From: Haag, Christine T - DNR
Sent: Tuesday, November 2, 2021 2:24 PM
To: Beggs, Tauren R - DNR
Subject: FW: Former Mirro/Newell Facility Located at 2009 Mirro Drive, Manitowoc, WI - VPLE Certificate/BRRTS # 06-36-556282

See below. Response from Bill.

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Christine Haag
(she/her)
Phone: (608) 422-1148
christine.haag@wisconsin.gov

From: Nelson, William J - DNR <William.Nelson@wisconsin.gov>
Sent: Tuesday, October 26, 2021 3:46 PM
To: Marchik, Diane <DMarchik@gklaw.com>
Cc: Haag, Christine T - DNR <Christine.Haag@wisconsin.gov>
Subject: RE: Former Mirro/Newell Facility Located at 2009 Mirro Drive, Manitowoc, WI - VPLE Certificate/BRRTS # 06-36-556282

Good afternoon Diane,

I write to confirm receipt of this notification. Christine has shared the information provided with Northeast Region (NER) Remediation and Redevelopment staff who oversee remedial action sites in Manitowoc, Wisconsin.

Christine and I welcome further discussion as you request and will ensure the appropriate DNR staff are available for our future call. As noted previously, feel free to contact RR program coordinator Michael Prager directly concerning any issues regarding the liability clarification letter request forms.

If you have any general questions please let me know.

Best,
Bill

We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

William J. Nelson
Phone: (608) 267-7456
william.nelson@wisconsin.gov

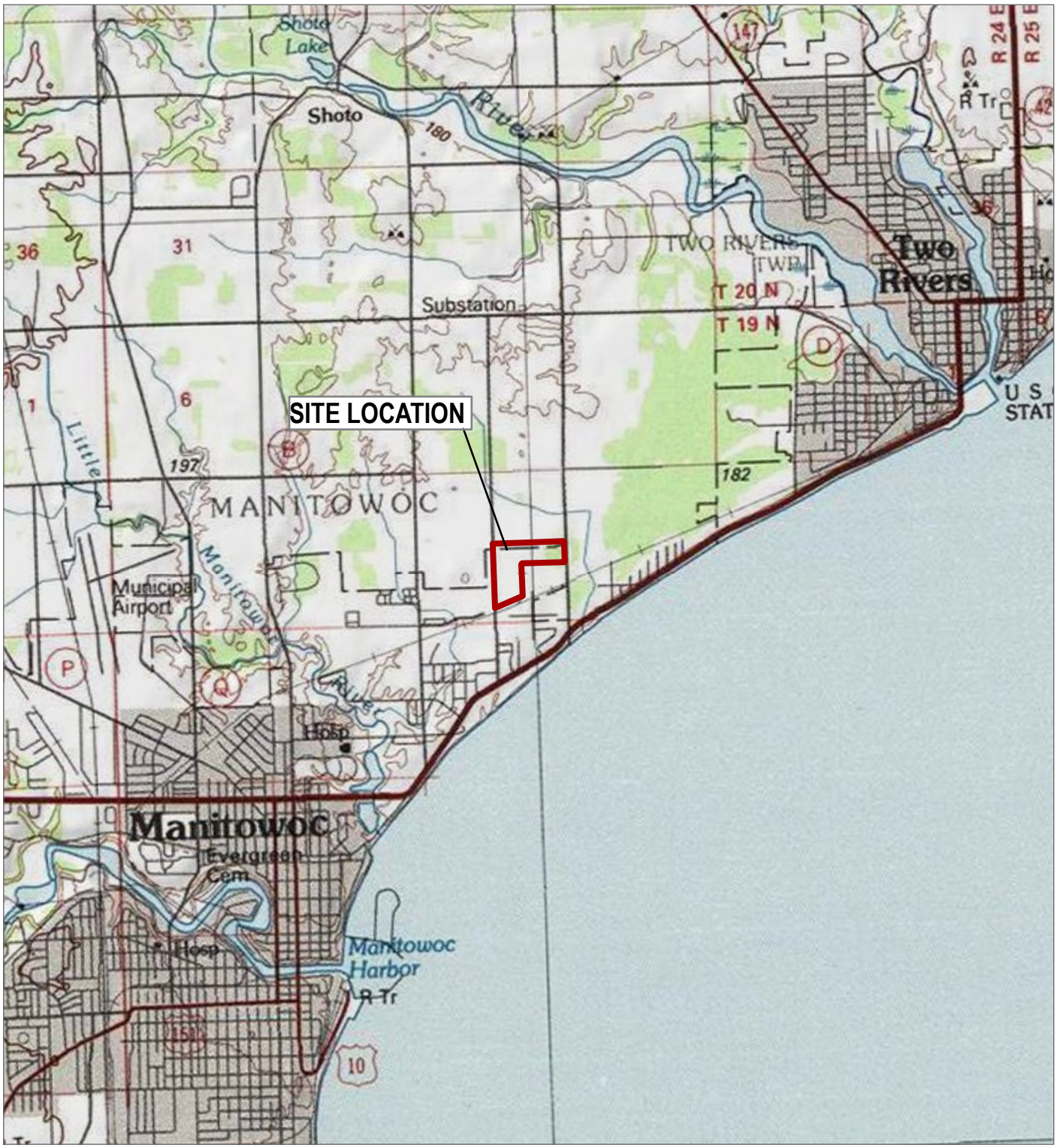
From: Marchik, Diane <DMarchik@gklaw.com>
Sent: Tuesday, October 26, 2021 2:33 PM
To: Haag, Christine T - DNR <Christine.Haag@wisconsin.gov>; Nelson, William J - DNR <William.Nelson@wisconsin.gov>
Subject: Former Mirro/Newell Facility Located at 2009 Mirro Drive, Manitowoc, WI - VPLE Certificate/BRRTS # 06-36-556282

Christine and Bill:

On behalf of our client, Skana Aluminum Company, and in furtherance of our recent conversations regarding the above-identified property, attached please find the laboratory report, figure and data tables that we've just recently received. In accordance with our conversation and in accordance with applicable notification requirements, we are providing these materials to the Department. I understand, of course, that you'll need some time to digest this information, but I wanted to let you know we would welcome the opportunity to discuss this matter with you and/or other appropriate representatives of the Department at your earliest convenience and to determine an appropriate path forward. Thank you in advance for your time and attention and we look forward to working you to resolve this matter.

Diane Marchik | Attorney
414.287.9220 direct
DMarchik@gklaw.com

GODFREY & KAHN S.C.
833 E. Michigan Street, Suite 1800 | Milwaukee, Wisconsin 53202-5615



0 2,500 5,000

FEET

1:60,000 1" = 5,000'

BASE MAP: USGS TOPO MAP

PROJECT: **PROJECT PEACE- MANITOWOC**
2009 MIRRO DRIVE
MANITOWOC, WI 54220

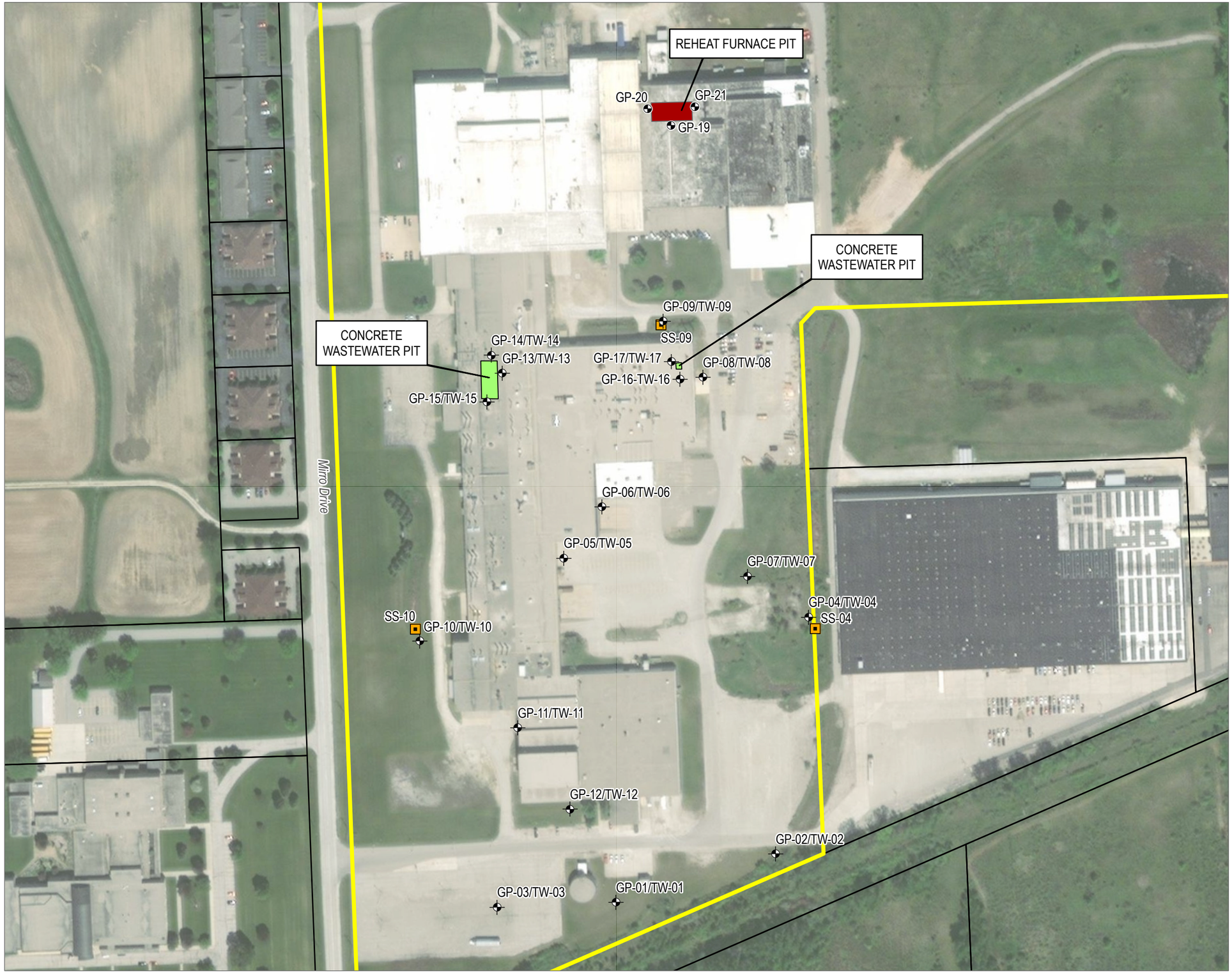
TITLE: **SITE LOCATION MAP**

DRAWN BY:	A. FOJTIK	PROJ. NO.:	462253
CHECKED BY:			
APPROVED BY:			
DATE:	OCTOBER 2021		

FIGURE 1

TRC
708 HEARTLAND TRAIL
SUITE 3000
MADISON, WI 53717
PHONE: 608.826.3600

FILE: 462253_MANITOWOC



SITE BOUNDARY

SURROUNDING PARCELS

SURFICIAL SOIL SAMPLE

SOIL BORING/TEMPORARY WELL

SOIL BORING

NOTES:

1. BASE MAP: ESRI "WORLD IMAGERY" ONLINE SERVICE LAYER.

2. LOCATIONS OF OUTDOOR BORINGS WERE RECORDED USING A GPS.

3. LOCATIONS OF INDOOR BORINGS/TEMPORARY WELLS AND PITS ARE APPROXIMATE. PIT DIMENSIONS ARE ALSO APPROXIMATE.

4. GP-18 WAS NOT INSTALLED DUE TO HEIGHT CLEARANCE AND THE SIZE OF THE PIT.

5. GROUNDWATER FLOW DIRECTION IS GENERALLY TO THE SOUTH-SOUTHEAST BASED ON PREVIOUS SUBSURFACE INVESTIGATIONS PERFROMED BY VARIOUS CONSULTANTS

N

1:2,400

1" = 200'

0 200 FEET

PROJECT:
PROJECT PEACE- MANITOWOC
2009 MIRRO DRIVE
MANITOWOC, WI 54220

TITLE:
SITE LAYOUT MAP WITH SAMPLING LOCATIONS

DRAWN BY:	A. FOJTIK	PROJ. NO.:	462253
CHECKED BY:			
APPROVED BY:			
DATE:	OCTOBER 2021		

FIGURE 2

TRC
708 HEARTLAND TRAIL
SUITE 3000
MADISON, WI 53717
PHONE: 608.826.3600

FILE: 462253_Manitowoc.aprx

Table 1: Soil Analytical Results - PFAS -
Manitowoc Phase II ESA Manitowoc,
Manitowoc County, Wisconsin TRC
Project #462253.0000.0000

Sample Location ID		NR 720 Soil RCLs[1]			SS-04	GP-04	GP-05	GP-05	GP-06	GP-06	GP-07	GP-07	GP-08	GP-08	SS-09	GP-09	SS-10	GP-10	GP-10	GP-11	GP-11	GP-12	GP-12	GP-13	GP-13	GP-14	GP-14	GP-15	GP-15	GP-16	GP-16	GP-17	GP-17
Sample Depth					(0-0.5)	(4-6)	(0-2)	(4-6)	(0-4)	(5-7)	(0-2)	(3-5)	(0-2)	(3-5)	(0-0.5)	(5-7)	(0-0.5)	(0-2)	(3-5)	(0-2)	(4-6)	(0-2)	(4-6)	(7-9)	(9-11)	(7-9)	(9-11)	(5-7)	(7-9)	(1-3)	(3-5)	(1-3)	(3-5)
Duplicate Sample ID						DUP-S-01																								DUP-S-03			
Sample Date		Soil to Groundwater Pathway	Non-Industrial Direct Contact	Industrial Direct Contact	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/4/2021	10/4/2021	10/4/2021	10/4/2021	10/4/2021	10/4/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/6/2021	10/6/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021
CAS RN	Constituent	Units																															
Carboxylic Acids																																	
375-22-4	Perfluorobutanoic acid (PFBA)	ug/kg	-	-	-	<0.057	<0.055	<0.054	<0.045	<0.052	<0.054	<0.052	<0.049	0.12 J	<0.053	<0.051	<0.054	<0.053	0.23 J	<0.053	<0.056	<0.045	<0.057	0.46	<0.050	<0.056	<0.054	<0.052	<0.053	<0.056	<0.058	<0.050	<0.048	<0.050	<0.043	<0.051
2706-90-3	Perfluoropentanoic acid (PFPeA)	ug/kg	-	-	-	<0.051	<0.049	<0.048	<0.040	<0.046	<0.048	<0.046	<0.044	<0.046	<0.048	<0.047	0.13 J	<0.047	0.18 J	0.12 J	<0.050	<0.040	<0.050	0.28	<0.045	<0.050	<0.048	<0.046	<0.047	<0.050	<0.052	<0.044	<0.042	<0.045	<0.039	<0.046
307-24-4	Perfluorohexanoic acid (PFHxA)	ug/kg	-	-	-	<0.038	<0.037	0.065 J I	<0.030	<0.035	<0.036	<0.035	<0.033	0.066 J	<0.034	<0.036	<0.036	<0.036	0.082 J	<0.036	<0.039	<0.031	<0.038	0.56	<0.034	<0.038	<0.036	<0.035	<0.036	<0.038	0.072 J	<0.033	<0.032	<0.034	<0.029	<0.034
375-85-9	Perfluoroheptanoic acid (PFHpA)	ug/kg	-	-	-	<0.047	<0.045	0.18 J	<0.037	<0.043	<0.045	<0.043	<0.041	0.061 J	<0.042	<0.044	<0.044	<0.044	0.13 J	<0.044	<0.036	<0.047	<0.037	<0.047	0.44	<0.042	0.070 J	<0.044	<0.043	<0.044	<0.047	<0.048	<0.041	0.048 J	0.043 J	0.040 J	<0.042
335-67-1	Perfluorooctanoic acid (PFOA)	ug/kg	-	1,260	16,400	1.5	1.7	5.9	0.18 J	0.30	0.38	<0.060	0.61	4.0	4.7	5.9	6.7	25	0.68	7.7	5.1	1.4	0.38	0.63	9.8	1.6	13	6.9	0.080 J	<0.061	0.32	0.12 J	85	88	20	6.6	3.3
375-95-1	Perfluorononanoic acid (PFNA)	ug/kg	-	-	-	<0.027	<0.026	<0.026	<0.021	<0.025	<0.026	<0.025	<0.024	0.029 J	<0.024	0.12 J	<0.025	0.36	<0.025	0.054 J	0.029 J	<0.027	<0.022	<0.027	0.068 J	<0.024	<0.027	<0.026	<0.025	<0.025	<0.027	<0.028	0.059 J	0.076 J	0.21 J	<0.021	<0.024
335-76-2	Perfluorodecanoic acid (PFDA)	ug/kg	-	-	-	<0.059	<0.057	<0.056	<0.047	<0.054	<0.056	<0.054	<0.051	<0.056	<0.053	<0.056	<0.055	0.46	<0.056	0.13 J	<0.056	<0.059	<0.047	<0.059	<0.058	<0.053	<0.058	<0.056	<0.054	<0.055	<0.059	<0.060	<0.052	<0.050	<0.053	<0.045	<0.053
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ug/kg	-	-	-	<0.052	<0.049	<0.050	<0.040	<0.047	<0.049	<0.047	<0.045	<0.049	<0.047	<0.049	<0.049	2.8	<0.049	0.39	<0.049	<0.052	<0.041	<0.052	<0.051	<0.046	<0.051	<0.049	<0.047	<0.048	<0.051	<0.053	<0.045	<0.044	<0.046	<0.040	<0.047
307-55-1	Perfluorododecanoic acid (PFDoA)	ug/kg	-	-	-	<0.037	<0.036	<0.035	<0.029	<0.034	<0.035	<0.034	<0.032	<0.035	<0.033	<0.035	<0.035	0.43	<0.035	0.19 J	<0.035	<0.037	<0.030	<0.037	<0.037	<0.033	<0.037	<0.035	<0.034	<0.035	<0.037	<0.038	<0.032	<0.031	<0.033	<0.028	<0.033
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ug/kg	-	-	-	0.069 J	0.082 J	<0.025	<0.020	<0.024	<0.025	<0.024	<0.023	<0.024	<0.023	<0.025	<0.024	2.0	<0.024	0.50	<0.024	<0.026	<0.021	<0.026	<0.026	<0.023	<0.026	<0.024	<0.024	<0.024	<0.026	<0.026	<0.023	<0.022	<0.023	<0.020	<0.023
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ug/kg	-	-	-	<0.046	<0.044	<0.043	<0.036	<0.041	<0.043	<0.042	<0.040	<0.043	<0.041	<0.043	<0.043	0.22 J	<0.043	0.14 J	<0.043	<0.045	<0.036	<0.046	<0.045	<0.041	<0.045	<0.043	<0.042	<0.043	<0.045	<0.047	<0.040	<0.038	<0.040	<0.035	<0.041
Sulfonic Acids																																	
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ug/kg	-	1,260,000	16,400,000	<0.047	<0.045	<0.044	<0.037	<0.043	<0.045	<0.043	<0.041	<0.044	<0.042	<0.044	<0.044	<0.055	<0.044	<0.058	<0.044	<0.047	<0.037	<0.047	<0.046	<0.042	<0.046	<0.044	<0.043	<0.044	<0.047	<0.048	<0.041	<0.039	<0.042	<0.036	<0.042
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	ug/kg	-	-	-	<0.046	<0.044	<0.043	<0.036	<0.041	<0.043	<0.042	<0.040	<0.043	<0.041	<0.043	<0.043	<0.054	<0.043	<0.057	<0.043	<0.046	<0.038	<0.046	<0.045	<0.041	<0.045	<0.043	<0.042	<0.043	<0.045	0.058 J I	<0.040	<0.038	<0.040	<0.035	<0.041
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ug/kg	-	-	-	<0.036	<0.034	<0.034	<0.028	<0.033	<0.034	<0.033	<0.031	<0.034	<0.032	<0.034	<0.034	<0.042	<0.034	<0.045	<0.034	<0.036	<0.029	<0.036	<0.035	<0.032	<0.035	<0.034	<0.033	<0.033	<0.036	0.68	<0.031	<0.030	<0.032	<0.027	<0.032
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ug/kg	-	-	-	<0.061	<0.059	<0.057	<0.048	<0.055	<0.057	<0.055	<0.053	<0.057	<0.054	<0.057	<0.057	<0.072	<0.057	<0.075	<0.057	<0.060	<0.048	<0.060	<0.060	<0.054	<0.060	<0.057	<0.055	<0.056	<0.060	<0.062	<0.053	<0.051	<0.054	<0.046	<0.054
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ug/kg	-	1,260	16,400	<0.053	<0.051	<0.050	<0.042	<0.048	<0.050	0.20 J	<0.046	0.12 J I	<0.048	0.52	<0.050	0.40	<0.050	0.38	0.17 J	<0.053	0.40	<0.053	0.23 J I	<0.047	<0.052	<0.050	<0.048	<0.050	<0.053	0.17 J	<0.046	<0.045	0.078 J	<0.041	0.067 J I
68259-12-1	Perfluorononanesulfonic acid (PFNS)	ug/kg	-	-	-	<0.036	<0.035	<0.034	<0.028	<0.033	<0.034	<0.033	<0.031	<0.034	<0.032	<0.034	<0.034	<0.042	<0.034	<0.045	<0.034	<0.036	<0.029	<0.036	<0.035	<0.032	<0.035	<0.034	<0.033	<0.033	<0.036	<0.037	<0.031	<0.030	<0.032	<0.027	<0.032
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ug/kg	-	-	-	<0.064	<0.062	<0.061	<0.051	<0.058	<0.061	<0.059	<0.056	<0.060	<0.058	<0.061	<0.060	<0.076	<0.060	<0.080	<0.060	<0.064	<0.051	<0.064	<0.063	<0.057	<0.063	<0.061	<0.059	<0.060	<0.064	<0.066	<0.056	<0.054	<0.057	<0.049	<0.058
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ug/kg	-	-	-	<0.058	<0.056	<0.055	<0.046	<0.053	<0.055	<0.053	<0.050	<0.054	<0.052	<0.055	<0.054	<0.069	<0.054	<0.072	<0.054	<0.058	<0.046	<0.058	<0.057	<0.052	<0.057	<0.055	<0.053	<0.054	<0.058	<0.059	<0.051	<0.049	<0.051	<0.044	<0.052
757124-72-4	4:2 FTS	ug/kg	-	-	-	<0.063	<0.061	<0.060	<0.050	<0.057	<0.060	<0.057	<0.055	<0.059	<0.057	<0.060	<0.059	<0.074	<0.059	<0.078	<0.059	<0.063	<0.050	<0.063	<0.062	<0.056	<0.062	<0.059	<0.057	<0.059	<0.062	<0.064	<0.055	<0.053	<0.056	<0.048	<0.057
27619-97-2	6:2 FTS	ug/kg	-	-	-	<0.033	<0.032	<0.032	<0.026	<0.030	<0.032	<0.030	<0.028	<0.031	<0.030	<0.032	<0.031	<0.039	<0.031	<0.041	<0.031	<0.033	<0.026	<0.033	<0.033	<0.030	<0.033	<0.031	<0.030	<0.031	<0.033	<0.034	<0.029	<0.028	<0.030	<0.026	<0.030
39108-34-4	8:2 FTS	ug/kg	-	-	-	<0.043	<0.042	<0.041	<0.034	<0.039	<0.041	<0.039	<0.038	<0.041	<0.039	<0.041	<0.040	<0.051	<0.041	<0.054	<0.041	<0.043	<0.035	<0.043	<0.043	<0.038	<0.043	<0.041	<0.039	<0.040	<0.043	<0.044	<0.038	<0.036	<0.038	<0.033	<0.039
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols																																	
754-91-6	Perfluorooctanesulfonamide (FOSA)	ug/kg	-	-	-	<0.041	<0.039	<0.039	<0.032	<0.037	<0.039	<0.037	<0.035	<0.038	<0.037	<0.039	<0.038	<0.048	<0.038	<0.051	<0.038	<0.041	<0.033	<0.041	<0.040	<0.036	<0.040	<0.038	<0.037	<0.038	<0.040	<0.042	<0.036	<0.034	<0.036	<0.031	<0.037
31506-32-8	NMeFOSA	ug/kg	-	-	-	<0.061	<0.059	<0.057	<0.048	<0.055	<0.057	<0.055	<0.053	<0.057	<0.054	<0.057	<0.057	<0.072	<0.057	<0.075	<0.057	<0.060	<0.048	<0.060	<0.060	<0.054	<0.060	<0.057	<0.055	<0.056	<0.060	<0.062	<0.053	<0.051	<0.054	<0.046	<0.054
4151-50-2	NEtFOSA	ug/kg	-	-	-	<0.058	<0.056	<0.055	<0.046	<0.053	<0.055	<0.053	<0.050	<0.054	<0.052	<0.055	<0.054	<0.069	<0.054	<0.072	<0.054	<0.058	<0.046	<0.058	<0.057	<0.052	<0.057	<0.055	<0.053	<0.054	<0.058	<0.059	<0.051	<0.049	<0.051	<0.044	<0.052
2355-31-9	NMeFOSAA	ug/kg	-	-	-	<0.028	<0.028	<0.027	<0.022	<0.026	<0.027	<0.026	<0.025	<0.027	<0.026	<0.027	<0.027	<0.034	<0.027	<0.035	<0.027	<0.028	<0.023	<0.028	<0.028	<0.025	<0.028	<0.027	<0.026	<0.027	<0.028	<0.029	<0.025	<0.024	<0.025	<0.022	<0.026
2991-50-6	NEtFOSAA	ug/kg	-	-	-	<0.057	<0.055	<0.054	<0.044	<0.052	<0.054	<0.051	<0.049	<0.053	<0.051	<0.054	<0.053	<0.067	<0.053	<0.070	<0.053	<0.056	<0.045	<0.056	<0.055	<0.050	<0.055	<0.053	<0.052	<0.053	<0.056	<0.058	<0.050	<0.048	<0.050	<0.043	<0.051
24448-09-7	NMeFOSE	ug/kg	-	-	-	<0.058	<0.056	<0.055	<0.046	<0.053	<0.055	<0.053	<0.050	<0.054	<0.052	<0.055	<0.054	<0.069	<0.054	<0.072	<0.054	<0.058	<0.046	<0.058	<0.057	<0.052	<0.057	<0.055	<0.053	<0.054	<0.058	<0.059	<0.051	<0.049	<0.051	<0.044	<0.052
1691-99-2	NEtFOSE	ug/kg	-	-	-	<0.035	0.045 J	<0.033	<0.027	<0.031	<0.033	<0.032	<0.030	<0.032	<0.031	<0.033	<0.032	<0.041	<0.032	<0.043	<0.032	<0.034	<0.028	<0.034	<0.034	<0.031	<0.034	<0.033	<0.032	<0.032	<0.034	<0.035	<0.030	<0.029	<0.031	<0.026	<0.031
Replacement Chemicals																																	
13252-13-6	HFPO-DA (GenX)	ug/kg	-	-	-	<0.051	<0.049	<0.048	<0.040	<0.046	<0.048	<0.046	<0.044	<0.048	<0.046	<0.048	<0.047	<0.060	<0.047	<0.063	<0.047	<0.050	<0.040	<0.050	<0.050	<0.045	<0.050	<0.048	<0.046	<0.047	<0.050	<0.052	<0.044	<0.042	<0.045	0.062 J	0.13 J
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ug/kg	-	-	-	<0.048	<0.047	<0.046	<0.038	<0.044	<0.046	<0.044	<0.042	<0.045	<0.043	<0.046	<0.045	<0.057	<0.045	<0.060	<0.045	<0.048	<0.038	<0.048	<0.047	<0.043	<0.047	<0.045	<0.044	<0.045	<0.048	<0.049	<0.042	<0.040	<0.043	<0.037	<0.043
756426-58-1	9Cl-PF3ONS	ug/kg	-	-	-	<0.043	<0.042	<0.041	<0.034	<0.039	<0.041	<0.039	<0.038	<0.041	<0.039	<0.041	<0.040	<0.051	<0.041	<0.054	<0.041	<0.043	<0.033	<0.043	<0.043	<0.038	<0.043	<0.041	<0.039	<0.040	<0.043	<0.044	<0.038	<0.036	<0.038	<0.033	<0.039
763051-92-9	11Cl-PF3OUdS	ug/kg	-	-	-	<0.038	<0.037	<0.036	<0.030	<0.035	<0.036	<0.035	<0.033	<0.036	<0.034	<0.036	<0.036	<0.045	<0.036	<0.048	<0.036	<0.038	<0.031	<0.038	<0.038	<0.034	<0.038	<0.036	<0.035	<0.036	<0.038	<0.039	<0.033	<0.032	<0.034	<0.029	<0.034

Notes:

CAS RN = Chemical Abstract Service Registry Number

RCL = NR 720 residual contaminant level

ug/kg = micrograms per kilogram (ppb)

- = Standard not established

< = Result not detected above laboratory method detection limit (MDL), reported as <MDL

Bold = Meets or exceeds NR 720 Industrial or Non-Industrial Direct Contact RCL

J = Estimated concentration at or above the method detection limit and below the laboratory reporting limit

I = Value is EMPC (estimated maximum possible concentration)

Footnotes:

[1] NR 720 RCLs taken from WDNR RCL spreadsheet (December 2018 update), in which RCLs are calculated using default exposure assumptions listed in NR 720.12(3).

