	1
M2-4:2 FTS	72		25 - 150	06/01/23 04:42	06/02/23 18:58	1
M2-6:2 FTS	77		25 - 150	06/01/23 04:42	06/02/23 18:58	1
M2-8:2 FTS	88		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C3 HFPO-DA	109		25 - 150	06/01/23 04:42	06/02/23 18:58	1
13C2 10:2 FTS	103		25 - 150	06/01/23 04:42	06/02/23 18:58	1

Lab Sample ID: LCS 320-679359/2-A
Matrix: Water
Analysis Batch: 679893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	40.0	40.0		ng/L		100	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	43.3		ng/L		108	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	43.2		ng/L		108	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	44.0		ng/L		110	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	43.3		ng/L		108	60 - 135
Perfluorononanoic acid (PFNA)	40.0	43.7		ng/L		109	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	45.2		ng/L		113	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	44.0		ng/L		110	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	44.8		ng/L		112	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	37.1		ng/L		93	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	43.8		ng/L		109	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.5	37.0		ng/L		104	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.6	41.5		ng/L		110	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.5	36.8		ng/L		101	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	38.2	40.9		ng/L		107	60 - 135

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-679359/2-A
Matrix: Water
Analysis Batch: 679893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	37.2	38.6		ng/L		104	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.5	41.1		ng/L		107	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	38.4		ng/L		100	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.8	30.7		ng/L		79	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	41.0		ng/L		103	60 - 135
NEtFOSA	40.0	43.6		ng/L		109	60 - 135
NMeFOSA	40.0	43.3		ng/L		108	60 - 135
NMeFOSAA	40.0	41.9		ng/L		105	60 - 135
NEtFOSAA	40.0	51.2		ng/L		128	60 - 135
NMeFOSE	40.0	41.1		ng/L		103	60 - 135
NEtFOSE	40.0	40.2		ng/L		100	60 - 135
4:2 FTS	37.5	37.6		ng/L		100	60 - 135
6:2 FTS	38.1	38.5		ng/L		101	60 - 135
8:2 FTS	38.4	39.6		ng/L		103	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	45.0		ng/L		119	60 - 135
HFPO-DA (GenX)	40.0	42.7		ng/L		107	60 - 135
9Cl-PF3ONS	37.4	41.6		ng/L		111	60 - 135
11Cl-PF3OUdS	37.8	38.7		ng/L		102	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*97*		*25 - 150*
13C5 PFPeA	*95*		*25 - 150*
13C2 PFHxA	*91*		*25 - 150*
13C4 PFHpA	*99*		*25 - 150*
13C4 PFOA	*96*		*25 - 150*
13C5 PFNA	*95*		*25 - 150*
13C2 PFDA	*94*		*25 - 150*
13C2 PFUnA	*87*		*25 - 150*
13C2 PFDoA	*85*		*25 - 150*
13C2 PFTeDA	*82*		*25 - 150*
13C3 PFBS	*97*		*25 - 150*
18O2 PFHxS	*100*		*25 - 150*
13C4 PFOS	*94*		*25 - 150*
13C8 FOSA	*98*		*10 - 150*
d3-NMeFOSAA	*80*		*25 - 150*
d5-NEtFOSAA	*83*		*25 - 150*
d-N-MeFOSA-M	*80*		*10 - 150*
d-N-EtFOSA-M	*76*		*10 - 150*
d7-N-MeFOSE-M	*83*		*10 - 150*
d9-N-EtFOSE-M	*84*		*10 - 150*
M2-4:2 FTS	*72*		*25 - 150*
M2-6:2 FTS	*75*		*25 - 150*
M2-8:2 FTS	*86*		*25 - 150*
13C3 HFPO-DA	*100*		*25 - 150*

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-679359/2-A
Matrix: Water
Analysis Batch: 679893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679359

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C2 10:2 FTS	*97*		*25 - 150*

Lab Sample ID: LCSD 320-679359/3-A
Matrix: Water
Analysis Batch: 679893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 679359