Prepared by: L. Auner, 10/18/2021
Checked by: E. Lawson, 10/20/2021

Table 2: Groundwater and Blank Analytical Results - PFAS
Manitowoc Phase II ESA
Manitowoc, Manitowoc County, Wisconsin
TRC Project #462253.0000.0000

Sample Type					Groundwater Samples																	Blank Samples						
Sample Location/Blank ID					TW-01	TW-02	TW-03	TW-04	TW-05	TW-06	TW-07	TW-08	TW-09	TW-10	TW-11		TW-12	TW-13	TW-14	TW-15		TW-16	TW-17	EB-01	EB-02	EB-03	EB-04	FB-01	FB-02	FB-03
Duplicate Sample ID		Recommended NR 140														DUP-01					DUP-02								
Sample Date		Groundwater Standards[1]			10/4/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/4/2021	10/6/2021	10/6/2021	10/6/2021	10/6/2021	10/5/2021	10/5/2021	10/4/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/5/2021	10/6/2021
CAS RN	Analyte	Units	PAL	ES																										
Carboxylic Acids																														
375-22-4	Perfluorobutanoic acid (PFBA)	ng/L	2,000	10,000	7.3	<21	13	<23	<2.1	<21	<24	<21	<2.2	2.5 J	35	35	14	<120	<2.1	16	16	<120	14	<2.4	<2.3	<2.1	<2.2	<2.2	<2.2	<2.2
2706-90-3	Perfluoropentanoic acid (PFPeA)	ng/L	-	-	4.1	<4.3	3.1	6.3 J	1.0 J	33	<4.9	13 J	<0.46	1.1 J	20	18	10	99 J	<0.44	<0.43	5.1	<25	11	<0.48	<0.48	<0.43	<0.45	<0.45	<0.45	<0.46
307-24-4	Perfluorohexanoic acid (PFHxA)	ng/L	30,000	150,000	15	17 J	7.9	28	5.7	51	7.4 J	58	<0.54	6.5	63	71	44	62 J	<0.52	2.2	2.3	46 J	36	<0.57	<0.56	<0.51	<0.53	<0.53	<0.53	<0.54
375-85-9	Perfluoroheptanoic acid (PFHpA)	ng/L	-	-	19	29	4.1	40	6.4	68	13 J	120	<0.23	5.8	79	94	23	150	0.33 J	2.5	2.3	110	31	<0.25	<0.24	<0.22	<0.23	<0.23	<0.23	<0.23
335-67-1	Perfluorooctanoic acid (PFOA)	ng/L	2[2]	20[2]	***270***	***990***	***21***	***790***	***94***	***2,900***	***780***	***3,800***	*8.9*	***24***	***1,800***	***2,000***	***37***	***17,000***	*12*	***240***	***240***	***26,000***	***150***	<0.84	<0.82	<0.74	<0.77	<0.78	<0.77	<0.79
375-95-1	Perfluorononanoic acid (PFNA)	ng/L	3	30	<0.26	<2.4	<0.27	<2.6	<0.24	<2.4	<2.7	<2.4	<0.25	<0.24	0.83 J	1.4 J	<0.24	<14	<0.24	0.29 J	<0.25	33 J*	<0.29	<0.27	<0.26	<0.24	<0.25	<0.25	<0.25	<0.25
335-76-2	Perfluorodecanoic acid (PFDA)	ng/L	60	300	<0.30	<2.7	<0.31	<2.9	<0.28	<2.7	<3.1	<2.7	<0.29	<0.28	<0.27	<0.27	<0.27	<16	<0.28	<0.27	<0.29	<16	<0.33	<0.30	<0.30	<0.27	<0.28	<0.28	<0.28	<0.29
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ng/L	600	3,000	<1.1	<9.7	<1.1	<10	<0.98	<9.7	<11	<9.7	<1.0	<0.99	<0.97	<0.95	<0.97	<55	<0.98	<0.97	<1.0	<55	<1.2	<1.1	<1.1	<0.96	<1.0	<1.0	<1.0	<1.0
307-55-1	Perfluorododecanoic acid (PFDoA)	ng/L	100	500	<0.54	<4.9	<0.55	<5.2	<0.49	<4.8	<5.5	<4.9	<0.51	<0.50	<0.49	<0.48	<0.49	<28	<0.49	<0.48	<0.52	<28	<0.59	<0.54	<0.53	<0.48	<0.50	<0.50	<0.50	<0.51
72629-94-8	Perfluorotridecanoic acid (PFTrDA)	ng/L	-	-	<1.3	<11	<1.3	<12	<1.2	<11	<13	<11	<1.2	<1.2	<1.1	<1.1	<1.1	<65	<1.2	<1.1	<1.2	<65	<1.4	<1.3	<1.3	<1.1	<1.2	<1.2	<1.2	<1.2
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ng/L	2,000	10,000	<0.71	<6.4	<0.73	<6.9	<0.65	<6.4	<7.2	<6.5	<0.68	<0.66	<0.64	<0.63	<0.65	<37	<0.65	<0.64	<0.68	<37	<0.79	<0.72	<0.71	<0.64	<0.67	<0.67	<0.66	<0.68
Sulfonic Acids																														
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ng/L	90,000	450,000	0.54 J	<1.8	<0.20	<1.9	<0.18	1.9 J	<2.0	<1.8	<0.19	<0.18	1.6 J	1.3 J	<0.18	<10	<0.18	1.1 J	1.3 J I	14 J	0.46 J	<0.20	<0.19	<0.17	<0.18	<0.18	<0.18	<0.19
2706-91-4	Perfluoropentanesulfonic acid (PFPeS)	ng/L	-	-	<0.29	<2.7	<0.30	<2.8	<0.27	<2.6	<3.0	<2.7	<0.28	<0.27	<0.26	<0.26	<0.27	<15	<0.27	<0.26	<0.28	<15	<0.32	<0.29	<0.29	<0.26	<0.27	<0.28	<0.27	<0.28
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ng/L	4	40	<0.56	<5.0	<0.57	<5.4	<0.51	<5.0	<5.7	<5.0	<0.53	<0.51	0.62 J I	0.59 J I	<0.50	<29	<0.51	0.63 J	0.65 J	<29	<0.61	<0.56	<0.55	<0.50	<0.52	<0.52	<0.52	<0.53
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	-	-	<0.19	<1.7	<0.19	<1.8	<0.17	<1.7	<1.9	<1.7	<0.18	<0.17	<0.17	<0.16	<0.17	<9.5	<0.17	<0.17	<0.18	<9.5	<0.20	<0.19	<0.18	<0.17	<0.17	<0.17	<0.17	<0.18
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ng/L	2[2]	20[2]	<0.53	<4.8	<0.54	<5.1	<0.48	*7.4 J*	<5.4	<4.8	<0.50	<0.49	<0.48	<0.47	<0.48	<27	<0.48	*5.1*	*3.7*	<27	<0.58	<0.53	<0.52	<0.47	<0.49	<0.50	<0.49	<0.50
68259-12-1	Perfluorononanesulfonic acid (PFNS)	ng/L	-	-	<0.36	<3.3	<0.37	<3.5	<0.33	<3.3	<3.7	<3.3	<0.34	<0.33	<0.33	<0.32	<0.33	<19	<0.33	<0.33	<0.35	<19	<0.40	<0.36	<0.36	<0.32	<0.34	<0.34	<0.34	<0.34
335-77-3	Perfluorodecanesulfonic acid (PFDS)	ng/L	-	-	<0.31	<2.8	<0.32	<3.0	<0.29	<2.8	<3.2	<2.8	<0.30	<0.29	<0.28	<0.28	<0.28	<16	<0.29	<0.28	<0.30	<16	<0.34	<0.31	<0.31	<0.28	<0.29	<0.29	<0.29	<0.30
79780-39-5	Perfluorododecanesulfonic acid (PFDoS)	ng/L	-	-	<0.95	<8.6	<0.97	<9.2	<0.87	<8.5	<9.6	<8.6	<0.90	<0.88	<0.86	<0.84	<0.86	<49	<0.87	<0.85	<0.91	<49	<1.0	<0.95	<0.94	<0.85	<0.88	<0.89	<0.88	<0.90
757124-72-4	4:2 FTS	ng/L	-	-	<0.23	<2.1	<0.24	<2.3	<0.21	<2.1	<2.4	<2.1	<0.22	<0.22	<0.21	<0.21	<0.21	<12	<0.21	<0.21	<0.22	<12	<0.26	<0.24	<0.23	<0.21	<0.22	<0.22	<0.22	<0.22
27619-97-2	6:2 FTS	ng/L	-	-	<2.4	<22	<2.5	<24	<2.2	<22	<25	<22	<2.3	<2.3	<2.2	<2.2	<2.2	<130	<2.2	<2.2	<2.3	<130	<2.7	<2.5	<2.4	<2.2	<2.3	<2.3	<2.3	<2.3
39108-34-4	8:2 FTS	ng/L	-	-	<0.45	<4.1	<0.46	<4.3	<0.41	<4.0	<4.6	<4.1	<0.43	<0.42	<0.41	<0.40	<0.41	<23	<0.41	<0.40	<0.43	<23	<0.50	<0.45	<0.45	<0.40	<0.42	<0.42	<0.42	<0.43
Sulfonamides, Sulfomidoacetic acids, Sulfonamidoethanols																														
754-91-6	Perfluorooctanesulfonamide (FOSA)	ng/L	2[2]	20[2]	<0.96	<8.7	<0.98	<9.3	<0.88	<8.6	<9.7	<8.7	<0.91	<0.89	<0.87	<0.85	<0.87	<49	<0.88	<0.86	<0.92	<49	<1.1	<0.96	<0.95	<0.86	<0.89	<0.90	<0.90	<0.91
31506-32-8	NMeFOSA	ng/L	-	-	<0.42	<3.8	<0.43	<4.1	<0.38	<3.8	<4.3	<3.8	<0.40	<0.39	<0.38	<0.37	<0.38	<22	<0.38	<0.38	<0.40	<22	<0.46	<0.42	<0.42	<0.38	<0.39	<0.39	<0.39	<0.40
4151-50-2	NEtFOSA	ng/L	2[2]	20[2]	<0.85	<7.7	<0.87	<8.2	<0.78	<7.7	<8.6	<7.7	<0.81	<0.79	<0.77	<0.75	<0.77	<44	<0.78	<0.76	<0.82	<44	<0.94	<0.86	<0.84	<0.76	<0.79	<0.80	<0.79	<0.81
2355-31-9	NMeFOSAA	ng/L	-	-	<1.2	<11	<1.2	<11	<1.1	<11	<12	<11	<1.1	<1.1	<1.1	<1.0	<1.1	<60	<1.1	<1.1	<1.1	<60	<1.3	<1.2	<1.2	<1.0	<1.1	<1.1	<1.1	<1.1
2991-50-6	NEtFOSAA	ng/L	2[2]	20[2]	<1.3	<11	<1.3	<12	<1.2	<11	<13	<11	<1.2	<1.2	<1.1	<1.1	<1.1	<65	<1.2	<1.1	<1.2	<65	<1.4	<1.3	<1.3	<1.1	<1.2	<1.2	<1.2	<1.2
24448-09-7	NMeFOSE	ng/L	-	-	<1.4	<12	<1.4	<13	<1.3	<12	<14	<12	<1.3	<1.3	<1.2	<1.2	<1.2	<70	<1.3	<1.2	<1.3	<70	<1.5	<1.4	<1.4	<1.2	<1.3	<1.3	<1.3	<1.3
1691-99-2	NEtFOSE	ng/L	2[2]	20[2]	<0.83	<7.5	<0.85	<8.0	<0.76	<7.5	<8.4	<7.5	<0.79	<0.77	<0.75	<0.74	<0.75	<43	<0.76	<0.75	<0.80	<43	<0.92	<0.84	<0.82	<0.74	<0.77	<0.78	<0.77	<0.79
Replacement Chemicals																														
13252-13-6	HFPO-DA (GenX)	ng/L	30	300	<1.5	<13	<1.5	<14	<1.3	15 J	<15	<13	<1.4	<1.4	<1.3	<1.3	<1.3	*150 J*	<1.3	1.3 J	<1.4	*93 J*	<1.6	<1.5	<1.5	<1.3	<1.4	<1.4	<1.4	<1.4
919005-14-4	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ng/L	600	3,000	<0.39	<3.5	<0.40	<3.8	<0.36	<3.5	<4.0	<3.5	<0.37	<0.36	<0.35	<0.35	<0.35	<20	<0.36	<0.35	<0.37	<20	<0.43	<0.39	<0.39	<0.35	<0.36	<0.37	<0.36	<0.37
756426-58-1	9Cl-PF3ONS	ng/L	-	-	<0.23	<2.1	<0.24	<2.3	<0.21	<2.1	<2.4	<2.1	<0.22	<0.22	<0.21	<0.21	<0.21	<12	<0.21	<0.21	<0.22	<12	<0.26	<0.24	<0.23	<0.21	<0.22	<0.22	<0.22	<0.22
763051-92-9	11Cl-PF3OUdS	ng/L	-	-	<0.31	<2.8	<0.32	<3.0	<0.29	<2.8	<3.2	<2.8	<0.30	<0.29	<0.28	<0.28	<0.28	<16	<0.29	<0.28	<0.30	<16	<0.34	<0.31	<0.31	<0.28	<0.29	<0.29	<0.29	<0.30
Combined Standard																														
-	Combined Standard[2]	ng/L	2	20	***270***	***990***	***21***	***790***	***94***	***2,907.4***	***780***	***3,800***	*8.9*	***24***	***1,800***	***2,000***	***37***	***17,000***	*12*	***245.1***	***243.7***	***26,000***	***150***	ND	ND	ND	ND	ND	ND	ND

Notes
CAS RN = Chemical Abstracts Service Registry Number
NR 140 ES = Wisconsin Administrative Code Chapter NR 140 enforcement standard
NR 140 PAL = Wisconsin Administrative Code Chapter NR 140 preventive action limit
ng/L = nanograms per liter (equivalent to parts per trillion [ppt])
- = Standard not recommended
< = Result not detected above laboratory method detection limit (MDL), reported as <MDL
ND = Not detected
Italics = concentration meets or exceeds proposed NR 140 PAL
Bold italics = concentration meets or exceeds proposed NR 140 ES
J = Estimated concentration at or above the method detection limit and below the laboratory reporting limit
I = Value is EMPC (estimated maximum possible concentration)
* = Per NR 140.14(3)b and NR 140.14(3)c, result is not considered to exceed PAL or ES.

Blank Samples
EB-01: Geoprobe liner and cutting shoe
EB-02: stainless steel bowl, spatula, and new glove to used for soil sample homogenization
EB-03: stainless steel scoop used for surficial soil samples
EB-04: HDPE and silicone tubing used for groundwater sampling

Prepared by: L. Auner, 10/18/2021
Checked by: E. Lawson, 10/20/2021

Footnotes
(1) Recommended NR 140 ESs and PALs were recommended by the Department of Health Services (DHS) to the DNR. The DNR is in the rule-making process to include these values in ch. NR 140.
(2) Combined standard recommended for PFOS, PFOA, FOSA, NEtFOSA, NEtFOSAA, and NEtFOSE.

Table 3: Soil Analytical Results - PCBs
Manitowoc Phase II ESA Manitowoc,
Manitowoc County, Wisconsin TRC Project
#462253.0000.0000

Sample Location ID			NR 720 Soil RCLs[1]			GP-19	GP-20	GP-21
Sample Depth			Soil to Groundwater Pathway	Non-Industrial Direct Contact	Industrial Direct Contact	(4-6)	(2-4)	(4-6)
Sample Date						10/4/2021	10/4/2021	10/4/2021
CAS RN	**Constituent**	**Units**						
12674-11-2	PCB-1016	ug/kg	-	4,110	28,000	<8.8	<6.6	<7.7
11104-28-2	PCB-1221	ug/kg	-	213	883	<8.8	<6.6	<7.7
11141-16-5	PCB-1232	ug/kg	-	190	792	<6.1	<4.6	<5.3
53469-21-9	PCB-1242	ug/kg	-	235	972	<8.7	<6.5	<7.7
12672-29-6	PCB-1248	ug/kg	-	236	975	62	<8.0	<9.4
11097-69-1	PCB-1254	ug/kg	-	239	988	<7.6	8.1 J	<6.7
11096-82-5	PCB-1260	ug/kg	-	243	1,000	<8.5	<6.3	<7.4

Notes:

CAS RN = Chemical Abstract Service Registry Number

RCL = NR 720 residual contaminant level

ug/kg = micrograms per kilogram (ppb)

- = Standard not established

Bold = Meets or exceeds NR 720 Industrial or Non-Industrial Direct Contact RCL

Italic = Meets or exceeds Protection of Groundwater Generic Screening Level

J = Estimated concentration at or above the method detection limit and below the laboratory reporting limit.

Prepared by: L. Auner, 10/18/2021

Checked by: E. Lawson, 10/20/2021

Footnotes:

(1) NR 720 RCLs taken from WDNR RCL spreadsheet (December 2018 update), in which RCLs are calculated using default exposure assumptions listed in NR 720.12(3).

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-80070-1
Client Project/Site: Project Peace – Manitowoc 462253

For:
TRC Environmental Corporation
708 Heartland Trail
Suite 3000
Madison, Wisconsin 53717

Attn: Ben Wachholz

Sandie Fredrick

Authorized for release by:
10/15/2021 5:00:04 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandra.fredrick@eurofinset.com

Table of Contents

Definitions/Glossary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

Qualifiers

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
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.
E	Result exceeded calibration range.
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

Job ID: 320-80070-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-80070-1

Comments
No additional comments.

Receipt
The samples were received on 10/8/2021 10:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6º C and 1.7º C.

Receipt Exceptions
COC lists sample 57 and 58 as solid. After opening the cooler, the samples were found to be water. Logged and labeled samples as water.TW-02 (320-80070-56) and DUP-02 (320-80070-57)

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): Sample 58. The sample ID is TW-03, the sample date is 10/05/21, and the sample time is 09:45. 2 water samples came in 250mL unpreserved plastic bottles.TW-03 (320-80070-58)

LCMS
Method 537 (modified): The “I” qualifier means the transition mass ratio for the indicated analyte was low outside of the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some bias. However, analyst judgment was used to positively identify the analyte. DUP-01 (320-80070-55) and DUP-02 (320-80070-57)

Method 537 (modified): Results for samples TW-11 (320-80070-54) and TW-02 (320-80070-56) 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 TW-08 (320-80070-48), TW-06 (320-80070-49), TW-07 (320-80070-51) and TW-04 (320-80070-52) 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 "I" qualifier means the transition mass ratio for the indicated analytes were outside of the established ratio limits. The qualitative identification of the analytes have some degree of uncertainty, and the reported values may have some high bias. However, analyst judgment was used to positively identify the analytes. GP-04 (4-6) (320-80070-2)

Method 537 (modified): Results for samples GP-16 (1-3) (320-80070-20), (320-80070-A-20-B MS) and (320-80070-A-20-C MSD) 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 sample TW-16 (320-80070-46) 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.The percent recovery for the internal standard in the 5X analysis is 100% after the dilution factor was applied to the labeled internal standard area count.

Method 537 (modified): Results for sample TW-08 (320-80070-48) 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.The percent recovery for the internal standard in the 20X analysis is 121% after the dilution factor was applied to the labeled internal standard area count.

Method 537 (modified): The transition mass ratio was outside of the established ratio limit for NEtFOSA in (CCVL 320-534095/2) associated to this data set. This is indicated by the "R" flag in the raw data. As the flagged data is in control in the CCVL, there is no adverse impact to the data.

Method 537 (modified): The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with preparation batch

Job ID: 320-80070-1 (Continued)

Laboratory: Eurofins TestAmerica, Sacramento (Continued)

320-533122 and analytical batch 320-534136 were analyzed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Perfluorooctanoic acid (PFOA) in the MS was above the instrument calibration range. The data have been reported and qualified.

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was low outside of the established ratio limit. The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte: GP-17 (3-5) (320-80070-26).

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was high outside of 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: GP-15 (7-9) (320-80070-32).

Method 537 (modified): Result for sample DUP-S-03 (320-80070-24) was reported from the analysis of a diluted extract due to high concentration of the matrix 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. The percent recovery for the internal standard in the 100X analysis is 102% after the dilution factor was applied to the labeled internal standard area count.

Method 537 (modified): Result for sample DUP-01 (320-80070-55) was reported from the analysis of a diluted extract due to high concentration of the matrix 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. The percent recovery for the internal standard in the 10X analysis is 104% after the dilution factor was applied to the labeled internal standard area count.

Method 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: GP-11 (4-6) (320-80070-16). 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. The sample was re-analyzed with concurring results; therefore, the data have been reported.

Method 537 (modified): Due to the high concentration of Perfluorooctanoic acid (PFOA), the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 320-533125 and analytical batch 320-533940 could not be evaluated for accuracy. 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 outside of the established ratio limit. The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte: TW-11 (320-80070-54).

Method 537 (modified): Result for sample DUP-S-03 (320-80070-24) was reported from the analysis of a diluted extract due to high concentration of the matrix 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. The percent recovery for the internal standard in the 10X analysis is 109% after the dilution factor was applied to the labeled internal standard area count.

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analytes were outside of the established ratio limits. The qualitative identification of the analytes have some degree of uncertainty, and the reported values may have some low bias. However, analyst judgment was used to positively identify the analytes. GP-07 (0-2) (320-80070-7) and GP-12 (0-2) (320-80070-17)

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
Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-533397. 320-533397 Method: PFC_IDA_WI Matrix: Water

Method 3535: The following samples are yellow and contain a thin layer of sediments at the bottom of the bottle prior to extraction: TW-01 (320-80070-33), TW-12 (320-80070-34), TW-13 (320-80070-42), TW-14 (320-80070-43), TW-15 (320-80070-44), TW-17 (320-80070-45),

Job ID: 320-80070-1 (Continued)

Laboratory: Eurofins TestAmerica, Sacramento (Continued)

TW-16 (320-80070-46), TW-09 (320-80070-47), TW-08 (320-80070-48), TW-06 (320-80070-49), TW-05 (320-80070-50), TW-07 (320-80070-51) and TW-04 (320-80070-52). 320-533397 Method: PFC_IDA_WI Matrix: Water

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-533400. 320-533400 Method: PFC_IDA_WI Matrix: Water

Method 3535: The following samples are yellow and contain a thin layer of sediments at the bottom of the bottle prior to extraction: TW-10 (320-80070-53), TW-11 (320-80070-54), DUP-01 (320-80070-55), TW-02 (320-80070-56), DUP-02 (320-80070-57) and TW-03 (320-80070-58).
320-533400 Method: PFC_IDA_WI Matrix: Water

Method 3535: The following samples are cloudy yellow after final voluming: TW-14 (320-80070-43), TW-15 (320-80070-44) and TW-17 (320-80070-45). 320-533397 Method: PFC_IDA_WI Matrix: Water

Method 3535: Due to the potential for high analyte concentration, the initial volumes used for the following samples deviated from the standard procedure: TW-13 (320-80070-42) and TW-16 (320-80070-46). A 50x dilution was made on the sample, then fortified with IDA and extracted. The reporting limits (RLs) have been adjusted proportionately 320-533397 Method: PFC_IDA_WI Matrix: Water

Method 3535: Elevated reporting limits are provided for the following sample due to insufficient sample provided for preparation: TW-17 (320-80070-45). 320-533397 Method: PFC_IDA_WI Matrix: Water

Method 3535: The following samples are cloudy yellow after final voluming: TW-10 (320-80070-53) and TW-02 (320-80070-56). 320-533400 Method: PFC_IDA_WI Matrix: Water

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

Detection Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: SS-04 — Lab Sample ID: 320-80070-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	1.5		0.25	0.066	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic acid (PFTrDA)	0.069	J	0.25	0.026	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-04 (4-6) — Lab Sample ID: 320-80070-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	0.065	J I	0.23	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.18	J	0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.9		0.23	0.062	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-05 (0-2) — Lab Sample ID: 320-80070-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.18	J	0.19	0.051	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-05 (4-6) — Lab Sample ID: 320-80070-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.30		0.22	0.059	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-06 (0-4) — Lab Sample ID: 320-80070-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	0.20	J	0.23	0.048	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-06 (5-7) — Lab Sample ID: 320-80070-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.61		0.21	0.057	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-07 (0-2) — Lab Sample ID: 320-80070-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.12	J	0.23	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.066	J	0.23	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.061	J	0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	4.0		0.23	0.061	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.029	J	0.23	0.026	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.12	J I	0.23	0.050	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-07 (3-5) — Lab Sample ID: 320-80070-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	4.7		0.22	0.059	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-08 (0-2) — Lab Sample ID: 320-80070-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	5.9		0.23	0.062	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.12	J	0.23	0.026	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.52		0.23	0.050	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GP-08 (3-5) — Lab Sample ID: 320-80070-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	6.7		0.23	0.061	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: SS-09 — Lab Sample ID: 320-80070-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.23	J	0.29	0.067	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.13	J	0.29	0.060	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.082	J	0.29	0.045	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.13	J	0.29	0.055	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	25		0.29	0.077	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.36		0.29	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.46		0.29	0.070	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	2.8		0.29	0.061	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	0.43		0.29	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic acid (PFTrDA)	2.0		0.29	0.031	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.22	J	0.29	0.054	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.40		0.29	0.063	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-09 (5-7) — Lab Sample ID: 320-80070-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.68		0.23	0.061	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-10 (0-2) — Lab Sample ID: 320-80070-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.22	J	0.23	0.053	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.12	J	0.23	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.17	J	0.23	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.10	J	0.23	0.044	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.1		0.23	0.061	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.029	J	0.23	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.17	J	0.23	0.050	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-10 (3-5) — Lab Sample ID: 320-80070-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	1.4		0.25	0.065	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-11 (0-2) — Lab Sample ID: 320-80070-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.38		0.20	0.052	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.40		0.20	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
NEtFOSAA	0.097	J	0.20	0.047	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-11 (4-6) — Lab Sample ID: 320-80070-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.63		0.25	0.065	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-12 (0-2) — Lab Sample ID: 320-80070-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.46		0.24	0.056	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.28		0.24	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.56		0.24	0.038	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.44		0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	9.8		0.24	0.064	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.068	J	0.24	0.027	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.23	J I	0.24	0.052	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-12 (4-6) — Lab Sample ID: 320-80070-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	1.6		0.22	0.058	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: SS-10 — Lab Sample ID: 320-80070-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.26	J	0.31	0.071	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.18	J	0.31	0.063	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	0.099	J	0.31	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.16	J	0.31	0.058	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	7.7		0.31	0.082	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.054	J	0.31	0.034	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.13	J	0.31	0.074	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.39		0.31	0.065	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorododecanoic acid (PFDoA)	0.19	J	0.31	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic acid (PFTrDA)	0.50		0.31	0.032	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotetradecanoic acid (PFTeA)	0.14	J	0.31	0.057	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.38		0.31	0.066	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-16 (1-3) — Lab Sample ID: 320-80070-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorononanoic acid (PFNA)	0.059	J	0.22	0.024	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	85		2.2	0.57	ug/Kg	10	☼	537 (modified)	Total/NA

Client Sample ID: GP-16 (3-5) — Lab Sample ID: 320-80070-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.043	J	0.22	0.042	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	20		0.22	0.058	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.21	J	0.22	0.024	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.078	J	0.22	0.047	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: DUP-S-01 — Lab Sample ID: 320-80070-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	1.7		0.24	0.063	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorotridecanoic acid (PFTrDA)	0.082	J	0.24	0.025	ug/Kg	1	☼	537 (modified)	Total/NA
NEtFOSE	0.045	J	0.24	0.033	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: DUP-S-02 — Lab Sample ID: 320-80070-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.38		0.23	0.062	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: DUP-S-03 — Lab Sample ID: 320-80070-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.048	J	0.21	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.076	J	0.21	0.023	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	88		2.1	0.55	ug/Kg	10	☼	537 (modified)	Total/NA

Client Sample ID: GP-17 (1-3) — Lab Sample ID: 320-80070-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.040	J	0.19	0.036	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	6.6		0.19	0.050	ug/Kg	1	☼	537 (modified)	Total/NA
HFPO-DA (GenX)	0.062	J	0.19	0.039	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-17 (3-5) — Lab Sample ID: 320-80070-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	3.3		0.22	0.059	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.067	J I	0.22	0.048	ug/Kg	1	☼	537 (modified)	Total/NA
HFPO-DA (GenX)	0.13	J	0.22	0.046	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-13 (7-9) — Lab Sample ID: 320-80070-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.070	J	0.24	0.046	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	13		0.24	0.065	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-13 (9-11) — Lab Sample ID: 320-80070-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	6.9		0.23	0.062	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-14 (7-9) — Lab Sample ID: 320-80070-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.080	J	0.23	0.060	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-14 (9-11) — Lab Sample ID: 320-80070-30

No Detections.

Client Sample ID: GP-15 (5-7) — Lab Sample ID: 320-80070-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.32		0.24	0.065	ug/Kg	1	☼	537 (modified)	Total/NA

Client Sample ID: GP-15 (7-9) — Lab Sample ID: 320-80070-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	0.072	J	0.25	0.039	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.12	J	0.25	0.067	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.058	J I	0.25	0.047	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.68		0.25	0.037	ug/Kg	1	☼	537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.17	J	0.25	0.054	ug/Kg	1	☼	537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TW-01 — Lab Sample ID: 320-80070-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.3		4.9	2.3	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.1		2.0	0.48	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	15		2.0	0.57	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	19		2.0	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	270		2.0	0.83	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.54	J	2.0	0.20	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TW-12 — Lab Sample ID: 320-80070-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	14		4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	10		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	44		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	23		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	37		1.8	0.75	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-01 — Lab Sample ID: 320-80070-35

No Detections.

Client Sample ID: EB-01 — Lab Sample ID: 320-80070-36

No Detections.

Client Sample ID: EB-02 — Lab Sample ID: 320-80070-37

No Detections.

Client Sample ID: EB-03 — Lab Sample ID: 320-80070-38

No Detections.

Client Sample ID: EB-04 — Lab Sample ID: 320-80070-39

No Detections.

Client Sample ID: FB-02 — Lab Sample ID: 320-80070-40

No Detections.

Client Sample ID: FB-03 — Lab Sample ID: 320-80070-41

No Detections.

Client Sample ID: TW-13 — Lab Sample ID: 320-80070-42

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	99	J	100	25	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	62	J	100	29	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	150		100	13	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	17000		100	43	ng/L	1		537 (modified)	Total/NA
HFPO-DA (GenX)	150	J	200	75	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TW-14 — Lab Sample ID: 320-80070-43

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.33	J	1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	12		1.8	0.76	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-15 — Lab Sample ID: 320-80070-44

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	16		4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.5		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	240		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.29	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.63	J	1.8	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.1		1.8	0.47	ng/L	1		537 (modified)	Total/NA
HFPO-DA (GenX)	1.3	J	3.5	1.3	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TW-17 — Lab Sample ID: 320-80070-45

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	14		5.4	2.6	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	11		2.2	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	36		2.2	0.63	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	31		2.2	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	150		2.2	0.92	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.46	J	2.2	0.22	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TW-16 — Lab Sample ID: 320-80070-46

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	46	J	100	29	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	110		100	13	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	33	J	100	14	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	14	J	100	10	ng/L	1		537 (modified)	Total/NA
HFPO-DA (GenX)	93	J	200	75	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	26000		500	210	ng/L	5		537 (modified)	Total/NA

Client Sample ID: TW-09 — Lab Sample ID: 320-80070-47

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	8.9		1.9	0.79	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TW-08 — Lab Sample ID: 320-80070-48

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	13	J	18	4.3	ng/L	10		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	58		18	5.1	ng/L	10		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	120		18	2.2	ng/L	10		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	3800		35	15	ng/L	20		537 (modified)	Total/NA

Client Sample ID: TW-06 — Lab Sample ID: 320-80070-49

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	33		18	4.3	ng/L	10		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	51		18	5.1	ng/L	10		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	68		18	2.2	ng/L	10		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2900		18	7.5	ng/L	10		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.9	J	18	1.8	ng/L	10		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.4	J	18	4.8	ng/L	10		537 (modified)	Total/NA
HFPO-DA (GenX)	15	J	35	13	ng/L	10		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-05 — Lab Sample ID: 320-80070-50

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	1.0	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.7		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	6.4		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	94		1.8	0.76	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TW-07 — Lab Sample ID: 320-80070-51

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	7.4	J	20	5.7	ng/L	10		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	13	J	20	2.5	ng/L	10		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	780		20	8.4	ng/L	10		537 (modified)	Total/NA

Client Sample ID: TW-04 — Lab Sample ID: 320-80070-52

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	6.3	J	19	4.6	ng/L	10		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	28		19	5.5	ng/L	10		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	40		19	2.4	ng/L	10		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	790		19	8.0	ng/L	10		537 (modified)	Total/NA

Client Sample ID: TW-10 — Lab Sample ID: 320-80070-53

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2.5	J	4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.1	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	6.5		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	5.8		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	24		1.8	0.77	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TW-11 — Lab Sample ID: 320-80070-54

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	35		4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	20		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	63		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	79		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.83	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.62	J I	1.8	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	1800		18	7.5	ng/L	10		537 (modified)	Total/NA

Client Sample ID: DUP-01 — Lab Sample ID: 320-80070-55

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	35		4.3	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	18		1.7	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	71		1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	94		1.7	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.4	J	1.7	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.3	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.59	J I	1.7	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	2000		17	7.4	ng/L	10		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-02 — Lab Sample ID: 320-80070-56

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	17	J	18	5.1	ng/L	10		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	29		18	2.2	ng/L	10		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	990		18	7.5	ng/L	10		537 (modified)	Total/NA

Client Sample ID: DUP-02 — Lab Sample ID: 320-80070-57

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	16		4.7	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	5.1		1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.3		1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.3		1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	240		1.9	0.80	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.3	J I	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.65	J	1.9	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.7		1.9	0.51	ng/L	1		537 (modified)	Total/NA

Client Sample ID: TW-03 — Lab Sample ID: 320-80070-58

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	13		5.0	2.4	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	3.1		2.0	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	7.9		2.0	0.58	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.1		2.0	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	21		2.0	0.85	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS-04

Date Collected: 10/05/21 11:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-1

Matrix: Solid
Percent Solids: 74.7

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.057		0.25	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluoropentanoic acid (PFPeA)	<0.051		0.25	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorohexanoic acid (PFHxA)	<0.038		0.25	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluoroheptanoic acid (PFHpA)	<0.047		0.25	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorooctanoic acid (PFOA)	**1.5**		0.25	0.066	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorononanoic acid (PFNA)	<0.027		0.25	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorodecanoic acid (PFDA)	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluoroundecanoic acid (PFUnA)	<0.052		0.25	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.25	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorotridecanoic acid (PFTrDA)	**0.069**	**J**	0.25	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorotetradecanoic acid (PFTeA)	<0.046		0.25	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorobutanesulfonic acid (PFBS)	<0.047		0.25	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluoropentanesulfonic acid (PFPeS)	<0.046		0.25	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorohexanesulfonic acid (PFHxS)	<0.036		0.25	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.061		0.25	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorooctanesulfonic acid (PFOS)	<0.053		0.25	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorononanesulfonic acid (PFNS)	<0.036		0.25	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.25	0.064	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorododecanesulfonic acid (PFDoS)	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
Perfluorooctanesulfonamide (FOSA)	<0.041		0.25	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
NEtFOSA	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
NMeFOSA	<0.061		0.25	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
NMeFOSAA	<0.028		0.25	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
NEtFOSAA	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
NMeFOSE	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
NEtFOSE	<0.035		0.25	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
4:2 FTS	<0.063		0.25	0.063	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
6:2 FTS	<0.033		0.25	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
8:2 FTS	<0.043		0.25	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.25	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
HFPO-DA (GenX)	<0.051		0.25	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
9Cl-PF3ONS	<0.043		0.25	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1
11Cl-PF3OUdS	<0.038		0.25	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 04:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C5 PFPeA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C2 PFHxA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C4 PFHpA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C4 PFOA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C5 PFNA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C2 PFDA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C2 PFUnA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C2 PFDoA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C2 PFTeDA	*67*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*
13C3 PFBS	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:33*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: SS-04
Date Collected: 10/05/21 11:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-1
Matrix: Solid
Percent Solids: 74.7

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	74		25 - 150	10/11/21 18:38	10/14/21 04:33	1
13C4 PFOS	72		25 - 150	10/11/21 18:38	10/14/21 04:33	1
13C8 FOSA	73		10 - 150	10/11/21 18:38	10/14/21 04:33	1
d3-NMeFOSAA	79		25 - 150	10/11/21 18:38	10/14/21 04:33	1
d5-NEtFOSAA	78		25 - 150	10/11/21 18:38	10/14/21 04:33	1
d-N-MeFOSA-M	75		10 - 150	10/11/21 18:38	10/14/21 04:33	1
d-N-EtFOSA-M	74		10 - 150	10/11/21 18:38	10/14/21 04:33	1
d7-N-MeFOSE-M	86		10 - 150	10/11/21 18:38	10/14/21 04:33	1
d9-N-EtFOSE-M	83		10 - 150	10/11/21 18:38	10/14/21 04:33	1
M2-4:2 FTS	88		25 - 150	10/11/21 18:38	10/14/21 04:33	1
M2-6:2 FTS	86		25 - 150	10/11/21 18:38	10/14/21 04:33	1
M2-8:2 FTS	87		25 - 150	10/11/21 18:38	10/14/21 04:33	1
13C3 HFPO-DA	73		25 - 150	10/11/21 18:38	10/14/21 04:33	1
13C2 10:2 FTS	89		25 - 150	10/11/21 18:38	10/14/21 04:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.3		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	74.7		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-04 (4-6)
Date Collected: 10/05/21 10:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-2
Matrix: Solid
Percent Solids: 85.4

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluoropentanoic acid (PFPeA)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorohexanoic acid (PFHxA)	**0.065**	**J I**	0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluoroheptanoic acid (PFHpA)	**0.18**	**J**	0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorooctanoic acid (PFOA)	**5.9**		0.23	0.062	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorononanoic acid (PFNA)	<0.026		0.23	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorohexanesulfonic acid (PFHxS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorooctanesulfonic acid (PFOS)	<0.050		0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorodecanesulfonic acid (PFDS)	<0.061		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
Perfluorooctanesulfonamide (FOSA)	<0.039		0.23	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
NEtFOSA	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
NMeFOSE	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
NEtFOSE	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
4:2 FTS	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
6:2 FTS	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.046		0.23	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
HFPO-DA (GenX)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 04:42	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C5 PFPeA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C2 PFHxA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C4 PFHpA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C4 PFOA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C5 PFNA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C2 PFDA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C2 PFUnA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C2 PFDoA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C2 PFTeDA	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
13C3 PFBS	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*
18O2 PFHxS	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:42*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-04 (4-6)
Date Collected: 10/05/21 10:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-2
Matrix: Solid
Percent Solids: 85.4

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	68		25 - 150	10/11/21 18:38	10/14/21 04:42	1
13C8 FOSA	74		10 - 150	10/11/21 18:38	10/14/21 04:42	1
d3-NMeFOSAA	75		25 - 150	10/11/21 18:38	10/14/21 04:42	1
d5-NEtFOSAA	74		25 - 150	10/11/21 18:38	10/14/21 04:42	1
d-N-MeFOSA-M	79		10 - 150	10/11/21 18:38	10/14/21 04:42	1
d-N-EtFOSA-M	81		10 - 150	10/11/21 18:38	10/14/21 04:42	1
d7-N-MeFOSE-M	92		10 - 150	10/11/21 18:38	10/14/21 04:42	1
d9-N-EtFOSE-M	87		10 - 150	10/11/21 18:38	10/14/21 04:42	1
M2-4:2 FTS	72		25 - 150	10/11/21 18:38	10/14/21 04:42	1
M2-6:2 FTS	70		25 - 150	10/11/21 18:38	10/14/21 04:42	1
M2-8:2 FTS	62		25 - 150	10/11/21 18:38	10/14/21 04:42	1
13C3 HFPO-DA	74		25 - 150	10/11/21 18:38	10/14/21 04:42	1
13C2 10:2 FTS	70		25 - 150	10/11/21 18:38	10/14/21 04:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.6		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	85.4		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-05 (0-2)
Date Collected: 10/05/21 12:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-3
Matrix: Solid
Percent Solids: 94.6

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.045		0.19	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluoropentanoic acid (PFPeA)	<0.040		0.19	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorohexanoic acid (PFHxA)	<0.030		0.19	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluoroheptanoic acid (PFHpA)	<0.037		0.19	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorooctanoic acid (PFOA)	**0.18**	**J**	0.19	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorononanoic acid (PFNA)	<0.021		0.19	0.021	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorodecanoic acid (PFDA)	<0.047		0.19	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluoroundecanoic acid (PFUnA)	<0.041		0.19	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorododecanoic acid (PFDoA)	<0.029		0.19	0.029	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorotridecanoic acid (PFTrDA)	<0.020		0.19	0.020	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorotetradecanoic acid (PFTeA)	<0.036		0.19	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorobutanesulfonic acid (PFBS)	<0.037		0.19	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluoropentanesulfonic acid (PFPeS)	<0.036		0.19	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorohexanesulfonic acid (PFHxS)	<0.028		0.19	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.048		0.19	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorooctanesulfonic acid (PFOS)	<0.042		0.19	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorononanesulfonic acid (PFNS)	<0.028		0.19	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorodecanesulfonic acid (PFDS)	<0.051		0.19	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorododecanesulfonic acid (PFDoS)	<0.046		0.19	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
Perfluorooctanesulfonamide (FOSA)	<0.032		0.19	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
NEtFOSA	<0.046		0.19	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
NMeFOSA	<0.048		0.19	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
NMeFOSAA	<0.022		0.19	0.022	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
NEtFOSAA	<0.047		0.19	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
NMeFOSE	<0.046		0.19	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
NEtFOSE	<0.027		0.19	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
4:2 FTS	<0.050		0.19	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
6:2 FTS	<0.026		0.19	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
8:2 FTS	<0.034		0.19	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.038		0.19	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
HFPO-DA (GenX)	<0.040		0.19	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
9Cl-PF3ONS	<0.034		0.19	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1
11Cl-PF3OUdS	<0.030		0.19	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 04:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C5 PFPeA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C2 PFHxA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C4 PFHpA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C4 PFOA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C5 PFNA	*85*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C2 PFDA	*86*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C2 PFUnA	*83*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C2 PFDoA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C2 PFTeDA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
13C3 PFBS	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*
18O2 PFHxS	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 04:51*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-05 (0-2)
Date Collected: 10/05/21 12:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-3
Matrix: Solid
Percent Solids: 94.6

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	75		25 - 150	10/11/21 18:38	10/14/21 04:51	1
13C8 FOSA	81		10 - 150	10/11/21 18:38	10/14/21 04:51	1
d3-NMeFOSAA	84		25 - 150	10/11/21 18:38	10/14/21 04:51	1
d5-NEtFOSAA	85		25 - 150	10/11/21 18:38	10/14/21 04:51	1
d-N-MeFOSA-M	80		10 - 150	10/11/21 18:38	10/14/21 04:51	1
d-N-EtFOSA-M	83		10 - 150	10/11/21 18:38	10/14/21 04:51	1
d7-N-MeFOSE-M	96		10 - 150	10/11/21 18:38	10/14/21 04:51	1
d9-N-EtFOSE-M	90		10 - 150	10/11/21 18:38	10/14/21 04:51	1
M2-4:2 FTS	88		25 - 150	10/11/21 18:38	10/14/21 04:51	1
M2-6:2 FTS	81		25 - 150	10/11/21 18:38	10/14/21 04:51	1
M2-8:2 FTS	78		25 - 150	10/11/21 18:38	10/14/21 04:51	1
13C3 HFPO-DA	80		25 - 150	10/11/21 18:38	10/14/21 04:51	1
13C2 10:2 FTS	83		25 - 150	10/11/21 18:38	10/14/21 04:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.4		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	94.6		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-05 (4-6)
Date Collected: 10/05/21 12:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-4
Matrix: Solid
Percent Solids: 85.0

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluoropentanoic acid (PFPeA)	<0.046		0.22	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorohexanoic acid (PFHxA)	<0.035		0.22	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluoroheptanoic acid (PFHpA)	<0.043		0.22	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorooctanoic acid (PFOA)	**0.30**		0.22	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorononanoic acid (PFNA)	<0.025		0.22	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorodecanoic acid (PFDA)	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.22	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.22	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.22	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluoropentanesulfonic acid (PFPeS)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorohexanesulfonic acid (PFHxS)	<0.033		0.22	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.055		0.22	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorooctanesulfonic acid (PFOS)	<0.048		0.22	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.22	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorodecanesulfonic acid (PFDS)	<0.058		0.22	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.22	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
NEtFOSA	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
NMeFOSA	<0.055		0.22	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
NMeFOSAA	<0.026		0.22	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
NEtFOSAA	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
NMeFOSE	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
4:2 FTS	<0.057		0.22	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
6:2 FTS	<0.030		0.22	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
8:2 FTS	<0.039		0.22	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.22	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
HFPO-DA (GenX)	<0.046		0.22	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
9Cl-PF3ONS	<0.039		0.22	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1
11Cl-PF3OUdS	<0.035		0.22	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 05:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C5 PFPeA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C2 PFHxA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C4 PFHpA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C4 PFOA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C5 PFNA	*82*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C2 PFDA	*84*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C2 PFUnA	*82*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C2 PFDoA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C2 PFTeDA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
13C3 PFBS	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*
18O2 PFHxS	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:00*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-05 (4-6)
Date Collected: 10/05/21 12:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-4
Matrix: Solid
Percent Solids: 85.0

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	76		25 - 150	10/11/21 18:38	10/14/21 05:00	1
13C8 FOSA	78		10 - 150	10/11/21 18:38	10/14/21 05:00	1
d3-NMeFOSAA	86		25 - 150	10/11/21 18:38	10/14/21 05:00	1
d5-NEtFOSAA	84		25 - 150	10/11/21 18:38	10/14/21 05:00	1
d-N-MeFOSA-M	83		10 - 150	10/11/21 18:38	10/14/21 05:00	1
d-N-EtFOSA-M	81		10 - 150	10/11/21 18:38	10/14/21 05:00	1
d7-N-MeFOSE-M	95		10 - 150	10/11/21 18:38	10/14/21 05:00	1
d9-N-EtFOSE-M	88		10 - 150	10/11/21 18:38	10/14/21 05:00	1
M2-4:2 FTS	90		25 - 150	10/11/21 18:38	10/14/21 05:00	1
M2-6:2 FTS	79		25 - 150	10/11/21 18:38	10/14/21 05:00	1
M2-8:2 FTS	80		25 - 150	10/11/21 18:38	10/14/21 05:00	1
13C3 HFPO-DA	79		25 - 150	10/11/21 18:38	10/14/21 05:00	1
13C2 10:2 FTS	86		25 - 150	10/11/21 18:38	10/14/21 05:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.0		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	85.0		0.1	0.1	%			10/11/21 15:57	1

Client Sample ID: GP-06 (0-4)

Date Collected: 10/05/21 12:35
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-5

Matrix: Solid
Percent Solids: 88.3

Method: 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	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluoropentanoic acid (PFPeA)	<0.046		0.23	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorohexanoic acid (PFHxA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluoroheptanoic acid (PFHpA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorooctanoic acid (PFOA)	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorononanoic acid (PFNA)	<0.025		0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorodecanoic acid (PFDA)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluoropentanesulfonic acid (PFPeS)	<0.042		0.23	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorohexanesulfonic acid (PFHxS)	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorooctanesulfonic acid (PFOS)	**0.20**	**J**	0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.23	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
NEtFOSA	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
NMeFOSA	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
NEtFOSAA	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
NMeFOSE	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
4:2 FTS	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
6:2 FTS	<0.030		0.23	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
8:2 FTS	<0.039		0.23	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
HFPO-DA (GenX)	<0.046		0.23	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
9Cl-PF3ONS	<0.039		0.23	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 05:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C5 PFPeA	*84*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C2 PFHxA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C4 PFHpA	*85*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C4 PFOA	*85*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C5 PFNA	*87*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C2 PFDA	*90*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C2 PFUnA	*85*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C2 PFDoA	*82*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C2 PFTeDA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*
13C3 PFBS	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:09*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-06 (0-4)
Date Collected: 10/05/21 12:35
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-5
Matrix: Solid
Percent Solids: 88.3

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	81		25 - 150	10/11/21 18:38	10/14/21 05:09	1
13C4 PFOS	80		25 - 150	10/11/21 18:38	10/14/21 05:09	1
13C8 FOSA	81		10 - 150	10/11/21 18:38	10/14/21 05:09	1
d3-NMeFOSAA	84		25 - 150	10/11/21 18:38	10/14/21 05:09	1
d5-NEtFOSAA	86		25 - 150	10/11/21 18:38	10/14/21 05:09	1
d-N-MeFOSA-M	83		10 - 150	10/11/21 18:38	10/14/21 05:09	1
d-N-EtFOSA-M	84		10 - 150	10/11/21 18:38	10/14/21 05:09	1
d7-N-MeFOSE-M	97		10 - 150	10/11/21 18:38	10/14/21 05:09	1
d9-N-EtFOSE-M	92		10 - 150	10/11/21 18:38	10/14/21 05:09	1
M2-4:2 FTS	98		25 - 150	10/11/21 18:38	10/14/21 05:09	1
M2-6:2 FTS	91		25 - 150	10/11/21 18:38	10/14/21 05:09	1
M2-8:2 FTS	81		25 - 150	10/11/21 18:38	10/14/21 05:09	1
13C3 HFPO-DA	81		25 - 150	10/11/21 18:38	10/14/21 05:09	1
13C2 10:2 FTS	85		25 - 150	10/11/21 18:38	10/14/21 05:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.7		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	88.3		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-06 (5-7)
Date Collected: 10/05/21 12:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-6
Matrix: Solid
Percent Solids: 90.6

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.049		0.21	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluoropentanoic acid (PFPeA)	<0.044		0.21	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorohexanoic acid (PFHxA)	<0.033		0.21	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluoroheptanoic acid (PFHpA)	<0.041		0.21	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorooctanoic acid (PFOA)	**0.61**		0.21	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorononanoic acid (PFNA)	<0.024		0.21	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorodecanoic acid (PFDA)	<0.051		0.21	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluoroundecanoic acid (PFUnA)	<0.045		0.21	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.21	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.21	0.023	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.21	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorobutanesulfonic acid (PFBS)	<0.041		0.21	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluoropentanesulfonic acid (PFPeS)	<0.040		0.21	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorohexanesulfonic acid (PFHxS)	<0.031		0.21	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.053		0.21	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorooctanesulfonic acid (PFOS)	<0.046		0.21	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.21	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorodecanesulfonic acid (PFDS)	<0.056		0.21	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorododecanesulfonic acid (PFDoS)	<0.050		0.21	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
Perfluorooctanesulfonamide (FOSA)	<0.035		0.21	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
NEtFOSA	<0.050		0.21	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
NMeFOSA	<0.053		0.21	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
NMeFOSAA	<0.025		0.21	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
NEtFOSAA	<0.051		0.21	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
NMeFOSE	<0.050		0.21	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
NEtFOSE	<0.030		0.21	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
4:2 FTS	<0.055		0.21	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
6:2 FTS	<0.029		0.21	0.029	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
8:2 FTS	<0.038		0.21	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.21	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
HFPO-DA (GenX)	<0.044		0.21	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
9Cl-PF3ONS	<0.038		0.21	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1
11Cl-PF3OUdS	<0.033		0.21	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 05:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C5 PFPeA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C2 PFHxA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C4 PFHpA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C4 PFOA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C5 PFNA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C2 PFDA	*84*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C2 PFUnA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C2 PFDoA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C2 PFTeDA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
13C3 PFBS	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*
18O2 PFHxS	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:18*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-06 (5-7)
Date Collected: 10/05/21 12:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-6
Matrix: Solid
Percent Solids: 90.6

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	71		25 - 150	10/11/21 18:38	10/14/21 05:18	1
13C8 FOSA	76		10 - 150	10/11/21 18:38	10/14/21 05:18	1
d3-NMeFOSAA	77		25 - 150	10/11/21 18:38	10/14/21 05:18	1
d5-NEtFOSAA	83		25 - 150	10/11/21 18:38	10/14/21 05:18	1
d-N-MeFOSA-M	78		10 - 150	10/11/21 18:38	10/14/21 05:18	1
d-N-EtFOSA-M	77		10 - 150	10/11/21 18:38	10/14/21 05:18	1
d7-N-MeFOSE-M	91		10 - 150	10/11/21 18:38	10/14/21 05:18	1
d9-N-EtFOSE-M	88		10 - 150	10/11/21 18:38	10/14/21 05:18	1
M2-4:2 FTS	82		25 - 150	10/11/21 18:38	10/14/21 05:18	1
M2-6:2 FTS	77		25 - 150	10/11/21 18:38	10/14/21 05:18	1
M2-8:2 FTS	74		25 - 150	10/11/21 18:38	10/14/21 05:18	1
13C3 HFPO-DA	73		25 - 150	10/11/21 18:38	10/14/21 05:18	1
13C2 10:2 FTS	77		25 - 150	10/11/21 18:38	10/14/21 05:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.4		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	90.6		0.1	0.1	%			10/11/21 15:57	1

Client Sample ID: GP-07 (0-2)

Date Collected: 10/05/21 11:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-7

Matrix: Solid
Percent Solids: 85.1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.12**	**J**	0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluoropentanoic acid (PFPeA)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorohexanoic acid (PFHxA)	**0.066**	**J**	0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluoroheptanoic acid (PFHpA)	**0.061**	**J**	0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorooctanoic acid (PFOA)	**4.0**		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorononanoic acid (PFNA)	**0.029**	**J**	0.23	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorooctanesulfonic acid (PFOS)	**0.12**	**J I**	0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
Perfluorooctanesulfonamide (FOSA)	<0.038		0.23	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
4:2 FTS	<0.059		0.23	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
HFPO-DA (GenX)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 05:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C5 PFPeA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C2 PFHxA	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C4 PFHpA	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C4 PFOA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C5 PFNA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C2 PFDA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C2 PFUnA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C2 PFDoA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C2 PFTeDA	*67*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*
13C3 PFBS	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:27*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-07 (0-2)
Date Collected: 10/05/21 11:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-7
Matrix: Solid
Percent Solids: 85.1