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	40.0		ng/L		100	60 - 135	0	30
Perfluoropentanoic acid (PFPeA)			40.0	44.6		ng/L		111	60 - 135	3	30
Perfluorohexanoic acid (PFHxA)			40.0	41.8		ng/L		104	60 - 135	3	30
Perfluoroheptanoic acid (PFHpA)			40.0	42.0		ng/L		105	60 - 135	5	30
Perfluorooctanoic acid (PFOA)			40.0	41.7		ng/L		104	60 - 135	4	30
Perfluorononanoic acid (PFNA)			40.0	42.6		ng/L		107	60 - 135	3	30
Perfluorodecanoic acid (PFDA)			40.0	44.2		ng/L		111	60 - 135	2	30
Perfluoroundecanoic acid (PFUnA)			40.0	45.7		ng/L		114	60 - 135	4	30
Perfluorododecanoic acid (PFDoA)			40.0	43.6		ng/L		109	60 - 135	3	30
Perfluorotridecanoic acid (PFTrDA)			40.0	36.3		ng/L		91	60 - 135	2	30
Perfluorotetradecanoic acid (PFTeA)			40.0	44.0		ng/L		110	60 - 135	0	30
Perfluorobutanesulfonic acid (PFBS)			35.5	37.1		ng/L		104	60 - 135	0	30
Perfluoropentanesulfonic acid (PFPeS)			37.6	43.3		ng/L		115	60 - 135	4	30
Perfluorohexanesulfonic acid (PFHxS)			36.5	35.8		ng/L		98	60 - 135	3	30
Perfluoroheptanesulfonic acid (PFHpS)			38.2	40.7		ng/L		107	60 - 135	0	30
Perfluorooctanesulfonic acid (PFOS)			37.2	40.3		ng/L		108	60 - 135	4	30
Perfluorononanesulfonic acid (PFNS)			38.5	41.8		ng/L		109	60 - 135	2	30
Perfluorodecanesulfonic acid (PFDS)			38.6	38.3		ng/L		99	60 - 135	0	30
Perfluorododecanesulfonic acid (PFDoS)			38.8	31.7		ng/L		82	60 - 135	3	30
Perfluorooctanesulfonamide (FOSA)			40.0	42.1		ng/L		105	60 - 135	3	30
NEtFOSA			40.0	44.7		ng/L		112	60 - 135	3	30
NMeFOSA			40.0	44.9		ng/L		112	60 - 135	4	30
NMeFOSAA			40.0	46.1		ng/L		115	60 - 135	10	30
NEtFOSAA			40.0	50.6		ng/L		127	60 - 135	1	30
NMeFOSE			40.0	42.7		ng/L		107	60 - 135	4	30
NEtFOSE			40.0	43.7		ng/L		109	60 - 135	8	30
4:2 FTS			37.5	36.4		ng/L		97	60 - 135	3	30
6:2 FTS			38.1	43.7		ng/L		115	60 - 135	12	30
8:2 FTS			38.4	39.9		ng/L		104	60 - 135	1	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			37.8	47.7		ng/L		126	60 - 135	6	30
HFPO-DA (GenX)			40.0	44.9		ng/L		112	60 - 135	5	30

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-679359/3-A
Matrix: Water
Analysis Batch: 679893

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 679359

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
9Cl-PF3ONS			37.4	41.0		ng/L		110	60 - 135	1	30
11Cl-PF3OUdS			37.8	39.4		ng/L		104	60 - 135	2	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*94*		*25 - 150*
13C5 PFPeA	*91*		*25 - 150*
13C2 PFHxA	*91*		*25 - 150*
13C4 PFHpA	*96*		*25 - 150*
13C4 PFOA	*96*		*25 - 150*
13C5 PFNA	*95*		*25 - 150*
13C2 PFDA	*92*		*25 - 150*
13C2 PFUnA	*83*		*25 - 150*
13C2 PFDoA	*84*		*25 - 150*
13C2 PFTeDA	*76*		*25 - 150*
13C3 PFBS	*89*		*25 - 150*
18O2 PFHxS	*94*		*25 - 150*
13C4 PFOS	*89*		*25 - 150*
13C8 FOSA	*91*		*10 - 150*
d3-NMeFOSAA	*74*		*25 - 150*
d5-NEtFOSAA	*86*		*25 - 150*
d-N-MeFOSA-M	*73*		*10 - 150*
d-N-EtFOSA-M	*69*		*10 - 150*
d7-N-MeFOSE-M	*77*		*10 - 150*
d9-N-EtFOSE-M	*78*		*10 - 150*
M2-4:2 FTS	*75*		*25 - 150*
M2-6:2 FTS	*70*		*25 - 150*
M2-8:2 FTS	*89*		*25 - 150*
13C3 HFPO-DA	*98*		*25 - 150*
13C2 10:2 FTS	*94*		*25 - 150*