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	66		25 - 150	10/11/21 18:38	10/14/21 05:27	1
13C4 PFOS	63		25 - 150	10/11/21 18:38	10/14/21 05:27	1
13C8 FOSA	72		10 - 150	10/11/21 18:38	10/14/21 05:27	1
d3-NMeFOSAA	73		25 - 150	10/11/21 18:38	10/14/21 05:27	1
d5-NEtFOSAA	75		25 - 150	10/11/21 18:38	10/14/21 05:27	1
d-N-MeFOSA-M	74		10 - 150	10/11/21 18:38	10/14/21 05:27	1
d-N-EtFOSA-M	74		10 - 150	10/11/21 18:38	10/14/21 05:27	1
d7-N-MeFOSE-M	91		10 - 150	10/11/21 18:38	10/14/21 05:27	1
d9-N-EtFOSE-M	85		10 - 150	10/11/21 18:38	10/14/21 05:27	1
M2-4:2 FTS	72		25 - 150	10/11/21 18:38	10/14/21 05:27	1
M2-6:2 FTS	69		25 - 150	10/11/21 18:38	10/14/21 05:27	1
M2-8:2 FTS	69		25 - 150	10/11/21 18:38	10/14/21 05:27	1
13C3 HFPO-DA	73		25 - 150	10/11/21 18:38	10/14/21 05:27	1
13C2 10:2 FTS	72		25 - 150	10/11/21 18:38	10/14/21 05:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.9		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	85.1		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-07 (3-5)
Date Collected: 10/05/21 11:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-8
Matrix: Solid
Percent Solids: 85.7

Method: 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	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluoropentanoic acid (PFPeA)	<0.046		0.22	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorohexanoic acid (PFHxA)	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluoroheptanoic acid (PFHpA)	<0.042		0.22	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorooctanoic acid (PFOA)	**4.7**		0.22	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorodecanoic acid (PFDA)	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.22	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorododecanoic acid (PFDoA)	<0.033		0.22	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorobutanesulfonic acid (PFBS)	<0.042		0.22	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluoropentanesulfonic acid (PFPeS)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorohexanesulfonic acid (PFHxS)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorooctanesulfonic acid (PFOS)	<0.048		0.22	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorodecanesulfonic acid (PFDS)	<0.058		0.22	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorododecanesulfonic acid (PFDoS)	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.22	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
NEtFOSA	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
NMeFOSA	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
NMeFOSAA	<0.026		0.22	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
NEtFOSAA	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
NMeFOSE	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
4:2 FTS	<0.057		0.22	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
6:2 FTS	<0.030		0.22	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
8:2 FTS	<0.039		0.22	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		0.22	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
HFPO-DA (GenX)	<0.046		0.22	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
9Cl-PF3ONS	<0.039		0.22	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:37	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C5 PFPeA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C2 PFHxA	*67*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C4 PFHpA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C4 PFOA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C5 PFNA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C2 PFDA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C2 PFUnA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C2 PFDoA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C2 PFTeDA	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
13C3 PFBS	*64*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*
18O2 PFHxS	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:37*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-07 (3-5)

Date Collected: 10/05/21 11:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-8

Matrix: Solid
Percent Solids: 85.7

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	65		25 - 150	10/11/21 18:38	10/14/21 05:37	1
13C8 FOSA	71		10 - 150	10/11/21 18:38	10/14/21 05:37	1
d3-NMeFOSAA	71		25 - 150	10/11/21 18:38	10/14/21 05:37	1
d5-NEtFOSAA	74		25 - 150	10/11/21 18:38	10/14/21 05:37	1
d-N-MeFOSA-M	76		10 - 150	10/11/21 18:38	10/14/21 05:37	1
d-N-EtFOSA-M	75		10 - 150	10/11/21 18:38	10/14/21 05:37	1
d7-N-MeFOSE-M	87		10 - 150	10/11/21 18:38	10/14/21 05:37	1
d9-N-EtFOSE-M	84		10 - 150	10/11/21 18:38	10/14/21 05:37	1
M2-4:2 FTS	74		25 - 150	10/11/21 18:38	10/14/21 05:37	1
M2-6:2 FTS	69		25 - 150	10/11/21 18:38	10/14/21 05:37	1
M2-8:2 FTS	67		25 - 150	10/11/21 18:38	10/14/21 05:37	1
13C3 HFPO-DA	70		25 - 150	10/11/21 18:38	10/14/21 05:37	1
13C2 10:2 FTS	69		25 - 150	10/11/21 18:38	10/14/21 05:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.3		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	85.7		0.1	0.1	%			10/11/21 15:57	1

Client Sample ID: GP-08 (0-2)

Date Collected: 10/05/21 13:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-9

Matrix: Solid
Percent Solids: 85.7

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluoropentanoic acid (PFPeA)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorohexanoic acid (PFHxA)	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluoroheptanoic acid (PFHpA)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorooctanoic acid (PFOA)	**5.9**		0.23	0.062	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorononanoic acid (PFNA)	**0.12**	**J**	0.23	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorohexanesulfonic acid (PFHxS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorooctanesulfonic acid (PFOS)	**0.52**		0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorodecanesulfonic acid (PFDS)	<0.061		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
Perfluorooctanesulfonamide (FOSA)	<0.039		0.23	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
NEtFOSA	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
NMeFOSE	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
NEtFOSE	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
4:2 FTS	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
6:2 FTS	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.046		0.23	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
HFPO-DA (GenX)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 05:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C5 PFPeA	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C2 PFHxA	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C4 PFHpA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C4 PFOA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C5 PFNA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C2 PFDA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C2 PFUnA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C2 PFDoA	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C2 PFTeDA	*65*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*
13C3 PFBS	*64*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:46*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-08 (0-2)
Date Collected: 10/05/21 13:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-9
Matrix: Solid
Percent Solids: 85.7

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	69		25 - 150	10/11/21 18:38	10/14/21 05:46	1
13C4 PFOS	68		25 - 150	10/11/21 18:38	10/14/21 05:46	1
13C8 FOSA	73		10 - 150	10/11/21 18:38	10/14/21 05:46	1
d3-NMeFOSAA	72		25 - 150	10/11/21 18:38	10/14/21 05:46	1
d5-NEtFOSAA	77		25 - 150	10/11/21 18:38	10/14/21 05:46	1
d-N-MeFOSA-M	76		10 - 150	10/11/21 18:38	10/14/21 05:46	1
d-N-EtFOSA-M	74		10 - 150	10/11/21 18:38	10/14/21 05:46	1
d7-N-MeFOSE-M	86		10 - 150	10/11/21 18:38	10/14/21 05:46	1
d9-N-EtFOSE-M	81		10 - 150	10/11/21 18:38	10/14/21 05:46	1
M2-4:2 FTS	71		25 - 150	10/11/21 18:38	10/14/21 05:46	1
M2-6:2 FTS	73		25 - 150	10/11/21 18:38	10/14/21 05:46	1
M2-8:2 FTS	77		25 - 150	10/11/21 18:38	10/14/21 05:46	1
13C3 HFPO-DA	69		25 - 150	10/11/21 18:38	10/14/21 05:46	1
13C2 10:2 FTS	77		25 - 150	10/11/21 18:38	10/14/21 05:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.3		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	85.7		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-08 (3-5)
Date Collected: 10/05/21 13:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-10
Matrix: Solid
Percent Solids: 82.9

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluoropentanoic acid (PFPeA)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorohexanoic acid (PFHxA)	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluoroheptanoic acid (PFHpA)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorooctanoic acid (PFOA)	**6.7**		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorononanoic acid (PFNA)	<0.025		0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorodecanoic acid (PFDA)	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorohexanesulfonic acid (PFHxS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.050		0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorodecanesulfonic acid (PFDS)	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
Perfluorooctanesulfonamide (FOSA)	<0.038		0.23	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
NEtFOSAA	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
4:2 FTS	<0.059		0.23	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
8:2 FTS	<0.040		0.23	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 05:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C5 PFPeA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C2 PFHxA	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C4 PFHpA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C4 PFOA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C5 PFNA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C2 PFDA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C2 PFUnA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C2 PFDoA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C2 PFTeDA	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
13C3 PFBS	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*
18O2 PFHxS	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 05:55*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-08 (3-5)
Date Collected: 10/05/21 13:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-10
Matrix: Solid
Percent Solids: 82.9

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	72		25 - 150	10/11/21 18:38	10/14/21 05:55	1
13C8 FOSA	78		10 - 150	10/11/21 18:38	10/14/21 05:55	1
d3-NMeFOSAA	83		25 - 150	10/11/21 18:38	10/14/21 05:55	1
d5-NEtFOSAA	84		25 - 150	10/11/21 18:38	10/14/21 05:55	1
d-N-MeFOSA-M	82		10 - 150	10/11/21 18:38	10/14/21 05:55	1
d-N-EtFOSA-M	81		10 - 150	10/11/21 18:38	10/14/21 05:55	1
d7-N-MeFOSE-M	87		10 - 150	10/11/21 18:38	10/14/21 05:55	1
d9-N-EtFOSE-M	82		10 - 150	10/11/21 18:38	10/14/21 05:55	1
M2-4:2 FTS	84		25 - 150	10/11/21 18:38	10/14/21 05:55	1
M2-6:2 FTS	77		25 - 150	10/11/21 18:38	10/14/21 05:55	1
M2-8:2 FTS	77		25 - 150	10/11/21 18:38	10/14/21 05:55	1
13C3 HFPO-DA	74		25 - 150	10/11/21 18:38	10/14/21 05:55	1
13C2 10:2 FTS	82		25 - 150	10/11/21 18:38	10/14/21 05:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.1		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	82.9		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: SS-09
Date Collected: 10/05/21 13:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-11
Matrix: Solid
Percent Solids: 64.5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.23**	**J**	0.29	0.067	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluoropentanoic acid (PFPeA)	**0.13**	**J**	0.29	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorohexanoic acid (PFHxA)	**0.082**	**J**	0.29	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluoroheptanoic acid (PFHpA)	**0.13**	**J**	0.29	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorooctanoic acid (PFOA)	**25**		0.29	0.077	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorononanoic acid (PFNA)	**0.36**		0.29	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorodecanoic acid (PFDA)	**0.46**		0.29	0.070	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluoroundecanoic acid (PFUnA)	**2.8**		0.29	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorododecanoic acid (PFDoA)	**0.43**		0.29	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorotridecanoic acid (PFTrDA)	**2.0**		0.29	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorotetradecanoic acid (PFTeA)	**0.22**	**J**	0.29	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorobutanesulfonic acid (PFBS)	<0.055		0.29	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluoropentanesulfonic acid (PFPeS)	<0.054		0.29	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorohexanesulfonic acid (PFHxS)	<0.042		0.29	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.072		0.29	0.072	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorooctanesulfonic acid (PFOS)	**0.40**		0.29	0.063	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorononanesulfonic acid (PFNS)	<0.042		0.29	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorodecanesulfonic acid (PFDS)	<0.076		0.29	0.076	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorododecanesulfonic acid (PFDoS)	<0.069		0.29	0.069	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
Perfluorooctanesulfonamide (FOSA)	<0.048		0.29	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
NEtFOSA	<0.069		0.29	0.069	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
NMeFOSA	<0.072		0.29	0.072	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
NMeFOSAA	<0.034		0.29	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
NEtFOSAA	<0.070		0.29	0.070	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
NMeFOSE	<0.069		0.29	0.069	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
NEtFOSE	<0.041		0.29	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
4:2 FTS	<0.074		0.29	0.074	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
6:2 FTS	<0.039		0.29	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
8:2 FTS	<0.051		0.29	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.057		0.29	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
HFPO-DA (GenX)	<0.060		0.29	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
9Cl-PF3ONS	<0.051		0.29	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1
11Cl-PF3OUdS	<0.045		0.29	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 06:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:31*	*1*
13C5 PFPeA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:31*	*1*
13C2 PFHxA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:31*	*1*
13C4 PFHpA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:31*	*1*
13C4 PFOA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:31*	*1*
13C5 PFNA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:31*	*1*
13C2 PFDA	*84*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:31*	*1*
13C2 PFUnA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:31*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: SS-09
Date Collected: 10/05/21 13:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-11
Matrix: Solid
Percent Solids: 64.5

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	74		25 - 150	10/11/21 18:38	10/14/21 06:31	1
13C2 PFTeDA	55		25 - 150	10/11/21 18:38	10/14/21 06:31	1
13C3 PFBS	71		25 - 150	10/11/21 18:38	10/14/21 06:31	1
18O2 PFHxS	72		25 - 150	10/11/21 18:38	10/14/21 06:31	1
13C4 PFOS	70		25 - 150	10/11/21 18:38	10/14/21 06:31	1
13C8 FOSA	73		10 - 150	10/11/21 18:38	10/14/21 06:31	1
d3-NMeFOSAA	82		25 - 150	10/11/21 18:38	10/14/21 06:31	1
d5-NEtFOSAA	84		25 - 150	10/11/21 18:38	10/14/21 06:31	1
d-N-MeFOSA-M	79		10 - 150	10/11/21 18:38	10/14/21 06:31	1
d-N-EtFOSA-M	77		10 - 150	10/11/21 18:38	10/14/21 06:31	1
d7-N-MeFOSE-M	90		10 - 150	10/11/21 18:38	10/14/21 06:31	1
d9-N-EtFOSE-M	86		10 - 150	10/11/21 18:38	10/14/21 06:31	1
M2-4:2 FTS	88		25 - 150	10/11/21 18:38	10/14/21 06:31	1
M2-6:2 FTS	87		25 - 150	10/11/21 18:38	10/14/21 06:31	1
M2-8:2 FTS	91		25 - 150	10/11/21 18:38	10/14/21 06:31	1
13C3 HFPO-DA	74		25 - 150	10/11/21 18:38	10/14/21 06:31	1
13C2 10:2 FTS	97		25 - 150	10/11/21 18:38	10/14/21 06:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	35.5		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	64.5		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-09 (5-7)
Date Collected: 10/05/21 13:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-12
Matrix: Solid
Percent Solids: 82.6

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluoropentanoic acid (PFPeA)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorohexanoic acid (PFHxA)	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluoroheptanoic acid (PFHpA)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorooctanoic acid (PFOA)	**0.68**		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorononanoic acid (PFNA)	<0.025		0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorohexanesulfonic acid (PFHxS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorooctanesulfonic acid (PFOS)	<0.050		0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorodecanesulfonic acid (PFDS)	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
Perfluorooctanesulfonamide (FOSA)	<0.038		0.23	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
4:2 FTS	<0.059		0.23	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 06:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C5 PFPeA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C2 PFHxA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C4 PFHpA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C4 PFOA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C5 PFNA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C2 PFDA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C2 PFUnA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C2 PFDoA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C2 PFTeDA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
13C3 PFBS	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*
18O2 PFHxS	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:40*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-09 (5-7)
Date Collected: 10/05/21 13:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-12
Matrix: Solid
Percent Solids: 82.6

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	69		25 - 150	10/11/21 18:38	10/14/21 06:40	1
13C8 FOSA	74		10 - 150	10/11/21 18:38	10/14/21 06:40	1
d3-NMeFOSAA	74		25 - 150	10/11/21 18:38	10/14/21 06:40	1
d5-NEtFOSAA	75		25 - 150	10/11/21 18:38	10/14/21 06:40	1
d-N-MeFOSA-M	76		10 - 150	10/11/21 18:38	10/14/21 06:40	1
d-N-EtFOSA-M	79		10 - 150	10/11/21 18:38	10/14/21 06:40	1
d7-N-MeFOSE-M	91		10 - 150	10/11/21 18:38	10/14/21 06:40	1
d9-N-EtFOSE-M	86		10 - 150	10/11/21 18:38	10/14/21 06:40	1
M2-4:2 FTS	76		25 - 150	10/11/21 18:38	10/14/21 06:40	1
M2-6:2 FTS	74		25 - 150	10/11/21 18:38	10/14/21 06:40	1
M2-8:2 FTS	70		25 - 150	10/11/21 18:38	10/14/21 06:40	1
13C3 HFPO-DA	73		25 - 150	10/11/21 18:38	10/14/21 06:40	1
13C2 10:2 FTS	73		25 - 150	10/11/21 18:38	10/14/21 06:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.4		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	82.6		0.1	0.1	%			10/11/21 15:57	1

Client Sample ID: GP-10 (0-2)

Date Collected: 10/04/21 16:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-13

Matrix: Solid
Percent Solids: 82.1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.22**	**J**	0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluoropentanoic acid (PFPeA)	**0.12**	**J**	0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorohexanoic acid (PFHxA)	**0.17**	**J**	0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluoroheptanoic acid (PFHpA)	**0.10**	**J**	0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorooctanoic acid (PFOA)	**5.1**		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorononanoic acid (PFNA)	**0.029**	**J**	0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorohexanesulfonic acid (PFHxS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorooctanesulfonic acid (PFOS)	**0.17**	**J**	0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorodecanesulfonic acid (PFDS)	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
Perfluorooctanesulfonamide (FOSA)	<0.038		0.23	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
4:2 FTS	<0.059		0.23	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 06:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*67*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C5 PFPeA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C2 PFHxA	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C4 PFHpA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C4 PFOA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C5 PFNA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C2 PFDA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C2 PFUnA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C2 PFDoA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C2 PFTeDA	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*
13C3 PFBS	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:50*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-10 (0-2)
Date Collected: 10/04/21 16:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-13
Matrix: Solid
Percent Solids: 82.1

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	69		25 - 150	10/11/21 18:38	10/14/21 06:50	1
13C4 PFOS	64		25 - 150	10/11/21 18:38	10/14/21 06:50	1
13C8 FOSA	70		10 - 150	10/11/21 18:38	10/14/21 06:50	1
d3-NMeFOSAA	72		25 - 150	10/11/21 18:38	10/14/21 06:50	1
d5-NEtFOSAA	74		25 - 150	10/11/21 18:38	10/14/21 06:50	1
d-N-MeFOSA-M	74		10 - 150	10/11/21 18:38	10/14/21 06:50	1
d-N-EtFOSA-M	73		10 - 150	10/11/21 18:38	10/14/21 06:50	1
d7-N-MeFOSE-M	87		10 - 150	10/11/21 18:38	10/14/21 06:50	1
d9-N-EtFOSE-M	81		10 - 150	10/11/21 18:38	10/14/21 06:50	1
M2-4:2 FTS	71		25 - 150	10/11/21 18:38	10/14/21 06:50	1
M2-6:2 FTS	73		25 - 150	10/11/21 18:38	10/14/21 06:50	1
M2-8:2 FTS	68		25 - 150	10/11/21 18:38	10/14/21 06:50	1
13C3 HFPO-DA	69		25 - 150	10/11/21 18:38	10/14/21 06:50	1
13C2 10:2 FTS	76		25 - 150	10/11/21 18:38	10/14/21 06:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.9		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	82.1		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-10 (3-5)
Date Collected: 10/04/21 16:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-14
Matrix: Solid
Percent Solids: 79.3

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.056		0.25	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluoropentanoic acid (PFPeA)	<0.050		0.25	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorohexanoic acid (PFHxA)	<0.038		0.25	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluoroheptanoic acid (PFHpA)	<0.047		0.25	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorooctanoic acid (PFOA)	**1.4**		0.25	0.065	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorononanoic acid (PFNA)	<0.027		0.25	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorodecanoic acid (PFDA)	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluoroundecanoic acid (PFUnA)	<0.052		0.25	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.25	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.25	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.25	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorobutanesulfonic acid (PFBS)	<0.047		0.25	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluoropentanesulfonic acid (PFPeS)	<0.045		0.25	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorohexanesulfonic acid (PFHxS)	<0.036		0.25	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.060		0.25	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorooctanesulfonic acid (PFOS)	<0.053		0.25	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorononanesulfonic acid (PFNS)	<0.036		0.25	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.25	0.064	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorododecanesulfonic acid (PFDoS)	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
Perfluorooctanesulfonamide (FOSA)	<0.041		0.25	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
NEtFOSA	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
NMeFOSA	<0.060		0.25	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
NMeFOSAA	<0.028		0.25	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
NEtFOSAA	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
NMeFOSE	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
NEtFOSE	<0.034		0.25	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
4:2 FTS	<0.063		0.25	0.063	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
6:2 FTS	<0.033		0.25	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
8:2 FTS	<0.043		0.25	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.25	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
HFPO-DA (GenX)	<0.050		0.25	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
9Cl-PF3ONS	<0.043		0.25	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1
11Cl-PF3OUdS	<0.038		0.25	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 06:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C5 PFPeA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C2 PFHxA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C4 PFHpA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C4 PFOA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C5 PFNA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C2 PFDA	*82*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C2 PFUnA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C2 PFDoA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C2 PFTeDA	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
13C3 PFBS	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*
18O2 PFHxS	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 06:59*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-10 (3-5)
Date Collected: 10/04/21 16:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-14
Matrix: Solid
Percent Solids: 79.3

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	70		25 - 150	10/11/21 18:38	10/14/21 06:59	1
13C8 FOSA	76		10 - 150	10/11/21 18:38	10/14/21 06:59	1
d3-NMeFOSAA	75		25 - 150	10/11/21 18:38	10/14/21 06:59	1
d5-NEtFOSAA	83		25 - 150	10/11/21 18:38	10/14/21 06:59	1
d-N-MeFOSA-M	80		10 - 150	10/11/21 18:38	10/14/21 06:59	1
d-N-EtFOSA-M	78		10 - 150	10/11/21 18:38	10/14/21 06:59	1
d7-N-MeFOSE-M	92		10 - 150	10/11/21 18:38	10/14/21 06:59	1
d9-N-EtFOSE-M	85		10 - 150	10/11/21 18:38	10/14/21 06:59	1
M2-4:2 FTS	86		25 - 150	10/11/21 18:38	10/14/21 06:59	1
M2-6:2 FTS	84		25 - 150	10/11/21 18:38	10/14/21 06:59	1
M2-8:2 FTS	78		25 - 150	10/11/21 18:38	10/14/21 06:59	1
13C3 HFPO-DA	74		25 - 150	10/11/21 18:38	10/14/21 06:59	1
13C2 10:2 FTS	85		25 - 150	10/11/21 18:38	10/14/21 06:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.7		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	79.3		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-11 (0-2)
Date Collected: 10/04/21 15:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-15
Matrix: Solid
Percent Solids: 94.8

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.045		0.20	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluoropentanoic acid (PFPeA)	<0.040		0.20	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluoroheptanoic acid (PFHpA)	<0.037		0.20	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorooctanoic acid (PFOA)	**0.38**		0.20	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorodecanoic acid (PFDA)	<0.047		0.20	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluoroundecanoic acid (PFUnA)	<0.041		0.20	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorotetradecanoic acid (PFTeA)	<0.036		0.20	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorobutanesulfonic acid (PFBS)	<0.037		0.20	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluoropentanesulfonic acid (PFPeS)	<0.036		0.20	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.048		0.20	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorooctanesulfonic acid (PFOS)	**0.40**		0.20	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorodecanesulfonic acid (PFDS)	<0.051		0.20	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorododecanesulfonic acid (PFDoS)	<0.046		0.20	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
NEtFOSA	<0.046		0.20	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
NMeFOSA	<0.048		0.20	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
NEtFOSAA	**0.097**	**J**	0.20	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
NMeFOSE	<0.046		0.20	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
4:2 FTS	<0.050		0.20	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.038		0.20	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
HFPO-DA (GenX)	<0.040		0.20	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 07:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C5 PFPeA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C2 PFHxA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C4 PFHpA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C4 PFOA	*85*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C5 PFNA	*87*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C2 PFDA	*90*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C2 PFUnA	*86*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C2 PFDoA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C2 PFTeDA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*
13C3 PFBS	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 07:08*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-11 (0-2)
Date Collected: 10/04/21 15:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-15
Matrix: Solid
Percent Solids: 94.8

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	81		25 - 150	10/11/21 18:38	10/14/21 07:08	1
13C4 PFOS	78		25 - 150	10/11/21 18:38	10/14/21 07:08	1
13C8 FOSA	85		10 - 150	10/11/21 18:38	10/14/21 07:08	1
d3-NMeFOSAA	90		25 - 150	10/11/21 18:38	10/14/21 07:08	1
d5-NEtFOSAA	89		25 - 150	10/11/21 18:38	10/14/21 07:08	1
d-N-MeFOSA-M	86		10 - 150	10/11/21 18:38	10/14/21 07:08	1
d-N-EtFOSA-M	84		10 - 150	10/11/21 18:38	10/14/21 07:08	1
d7-N-MeFOSE-M	97		10 - 150	10/11/21 18:38	10/14/21 07:08	1
d9-N-EtFOSE-M	95		10 - 150	10/11/21 18:38	10/14/21 07:08	1
M2-4:2 FTS	92		25 - 150	10/11/21 18:38	10/14/21 07:08	1
M2-6:2 FTS	89		25 - 150	10/11/21 18:38	10/14/21 07:08	1
M2-8:2 FTS	86		25 - 150	10/11/21 18:38	10/14/21 07:08	1
13C3 HFPO-DA	80		25 - 150	10/11/21 18:38	10/14/21 07:08	1
13C2 10:2 FTS	89		25 - 150	10/11/21 18:38	10/14/21 07:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.2		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	94.8		0.1	0.1	%			10/11/21 15:57	1

Client Sample ID: GP-11 (4-6)

Date Collected: 10/04/21 15:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-16

Matrix: Solid
Percent Solids: 79.1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.057		0.25	0.057	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluoropentanoic acid (PFPeA)	<0.050		0.25	0.050	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorohexanoic acid (PFHxA)	<0.038		0.25	0.038	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluoroheptanoic acid (PFHpA)	<0.047		0.25	0.047	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorooctanoic acid (PFOA)	**0.63**		0.25	0.065	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorononanoic acid (PFNA)	<0.027		0.25	0.027	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorodecanoic acid (PFDA)	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluoroundecanoic acid (PFUnA)	<0.052		0.25	0.052	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.25	0.037	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.25	0.026	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorotetradecanoic acid (PFTeA)	<0.046		0.25	0.046	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorobutanesulfonic acid (PFBS)	<0.047		0.25	0.047	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluoropentanesulfonic acid (PFPeS)	<0.046		0.25	0.046	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorohexanesulfonic acid (PFHxS)	<0.036		0.25	0.036	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.060		0.25	0.060	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorooctanesulfonic acid (PFOS)	<0.053		0.25	0.053	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorononanesulfonic acid (PFNS)	<0.036		0.25	0.036	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.25	0.064	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorododecanesulfonic acid (PFDoS)	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
Perfluorooctanesulfonamide (FOSA)	<0.041		0.25	0.041	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
NEtFOSA	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
NMeFOSA	<0.060		0.25	0.060	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
NMeFOSAA	<0.028		0.25	0.028	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
NEtFOSAA	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
NMeFOSE	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
NEtFOSE	<0.034		0.25	0.034	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
4:2 FTS	<0.063		0.25	0.063	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
6:2 FTS	<0.033		0.25	0.033	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
8:2 FTS	<0.043		0.25	0.043	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.25	0.048	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
HFPO-DA (GenX)	<0.050		0.25	0.050	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
9Cl-PF3ONS	<0.043		0.25	0.043	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1
11Cl-PF3OUdS	<0.038		0.25	0.038	ug/Kg	☼	10/11/21 19:03	10/14/21 07:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*7*	*5-	*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C5 PFPeA	*47*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C2 PFHxA	*69*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C4 PFHpA	*77*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C4 PFOA	*81*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C5 PFNA	*81*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C2 PFDA	*81*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C2 PFUnA	*26*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C2 PFDoA	*17*	*5-	*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C2 PFTeDA	*38*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
13C3 PFBS	*69*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*
18O2 PFHxS	*70*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:17*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-11 (4-6)
Date Collected: 10/04/21 15:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-16
Matrix: Solid
Percent Solids: 79.1

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	69		25 - 150	10/11/21 19:03	10/14/21 07:17	1
13C8 FOSA	76		10 - 150	10/11/21 19:03	10/14/21 07:17	1
d3-NMeFOSAA	21	*5-	25 - 150	10/11/21 19:03	10/14/21 07:17	1
d5-NEtFOSAA	10	*5-	25 - 150	10/11/21 19:03	10/14/21 07:17	1
d-N-MeFOSA-M	18		10 - 150	10/11/21 19:03	10/14/21 07:17	1
d-N-EtFOSA-M	24		10 - 150	10/11/21 19:03	10/14/21 07:17	1
d7-N-MeFOSE-M	22		10 - 150	10/11/21 19:03	10/14/21 07:17	1
d9-N-EtFOSE-M	25		10 - 150	10/11/21 19:03	10/14/21 07:17	1
M2-4:2 FTS	82		25 - 150	10/11/21 19:03	10/14/21 07:17	1
M2-6:2 FTS	119		25 - 150	10/11/21 19:03	10/14/21 07:17	1
M2-8:2 FTS	113		25 - 150	10/11/21 19:03	10/14/21 07:17	1
13C3 HFPO-DA	71		25 - 150	10/11/21 19:03	10/14/21 07:17	1
13C2 10:2 FTS	20	*5-	25 - 150	10/11/21 19:03	10/14/21 07:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.9		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	79.1		0.1	0.1	%			10/11/21 15:57	1

Client Sample ID: GP-12 (0-2)
Date Collected: 10/04/21 14:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-17
Matrix: Solid
Percent Solids: 79.5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.46**		0.24	0.056	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluoropentanoic acid (PFPeA)	**0.28**		0.24	0.050	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorohexanoic acid (PFHxA)	**0.56**		0.24	0.038	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluoroheptanoic acid (PFHpA)	**0.44**		0.24	0.046	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorooctanoic acid (PFOA)	**9.8**		0.24	0.064	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorononanoic acid (PFNA)	**0.068**	**J**	0.24	0.027	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorodecanoic acid (PFDA)	<0.058		0.24	0.058	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.24	0.037	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.24	0.026	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorobutanesulfonic acid (PFBS)	<0.046		0.24	0.046	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluoropentanesulfonic acid (PFPeS)	<0.045		0.24	0.045	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorohexanesulfonic acid (PFHxS)	<0.035		0.24	0.035	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.060		0.24	0.060	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorooctanesulfonic acid (PFOS)	**0.23**	**J I**	0.24	0.052	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorodecanesulfonic acid (PFDS)	<0.063		0.24	0.063	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorododecanesulfonic acid (PFDoS)	<0.057		0.24	0.057	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
NEtFOSA	<0.057		0.24	0.057	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
NMeFOSA	<0.060		0.24	0.060	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
NEtFOSAA	<0.058		0.24	0.058	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
NMeFOSE	<0.057		0.24	0.057	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
8:2 FTS	<0.043		0.24	0.043	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.047		0.24	0.047	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
9Cl-PF3ONS	<0.043		0.24	0.043	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	10/11/21 19:03	10/14/21 07:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*65*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C5 PFPeA	*67*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C2 PFHxA	*63*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C4 PFHpA	*66*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C4 PFOA	*74*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C5 PFNA	*74*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C2 PFDA	*77*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C2 PFUnA	*72*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C2 PFDoA	*69*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C2 PFTeDA	*63*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*
13C3 PFBS	*64*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:26*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-12 (0-2)

Date Collected: 10/04/21 14:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-17

Matrix: Solid
Percent Solids: 79.5

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	64		25 - 150	10/11/21 19:03	10/14/21 07:26	1
13C4 PFOS	64		25 - 150	10/11/21 19:03	10/14/21 07:26	1
13C8 FOSA	69		10 - 150	10/11/21 19:03	10/14/21 07:26	1
d3-NMeFOSAA	74		25 - 150	10/11/21 19:03	10/14/21 07:26	1
d5-NEtFOSAA	73		25 - 150	10/11/21 19:03	10/14/21 07:26	1
d-N-MeFOSA-M	75		10 - 150	10/11/21 19:03	10/14/21 07:26	1
d-N-EtFOSA-M	73		10 - 150	10/11/21 19:03	10/14/21 07:26	1
d7-N-MeFOSE-M	84		10 - 150	10/11/21 19:03	10/14/21 07:26	1
d9-N-EtFOSE-M	81		10 - 150	10/11/21 19:03	10/14/21 07:26	1
M2-4:2 FTS	76		25 - 150	10/11/21 19:03	10/14/21 07:26	1
M2-6:2 FTS	84		25 - 150	10/11/21 19:03	10/14/21 07:26	1
M2-8:2 FTS	84		25 - 150	10/11/21 19:03	10/14/21 07:26	1
13C3 HFPO-DA	67		25 - 150	10/11/21 19:03	10/14/21 07:26	1
13C2 10:2 FTS	82		25 - 150	10/11/21 19:03	10/14/21 07:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20.5		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	79.5		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-12 (4-6)
Date Collected: 10/04/21 14:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-18
Matrix: Solid
Percent Solids: 87.9

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.050		0.22	0.050	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluoropentanoic acid (PFPeA)	<0.045		0.22	0.045	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorohexanoic acid (PFHxA)	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluoroheptanoic acid (PFHpA)	<0.042		0.22	0.042	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorooctanoic acid (PFOA)	**1.6**		0.22	0.058	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorodecanoic acid (PFDA)	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluoroundecanoic acid (PFUnA)	<0.046		0.22	0.046	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorododecanoic acid (PFDoA)	<0.033		0.22	0.033	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorobutanesulfonic acid (PFBS)	<0.042		0.22	0.042	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluoropentanesulfonic acid (PFPeS)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorohexanesulfonic acid (PFHxS)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorooctanesulfonic acid (PFOS)	<0.047		0.22	0.047	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorodecanesulfonic acid (PFDS)	<0.057		0.22	0.057	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorododecanesulfonic acid (PFDoS)	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
Perfluorooctanesulfonamide (FOSA)	<0.036		0.22	0.036	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
NEtFOSA	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
NMeFOSA	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
NEtFOSAA	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
NMeFOSE	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
4:2 FTS	<0.056		0.22	0.056	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
6:2 FTS	<0.030		0.22	0.030	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
8:2 FTS	<0.038		0.22	0.038	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		0.22	0.043	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
HFPO-DA (GenX)	<0.045		0.22	0.045	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 19:03	10/14/21 07:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*73*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C5 PFPeA	*73*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C2 PFHxA	*71*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C4 PFHpA	*79*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C4 PFOA	*82*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C5 PFNA	*80*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C2 PFDA	*79*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C2 PFUnA	*78*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C2 PFDoA	*75*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C2 PFTeDA	*68*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
13C3 PFBS	*67*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*
18O2 PFHxS	*69*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:35*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-12 (4-6)
Date Collected: 10/04/21 14:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-18
Matrix: Solid
Percent Solids: 87.9

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	67		25 - 150	10/11/21 19:03	10/14/21 07:35	1
13C8 FOSA	74		10 - 150	10/11/21 19:03	10/14/21 07:35	1
d3-NMeFOSAA	79		25 - 150	10/11/21 19:03	10/14/21 07:35	1
d5-NEtFOSAA	80		25 - 150	10/11/21 19:03	10/14/21 07:35	1
d-N-MeFOSA-M	77		10 - 150	10/11/21 19:03	10/14/21 07:35	1
d-N-EtFOSA-M	77		10 - 150	10/11/21 19:03	10/14/21 07:35	1
d7-N-MeFOSE-M	91		10 - 150	10/11/21 19:03	10/14/21 07:35	1
d9-N-EtFOSE-M	85		10 - 150	10/11/21 19:03	10/14/21 07:35	1
M2-4:2 FTS	78		25 - 150	10/11/21 19:03	10/14/21 07:35	1
M2-6:2 FTS	78		25 - 150	10/11/21 19:03	10/14/21 07:35	1
M2-8:2 FTS	72		25 - 150	10/11/21 19:03	10/14/21 07:35	1
13C3 HFPO-DA	74		25 - 150	10/11/21 19:03	10/14/21 07:35	1
13C2 10:2 FTS	74		25 - 150	10/11/21 19:03	10/14/21 07:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.1		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	87.9		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: SS-10
Date Collected: 10/05/21 15:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-19
Matrix: Solid
Percent Solids: 63.3

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.26**	**J**	0.31	0.071	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluoropentanoic acid (PFPeA)	**0.18**	**J**	0.31	0.063	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorohexanoic acid (PFHxA)	**0.099**	**J**	0.31	0.048	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluoroheptanoic acid (PFHpA)	**0.16**	**J**	0.31	0.058	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorooctanoic acid (PFOA)	**7.7**		0.31	0.082	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorononanoic acid (PFNA)	**0.054**	**J**	0.31	0.034	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorodecanoic acid (PFDA)	**0.13**	**J**	0.31	0.074	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluoroundecanoic acid (PFUnA)	**0.39**		0.31	0.065	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorododecanoic acid (PFDoA)	**0.19**	**J**	0.31	0.046	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorotridecanoic acid (PFTrDA)	**0.50**		0.31	0.032	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorotetradecanoic acid (PFTeA)	**0.14**	**J**	0.31	0.057	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorobutanesulfonic acid (PFBS)	<0.058		0.31	0.058	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluoropentanesulfonic acid (PFPeS)	<0.057		0.31	0.057	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorohexanesulfonic acid (PFHxS)	<0.045		0.31	0.045	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.075		0.31	0.075	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorooctanesulfonic acid (PFOS)	**0.38**		0.31	0.066	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorononanesulfonic acid (PFNS)	<0.045		0.31	0.045	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorodecanesulfonic acid (PFDS)	<0.080		0.31	0.080	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorododecanesulfonic acid (PFDoS)	<0.072		0.31	0.072	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
Perfluorooctanesulfonamide (FOSA)	<0.051		0.31	0.051	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
NEtFOSA	<0.072		0.31	0.072	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
NMeFOSA	<0.075		0.31	0.075	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
NMeFOSAA	<0.035		0.31	0.035	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
NEtFOSAA	<0.074		0.31	0.074	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
NMeFOSE	<0.072		0.31	0.072	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
NEtFOSE	<0.043		0.31	0.043	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
4:2 FTS	<0.078		0.31	0.078	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
6:2 FTS	<0.042		0.31	0.042	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
8:2 FTS	<0.054		0.31	0.054	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.060		0.31	0.060	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
HFPO-DA (GenX)	<0.063		0.31	0.063	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
9Cl-PF3ONS	<0.054		0.31	0.054	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1
11Cl-PF3OUdS	<0.048		0.31	0.048	ug/Kg	☼	10/11/21 19:03	10/14/21 07:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*68*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:44*	*1*
13C5 PFPeA	*72*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:44*	*1*
13C2 PFHxA	*70*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:44*	*1*
13C4 PFHpA	*71*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:44*	*1*
13C4 PFOA	*72*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:44*	*1*
13C5 PFNA	*77*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:44*	*1*
13C2 PFDA	*74*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:44*	*1*
13C2 PFUnA	*73*		*25 - 150*	*10/11/21 19:03*	*10/14/21 07:44*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: SS-10
Date Collected: 10/05/21 15:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-19
Matrix: Solid
Percent Solids: 63.3

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDoA	66		25 - 150	10/11/21 19:03	10/14/21 07:44	1
13C2 PFTeDA	66		25 - 150	10/11/21 19:03	10/14/21 07:44	1
13C3 PFBS	68		25 - 150	10/11/21 19:03	10/14/21 07:44	1
18O2 PFHxS	69		25 - 150	10/11/21 19:03	10/14/21 07:44	1
13C4 PFOS	68		25 - 150	10/11/21 19:03	10/14/21 07:44	1
13C8 FOSA	70		10 - 150	10/11/21 19:03	10/14/21 07:44	1
d3-NMeFOSAA	75		25 - 150	10/11/21 19:03	10/14/21 07:44	1
d5-NEtFOSAA	81		25 - 150	10/11/21 19:03	10/14/21 07:44	1
d-N-MeFOSA-M	73		10 - 150	10/11/21 19:03	10/14/21 07:44	1
d-N-EtFOSA-M	70		10 - 150	10/11/21 19:03	10/14/21 07:44	1
d7-N-MeFOSE-M	84		10 - 150	10/11/21 19:03	10/14/21 07:44	1
d9-N-EtFOSE-M	82		10 - 150	10/11/21 19:03	10/14/21 07:44	1
M2-4:2 FTS	91		25 - 150	10/11/21 19:03	10/14/21 07:44	1
M2-6:2 FTS	96		25 - 150	10/11/21 19:03	10/14/21 07:44	1
M2-8:2 FTS	94		25 - 150	10/11/21 19:03	10/14/21 07:44	1
13C3 HFPO-DA	70		25 - 150	10/11/21 19:03	10/14/21 07:44	1
13C2 10:2 FTS	84		25 - 150	10/11/21 19:03	10/14/21 07:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	36.7		0.1	0.1	%			10/11/21 15:57	1
Percent Solids	63.3		0.1	0.1	%			10/11/21 15:57	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-16 (1-3)
Date Collected: 10/05/21 15:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-20
Matrix: Solid
Percent Solids: 89.5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.050		0.22	0.050	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluoropentanoic acid (PFPeA)	<0.044		0.22	0.044	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorohexanoic acid (PFHxA)	<0.033		0.22	0.033	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluoroheptanoic acid (PFHpA)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorononanoic acid (PFNA)	**0.059**	**J**	0.22	0.024	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorodecanoic acid (PFDA)	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluoroundecanoic acid (PFUnA)	<0.045		0.22	0.045	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorododecanoic acid (PFDoA)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.22	0.040	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorobutanesulfonic acid (PFBS)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluoropentanesulfonic acid (PFPeS)	<0.040		0.22	0.040	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorohexanesulfonic acid (PFHxS)	<0.031		0.22	0.031	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorooctanesulfonic acid (PFOS)	<0.046		0.22	0.046	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorononanesulfonic acid (PFNS)	<0.031		0.22	0.031	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorodecanesulfonic acid (PFDS)	<0.056		0.22	0.056	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorododecanesulfonic acid (PFDoS)	<0.051		0.22	0.051	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
Perfluorooctanesulfonamide (FOSA)	<0.036		0.22	0.036	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
NEtFOSA	<0.051		0.22	0.051	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
NMeFOSA	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
NEtFOSAA	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
NMeFOSE	<0.051		0.22	0.051	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
NEtFOSE	<0.030		0.22	0.030	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
4:2 FTS	<0.055		0.22	0.055	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
6:2 FTS	<0.029		0.22	0.029	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
8:2 FTS	<0.038		0.22	0.038	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		0.22	0.042	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
HFPO-DA (GenX)	<0.044		0.22	0.044	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1
11Cl-PF3OUdS	<0.033		0.22	0.033	ug/Kg	☼	10/11/21 19:03	10/15/21 11:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*72*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C5 PFPeA	*71*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C2 PFHxA	*75*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C4 PFHpA	*82*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C5 PFNA	*77*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C2 PFDA	*79*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C2 PFUnA	*82*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C2 PFDoA	*76*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C2 PFTeDA	*77*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C3 PFBS	*63*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
18O2 PFHxS	*76*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C4 PFOS	*72*		*25 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*
13C8 FOSA	*75*		*10 - 150*	*10/11/21 19:03*	*10/15/21 11:08*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-16 (1-3)

Date Collected: 10/05/21 15:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-20

Matrix: Solid
Percent Solids: 89.5

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d3-NMeFOSAA	78		25 - 150	10/11/21 19:03	10/15/21 11:08	1
d5-NEtFOSAA	76		25 - 150	10/11/21 19:03	10/15/21 11:08	1
d-N-MeFOSA-M	78		10 - 150	10/11/21 19:03	10/15/21 11:08	1
d-N-EtFOSA-M	67		10 - 150	10/11/21 19:03	10/15/21 11:08	1
d7-N-MeFOSE-M	69		10 - 150	10/11/21 19:03	10/15/21 11:08	1
d9-N-EtFOSE-M	74		10 - 150	10/11/21 19:03	10/15/21 11:08	1
M2-4:2 FTS	61		25 - 150	10/11/21 19:03	10/15/21 11:08	1
M2-6:2 FTS	58		25 - 150	10/11/21 19:03	10/15/21 11:08	1
M2-8:2 FTS	52		25 - 150	10/11/21 19:03	10/15/21 11:08	1
13C3 HFPO-DA	78		25 - 150	10/11/21 19:03	10/15/21 11:08	1
13C2 10:2 FTS	77		25 - 150	10/11/21 19:03	10/15/21 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	85		2.2	0.57	ug/Kg	☼	10/11/21 19:03	10/14/21 09:37	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	81		25 - 150	10/11/21 19:03	10/14/21 09:37	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.5		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	89.5		0.1	0.1	%			10/11/21 16:01	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-16 (3-5)
Date Collected: 10/05/21 15:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-21
Matrix: Solid
Percent Solids: 81.1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.050		0.22	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluoropentanoic acid (PFPeA)	<0.045		0.22	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorohexanoic acid (PFHxA)	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluoroheptanoic acid (PFHpA)	**0.043**	**J**	0.22	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorooctanoic acid (PFOA)	**20**		0.22	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorononanoic acid (PFNA)	**0.21**	**J**	0.22	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorodecanoic acid (PFDA)	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluoroundecanoic acid (PFUnA)	<0.046		0.22	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorododecanoic acid (PFDoA)	<0.033		0.22	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorotetradecanoic acid (PFTeA)	<0.040		0.22	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorobutanesulfonic acid (PFBS)	<0.042		0.22	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluoropentanesulfonic acid (PFPeS)	<0.040		0.22	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorohexanesulfonic acid (PFHxS)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorooctanesulfonic acid (PFOS)	**0.078**	**J**	0.22	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorodecanesulfonic acid (PFDS)	<0.057		0.22	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorododecanesulfonic acid (PFDoS)	<0.051		0.22	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
Perfluorooctanesulfonamide (FOSA)	<0.036		0.22	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
NEtFOSA	<0.051		0.22	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
NMeFOSA	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
NEtFOSAA	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
NMeFOSE	<0.051		0.22	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
4:2 FTS	<0.056		0.22	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
6:2 FTS	<0.030		0.22	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
8:2 FTS	<0.038		0.22	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		0.22	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
HFPO-DA (GenX)	<0.045		0.22	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
9Cl-PF3ONS	<0.038		0.22	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 22:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*58*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C5 PFPeA	*67*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C2 PFHxA	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C4 PFHpA	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C4 PFOA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C5 PFNA	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C2 PFDA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C2 PFUnA	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C2 PFDoA	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C2 PFTeDA	*62*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*
13C3 PFBS	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:00*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-16 (3-5)
Date Collected: 10/05/21 15:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-21
Matrix: Solid
Percent Solids: 81.1

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	68		25 - 150	10/11/21 18:38	10/14/21 22:00	1
13C4 PFOS	66		25 - 150	10/11/21 18:38	10/14/21 22:00	1
13C8 FOSA	65		10 - 150	10/11/21 18:38	10/14/21 22:00	1
d3-NMeFOSAA	65		25 - 150	10/11/21 18:38	10/14/21 22:00	1
d5-NEtFOSAA	70		25 - 150	10/11/21 18:38	10/14/21 22:00	1
d-N-MeFOSA-M	68		10 - 150	10/11/21 18:38	10/14/21 22:00	1
d-N-EtFOSA-M	69		10 - 150	10/11/21 18:38	10/14/21 22:00	1
d7-N-MeFOSE-M	76		10 - 150	10/11/21 18:38	10/14/21 22:00	1
d9-N-EtFOSE-M	74		10 - 150	10/11/21 18:38	10/14/21 22:00	1
M2-4:2 FTS	95		25 - 150	10/11/21 18:38	10/14/21 22:00	1
M2-6:2 FTS	68		25 - 150	10/11/21 18:38	10/14/21 22:00	1
M2-8:2 FTS	67		25 - 150	10/11/21 18:38	10/14/21 22:00	1
13C3 HFPO-DA	69		25 - 150	10/11/21 18:38	10/14/21 22:00	1
13C2 10:2 FTS	74		25 - 150	10/11/21 18:38	10/14/21 22:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.9		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	81.1		0.1	0.1	%			10/11/21 16:01	1

Client Sample ID: DUP-S-01

Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-22

Matrix: Solid
Percent Solids: 74.8

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.055		0.24	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluoropentanoic acid (PFPeA)	<0.049		0.24	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorohexanoic acid (PFHxA)	<0.037		0.24	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluoroheptanoic acid (PFHpA)	<0.045		0.24	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorooctanoic acid (PFOA)	**1.7**		0.24	0.063	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorononanoic acid (PFNA)	<0.026		0.24	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorodecanoic acid (PFDA)	<0.057		0.24	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluoroundecanoic acid (PFUnA)	<0.050		0.24	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorododecanoic acid (PFDoA)	<0.036		0.24	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorotridecanoic acid (PFTrDA)	**0.082**	**J**	0.24	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.044		0.24	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.045		0.24	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.044		0.24	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.035		0.24	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.059		0.24	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.051		0.24	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.062		0.24	0.062	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.056		0.24	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
Perfluorooctanesulfonamide (FOSA)	<0.039		0.24	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
NEtFOSA	<0.056		0.24	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
NMeFOSA	<0.059		0.24	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
NEtFOSAA	<0.057		0.24	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
NMeFOSE	<0.056		0.24	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
NEtFOSE	**0.045**	**J**	0.24	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
4:2 FTS	<0.061		0.24	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
6:2 FTS	<0.032		0.24	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
8:2 FTS	<0.042		0.24	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.047		0.24	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
HFPO-DA (GenX)	<0.049		0.24	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
9Cl-PF3ONS	<0.042		0.24	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1
11Cl-PF3OUdS	<0.037		0.24	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 22:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*54*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C5 PFPeA	*64*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C2 PFHxA	*61*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C4 PFHpA	*65*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C4 PFOA	*67*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C5 PFNA	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C2 PFDA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C2 PFUnA	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C2 PFDoA	*64*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C2 PFTeDA	*62*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*
13C3 PFBS	*63*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:27*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: DUP-S-01
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-22
Matrix: Solid
Percent Solids: 74.8

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	65		25 - 150	10/11/21 18:38	10/14/21 22:27	1
13C4 PFOS	63		25 - 150	10/11/21 18:38	10/14/21 22:27	1
13C8 FOSA	64		10 - 150	10/11/21 18:38	10/14/21 22:27	1
d3-NMeFOSAA	66		25 - 150	10/11/21 18:38	10/14/21 22:27	1
d5-NEtFOSAA	68		25 - 150	10/11/21 18:38	10/14/21 22:27	1
d-N-MeFOSA-M	64		10 - 150	10/11/21 18:38	10/14/21 22:27	1
d-N-EtFOSA-M	67		10 - 150	10/11/21 18:38	10/14/21 22:27	1
d7-N-MeFOSE-M	73		10 - 150	10/11/21 18:38	10/14/21 22:27	1
d9-N-EtFOSE-M	73		10 - 150	10/11/21 18:38	10/14/21 22:27	1
M2-4:2 FTS	101		25 - 150	10/11/21 18:38	10/14/21 22:27	1
M2-6:2 FTS	91		25 - 150	10/11/21 18:38	10/14/21 22:27	1
M2-8:2 FTS	89		25 - 150	10/11/21 18:38	10/14/21 22:27	1
13C3 HFPO-DA	62		25 - 150	10/11/21 18:38	10/14/21 22:27	1
13C2 10:2 FTS	82		25 - 150	10/11/21 18:38	10/14/21 22:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25.2		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	74.8		0.1	0.1	%			10/11/21 16:01	1

Client Sample ID: DUP-S-02

Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-23

Matrix: Solid
Percent Solids: 81.5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluoropentanoic acid (PFPeA)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorohexanoic acid (PFHxA)	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluoroheptanoic acid (PFHpA)	<0.045		0.23	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorooctanoic acid (PFOA)	**0.38**		0.23	0.062	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorononanoic acid (PFNA)	<0.026		0.23	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorotridecanoic acid (PFTrDA)	<0.025		0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorobutanesulfonic acid (PFBS)	<0.045		0.23	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorohexanesulfonic acid (PFHxS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorooctanesulfonic acid (PFOS)	<0.050		0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorodecanesulfonic acid (PFDS)	<0.061		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
Perfluorooctanesulfonamide (FOSA)	<0.039		0.23	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
NEtFOSA	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
NMeFOSE	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
NEtFOSE	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
4:2 FTS	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
6:2 FTS	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.046		0.23	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
HFPO-DA (GenX)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 22:37	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C5 PFPeA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C2 PFHxA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C4 PFHpA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C4 PFOA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C5 PFNA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C2 PFDA	*83*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C2 PFUnA	*78*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C2 PFDoA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C2 PFTeDA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
13C3 PFBS	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*
18O2 PFHxS	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:37*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: DUP-S-02
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-23
Matrix: Solid
Percent Solids: 81.5

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	72		25 - 150	10/11/21 18:38	10/14/21 22:37	1
13C8 FOSA	76		10 - 150	10/11/21 18:38	10/14/21 22:37	1
d3-NMeFOSAA	79		25 - 150	10/11/21 18:38	10/14/21 22:37	1
d5-NEtFOSAA	80		25 - 150	10/11/21 18:38	10/14/21 22:37	1
d-N-MeFOSA-M	76		10 - 150	10/11/21 18:38	10/14/21 22:37	1
d-N-EtFOSA-M	80		10 - 150	10/11/21 18:38	10/14/21 22:37	1
d7-N-MeFOSE-M	90		10 - 150	10/11/21 18:38	10/14/21 22:37	1
d9-N-EtFOSE-M	86		10 - 150	10/11/21 18:38	10/14/21 22:37	1
M2-4:2 FTS	107		25 - 150	10/11/21 18:38	10/14/21 22:37	1
M2-6:2 FTS	85		25 - 150	10/11/21 18:38	10/14/21 22:37	1
M2-8:2 FTS	79		25 - 150	10/11/21 18:38	10/14/21 22:37	1
13C3 HFPO-DA	78		25 - 150	10/11/21 18:38	10/14/21 22:37	1
13C2 10:2 FTS	86		25 - 150	10/11/21 18:38	10/14/21 22:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.5		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	81.5		0.1	0.1	%			10/11/21 16:01	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: DUP-S-03
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-24
Matrix: Solid
Percent Solids: 91.2

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.048		0.21	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluoropentanoic acid (PFPeA)	<0.042		0.21	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorohexanoic acid (PFHxA)	<0.032		0.21	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluoroheptanoic acid (PFHpA)	**0.048**	**J**	0.21	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorononanoic acid (PFNA)	**0.076**	**J**	0.21	0.023	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorodecanoic acid (PFDA)	<0.050		0.21	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluoroundecanoic acid (PFUnA)	<0.044		0.21	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorobutanesulfonic acid (PFBS)	<0.039		0.21	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluoropentanesulfonic acid (PFPeS)	<0.038		0.21	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorohexanesulfonic acid (PFHxS)	<0.030		0.21	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.051		0.21	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorooctanesulfonic acid (PFOS)	<0.045		0.21	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.21	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorodecanesulfonic acid (PFDS)	<0.054		0.21	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorododecanesulfonic acid (PFDoS)	<0.049		0.21	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
Perfluorooctanesulfonamide (FOSA)	<0.034		0.21	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
NEtFOSA	<0.049		0.21	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
NMeFOSA	<0.051		0.21	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
NEtFOSAA	<0.050		0.21	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
NMeFOSE	<0.049		0.21	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
6:2 FTS	<0.028		0.21	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
8:2 FTS	<0.036		0.21	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.040		0.21	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
HFPO-DA (GenX)	<0.042		0.21	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 22:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C5 PFPeA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C2 PFHxA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C4 PFHpA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C5 PFNA	*84*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C2 PFDA	*85*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C2 PFUnA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C2 PFDoA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C2 PFTeDA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C3 PFBS	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
18O2 PFHxS	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C4 PFOS	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*
13C8 FOSA	*78*		*10 - 150*	*10/11/21 18:38*	*10/14/21 22:46*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: DUP-S-03
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-24
Matrix: Solid
Percent Solids: 91.2

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d3-NMeFOSAA	81		25 - 150	10/11/21 18:38	10/14/21 22:46	1
d5-NEtFOSAA	84		25 - 150	10/11/21 18:38	10/14/21 22:46	1
d-N-MeFOSA-M	78		10 - 150	10/11/21 18:38	10/14/21 22:46	1
d-N-EtFOSA-M	82		10 - 150	10/11/21 18:38	10/14/21 22:46	1
d7-N-MeFOSE-M	91		10 - 150	10/11/21 18:38	10/14/21 22:46	1
d9-N-EtFOSE-M	89		10 - 150	10/11/21 18:38	10/14/21 22:46	1
M2-4:2 FTS	101		25 - 150	10/11/21 18:38	10/14/21 22:46	1
M2-6:2 FTS	67		25 - 150	10/11/21 18:38	10/14/21 22:46	1
M2-8:2 FTS	75		25 - 150	10/11/21 18:38	10/14/21 22:46	1
13C3 HFPO-DA	78		25 - 150	10/11/21 18:38	10/14/21 22:46	1
13C2 10:2 FTS	81		25 - 150	10/11/21 18:38	10/14/21 22:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	88		2.1	0.55	ug/Kg	☼	10/11/21 18:38	10/15/21 10:47	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	76		25 - 150	10/11/21 18:38	10/15/21 10:47	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.8		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	91.2		0.1	0.1	%			10/11/21 16:01	1