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: MW-1
Date Collected: 05/02/23 11:45
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)		1	676252	S1M	EET SAC	05/20/23 01:41

Client Sample ID: MW-2
Date Collected: 05/02/23 14:00
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)		1	676252	S1M	EET SAC	05/20/23 01:51
Total/NA	Prep	3535	DL		674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)	DL	50	676474	S1M	EET SAC	05/21/23 02:34

Client Sample ID: MW-3
Date Collected: 05/02/23 17:20
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)		100	676474	S1M	EET SAC	05/21/23 02:54

Client Sample ID: MW-4
Date Collected: 05/02/23 15:35
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)		1	676252	S1M	EET SAC	05/20/23 02:12
Total/NA	Prep	3535	DL		674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)	DL	100	676474	S1M	EET SAC	05/21/23 03:04

Client Sample ID: PZ-1
Date Collected: 05/02/23 10:10
Date Received: 05/04/23 09:40

Lab Sample ID: 500-233239-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)		1	676252	S1M	EET SAC	05/20/23 02:22
Total/NA	Prep	3535	DL		674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)	DL	100	676474	S1M	EET SAC	05/21/23 03:15

Lab Chronicle

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Client Sample ID: TRIP BLANK
Lab Sample ID: 500-233239-6
Date Collected: 05/02/23 00:00
Matrix: Water
Date Received: 05/04/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)		1	677091	RS1	EET SAC	05/24/23 05:27

Client Sample ID: EQUIPMENT BLANK
Lab Sample ID: 500-233239-7
Date Collected: 05/02/23 12:45
Matrix: Water
Date Received: 05/04/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)		1	676252	S1M	EET SAC	05/20/23 03:24

Client Sample ID: FIELD BLANK
Lab Sample ID: 500-233239-8
Date Collected: 05/02/23 07:30
Matrix: Water
Date Received: 05/04/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535	RE		679359	EFG	EET SAC	06/01/23 04:42
Total/NA	Analysis	537 (modified)	RE	1	679893	K1S	EET SAC	06/02/23 19:29
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:41
Total/NA	Analysis	537 (modified)		1	676252	S1M	EET SAC	05/20/23 03:34

Client Sample ID: FIELD DUPLICATE
Lab Sample ID: 500-233239-9
Date Collected: 05/02/23 00:00
Matrix: Water
Date Received: 05/04/23 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			674233	EFG	EET SAC	05/12/23 05:43
Total/NA	Analysis	537 (modified)		1	676252	S1M	EET SAC	05/20/23 03:44
Total/NA	Prep	3535	DL		674233	EFG	EET SAC	05/12/23 05:43
Total/NA	Analysis	537 (modified)	DL	50	676474	S1M	EET SAC	05/21/23 02:44

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Laboratory: Eurofins Sacramento

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-23

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

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Client Information	Sampler: Joe Hahn	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-112053-46443.6
Client Contact: Mr. Joey Hahn	Phone: 608-354-7999	E-Mail: Sandra.Fredrick@et.eurofinsus.com	State of Origin:	Page: Page 6 of 7
Company: Shannon & Wilson, Inc	PWSID:	Analysis Requested		Job #:
Address: 5325 Wall Street, Suite 2355	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:
City: Madison	TAT Requested (days):			
State, Zip: WI, 53718	Compliance Project: Δ Yes Δ No			
Phone: 608-354-7999	PO #: Purchase Order not required			
Email: joey.hahn@shanwil.com	WO #:			
Project Name: Dane County PFAS	Project #: 50021461			
Site: Dane County	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA_WI - PFAS, Standard List (33 analytes)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
MW-1	5/2/23	11:45	G	Water			X		
MW-2		14:00		Water			X		
MW-3		17:20		Water			X		
MW-4		15:35		Water			X		
PZ-1		10:10		Water			X		
Trip Blank	—	—		Water			X		
Equipment Blank		12:45		Water			X		
Field Blank		7:30		Water			X		
Field Duplicate	—	—		Water			X		
				Water					
				Water					

500-233239 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by: Joe Hahn	Date/Time: 5/3/23 - 15:00	Company: SWI	Received by:	Date/Time: 5/4/23 940	Company	
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: 2133172 | Cooler Temperature(s) °C and Other Remarks: 3.3°c