Client Sample ID: GP-17 (1-3)

Date Collected: 10/05/21 15:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-25

Matrix: Solid
Percent Solids: 95.3

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.043		0.19	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluoropentanoic acid (PFPeA)	<0.039		0.19	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorohexanoic acid (PFHxA)	<0.029		0.19	0.029	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluoroheptanoic acid (PFHpA)	**0.040**	**J**	0.19	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorooctanoic acid (PFOA)	**6.6**		0.19	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorononanoic acid (PFNA)	<0.021		0.19	0.021	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorodecanoic acid (PFDA)	<0.045		0.19	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluoroundecanoic acid (PFUnA)	<0.040		0.19	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorododecanoic acid (PFDoA)	<0.028		0.19	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorotridecanoic acid (PFTrDA)	<0.020		0.19	0.020	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorotetradecanoic acid (PFTeA)	<0.035		0.19	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorobutanesulfonic acid (PFBS)	<0.036		0.19	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.035		0.19	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorohexanesulfonic acid (PFHxS)	<0.027		0.19	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.046		0.19	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.041		0.19	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorononanesulfonic acid (PFNS)	<0.027		0.19	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorodecanesulfonic acid (PFDS)	<0.049		0.19	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorododecanesulfonic acid (PFDoS)	<0.044		0.19	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
Perfluorooctanesulfonamide (FOSA)	<0.031		0.19	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
NEtFOSA	<0.044		0.19	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
NMeFOSA	<0.046		0.19	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
NMeFOSAA	<0.022		0.19	0.022	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
NEtFOSAA	<0.045		0.19	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
NMeFOSE	<0.044		0.19	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
NEtFOSE	<0.026		0.19	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
4:2 FTS	<0.048		0.19	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
6:2 FTS	<0.026		0.19	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
8:2 FTS	<0.033		0.19	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.037		0.19	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
HFPO-DA (GenX)	**0.062**	**J**	0.19	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
9Cl-PF3ONS	<0.033		0.19	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1
11Cl-PF3OUdS	<0.029		0.19	0.029	ug/Kg	☼	10/11/21 18:38	10/14/21 22:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*66*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C5 PFPeA	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C2 PFHxA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C4 PFHpA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C4 PFOA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C5 PFNA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C2 PFDA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C2 PFUnA	*79*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C2 PFDoA	*73*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C2 PFTeDA	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
13C3 PFBS	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*
18O2 PFHxS	*74*		*25 - 150*	*10/11/21 18:38*	*10/14/21 22:55*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-17 (1-3)
Date Collected: 10/05/21 15:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-25
Matrix: Solid
Percent Solids: 95.3

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	71		25 - 150	10/11/21 18:38	10/14/21 22:55	1
13C8 FOSA	76		10 - 150	10/11/21 18:38	10/14/21 22:55	1
d3-NMeFOSAA	78		25 - 150	10/11/21 18:38	10/14/21 22:55	1
d5-NEtFOSAA	78		25 - 150	10/11/21 18:38	10/14/21 22:55	1
d-N-MeFOSA-M	77		10 - 150	10/11/21 18:38	10/14/21 22:55	1
d-N-EtFOSA-M	79		10 - 150	10/11/21 18:38	10/14/21 22:55	1
d7-N-MeFOSE-M	87		10 - 150	10/11/21 18:38	10/14/21 22:55	1
d9-N-EtFOSE-M	84		10 - 150	10/11/21 18:38	10/14/21 22:55	1
M2-4:2 FTS	99		25 - 150	10/11/21 18:38	10/14/21 22:55	1
M2-6:2 FTS	80		25 - 150	10/11/21 18:38	10/14/21 22:55	1
M2-8:2 FTS	79		25 - 150	10/11/21 18:38	10/14/21 22:55	1
13C3 HFPO-DA	74		25 - 150	10/11/21 18:38	10/14/21 22:55	1
13C2 10:2 FTS	83		25 - 150	10/11/21 18:38	10/14/21 22:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.7		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	95.3		0.1	0.1	%			10/11/21 16:01	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-17 (3-5)
Date Collected: 10/05/21 15:50
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-26
Matrix: Solid
Percent Solids: 85.1

Method: 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	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluoropentanoic acid (PFPeA)	<0.046		0.22	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorohexanoic acid (PFHxA)	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluoroheptanoic acid (PFHpA)	<0.042		0.22	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorooctanoic acid (PFOA)	**3.3**		0.22	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorodecanoic acid (PFDA)	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.22	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorododecanoic acid (PFDoA)	<0.033		0.22	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorobutanesulfonic acid (PFBS)	<0.042		0.22	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluoropentanesulfonic acid (PFPeS)	<0.041		0.22	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorohexanesulfonic acid (PFHxS)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorooctanesulfonic acid (PFOS)	**0.067**	**J I**	0.22	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorodecanesulfonic acid (PFDS)	<0.058		0.22	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorododecanesulfonic acid (PFDoS)	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.22	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
NEtFOSA	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
NMeFOSA	<0.054		0.22	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
NMeFOSAA	<0.026		0.22	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
NEtFOSAA	<0.053		0.22	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
NMeFOSE	<0.052		0.22	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
4:2 FTS	<0.057		0.22	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
6:2 FTS	<0.030		0.22	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
8:2 FTS	<0.039		0.22	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		0.22	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
HFPO-DA (GenX)	**0.13**	**J**	0.22	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
9Cl-PF3ONS	<0.039		0.22	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 23:04	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*57*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C5 PFPeA	*65*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C2 PFHxA	*63*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C4 PFHpA	*65*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C4 PFOA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C5 PFNA	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C2 PFDA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C2 PFUnA	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C2 PFDoA	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C2 PFTeDA	*65*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*
13C3 PFBS	*68*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:04*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-17 (3-5)
Date Collected: 10/05/21 15:50
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-26
Matrix: Solid
Percent Solids: 85.1

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	70		25 - 150	10/11/21 18:38	10/14/21 23:04	1
13C4 PFOS	65		25 - 150	10/11/21 18:38	10/14/21 23:04	1
13C8 FOSA	68		10 - 150	10/11/21 18:38	10/14/21 23:04	1
d3-NMeFOSAA	72		25 - 150	10/11/21 18:38	10/14/21 23:04	1
d5-NEtFOSAA	72		25 - 150	10/11/21 18:38	10/14/21 23:04	1
d-N-MeFOSA-M	68		10 - 150	10/11/21 18:38	10/14/21 23:04	1
d-N-EtFOSA-M	71		10 - 150	10/11/21 18:38	10/14/21 23:04	1
d7-N-MeFOSE-M	79		10 - 150	10/11/21 18:38	10/14/21 23:04	1
d9-N-EtFOSE-M	76		10 - 150	10/11/21 18:38	10/14/21 23:04	1
M2-4:2 FTS	93		25 - 150	10/11/21 18:38	10/14/21 23:04	1
M2-6:2 FTS	79		25 - 150	10/11/21 18:38	10/14/21 23:04	1
M2-8:2 FTS	69		25 - 150	10/11/21 18:38	10/14/21 23:04	1
13C3 HFPO-DA	68		25 - 150	10/11/21 18:38	10/14/21 23:04	1
13C2 10:2 FTS	77		25 - 150	10/11/21 18:38	10/14/21 23:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.9		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	85.1		0.1	0.1	%			10/11/21 16:01	1

Client Sample ID: GP-13 (7-9)

Date Collected: 10/05/21 18:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-27

Matrix: Solid
Percent Solids: 81.3

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.056		0.24	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluoropentanoic acid (PFPeA)	<0.050		0.24	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorohexanoic acid (PFHxA)	<0.038		0.24	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluoroheptanoic acid (PFHpA)	**0.070**	**J**	0.24	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorooctanoic acid (PFOA)	**13**		0.24	0.065	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorononanoic acid (PFNA)	<0.027		0.24	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorodecanoic acid (PFDA)	<0.058		0.24	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.24	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.24	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorobutanesulfonic acid (PFBS)	<0.046		0.24	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluoropentanesulfonic acid (PFPeS)	<0.045		0.24	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorohexanesulfonic acid (PFHxS)	<0.035		0.24	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.060		0.24	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorooctanesulfonic acid (PFOS)	<0.052		0.24	0.052	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorodecanesulfonic acid (PFDS)	<0.063		0.24	0.063	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorododecanesulfonic acid (PFDoS)	<0.057		0.24	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
NEtFOSA	<0.057		0.24	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
NMeFOSA	<0.060		0.24	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
NEtFOSAA	<0.058		0.24	0.058	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
NMeFOSE	<0.057		0.24	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
8:2 FTS	<0.043		0.24	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.047		0.24	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
9Cl-PF3ONS	<0.043		0.24	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 23:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*56*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C5 PFPeA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C2 PFHxA	*65*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C4 PFHpA	*70*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C4 PFOA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C5 PFNA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C2 PFDA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C2 PFUnA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C2 PFDoA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C2 PFTeDA	*69*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
13C3 PFBS	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*
18O2 PFHxS	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:40*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-13 (7-9)
Date Collected: 10/05/21 18:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-27
Matrix: Solid
Percent Solids: 81.3

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	68		25 - 150	10/11/21 18:38	10/14/21 23:40	1
13C8 FOSA	70		10 - 150	10/11/21 18:38	10/14/21 23:40	1
d3-NMeFOSAA	76		25 - 150	10/11/21 18:38	10/14/21 23:40	1
d5-NEtFOSAA	82		25 - 150	10/11/21 18:38	10/14/21 23:40	1
d-N-MeFOSA-M	72		10 - 150	10/11/21 18:38	10/14/21 23:40	1
d-N-EtFOSA-M	73		10 - 150	10/11/21 18:38	10/14/21 23:40	1
d7-N-MeFOSE-M	83		10 - 150	10/11/21 18:38	10/14/21 23:40	1
d9-N-EtFOSE-M	80		10 - 150	10/11/21 18:38	10/14/21 23:40	1
M2-4:2 FTS	99		25 - 150	10/11/21 18:38	10/14/21 23:40	1
M2-6:2 FTS	79		25 - 150	10/11/21 18:38	10/14/21 23:40	1
M2-8:2 FTS	79		25 - 150	10/11/21 18:38	10/14/21 23:40	1
13C3 HFPO-DA	71		25 - 150	10/11/21 18:38	10/14/21 23:40	1
13C2 10:2 FTS	91		25 - 150	10/11/21 18:38	10/14/21 23:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.7		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	81.3		0.1	0.1	%			10/11/21 16:01	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-13 (9-11)
Date Collected: 10/05/21 18:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-28
Matrix: Solid
Percent Solids: 81.8

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluoropentanoic acid (PFPeA)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorohexanoic acid (PFHxA)	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluoroheptanoic acid (PFHpA)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorooctanoic acid (PFOA)	**6.9**		0.23	0.062	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorononanoic acid (PFNA)	<0.026		0.23	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorodecanoic acid (PFDA)	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluoroundecanoic acid (PFUnA)	<0.049		0.23	0.049	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorohexanesulfonic acid (PFHxS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorooctanesulfonic acid (PFOS)	<0.050		0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorononanesulfonic acid (PFNS)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorodecanesulfonic acid (PFDS)	<0.061		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorododecanesulfonic acid (PFDoS)	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
Perfluorooctanesulfonamide (FOSA)	<0.038		0.23	0.038	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
NEtFOSA	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
NMeFOSA	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
NEtFOSAA	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
NMeFOSE	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
NEtFOSE	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
4:2 FTS	<0.059		0.23	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
8:2 FTS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
HFPO-DA (GenX)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
9Cl-PF3ONS	<0.041		0.23	0.041	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/14/21 23:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*50*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C5 PFPeA	*60*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C2 PFHxA	*56*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C4 PFHpA	*57*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C4 PFOA	*64*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C5 PFNA	*62*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C2 PFDA	*64*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C2 PFUnA	*62*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C2 PFDoA	*61*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C2 PFTeDA	*56*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
13C3 PFBS	*57*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*
18O2 PFHxS	*59*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:50*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-13 (9-11)
Date Collected: 10/05/21 18:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-28
Matrix: Solid
Percent Solids: 81.8

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	56		25 - 150	10/11/21 18:38	10/14/21 23:50	1
13C8 FOSA	58		10 - 150	10/11/21 18:38	10/14/21 23:50	1
d3-NMeFOSAA	61		25 - 150	10/11/21 18:38	10/14/21 23:50	1
d5-NEtFOSAA	65		25 - 150	10/11/21 18:38	10/14/21 23:50	1
d-N-MeFOSA-M	60		10 - 150	10/11/21 18:38	10/14/21 23:50	1
d-N-EtFOSA-M	63		10 - 150	10/11/21 18:38	10/14/21 23:50	1
d7-N-MeFOSE-M	67		10 - 150	10/11/21 18:38	10/14/21 23:50	1
d9-N-EtFOSE-M	66		10 - 150	10/11/21 18:38	10/14/21 23:50	1
M2-4:2 FTS	84		25 - 150	10/11/21 18:38	10/14/21 23:50	1
M2-6:2 FTS	72		25 - 150	10/11/21 18:38	10/14/21 23:50	1
M2-8:2 FTS	75		25 - 150	10/11/21 18:38	10/14/21 23:50	1
13C3 HFPO-DA	61		25 - 150	10/11/21 18:38	10/14/21 23:50	1
13C2 10:2 FTS	78		25 - 150	10/11/21 18:38	10/14/21 23:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18.2		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	81.8		0.1	0.1	%			10/11/21 16:01	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-14 (7-9)
Date Collected: 10/05/21 18:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-29
Matrix: Solid
Percent Solids: 86.3

Method: 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	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluoropentanoic acid (PFPeA)	<0.046		0.23	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorohexanoic acid (PFHxA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluoroheptanoic acid (PFHpA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorooctanoic acid (PFOA)	**0.080**	**J**	0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorononanoic acid (PFNA)	<0.025		0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorodecanoic acid (PFDA)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluoroundecanoic acid (PFUnA)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluoropentanesulfonic acid (PFPeS)	<0.042		0.23	0.042	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorohexanesulfonic acid (PFHxS)	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorooctanesulfonic acid (PFOS)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.23	0.037	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
NEtFOSA	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
NMeFOSA	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
NEtFOSAA	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
NMeFOSE	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
4:2 FTS	<0.057		0.23	0.057	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
6:2 FTS	<0.030		0.23	0.030	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
8:2 FTS	<0.039		0.23	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
HFPO-DA (GenX)	<0.046		0.23	0.046	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
9Cl-PF3ONS	<0.039		0.23	0.039	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/14/21 23:59	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*62*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C5 PFPeA	*76*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C2 PFHxA	*71*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C4 PFHpA	*75*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C4 PFOA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C5 PFNA	*81*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C2 PFDA	*83*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C2 PFUnA	*80*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C2 PFDoA	*77*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C2 PFTeDA	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
13C3 PFBS	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*
18O2 PFHxS	*72*		*25 - 150*	*10/11/21 18:38*	*10/14/21 23:59*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-14 (7-9)
Date Collected: 10/05/21 18:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-29
Matrix: Solid
Percent Solids: 86.3

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	69		25 - 150	10/11/21 18:38	10/14/21 23:59	1
13C8 FOSA	74		10 - 150	10/11/21 18:38	10/14/21 23:59	1
d3-NMeFOSAA	82		25 - 150	10/11/21 18:38	10/14/21 23:59	1
d5-NEtFOSAA	82		25 - 150	10/11/21 18:38	10/14/21 23:59	1
d-N-MeFOSA-M	74		10 - 150	10/11/21 18:38	10/14/21 23:59	1
d-N-EtFOSA-M	79		10 - 150	10/11/21 18:38	10/14/21 23:59	1
d7-N-MeFOSE-M	87		10 - 150	10/11/21 18:38	10/14/21 23:59	1
d9-N-EtFOSE-M	86		10 - 150	10/11/21 18:38	10/14/21 23:59	1
M2-4:2 FTS	95		25 - 150	10/11/21 18:38	10/14/21 23:59	1
M2-6:2 FTS	80		25 - 150	10/11/21 18:38	10/14/21 23:59	1
M2-8:2 FTS	78		25 - 150	10/11/21 18:38	10/14/21 23:59	1
13C3 HFPO-DA	75		25 - 150	10/11/21 18:38	10/14/21 23:59	1
13C2 10:2 FTS	86		25 - 150	10/11/21 18:38	10/14/21 23:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13.7		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	86.3		0.1	0.1	%			10/11/21 16:01	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-14 (9-11)
Date Collected: 10/05/21 18:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-30
Matrix: Solid
Percent Solids: 80.9

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.053		0.23	0.053	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluoropentanoic acid (PFPeA)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorohexanoic acid (PFHxA)	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluoroheptanoic acid (PFHpA)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorooctanoic acid (PFOA)	<0.061		0.23	0.061	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorononanoic acid (PFNA)	<0.025		0.23	0.025	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorodecanoic acid (PFDA)	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluoroundecanoic acid (PFUnA)	<0.048		0.23	0.048	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorododecanoic acid (PFDoA)	<0.035		0.23	0.035	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorotetradecanoic acid (PFTeA)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorobutanesulfonic acid (PFBS)	<0.044		0.23	0.044	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluoropentanesulfonic acid (PFPeS)	<0.043		0.23	0.043	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorohexanesulfonic acid (PFHxS)	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorooctanesulfonic acid (PFOS)	<0.050		0.23	0.050	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorodecanesulfonic acid (PFDS)	<0.060		0.23	0.060	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorododecanesulfonic acid (PFDoS)	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
Perfluorooctanesulfonamide (FOSA)	<0.038		0.23	0.038	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
NEtFOSA	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
NMeFOSA	<0.056		0.23	0.056	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
NMeFOSAA	<0.027		0.23	0.027	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
NEtFOSAA	<0.055		0.23	0.055	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
NMeFOSE	<0.054		0.23	0.054	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
4:2 FTS	<0.059		0.23	0.059	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
8:2 FTS	<0.040		0.23	0.040	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.045		0.23	0.045	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
HFPO-DA (GenX)	<0.047		0.23	0.047	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1
11Cl-PF3OUdS	<0.036		0.23	0.036	ug/Kg	☼	10/11/21 18:38	10/15/21 00:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*47*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C5 PFPeA	*51*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C2 PFHxA	*48*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C4 PFHpA	*51*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C4 PFOA	*53*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C5 PFNA	*54*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C2 PFDA	*55*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C2 PFUnA	*55*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C2 PFDoA	*54*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C2 PFTeDA	*52*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
13C3 PFBS	*54*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*
18O2 PFHxS	*52*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:08*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-14 (9-11)
Date Collected: 10/05/21 18:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-30
Matrix: Solid
Percent Solids: 80.9

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	52		25 - 150	10/11/21 18:38	10/15/21 00:08	1
13C8 FOSA	53		10 - 150	10/11/21 18:38	10/15/21 00:08	1
d3-NMeFOSAA	57		25 - 150	10/11/21 18:38	10/15/21 00:08	1
d5-NEtFOSAA	59		25 - 150	10/11/21 18:38	10/15/21 00:08	1
d-N-MeFOSA-M	52		10 - 150	10/11/21 18:38	10/15/21 00:08	1
d-N-EtFOSA-M	55		10 - 150	10/11/21 18:38	10/15/21 00:08	1
d7-N-MeFOSE-M	62		10 - 150	10/11/21 18:38	10/15/21 00:08	1
d9-N-EtFOSE-M	60		10 - 150	10/11/21 18:38	10/15/21 00:08	1
M2-4:2 FTS	68		25 - 150	10/11/21 18:38	10/15/21 00:08	1
M2-6:2 FTS	61		25 - 150	10/11/21 18:38	10/15/21 00:08	1
M2-8:2 FTS	59		25 - 150	10/11/21 18:38	10/15/21 00:08	1
13C3 HFPO-DA	52		25 - 150	10/11/21 18:38	10/15/21 00:08	1
13C2 10:2 FTS	65		25 - 150	10/11/21 18:38	10/15/21 00:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19.1		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	80.9		0.1	0.1	%			10/11/21 16:01	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-15 (5-7)
Date Collected: 10/06/21 10:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-31
Matrix: Solid
Percent Solids: 77.9

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.056		0.24	0.056	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluoropentanoic acid (PFPeA)	<0.050		0.24	0.050	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorohexanoic acid (PFHxA)	<0.038		0.24	0.038	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluoroheptanoic acid (PFHpA)	<0.047		0.24	0.047	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorooctanoic acid (PFOA)	**0.32**		0.24	0.065	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorononanoic acid (PFNA)	<0.027		0.24	0.027	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorodecanoic acid (PFDA)	<0.059		0.24	0.059	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.24	0.037	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.24	0.026	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorobutanesulfonic acid (PFBS)	<0.047		0.24	0.047	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluoropentanesulfonic acid (PFPeS)	<0.045		0.24	0.045	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorohexanesulfonic acid (PFHxS)	<0.036		0.24	0.036	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.060		0.24	0.060	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorooctanesulfonic acid (PFOS)	<0.053		0.24	0.053	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorononanesulfonic acid (PFNS)	<0.036		0.24	0.036	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.24	0.064	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorododecanesulfonic acid (PFDoS)	<0.058		0.24	0.058	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
NEtFOSA	<0.058		0.24	0.058	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
NMeFOSA	<0.060		0.24	0.060	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
NEtFOSAA	<0.059		0.24	0.059	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
NMeFOSE	<0.058		0.24	0.058	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
8:2 FTS	<0.043		0.24	0.043	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.24	0.048	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
9Cl-PF3ONS	<0.043		0.24	0.043	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	10/11/21 18:38	10/15/21 00:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*57*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C5 PFPeA	*71*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C2 PFHxA	*65*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C4 PFHpA	*69*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C4 PFOA	*72*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C5 PFNA	*74*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C2 PFDA	*76*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C2 PFUnA	*73*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C2 PFDoA	*72*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C2 PFTeDA	*68*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
13C3 PFBS	*72*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*
18O2 PFHxS	*73*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:17*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-15 (5-7)
Date Collected: 10/06/21 10:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-31
Matrix: Solid
Percent Solids: 77.9

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	70		25 - 150	10/11/21 18:38	10/15/21 00:17	1
13C8 FOSA	71		10 - 150	10/11/21 18:38	10/15/21 00:17	1
d3-NMeFOSAA	72		25 - 150	10/11/21 18:38	10/15/21 00:17	1
d5-NEtFOSAA	76		25 - 150	10/11/21 18:38	10/15/21 00:17	1
d-N-MeFOSA-M	70		10 - 150	10/11/21 18:38	10/15/21 00:17	1
d-N-EtFOSA-M	76		10 - 150	10/11/21 18:38	10/15/21 00:17	1
d7-N-MeFOSE-M	81		10 - 150	10/11/21 18:38	10/15/21 00:17	1
d9-N-EtFOSE-M	79		10 - 150	10/11/21 18:38	10/15/21 00:17	1
M2-4:2 FTS	99		25 - 150	10/11/21 18:38	10/15/21 00:17	1
M2-6:2 FTS	85		25 - 150	10/11/21 18:38	10/15/21 00:17	1
M2-8:2 FTS	80		25 - 150	10/11/21 18:38	10/15/21 00:17	1
13C3 HFPO-DA	70		25 - 150	10/11/21 18:38	10/15/21 00:17	1
13C2 10:2 FTS	84		25 - 150	10/11/21 18:38	10/15/21 00:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22.1		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	77.9		0.1	0.1	%			10/11/21 16:01	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-15 (7-9)
Date Collected: 10/06/21 10:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-32
Matrix: Solid
Percent Solids: 76.7

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.058		0.25	0.058	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluoropentanoic acid (PFPeA)	<0.052		0.25	0.052	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorohexanoic acid (PFHxA)	**0.072**	**J**	0.25	0.039	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluoroheptanoic acid (PFHpA)	<0.048		0.25	0.048	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorooctanoic acid (PFOA)	**0.12**	**J**	0.25	0.067	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorononanoic acid (PFNA)	<0.028		0.25	0.028	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorodecanoic acid (PFDA)	<0.060		0.25	0.060	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluoroundecanoic acid (PFUnA)	<0.053		0.25	0.053	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorododecanoic acid (PFDoA)	<0.038		0.25	0.038	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.25	0.026	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorotetradecanoic acid (PFTeA)	<0.047		0.25	0.047	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorobutanesulfonic acid (PFBS)	<0.048		0.25	0.048	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluoropentanesulfonic acid (PFPeS)	**0.058**	**J I**	0.25	0.047	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorohexanesulfonic acid (PFHxS)	**0.68**		0.25	0.037	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.062		0.25	0.062	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorooctanesulfonic acid (PFOS)	**0.17**	**J**	0.25	0.054	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorononanesulfonic acid (PFNS)	<0.037		0.25	0.037	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorodecanesulfonic acid (PFDS)	<0.066		0.25	0.066	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorododecanesulfonic acid (PFDoS)	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
Perfluorooctanesulfonamide (FOSA)	<0.042		0.25	0.042	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
NEtFOSA	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
NMeFOSA	<0.062		0.25	0.062	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
NMeFOSAA	<0.029		0.25	0.029	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
NEtFOSAA	<0.060		0.25	0.060	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
NMeFOSE	<0.059		0.25	0.059	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
NEtFOSE	<0.035		0.25	0.035	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
4:2 FTS	<0.064		0.25	0.064	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
6:2 FTS	<0.034		0.25	0.034	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
8:2 FTS	<0.044		0.25	0.044	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.049		0.25	0.049	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
HFPO-DA (GenX)	<0.052		0.25	0.052	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
9Cl-PF3ONS	<0.044		0.25	0.044	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1
11Cl-PF3OUdS	<0.039		0.25	0.039	ug/Kg	☼	10/11/21 18:38	10/15/21 00:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*45*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C5 PFPeA	*56*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C2 PFHxA	*55*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C4 PFHpA	*59*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C4 PFOA	*62*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C5 PFNA	*62*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C2 PFDA	*64*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C2 PFUnA	*62*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C2 PFDoA	*61*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C2 PFTeDA	*57*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*
13C3 PFBS	*62*		*25 - 150*	*10/11/21 18:38*	*10/15/21 00:26*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-15 (7-9)
Date Collected: 10/06/21 10:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-32
Matrix: Solid
Percent Solids: 76.7

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	62		25 - 150	10/11/21 18:38	10/15/21 00:26	1
13C4 PFOS	58		25 - 150	10/11/21 18:38	10/15/21 00:26	1
13C8 FOSA	61		10 - 150	10/11/21 18:38	10/15/21 00:26	1
d3-NMeFOSAA	63		25 - 150	10/11/21 18:38	10/15/21 00:26	1
d5-NEtFOSAA	69		25 - 150	10/11/21 18:38	10/15/21 00:26	1
d-N-MeFOSA-M	58		10 - 150	10/11/21 18:38	10/15/21 00:26	1
d-N-EtFOSA-M	62		10 - 150	10/11/21 18:38	10/15/21 00:26	1
d7-N-MeFOSE-M	68		10 - 150	10/11/21 18:38	10/15/21 00:26	1
d9-N-EtFOSE-M	66		10 - 150	10/11/21 18:38	10/15/21 00:26	1
M2-4:2 FTS	83		25 - 150	10/11/21 18:38	10/15/21 00:26	1
M2-6:2 FTS	75		25 - 150	10/11/21 18:38	10/15/21 00:26	1
M2-8:2 FTS	70		25 - 150	10/11/21 18:38	10/15/21 00:26	1
13C3 HFPO-DA	57		25 - 150	10/11/21 18:38	10/15/21 00:26	1
13C2 10:2 FTS	75		25 - 150	10/11/21 18:38	10/15/21 00:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23.3		0.1	0.1	%			10/11/21 16:01	1
Percent Solids	76.7		0.1	0.1	%			10/11/21 16:01	1

Client Sample ID: TW-01

Date Collected: 10/04/21 16:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-33

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**7.3**		4.9	2.3	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluoropentanoic acid (PFPeA)	**4.1**		2.0	0.48	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorohexanoic acid (PFHxA)	**15**		2.0	0.57	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluoroheptanoic acid (PFHpA)	**19**		2.0	0.24	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorooctanoic acid (PFOA)	**270**		2.0	0.83	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorononanoic acid (PFNA)	<0.26		2.0	0.26	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorodecanoic acid (PFDA)	<0.30		2.0	0.30	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	0.54	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorotetradecanoic acid (PFTeA)	<0.71		2.0	0.71	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorobutanesulfonic acid (PFBS)	**0.54**	**J**	2.0	0.20	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		2.0	0.29	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorohexanesulfonic acid (PFHxS)	<0.56		2.0	0.56	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorooctanesulfonic acid (PFOS)	<0.53		2.0	0.53	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorononanesulfonic acid (PFNS)	<0.36		2.0	0.36	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		2.0	0.31	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorododecanesulfonic acid (PFDoS)	<0.95		2.0	0.95	ng/L		10/12/21 19:14	10/13/21 22:08	1
Perfluorooctanesulfonamide (FOSA)	<0.96		2.0	0.96	ng/L		10/12/21 19:14	10/13/21 22:08	1
NEtFOSA	<0.85		2.0	0.85	ng/L		10/12/21 19:14	10/13/21 22:08	1
NMeFOSA	<0.42		2.0	0.42	ng/L		10/12/21 19:14	10/13/21 22:08	1
NMeFOSAA	<1.2		4.9	1.2	ng/L		10/12/21 19:14	10/13/21 22:08	1
NEtFOSAA	<1.3		4.9	1.3	ng/L		10/12/21 19:14	10/13/21 22:08	1
NMeFOSE	<1.4		3.9	1.4	ng/L		10/12/21 19:14	10/13/21 22:08	1
NEtFOSE	<0.83		2.0	0.83	ng/L		10/12/21 19:14	10/13/21 22:08	1
4:2 FTS	<0.23		2.0	0.23	ng/L		10/12/21 19:14	10/13/21 22:08	1
6:2 FTS	<2.4		4.9	2.4	ng/L		10/12/21 19:14	10/13/21 22:08	1
8:2 FTS	<0.45		2.0	0.45	ng/L		10/12/21 19:14	10/13/21 22:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.39		2.0	0.39	ng/L		10/12/21 19:14	10/13/21 22:08	1
HFPO-DA (GenX)	<1.5		3.9	1.5	ng/L		10/12/21 19:14	10/13/21 22:08	1
9Cl-PF3ONS	<0.23		2.0	0.23	ng/L		10/12/21 19:14	10/13/21 22:08	1
11Cl-PF3OUdS	<0.31		2.0	0.31	ng/L		10/12/21 19:14	10/13/21 22:08	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*87*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C5 PFPeA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C2 PFHxA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C4 PFHpA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C4 PFOA	*96*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C5 PFNA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C2 PFDA	*91*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C2 PFUnA	*84*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C2 PFDoA	*78*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C2 PFTeDA	*74*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*
13C3 PFBS	*88*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:08*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-01
Date Collected: 10/04/21 16:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-33
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	92		25 - 150	10/12/21 19:14	10/13/21 22:08	1
13C4 PFOS	83		25 - 150	10/12/21 19:14	10/13/21 22:08	1
13C8 FOSA	83		10 - 150	10/12/21 19:14	10/13/21 22:08	1
d3-NMeFOSAA	77		25 - 150	10/12/21 19:14	10/13/21 22:08	1
d5-NEtFOSAA	78		25 - 150	10/12/21 19:14	10/13/21 22:08	1
d-N-MeFOSA-M	72		10 - 150	10/12/21 19:14	10/13/21 22:08	1
d-N-EtFOSA-M	70		10 - 150	10/12/21 19:14	10/13/21 22:08	1
d7-N-MeFOSE-M	91		10 - 150	10/12/21 19:14	10/13/21 22:08	1
d9-N-EtFOSE-M	83		10 - 150	10/12/21 19:14	10/13/21 22:08	1
M2-4:2 FTS	126		25 - 150	10/12/21 19:14	10/13/21 22:08	1
M2-6:2 FTS	106		25 - 150	10/12/21 19:14	10/13/21 22:08	1
M2-8:2 FTS	92		25 - 150	10/12/21 19:14	10/13/21 22:08	1
13C3 HFPO-DA	87		25 - 150	10/12/21 19:14	10/13/21 22:08	1
13C2 10:2 FTS	81		25 - 150	10/12/21 19:14	10/13/21 22:08	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-12
Date Collected: 10/04/21 16:35
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-34
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**14**		4.4	2.1	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluoropentanoic acid (PFPeA)	**10**		1.8	0.43	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorohexanoic acid (PFHxA)	**44**		1.8	0.51	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluoroheptanoic acid (PFHpA)	**23**		1.8	0.22	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorooctanoic acid (PFOA)	**37**		1.8	0.75	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorodecanoic acid (PFDA)	<0.27		1.8	0.27	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluoroundecanoic acid (PFUnA)	<0.97		1.8	0.97	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.8	1.1	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorotetradecanoic acid (PFTeA)	<0.65		1.8	0.65	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorohexanesulfonic acid (PFHxS)	<0.50		1.8	0.50	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorododecanesulfonic acid (PFDoS)	<0.86		1.8	0.86	ng/L		10/12/21 19:14	10/13/21 22:17	1
Perfluorooctanesulfonamide (FOSA)	<0.87		1.8	0.87	ng/L		10/12/21 19:14	10/13/21 22:17	1
NEtFOSA	<0.77		1.8	0.77	ng/L		10/12/21 19:14	10/13/21 22:17	1
NMeFOSA	<0.38		1.8	0.38	ng/L		10/12/21 19:14	10/13/21 22:17	1
NMeFOSAA	<1.1		4.4	1.1	ng/L		10/12/21 19:14	10/13/21 22:17	1
NEtFOSAA	<1.1		4.4	1.1	ng/L		10/12/21 19:14	10/13/21 22:17	1
NMeFOSE	<1.2		3.5	1.2	ng/L		10/12/21 19:14	10/13/21 22:17	1
NEtFOSE	<0.75		1.8	0.75	ng/L		10/12/21 19:14	10/13/21 22:17	1
4:2 FTS	<0.21		1.8	0.21	ng/L		10/12/21 19:14	10/13/21 22:17	1
6:2 FTS	<2.2		4.4	2.2	ng/L		10/12/21 19:14	10/13/21 22:17	1
8:2 FTS	<0.41		1.8	0.41	ng/L		10/12/21 19:14	10/13/21 22:17	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.8	0.35	ng/L		10/12/21 19:14	10/13/21 22:17	1
HFPO-DA (GenX)	<1.3		3.5	1.3	ng/L		10/12/21 19:14	10/13/21 22:17	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		10/12/21 19:14	10/13/21 22:17	1
11Cl-PF3OUdS	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/13/21 22:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*71*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C5 PFPeA	*88*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C2 PFHxA	*90*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C4 PFHpA	*94*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C4 PFOA	*96*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C5 PFNA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C2 PFDA	*91*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C2 PFUnA	*83*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C2 PFDoA	*77*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C2 PFTeDA	*71*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
13C3 PFBS	*84*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*
18O2 PFHxS	*88*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:17*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-12
Date Collected: 10/04/21 16:35
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-34
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	79		25 - 150	10/12/21 19:14	10/13/21 22:17	1
13C8 FOSA	83		10 - 150	10/12/21 19:14	10/13/21 22:17	1
d3-NMeFOSAA	72		25 - 150	10/12/21 19:14	10/13/21 22:17	1
d5-NEtFOSAA	74		25 - 150	10/12/21 19:14	10/13/21 22:17	1
d-N-MeFOSA-M	66		10 - 150	10/12/21 19:14	10/13/21 22:17	1
d-N-EtFOSA-M	63		10 - 150	10/12/21 19:14	10/13/21 22:17	1
d7-N-MeFOSE-M	88		10 - 150	10/12/21 19:14	10/13/21 22:17	1
d9-N-EtFOSE-M	82		10 - 150	10/12/21 19:14	10/13/21 22:17	1
M2-4:2 FTS	134		25 - 150	10/12/21 19:14	10/13/21 22:17	1
M2-6:2 FTS	111		25 - 150	10/12/21 19:14	10/13/21 22:17	1
M2-8:2 FTS	94		25 - 150	10/12/21 19:14	10/13/21 22:17	1
13C3 HFPO-DA	89		25 - 150	10/12/21 19:14	10/13/21 22:17	1
13C2 10:2 FTS	85		25 - 150	10/12/21 19:14	10/13/21 22:17	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: FB-01
Date Collected: 10/05/21 10:21
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-35
Matrix: Water

Method: 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		10/12/21 19:14	10/13/21 22:27	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.8	0.45	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorohexanoic acid (PFHxA)	<0.53		1.8	0.53	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorooctanoic acid (PFOA)	<0.78		1.8	0.78	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.8	0.50	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.89		1.8	0.89	ng/L		10/12/21 19:14	10/13/21 22:27	1
Perfluorooctanesulfonamide (FOSA)	<0.90		1.8	0.90	ng/L		10/12/21 19:14	10/13/21 22:27	1
NEtFOSA	<0.80		1.8	0.80	ng/L		10/12/21 19:14	10/13/21 22:27	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/12/21 19:14	10/13/21 22:27	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		10/12/21 19:14	10/13/21 22:27	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		10/12/21 19:14	10/13/21 22:27	1
NMeFOSE	<1.3		3.7	1.3	ng/L		10/12/21 19:14	10/13/21 22:27	1
NEtFOSE	<0.78		1.8	0.78	ng/L		10/12/21 19:14	10/13/21 22:27	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/12/21 19:14	10/13/21 22:27	1
6:2 FTS	<2.3		4.6	2.3	ng/L		10/12/21 19:14	10/13/21 22:27	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/12/21 19:14	10/13/21 22:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		10/12/21 19:14	10/13/21 22:27	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		10/12/21 19:14	10/13/21 22:27	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/12/21 19:14	10/13/21 22:27	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/13/21 22:27	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C5 PFPeA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C2 PFHxA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C4 PFHpA	*101*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C4 PFOA	*104*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C5 PFNA	*102*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C2 PFDA	*102*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C2 PFUnA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C2 PFDoA	*90*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C2 PFTeDA	*82*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
13C3 PFBS	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*
18O2 PFHxS	*102*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:27*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: FB-01
Date Collected: 10/05/21 10:21
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-35
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	95		25 - 150	10/12/21 19:14	10/13/21 22:27	1
13C8 FOSA	85		10 - 150	10/12/21 19:14	10/13/21 22:27	1
d3-NMeFOSAA	92		25 - 150	10/12/21 19:14	10/13/21 22:27	1
d5-NEtFOSAA	88		25 - 150	10/12/21 19:14	10/13/21 22:27	1
d-N-MeFOSA-M	83		10 - 150	10/12/21 19:14	10/13/21 22:27	1
d-N-EtFOSA-M	81		10 - 150	10/12/21 19:14	10/13/21 22:27	1
d7-N-MeFOSE-M	103		10 - 150	10/12/21 19:14	10/13/21 22:27	1
d9-N-EtFOSE-M	97		10 - 150	10/12/21 19:14	10/13/21 22:27	1
M2-4:2 FTS	125		25 - 150	10/12/21 19:14	10/13/21 22:27	1
M2-6:2 FTS	113		25 - 150	10/12/21 19:14	10/13/21 22:27	1
M2-8:2 FTS	100		25 - 150	10/12/21 19:14	10/13/21 22:27	1
13C3 HFPO-DA	97		25 - 150	10/12/21 19:14	10/13/21 22:27	1
13C2 10:2 FTS	91		25 - 150	10/12/21 19:14	10/13/21 22:27	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-01
Date Collected: 10/04/21 11:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-36
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		4.9	2.4	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluoropentanoic acid (PFPeA)	<0.48		2.0	0.48	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorohexanoic acid (PFHxA)	<0.57		2.0	0.57	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorooctanoic acid (PFOA)	<0.84		2.0	0.84	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorodecanoic acid (PFDA)	<0.30		2.0	0.30	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	0.54	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorotetradecanoic acid (PFTeA)	<0.72		2.0	0.72	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		2.0	0.29	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorohexanesulfonic acid (PFHxS)	<0.56		2.0	0.56	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorooctanesulfonic acid (PFOS)	<0.53		2.0	0.53	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorononanesulfonic acid (PFNS)	<0.36		2.0	0.36	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		2.0	0.31	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorododecanesulfonic acid (PFDoS)	<0.95		2.0	0.95	ng/L		10/12/21 19:14	10/13/21 22:36	1
Perfluorooctanesulfonamide (FOSA)	<0.96		2.0	0.96	ng/L		10/12/21 19:14	10/13/21 22:36	1
NEtFOSA	<0.86		2.0	0.86	ng/L		10/12/21 19:14	10/13/21 22:36	1
NMeFOSA	<0.42		2.0	0.42	ng/L		10/12/21 19:14	10/13/21 22:36	1
NMeFOSAA	<1.2		4.9	1.2	ng/L		10/12/21 19:14	10/13/21 22:36	1
NEtFOSAA	<1.3		4.9	1.3	ng/L		10/12/21 19:14	10/13/21 22:36	1
NMeFOSE	<1.4		3.9	1.4	ng/L		10/12/21 19:14	10/13/21 22:36	1
NEtFOSE	<0.84		2.0	0.84	ng/L		10/12/21 19:14	10/13/21 22:36	1
4:2 FTS	<0.24		2.0	0.24	ng/L		10/12/21 19:14	10/13/21 22:36	1
6:2 FTS	<2.5		4.9	2.5	ng/L		10/12/21 19:14	10/13/21 22:36	1
8:2 FTS	<0.45		2.0	0.45	ng/L		10/12/21 19:14	10/13/21 22:36	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.39		2.0	0.39	ng/L		10/12/21 19:14	10/13/21 22:36	1
HFPO-DA (GenX)	<1.5		3.9	1.5	ng/L		10/12/21 19:14	10/13/21 22:36	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		10/12/21 19:14	10/13/21 22:36	1
11Cl-PF3OUdS	<0.31		2.0	0.31	ng/L		10/12/21 19:14	10/13/21 22:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C5 PFPeA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C2 PFHxA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C4 PFHpA	*93*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C4 PFOA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C5 PFNA	*101*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C2 PFDA	*100*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C2 PFUnA	*94*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C2 PFDoA	*89*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C2 PFTeDA	*80*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
13C3 PFBS	*91*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*
18O2 PFHxS	*94*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:36*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-01
Date Collected: 10/04/21 11:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-36
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	89		25 - 150	10/12/21 19:14	10/13/21 22:36	1
13C8 FOSA	84		10 - 150	10/12/21 19:14	10/13/21 22:36	1
d3-NMeFOSAA	96		25 - 150	10/12/21 19:14	10/13/21 22:36	1
d5-NEtFOSAA	99		25 - 150	10/12/21 19:14	10/13/21 22:36	1
d-N-MeFOSA-M	73		10 - 150	10/12/21 19:14	10/13/21 22:36	1
d-N-EtFOSA-M	72		10 - 150	10/12/21 19:14	10/13/21 22:36	1
d7-N-MeFOSE-M	99		10 - 150	10/12/21 19:14	10/13/21 22:36	1
d9-N-EtFOSE-M	94		10 - 150	10/12/21 19:14	10/13/21 22:36	1
M2-4:2 FTS	115		25 - 150	10/12/21 19:14	10/13/21 22:36	1
M2-6:2 FTS	111		25 - 150	10/12/21 19:14	10/13/21 22:36	1
M2-8:2 FTS	100		25 - 150	10/12/21 19:14	10/13/21 22:36	1
13C3 HFPO-DA	93		25 - 150	10/12/21 19:14	10/13/21 22:36	1
13C2 10:2 FTS	99		25 - 150	10/12/21 19:14	10/13/21 22:36	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-02
Date Collected: 10/05/21 10:08
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-37
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.3		4.8	2.3	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluoropentanoic acid (PFPeA)	<0.48		1.9	0.48	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorohexanoic acid (PFHxA)	<0.56		1.9	0.56	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorooctanoic acid (PFOA)	<0.82		1.9	0.82	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		1.9	1.3	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorotetradecanoic acid (PFTeA)	<0.71		1.9	0.71	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorohexanesulfonic acid (PFHxS)	<0.55		1.9	0.55	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorooctanesulfonic acid (PFOS)	<0.52		1.9	0.52	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorononanesulfonic acid (PFNS)	<0.36		1.9	0.36	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorododecanesulfonic acid (PFDoS)	<0.94		1.9	0.94	ng/L		10/12/21 19:14	10/13/21 22:45	1
Perfluorooctanesulfonamide (FOSA)	<0.95		1.9	0.95	ng/L		10/12/21 19:14	10/13/21 22:45	1
NEtFOSA	<0.84		1.9	0.84	ng/L		10/12/21 19:14	10/13/21 22:45	1
NMeFOSA	<0.42		1.9	0.42	ng/L		10/12/21 19:14	10/13/21 22:45	1
NMeFOSAA	<1.2		4.8	1.2	ng/L		10/12/21 19:14	10/13/21 22:45	1
NEtFOSAA	<1.3		4.8	1.3	ng/L		10/12/21 19:14	10/13/21 22:45	1
NMeFOSE	<1.4		3.9	1.4	ng/L		10/12/21 19:14	10/13/21 22:45	1
NEtFOSE	<0.82		1.9	0.82	ng/L		10/12/21 19:14	10/13/21 22:45	1
4:2 FTS	<0.23		1.9	0.23	ng/L		10/12/21 19:14	10/13/21 22:45	1
6:2 FTS	<2.4		4.8	2.4	ng/L		10/12/21 19:14	10/13/21 22:45	1
8:2 FTS	<0.45		1.9	0.45	ng/L		10/12/21 19:14	10/13/21 22:45	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.39		1.9	0.39	ng/L		10/12/21 19:14	10/13/21 22:45	1
HFPO-DA (GenX)	<1.5		3.9	1.5	ng/L		10/12/21 19:14	10/13/21 22:45	1
9Cl-PF3ONS	<0.23		1.9	0.23	ng/L		10/12/21 19:14	10/13/21 22:45	1
11Cl-PF3OUdS	<0.31		1.9	0.31	ng/L		10/12/21 19:14	10/13/21 22:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C5 PFPeA	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C2 PFHxA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C4 PFHpA	*93*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C4 PFOA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C5 PFNA	*102*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C2 PFDA	*100*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C2 PFUnA	*90*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C2 PFDoA	*70*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C2 PFTeDA	*77*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
13C3 PFBS	*93*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*
18O2 PFHxS	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:45*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-02
Date Collected: 10/05/21 10:08
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-37
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	91		25 - 150	10/12/21 19:14	10/13/21 22:45	1
13C8 FOSA	83		10 - 150	10/12/21 19:14	10/13/21 22:45	1
d3-NMeFOSAA	78		25 - 150	10/12/21 19:14	10/13/21 22:45	1
d5-NEtFOSAA	68		25 - 150	10/12/21 19:14	10/13/21 22:45	1
d-N-MeFOSA-M	70		10 - 150	10/12/21 19:14	10/13/21 22:45	1
d-N-EtFOSA-M	61		10 - 150	10/12/21 19:14	10/13/21 22:45	1
d7-N-MeFOSE-M	97		10 - 150	10/12/21 19:14	10/13/21 22:45	1
d9-N-EtFOSE-M	82		10 - 150	10/12/21 19:14	10/13/21 22:45	1
M2-4:2 FTS	121		25 - 150	10/12/21 19:14	10/13/21 22:45	1
M2-6:2 FTS	113		25 - 150	10/12/21 19:14	10/13/21 22:45	1
M2-8:2 FTS	121		25 - 150	10/12/21 19:14	10/13/21 22:45	1
13C3 HFPO-DA	92		25 - 150	10/12/21 19:14	10/13/21 22:45	1
13C2 10:2 FTS	93		25 - 150	10/12/21 19:14	10/13/21 22:45	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-03
Date Collected: 10/05/21 10:16
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-38
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.1		4.4	2.1	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluoropentanoic acid (PFPeA)	<0.43		1.7	0.43	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorohexanoic acid (PFHxA)	<0.51		1.7	0.51	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.7	0.22	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorooctanoic acid (PFOA)	<0.74		1.7	0.74	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorononanoic acid (PFNA)	<0.24		1.7	0.24	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorodecanoic acid (PFDA)	<0.27		1.7	0.27	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluoroundecanoic acid (PFUnA)	<0.96		1.7	0.96	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.7	0.48	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.7	0.64	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorobutanesulfonic acid (PFBS)	<0.17		1.7	0.17	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.7	0.26	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorohexanesulfonic acid (PFHxS)	<0.50		1.7	0.50	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.7	0.17	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorooctanesulfonic acid (PFOS)	<0.47		1.7	0.47	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.7	0.32	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.7	0.28	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorododecanesulfonic acid (PFDoS)	<0.85		1.7	0.85	ng/L		10/12/21 19:14	10/13/21 22:54	1
Perfluorooctanesulfonamide (FOSA)	<0.86		1.7	0.86	ng/L		10/12/21 19:14	10/13/21 22:54	1
NEtFOSA	<0.76		1.7	0.76	ng/L		10/12/21 19:14	10/13/21 22:54	1
NMeFOSA	<0.38		1.7	0.38	ng/L		10/12/21 19:14	10/13/21 22:54	1
NMeFOSAA	<1.0		4.4	1.0	ng/L		10/12/21 19:14	10/13/21 22:54	1
NEtFOSAA	<1.1		4.4	1.1	ng/L		10/12/21 19:14	10/13/21 22:54	1
NMeFOSE	<1.2		3.5	1.2	ng/L		10/12/21 19:14	10/13/21 22:54	1
NEtFOSE	<0.74		1.7	0.74	ng/L		10/12/21 19:14	10/13/21 22:54	1
4:2 FTS	<0.21		1.7	0.21	ng/L		10/12/21 19:14	10/13/21 22:54	1
6:2 FTS	<2.2		4.4	2.2	ng/L		10/12/21 19:14	10/13/21 22:54	1
8:2 FTS	<0.40		1.7	0.40	ng/L		10/12/21 19:14	10/13/21 22:54	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.7	0.35	ng/L		10/12/21 19:14	10/13/21 22:54	1
HFPO-DA (GenX)	<1.3		3.5	1.3	ng/L		10/12/21 19:14	10/13/21 22:54	1
9Cl-PF3ONS	<0.21		1.7	0.21	ng/L		10/12/21 19:14	10/13/21 22:54	1
11Cl-PF3OUdS	<0.28		1.7	0.28	ng/L		10/12/21 19:14	10/13/21 22:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C5 PFPeA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C2 PFHxA	*94*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C4 PFHpA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C4 PFOA	*100*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C5 PFNA	*105*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C2 PFDA	*104*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C2 PFUnA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C2 PFDoA	*90*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C2 PFTeDA	*82*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
13C3 PFBS	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*
18O2 PFHxS	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 22:54*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-03
Date Collected: 10/05/21 10:16
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-38
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	95		25 - 150	10/12/21 19:14	10/13/21 22:54	1
13C8 FOSA	89		10 - 150	10/12/21 19:14	10/13/21 22:54	1
d3-NMeFOSAA	94		25 - 150	10/12/21 19:14	10/13/21 22:54	1
d5-NEtFOSAA	93		25 - 150	10/12/21 19:14	10/13/21 22:54	1
d-N-MeFOSA-M	81		10 - 150	10/12/21 19:14	10/13/21 22:54	1
d-N-EtFOSA-M	83		10 - 150	10/12/21 19:14	10/13/21 22:54	1
d7-N-MeFOSE-M	108		10 - 150	10/12/21 19:14	10/13/21 22:54	1
d9-N-EtFOSE-M	99		10 - 150	10/12/21 19:14	10/13/21 22:54	1
M2-4:2 FTS	131		25 - 150	10/12/21 19:14	10/13/21 22:54	1
M2-6:2 FTS	113		25 - 150	10/12/21 19:14	10/13/21 22:54	1
M2-8:2 FTS	107		25 - 150	10/12/21 19:14	10/13/21 22:54	1
13C3 HFPO-DA	94		25 - 150	10/12/21 19:14	10/13/21 22:54	1
13C2 10:2 FTS	96		25 - 150	10/12/21 19:14	10/13/21 22:54	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-04
Date Collected: 10/05/21 11:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-39
Matrix: Water

Method: 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		10/12/21 19:14	10/13/21 23:03	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.8	0.45	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorohexanoic acid (PFHxA)	<0.53		1.8	0.53	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorooctanoic acid (PFOA)	<0.77		1.8	0.77	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		10/12/21 19:14	10/13/21 23:03	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		10/12/21 19:14	10/13/21 23:03	1
NEtFOSA	<0.79		1.8	0.79	ng/L		10/12/21 19:14	10/13/21 23:03	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/12/21 19:14	10/13/21 23:03	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		10/12/21 19:14	10/13/21 23:03	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		10/12/21 19:14	10/13/21 23:03	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/12/21 19:14	10/13/21 23:03	1
NEtFOSE	<0.77		1.8	0.77	ng/L		10/12/21 19:14	10/13/21 23:03	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/12/21 19:14	10/13/21 23:03	1
6:2 FTS	<2.3		4.6	2.3	ng/L		10/12/21 19:14	10/13/21 23:03	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/12/21 19:14	10/13/21 23:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/12/21 19:14	10/13/21 23:03	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		10/12/21 19:14	10/13/21 23:03	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/12/21 19:14	10/13/21 23:03	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/13/21 23:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C5 PFPeA	*95*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C2 PFHxA	*91*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C4 PFHpA	*94*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C4 PFOA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C5 PFNA	*101*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C2 PFDA	*100*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C2 PFUnA	*93*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C2 PFDoA	*87*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C2 PFTeDA	*82*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
13C3 PFBS	*93*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*
18O2 PFHxS	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:03*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-04
Date Collected: 10/05/21 11:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-39
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	90		25 - 150	10/12/21 19:14	10/13/21 23:03	1
13C8 FOSA	85		10 - 150	10/12/21 19:14	10/13/21 23:03	1
d3-NMeFOSAA	91		25 - 150	10/12/21 19:14	10/13/21 23:03	1
d5-NEtFOSAA	92		25 - 150	10/12/21 19:14	10/13/21 23:03	1
d-N-MeFOSA-M	85		10 - 150	10/12/21 19:14	10/13/21 23:03	1
d-N-EtFOSA-M	82		10 - 150	10/12/21 19:14	10/13/21 23:03	1
d7-N-MeFOSE-M	104		10 - 150	10/12/21 19:14	10/13/21 23:03	1
d9-N-EtFOSE-M	95		10 - 150	10/12/21 19:14	10/13/21 23:03	1
M2-4:2 FTS	121		25 - 150	10/12/21 19:14	10/13/21 23:03	1
M2-6:2 FTS	112		25 - 150	10/12/21 19:14	10/13/21 23:03	1
M2-8:2 FTS	99		25 - 150	10/12/21 19:14	10/13/21 23:03	1
13C3 HFPO-DA	93		25 - 150	10/12/21 19:14	10/13/21 23:03	1
13C2 10:2 FTS	91		25 - 150	10/12/21 19:14	10/13/21 23:03	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: FB-02
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-40
Matrix: Water