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Shannon & Wilson, Inc

Job Number: 500-233239-1

Login Number: 233239
List Number: 2
Creator: Oropeza, Salvador

List Source: Eurofins Sacramento
List Creation: 05/04/23 07:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	2133172
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Sacramento
Sample Receiving Notes

500-233239 Field Sheet

Tracking # : 6374 2028 6063

Job: ___

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other ___

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: C10 Corr. Factor: (+ / -) ___ °C

Ice ___ Wet ___ Gel ___ Other ___

Cooler Custody Seal: 2133172

Cooler ID: ___

Temp Observed: 3.3 °C Corrected: 3.3 °C

From: Temp Blank ☐ Sample ☑

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☑	☐
Cooler Temperature is acceptable?	☑	☐	☐
Frozen samples show signs of thaw?	☐	☐	☑

Initials: JT Date: 5/4/23

Unpacking/Labeling The Samples	Yes	No	NA
COC is complete w/o discrepancies?	☑	☐	☐
Samples compromised/tampered with?	☐	☑	☐
Containers are not broken or leaking?	☑	☐	☐
Sample custody seal?	☐	☐	☑
Sample containers have legible labels?	☑	☐	☐
Sample date/times are provided?	☑	☐	☐
Appropriate containers are used?	☑	☐	☐
Sample bottles are completely filled?	☑	☐	☐
Sample preservatives verified?	☐	☐	☑
Is the Field Sampler's name on COC?	☑	☐	☐
Samples require splitting/compositing?	☐	☐	☑
Samples w/o discrepancies?	☑	☐	☐
Zero headspace?*	☐	☐	☑
Alkalinity has no headspace?	☐	☐	☑
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☑
Multiphasic samples are not present?	☑	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: JT Date: 5/4/23

Notes: ___

Trizma Lot #(s): ___

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☑	☐	☐
Samples received within hold time?	☑	☐	☐
NCM Filed?	☐	☐	☑
Log Release checked in TALS?	☐	☐	☑

Initials: LD Date: 5/4/23

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-233239-1	MW-1	96	83	99	106	100	83	80	108
500-233239-2	MW-2						98	86	106
500-233239-2 - DL	MW-2	86	79	106	100	97			
500-233239-3	MW-3	64	53	78	77	73	58	59	75
500-233239-4	MW-4						145	126	
500-233239-4 - DL	MW-4	84	73	108	114	91			85
500-233239-5	PZ-1						85	109	125
500-233239-5 - DL	PZ-1	82	67	103	100	87			
500-233239-6	TRIP BLANK	82	71	99	113	99	84	85	106
500-233239-6 MS	TRIP BLANK	88	70	106	123	102	88	92	102
500-233239-6 MSD	TRIP BLANK	85	58	98	102	100	87	84	89
500-233239-7	EQUIPMENT BLANK	97	81	108	113	104	92	90	115
500-233239-8	FIELD BLANK	96	85	110	117	103	92	89	113
500-233239-8 - RE	FIELD BLANK	98	99	95	103	98	103	98	89
500-233239-9	FIELD DUPLICATE						100	89	114
500-233239-9 - DL	FIELD DUPLICATE	89	81	111	112	108			
LCS 320-674233/2-A	Lab Control Sample	92	69	103	120	106	95	87	100
LCS 320-679359/2-A	Lab Control Sample	97	95	91	99	96	95	94	87
LCSD 320-679359/3-A	Lab Control Sample Dup	94	91	91	96	96	95	92	83
MB 320-674233/1-A	Method Blank	93	90	109	117	102	88	85	111
MB 320-679359/1-A	Method Blank	98	99	92	102	96	103	98	92

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-233239-1	MW-1	101	84	92	104	84	88	91	90
500-233239-2	MW-2	82	76			92	89	90	91
500-233239-2 - DL	MW-2			90	104	90			
500-233239-3	MW-3	61	59	67	138	57	54	69	67
500-233239-4	MW-4	143	127			137	128	145	138
500-233239-4 - DL	MW-4			99	134	99			
500-233239-5	PZ-1	130	93			84	116	120	118
500-233239-5 - DL	PZ-1			85	99	76			
500-233239-6	TRIP BLANK	96	85	85	102	83	78	97	89
500-233239-6 MS	TRIP BLANK	107	91	91	100	90	81	103	99
500-233239-6 MSD	TRIP BLANK	86	88	82	94	79	78	91	78
500-233239-7	EQUIPMENT BLANK	102	99	97	105	96	88	96	103
500-233239-8	FIELD BLANK	104	105	104	105	100	94	104	112
500-233239-8 - RE	FIELD BLANK	84	83	95	99	97	97	85	82
500-233239-9	FIELD DUPLICATE	96	80			93	94	101	104
500-233239-9 - DL	FIELD DUPLICATE			103	114	91			
LCS 320-674233/2-A	Lab Control Sample	116	93	92	96	94	83	101	88
LCS 320-679359/2-A	Lab Control Sample	85	82	97	100	94	98	80	83
LCSD 320-679359/3-A	Lab Control Sample Dup	84	76	89	94	89	91	74	86
MB 320-674233/1-A	Method Blank	116	94	102	103	90	89	106	108
MB 320-679359/1-A	Method Blank	88	85	98	98	101	106	87	94

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-233239-1	MW-1	84	84	76	70	86	78	78	92

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-233239-2	MW-2	80	79	80	61	80	80	89	117
500-233239-2 - DL	MW-2								
500-233239-3	MW-3	55	59	50	44	59	45	65	73
500-233239-4	MW-4	115	113	121	98	78	71	114	
500-233239-4 - DL	MW-4								87
500-233239-5	PZ-1	100	102	96	82	85	74	98	
500-233239-5 - DL	PZ-1								79
500-233239-6	TRIP BLANK	75	79	80	58	93	80	65	103
500-233239-6 MS	TRIP BLANK	79	79	82	62	94	83	80	110
500-233239-6 MSD	TRIP BLANK	76	77	69	55	89	69	70	100
500-233239-7	EQUIPMENT BLANK	78	80	88	70	88	72	85	99
500-233239-8	FIELD BLANK	87	91	91	75	83	76	81	102
500-233239-8 - RE	FIELD BLANK	79	74	80	81	70	75	87	108
500-233239-9	FIELD DUPLICATE	87	78	85	64	77	81	87	125
500-233239-9 - DL	FIELD DUPLICATE								
LCS 320-674233/2-A	Lab Control Sample	80	77	81	53	101	82	81	111
LCS 320-679359/2-A	Lab Control Sample	80	76	83	84	72	75	86	100
LCSD 320-679359/3-A	Lab Control Sample Dup	73	69	77	78	75	70	89	98
MB 320-674233/1-A	Method Blank	75	77	86	67	85	73	77	93
MB 320-679359/1-A	Method Blank	84	81	83	85	72	77	88	109

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M102FTS (25-150)							
500-233239-1	MW-1	82							
500-233239-2	MW-2	95							
500-233239-2 - DL	MW-2								
500-233239-3	MW-3	59							
500-233239-4	MW-4	125							
500-233239-4 - DL	MW-4								
500-233239-5	PZ-1	108							
500-233239-5 - DL	PZ-1								
500-233239-6	TRIP BLANK	93							
500-233239-6 MS	TRIP BLANK	97							
500-233239-6 MSD	TRIP BLANK	95							
500-233239-7	EQUIPMENT BLANK	86							
500-233239-8	FIELD BLANK	95							
500-233239-8 - RE	FIELD BLANK	100							
500-233239-9	FIELD DUPLICATE	85							
500-233239-9 - DL	FIELD DUPLICATE								
LCS 320-674233/2-A	Lab Control Sample	92							
LCS 320-679359/2-A	Lab Control Sample	97							
LCSD 320-679359/3-A	Lab Control Sample Dup	94							
MB 320-674233/1-A	Method Blank	90							
MB 320-679359/1-A	Method Blank	103							

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
PFHxA = 13C2 PFHxA
C4PFHA = 13C4 PFHpA

Isotope Dilution Summary

Client: Shannon & Wilson, Inc
Project/Site: Dane County PFAS

Job ID: 500-233239-1

PFOA = 13C4 PFOA
PFNA = 13C5 PFNA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
PFHxS = 18O2 PFHxS
PFOS = 13C4 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
dMeFOSA = d-N-MeFOSA-M
dEtFOSA = d-N-EtFOSA-M
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
M102FTS = 13C2 10:2 FTS