Method: 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		10/12/21 19:14	10/13/21 23:39	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.8	0.45	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorohexanoic acid (PFHxA)	<0.53		1.8	0.53	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorooctanoic acid (PFOA)	<0.77		1.8	0.77	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		10/12/21 19:14	10/13/21 23:39	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		10/12/21 19:14	10/13/21 23:39	1
NEtFOSA	<0.79		1.8	0.79	ng/L		10/12/21 19:14	10/13/21 23:39	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/12/21 19:14	10/13/21 23:39	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		10/12/21 19:14	10/13/21 23:39	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		10/12/21 19:14	10/13/21 23:39	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/12/21 19:14	10/13/21 23:39	1
NEtFOSE	<0.77		1.8	0.77	ng/L		10/12/21 19:14	10/13/21 23:39	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/12/21 19:14	10/13/21 23:39	1
6:2 FTS	<2.3		4.5	2.3	ng/L		10/12/21 19:14	10/13/21 23:39	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/12/21 19:14	10/13/21 23:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/12/21 19:14	10/13/21 23:39	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		10/12/21 19:14	10/13/21 23:39	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/12/21 19:14	10/13/21 23:39	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/13/21 23:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C5 PFPeA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C2 PFHxA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C4 PFHpA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C4 PFOA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C5 PFNA	*102*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C2 PFDA	*102*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C2 PFUnA	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C2 PFDoA	*91*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C2 PFTeDA	*82*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
13C3 PFBS	*96*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*
18O2 PFHxS	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:39*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: FB-02
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-40
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	94		25 - 150	10/12/21 19:14	10/13/21 23:39	1
13C8 FOSA	83		10 - 150	10/12/21 19:14	10/13/21 23:39	1
d3-NMeFOSAA	90		25 - 150	10/12/21 19:14	10/13/21 23:39	1
d5-NEtFOSAA	91		25 - 150	10/12/21 19:14	10/13/21 23:39	1
d-N-MeFOSA-M	79		10 - 150	10/12/21 19:14	10/13/21 23:39	1
d-N-EtFOSA-M	76		10 - 150	10/12/21 19:14	10/13/21 23:39	1
d7-N-MeFOSE-M	102		10 - 150	10/12/21 19:14	10/13/21 23:39	1
d9-N-EtFOSE-M	93		10 - 150	10/12/21 19:14	10/13/21 23:39	1
M2-4:2 FTS	119		25 - 150	10/12/21 19:14	10/13/21 23:39	1
M2-6:2 FTS	117		25 - 150	10/12/21 19:14	10/13/21 23:39	1
M2-8:2 FTS	102		25 - 150	10/12/21 19:14	10/13/21 23:39	1
13C3 HFPO-DA	96		25 - 150	10/12/21 19:14	10/13/21 23:39	1
13C2 10:2 FTS	88		25 - 150	10/12/21 19:14	10/13/21 23:39	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: FB-03
Date Collected: 10/06/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-41
Matrix: Water

Method: 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		10/12/21 19:14	10/13/21 23:49	1
Perfluoropentanoic acid (PFPeA)	<0.46		1.9	0.46	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorooctanoic acid (PFOA)	<0.79		1.9	0.79	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.9	0.50	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.9	0.34	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.9	0.90	ng/L		10/12/21 19:14	10/13/21 23:49	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.9	0.91	ng/L		10/12/21 19:14	10/13/21 23:49	1
NEtFOSA	<0.81		1.9	0.81	ng/L		10/12/21 19:14	10/13/21 23:49	1
NMeFOSA	<0.40		1.9	0.40	ng/L		10/12/21 19:14	10/13/21 23:49	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		10/12/21 19:14	10/13/21 23:49	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		10/12/21 19:14	10/13/21 23:49	1
NMeFOSE	<1.3		3.7	1.3	ng/L		10/12/21 19:14	10/13/21 23:49	1
NEtFOSE	<0.79		1.9	0.79	ng/L		10/12/21 19:14	10/13/21 23:49	1
4:2 FTS	<0.22		1.9	0.22	ng/L		10/12/21 19:14	10/13/21 23:49	1
6:2 FTS	<2.3		4.7	2.3	ng/L		10/12/21 19:14	10/13/21 23:49	1
8:2 FTS	<0.43		1.9	0.43	ng/L		10/12/21 19:14	10/13/21 23:49	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		10/12/21 19:14	10/13/21 23:49	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		10/12/21 19:14	10/13/21 23:49	1
9Cl-PF3ONS	<0.22		1.9	0.22	ng/L		10/12/21 19:14	10/13/21 23:49	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		10/12/21 19:14	10/13/21 23:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C5 PFPeA	*99*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C2 PFHxA	*95*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C4 PFHpA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C4 PFOA	*100*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C5 PFNA	*106*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C2 PFDA	*100*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C2 PFUnA	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C2 PFDoA	*87*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C2 PFTeDA	*81*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
13C3 PFBS	*94*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*
18O2 PFHxS	*101*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:49*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: FB-03
Date Collected: 10/06/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-41
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	95		25 - 150	10/12/21 19:14	10/13/21 23:49	1
13C8 FOSA	86		10 - 150	10/12/21 19:14	10/13/21 23:49	1
d3-NMeFOSAA	93		25 - 150	10/12/21 19:14	10/13/21 23:49	1
d5-NEtFOSAA	87		25 - 150	10/12/21 19:14	10/13/21 23:49	1
d-N-MeFOSA-M	79		10 - 150	10/12/21 19:14	10/13/21 23:49	1
d-N-EtFOSA-M	79		10 - 150	10/12/21 19:14	10/13/21 23:49	1
d7-N-MeFOSE-M	103		10 - 150	10/12/21 19:14	10/13/21 23:49	1
d9-N-EtFOSE-M	97		10 - 150	10/12/21 19:14	10/13/21 23:49	1
M2-4:2 FTS	123		25 - 150	10/12/21 19:14	10/13/21 23:49	1
M2-6:2 FTS	119		25 - 150	10/12/21 19:14	10/13/21 23:49	1
M2-8:2 FTS	102		25 - 150	10/12/21 19:14	10/13/21 23:49	1
13C3 HFPO-DA	99		25 - 150	10/12/21 19:14	10/13/21 23:49	1
13C2 10:2 FTS	95		25 - 150	10/12/21 19:14	10/13/21 23:49	1

Client Sample ID: TW-13

Date Collected: 10/06/21 12:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-42

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<120		250	120	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluoropentanoic acid (PFPeA)	**99**	**J**	100	25	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorohexanoic acid (PFHxA)	**62**	**J**	100	29	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluoroheptanoic acid (PFHpA)	**150**		100	13	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorooctanoic acid (PFOA)	**17000**		100	43	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorononanoic acid (PFNA)	<14		100	14	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorodecanoic acid (PFDA)	<16		100	16	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluoroundecanoic acid (PFUnA)	<55		100	55	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorododecanoic acid (PFDoA)	<28		100	28	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorotridecanoic acid (PFTrDA)	<65		100	65	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorotetradecanoic acid (PFTeA)	<37		100	37	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorobutanesulfonic acid (PFBS)	<10		100	10	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluoropentanesulfonic acid (PFPeS)	<15		100	15	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorohexanesulfonic acid (PFHxS)	<29		100	29	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	<9.5		100	9.5	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorooctanesulfonic acid (PFOS)	<27		100	27	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorononanesulfonic acid (PFNS)	<19		100	19	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorodecanesulfonic acid (PFDS)	<16		100	16	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorododecanesulfonic acid (PFDoS)	<49		100	49	ng/L		10/12/21 19:14	10/13/21 23:58	1
Perfluorooctanesulfonamide (FOSA)	<49		100	49	ng/L		10/12/21 19:14	10/13/21 23:58	1
NEtFOSA	<44		100	44	ng/L		10/12/21 19:14	10/13/21 23:58	1
NMeFOSA	<22		100	22	ng/L		10/12/21 19:14	10/13/21 23:58	1
NMeFOSAA	<60		250	60	ng/L		10/12/21 19:14	10/13/21 23:58	1
NEtFOSAA	<65		250	65	ng/L		10/12/21 19:14	10/13/21 23:58	1
NMeFOSE	<70		200	70	ng/L		10/12/21 19:14	10/13/21 23:58	1
NEtFOSE	<43		100	43	ng/L		10/12/21 19:14	10/13/21 23:58	1
4:2 FTS	<12		100	12	ng/L		10/12/21 19:14	10/13/21 23:58	1
6:2 FTS	<130		250	130	ng/L		10/12/21 19:14	10/13/21 23:58	1
8:2 FTS	<23		100	23	ng/L		10/12/21 19:14	10/13/21 23:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<20		100	20	ng/L		10/12/21 19:14	10/13/21 23:58	1
HFPO-DA (GenX)	**150**	**J**	200	75	ng/L		10/12/21 19:14	10/13/21 23:58	1
9Cl-PF3ONS	<12		100	12	ng/L		10/12/21 19:14	10/13/21 23:58	1
11Cl-PF3OUdS	<16		100	16	ng/L		10/12/21 19:14	10/13/21 23:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C5 PFPeA	*102*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C2 PFHxA	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C4 PFHpA	*101*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C4 PFOA	*101*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C5 PFNA	*101*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C2 PFDA	*103*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C2 PFUnA	*97*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C2 PFDoA	*92*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C2 PFTeDA	*88*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
13C3 PFBS	*98*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*
18O2 PFHxS	*102*		*25 - 150*	*10/12/21 19:14*	*10/13/21 23:58*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-13
Date Collected: 10/06/21 12:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-42
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	94		25 - 150	10/12/21 19:14	10/13/21 23:58	1
13C8 FOSA	98		10 - 150	10/12/21 19:14	10/13/21 23:58	1
d3-NMeFOSAA	95		25 - 150	10/12/21 19:14	10/13/21 23:58	1
d5-NEtFOSAA	94		25 - 150	10/12/21 19:14	10/13/21 23:58	1
d-N-MeFOSA-M	89		10 - 150	10/12/21 19:14	10/13/21 23:58	1
d-N-EtFOSA-M	86		10 - 150	10/12/21 19:14	10/13/21 23:58	1
d7-N-MeFOSE-M	106		10 - 150	10/12/21 19:14	10/13/21 23:58	1
d9-N-EtFOSE-M	95		10 - 150	10/12/21 19:14	10/13/21 23:58	1
M2-4:2 FTS	131		25 - 150	10/12/21 19:14	10/13/21 23:58	1
M2-6:2 FTS	109		25 - 150	10/12/21 19:14	10/13/21 23:58	1
M2-8:2 FTS	115		25 - 150	10/12/21 19:14	10/13/21 23:58	1
13C3 HFPO-DA	95		25 - 150	10/12/21 19:14	10/13/21 23:58	1
13C2 10:2 FTS	105		25 - 150	10/12/21 19:14	10/13/21 23:58	1

Client Sample ID: TW-14

Date Collected: 10/06/21 13:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-43

Matrix: Water

Method: 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		10/12/21 19:14	10/14/21 00:07	1
Perfluoropentanoic acid (PFPeA)	<0.44		1.8	0.44	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorohexanoic acid (PFHxA)	<0.52		1.8	0.52	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluoroheptanoic acid (PFHpA)	**0.33**	**J**	1.8	0.22	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorooctanoic acid (PFOA)	**12**		1.8	0.76	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluoroundecanoic acid (PFUnA)	<0.98		1.8	0.98	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorotetradecanoic acid (PFTeA)	<0.65		1.8	0.65	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		10/12/21 19:14	10/14/21 00:07	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		10/12/21 19:14	10/14/21 00:07	1
NEtFOSA	<0.78		1.8	0.78	ng/L		10/12/21 19:14	10/14/21 00:07	1
NMeFOSA	<0.38		1.8	0.38	ng/L		10/12/21 19:14	10/14/21 00:07	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		10/12/21 19:14	10/14/21 00:07	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		10/12/21 19:14	10/14/21 00:07	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/12/21 19:14	10/14/21 00:07	1
NEtFOSE	<0.76		1.8	0.76	ng/L		10/12/21 19:14	10/14/21 00:07	1
4:2 FTS	<0.21		1.8	0.21	ng/L		10/12/21 19:14	10/14/21 00:07	1
6:2 FTS	<2.2		4.5	2.2	ng/L		10/12/21 19:14	10/14/21 00:07	1
8:2 FTS	<0.41		1.8	0.41	ng/L		10/12/21 19:14	10/14/21 00:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/12/21 19:14	10/14/21 00:07	1
HFPO-DA (GenX)	<1.3		3.6	1.3	ng/L		10/12/21 19:14	10/14/21 00:07	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		10/12/21 19:14	10/14/21 00:07	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/14/21 00:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*77*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C5 PFPeA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C2 PFHxA	*87*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C4 PFHpA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C4 PFOA	*93*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C5 PFNA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C2 PFDA	*92*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C2 PFUnA	*81*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C2 PFDoA	*74*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C2 PFTeDA	*70*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
13C3 PFBS	*83*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*
18O2 PFHxS	*86*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:07*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-14
Date Collected: 10/06/21 13:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-43
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	80		25 - 150	10/12/21 19:14	10/14/21 00:07	1
13C8 FOSA	81		10 - 150	10/12/21 19:14	10/14/21 00:07	1
d3-NMeFOSAA	74		25 - 150	10/12/21 19:14	10/14/21 00:07	1
d5-NEtFOSAA	77		25 - 150	10/12/21 19:14	10/14/21 00:07	1
d-N-MeFOSA-M	71		10 - 150	10/12/21 19:14	10/14/21 00:07	1
d-N-EtFOSA-M	68		10 - 150	10/12/21 19:14	10/14/21 00:07	1
d7-N-MeFOSE-M	86		10 - 150	10/12/21 19:14	10/14/21 00:07	1
d9-N-EtFOSE-M	81		10 - 150	10/12/21 19:14	10/14/21 00:07	1
M2-4:2 FTS	130		25 - 150	10/12/21 19:14	10/14/21 00:07	1
M2-6:2 FTS	106		25 - 150	10/12/21 19:14	10/14/21 00:07	1
M2-8:2 FTS	102		25 - 150	10/12/21 19:14	10/14/21 00:07	1
13C3 HFPO-DA	84		25 - 150	10/12/21 19:14	10/14/21 00:07	1
13C2 10:2 FTS	91		25 - 150	10/12/21 19:14	10/14/21 00:07	1

Client Sample ID: TW-15

Date Collected: 10/06/21 12:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-44

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**16**		4.4	2.1	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluoropentanoic acid (PFPeA)	<0.43		1.8	0.43	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorohexanoic acid (PFHxA)	**2.2**		1.8	0.51	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluoroheptanoic acid (PFHpA)	**2.5**		1.8	0.22	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorooctanoic acid (PFOA)	**240**		1.8	0.75	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorononanoic acid (PFNA)	**0.29**	**J**	1.8	0.24	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorodecanoic acid (PFDA)	<0.27		1.8	0.27	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluoroundecanoic acid (PFUnA)	<0.97		1.8	0.97	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.8	0.48	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.8	1.1	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.8	0.64	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorobutanesulfonic acid (PFBS)	**1.1**	**J**	1.8	0.18	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.8	0.26	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorohexanesulfonic acid (PFHxS)	**0.63**	**J**	1.8	0.50	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorooctanesulfonic acid (PFOS)	**5.1**		1.8	0.47	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorododecanesulfonic acid (PFDoS)	<0.85		1.8	0.85	ng/L		10/12/21 19:14	10/14/21 00:16	1
Perfluorooctanesulfonamide (FOSA)	<0.86		1.8	0.86	ng/L		10/12/21 19:14	10/14/21 00:16	1
NEtFOSA	<0.76		1.8	0.76	ng/L		10/12/21 19:14	10/14/21 00:16	1
NMeFOSA	<0.38		1.8	0.38	ng/L		10/12/21 19:14	10/14/21 00:16	1
NMeFOSAA	<1.1		4.4	1.1	ng/L		10/12/21 19:14	10/14/21 00:16	1
NEtFOSAA	<1.1		4.4	1.1	ng/L		10/12/21 19:14	10/14/21 00:16	1
NMeFOSE	<1.2		3.5	1.2	ng/L		10/12/21 19:14	10/14/21 00:16	1
NEtFOSE	<0.75		1.8	0.75	ng/L		10/12/21 19:14	10/14/21 00:16	1
4:2 FTS	<0.21		1.8	0.21	ng/L		10/12/21 19:14	10/14/21 00:16	1
6:2 FTS	<2.2		4.4	2.2	ng/L		10/12/21 19:14	10/14/21 00:16	1
8:2 FTS	<0.40		1.8	0.40	ng/L		10/12/21 19:14	10/14/21 00:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.8	0.35	ng/L		10/12/21 19:14	10/14/21 00:16	1
HFPO-DA (GenX)	**1.3**	**J**	3.5	1.3	ng/L		10/12/21 19:14	10/14/21 00:16	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		10/12/21 19:14	10/14/21 00:16	1
11Cl-PF3OUdS	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/14/21 00:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*53*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C5 PFPeA	*80*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C2 PFHxA	*89*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C4 PFHpA	*95*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C4 PFOA	*96*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C5 PFNA	*93*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C2 PFDA	*95*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C2 PFUnA	*85*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C2 PFDoA	*81*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*
13C2 PFTeDA	*74*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:16*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-15
Date Collected: 10/06/21 12:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-44
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	92		25 - 150	10/12/21 19:14	10/14/21 00:16	1
18O2 PFHxS	93		25 - 150	10/12/21 19:14	10/14/21 00:16	1
13C4 PFOS	87		25 - 150	10/12/21 19:14	10/14/21 00:16	1
13C8 FOSA	83		10 - 150	10/12/21 19:14	10/14/21 00:16	1
d3-NMeFOSAA	67		25 - 150	10/12/21 19:14	10/14/21 00:16	1
d5-NEtFOSAA	73		25 - 150	10/12/21 19:14	10/14/21 00:16	1
d-N-MeFOSA-M	76		10 - 150	10/12/21 19:14	10/14/21 00:16	1
d-N-EtFOSA-M	78		10 - 150	10/12/21 19:14	10/14/21 00:16	1
d7-N-MeFOSE-M	87		10 - 150	10/12/21 19:14	10/14/21 00:16	1
d9-N-EtFOSE-M	83		10 - 150	10/12/21 19:14	10/14/21 00:16	1
M2-4:2 FTS	135		25 - 150	10/12/21 19:14	10/14/21 00:16	1
M2-6:2 FTS	123		25 - 150	10/12/21 19:14	10/14/21 00:16	1
M2-8:2 FTS	119		25 - 150	10/12/21 19:14	10/14/21 00:16	1
13C3 HFPO-DA	85		25 - 150	10/12/21 19:14	10/14/21 00:16	1
13C2 10:2 FTS	92		25 - 150	10/12/21 19:14	10/14/21 00:16	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-17
Date Collected: 10/05/21 17:08
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-45
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**14**		5.4	2.6	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluoropentanoic acid (PFPeA)	**11**		2.2	0.53	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorohexanoic acid (PFHxA)	**36**		2.2	0.63	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluoroheptanoic acid (PFHpA)	**31**		2.2	0.27	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorooctanoic acid (PFOA)	**150**		2.2	0.92	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorononanoic acid (PFNA)	<0.29		2.2	0.29	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorodecanoic acid (PFDA)	<0.33		2.2	0.33	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluoroundecanoic acid (PFUnA)	<1.2		2.2	1.2	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorododecanoic acid (PFDoA)	<0.59		2.2	0.59	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorotridecanoic acid (PFTrDA)	<1.4		2.2	1.4	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorotetradecanoic acid (PFTeA)	<0.79		2.2	0.79	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorobutanesulfonic acid (PFBS)	**0.46**	**J**	2.2	0.22	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluoropentanesulfonic acid (PFPeS)	<0.32		2.2	0.32	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorohexanesulfonic acid (PFHxS)	<0.61		2.2	0.61	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.20		2.2	0.20	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorooctanesulfonic acid (PFOS)	<0.58		2.2	0.58	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorononanesulfonic acid (PFNS)	<0.40		2.2	0.40	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorodecanesulfonic acid (PFDS)	<0.34		2.2	0.34	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorododecanesulfonic acid (PFDoS)	<1.0		2.2	1.0	ng/L		10/12/21 19:14	10/14/21 00:25	1
Perfluorooctanesulfonamide (FOSA)	<1.1		2.2	1.1	ng/L		10/12/21 19:14	10/14/21 00:25	1
NEtFOSA	<0.94		2.2	0.94	ng/L		10/12/21 19:14	10/14/21 00:25	1
NMeFOSA	<0.46		2.2	0.46	ng/L		10/12/21 19:14	10/14/21 00:25	1
NMeFOSAA	<1.3		5.4	1.3	ng/L		10/12/21 19:14	10/14/21 00:25	1
NEtFOSAA	<1.4		5.4	1.4	ng/L		10/12/21 19:14	10/14/21 00:25	1
NMeFOSE	<1.5		4.3	1.5	ng/L		10/12/21 19:14	10/14/21 00:25	1
NEtFOSE	<0.92		2.2	0.92	ng/L		10/12/21 19:14	10/14/21 00:25	1
4:2 FTS	<0.26		2.2	0.26	ng/L		10/12/21 19:14	10/14/21 00:25	1
6:2 FTS	<2.7		5.4	2.7	ng/L		10/12/21 19:14	10/14/21 00:25	1
8:2 FTS	<0.50		2.2	0.50	ng/L		10/12/21 19:14	10/14/21 00:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.43		2.2	0.43	ng/L		10/12/21 19:14	10/14/21 00:25	1
HFPO-DA (GenX)	<1.6		4.3	1.6	ng/L		10/12/21 19:14	10/14/21 00:25	1
9Cl-PF3ONS	<0.26		2.2	0.26	ng/L		10/12/21 19:14	10/14/21 00:25	1
11Cl-PF3OUdS	<0.34		2.2	0.34	ng/L		10/12/21 19:14	10/14/21 00:25	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C5 PFPeA	*103*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C2 PFHxA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C4 PFHpA	*100*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C4 PFOA	*100*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C5 PFNA	*96*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C2 PFDA	*90*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C2 PFUnA	*88*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C2 PFDoA	*79*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C2 PFTeDA	*75*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*
13C3 PFBS	*95*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:25*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-17
Date Collected: 10/05/21 17:08
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-45
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		25 - 150	10/12/21 19:14	10/14/21 00:25	1
13C4 PFOS	83		25 - 150	10/12/21 19:14	10/14/21 00:25	1
13C8 FOSA	88		10 - 150	10/12/21 19:14	10/14/21 00:25	1
d3-NMeFOSAA	71		25 - 150	10/12/21 19:14	10/14/21 00:25	1
d5-NEtFOSAA	74		25 - 150	10/12/21 19:14	10/14/21 00:25	1
d-N-MeFOSA-M	72		10 - 150	10/12/21 19:14	10/14/21 00:25	1
d-N-EtFOSA-M	71		10 - 150	10/12/21 19:14	10/14/21 00:25	1
d7-N-MeFOSE-M	88		10 - 150	10/12/21 19:14	10/14/21 00:25	1
d9-N-EtFOSE-M	84		10 - 150	10/12/21 19:14	10/14/21 00:25	1
M2-4:2 FTS	132		25 - 150	10/12/21 19:14	10/14/21 00:25	1
M2-6:2 FTS	106		25 - 150	10/12/21 19:14	10/14/21 00:25	1
M2-8:2 FTS	85		25 - 150	10/12/21 19:14	10/14/21 00:25	1
13C3 HFPO-DA	93		25 - 150	10/12/21 19:14	10/14/21 00:25	1
13C2 10:2 FTS	78		25 - 150	10/12/21 19:14	10/14/21 00:25	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-16
Date Collected: 10/05/21 16:50
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-46
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<120		250	120	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluoropentanoic acid (PFPeA)	<25		100	25	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorohexanoic acid (PFHxA)	**46**	**J**	100	29	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluoroheptanoic acid (PFHpA)	**110**		100	13	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorononanoic acid (PFNA)	**33**	**J**	100	14	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorodecanoic acid (PFDA)	<16		100	16	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluoroundecanoic acid (PFUnA)	<55		100	55	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorododecanoic acid (PFDoA)	<28		100	28	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorotridecanoic acid (PFTrDA)	<65		100	65	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorotetradecanoic acid (PFTeA)	<37		100	37	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorobutanesulfonic acid (PFBS)	**14**	**J**	100	10	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluoropentanesulfonic acid (PFPeS)	<15		100	15	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorohexanesulfonic acid (PFHxS)	<29		100	29	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluoroheptanesulfonic Acid (PFHpS)	<9.5		100	9.5	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorooctanesulfonic acid (PFOS)	<27		100	27	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorononanesulfonic acid (PFNS)	<19		100	19	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorodecanesulfonic acid (PFDS)	<16		100	16	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorododecanesulfonic acid (PFDoS)	<49		100	49	ng/L		10/12/21 19:14	10/14/21 00:34	1
Perfluorooctanesulfonamide (FOSA)	<49		100	49	ng/L		10/12/21 19:14	10/14/21 00:34	1
NEtFOSA	<44		100	44	ng/L		10/12/21 19:14	10/14/21 00:34	1
NMeFOSA	<22		100	22	ng/L		10/12/21 19:14	10/14/21 00:34	1
NMeFOSAA	<60		250	60	ng/L		10/12/21 19:14	10/14/21 00:34	1
NEtFOSAA	<65		250	65	ng/L		10/12/21 19:14	10/14/21 00:34	1
NMeFOSE	<70		200	70	ng/L		10/12/21 19:14	10/14/21 00:34	1
NEtFOSE	<43		100	43	ng/L		10/12/21 19:14	10/14/21 00:34	1
4:2 FTS	<12		100	12	ng/L		10/12/21 19:14	10/14/21 00:34	1
6:2 FTS	<130		250	130	ng/L		10/12/21 19:14	10/14/21 00:34	1
8:2 FTS	<23		100	23	ng/L		10/12/21 19:14	10/14/21 00:34	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<20		100	20	ng/L		10/12/21 19:14	10/14/21 00:34	1
HFPO-DA (GenX)	**93**	**J**	200	75	ng/L		10/12/21 19:14	10/14/21 00:34	1
9Cl-PF3ONS	<12		100	12	ng/L		10/12/21 19:14	10/14/21 00:34	1
11Cl-PF3OUdS	<16		100	16	ng/L		10/12/21 19:14	10/14/21 00:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*104*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C5 PFPeA	*107*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C2 PFHxA	*97*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C4 PFHpA	*104*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C4 PFOA	*103*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C5 PFNA	*105*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C2 PFDA	*107*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C2 PFUnA	*102*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C2 PFDoA	*94*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C2 PFTeDA	*93*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
13C3 PFBS	*102*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*
18O2 PFHxS	*104*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:34*	*1*

Client Sample ID: TW-16
Lab Sample ID: 320-80070-46
Date Collected: 10/05/21 16:50
Matrix: Water
Date Received: 10/08/21 10:35

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	94		25 - 150	10/12/21 19:14	10/14/21 00:34	1
13C8 FOSA	97		10 - 150	10/12/21 19:14	10/14/21 00:34	1
d3-NMeFOSAA	95		25 - 150	10/12/21 19:14	10/14/21 00:34	1
d5-NEtFOSAA	96		25 - 150	10/12/21 19:14	10/14/21 00:34	1
d-N-MeFOSA-M	84		10 - 150	10/12/21 19:14	10/14/21 00:34	1
d-N-EtFOSA-M	85		10 - 150	10/12/21 19:14	10/14/21 00:34	1
d7-N-MeFOSE-M	112		10 - 150	10/12/21 19:14	10/14/21 00:34	1
d9-N-EtFOSE-M	102		10 - 150	10/12/21 19:14	10/14/21 00:34	1
M2-4:2 FTS	129		25 - 150	10/12/21 19:14	10/14/21 00:34	1
M2-6:2 FTS	107		25 - 150	10/12/21 19:14	10/14/21 00:34	1
M2-8:2 FTS	102		25 - 150	10/12/21 19:14	10/14/21 00:34	1
13C3 HFPO-DA	104		25 - 150	10/12/21 19:14	10/14/21 00:34	1
13C2 10:2 FTS	95		25 - 150	10/12/21 19:14	10/14/21 00:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	26000		500	210	ng/L		10/12/21 19:14	10/14/21 22:59	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	97		25 - 150	10/12/21 19:14	10/14/21 22:59	5

Client Sample ID: TW-09

Date Collected: 10/05/21 16:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-47

Matrix: Water

Method: 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		10/12/21 19:14	10/14/21 00:43	1
Perfluoropentanoic acid (PFPeA)	<0.46		1.9	0.46	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorooctanoic acid (PFOA)	**8.9**		1.9	0.79	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.9	0.50	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.9	0.34	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.9	0.90	ng/L		10/12/21 19:14	10/14/21 00:43	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.9	0.91	ng/L		10/12/21 19:14	10/14/21 00:43	1
NEtFOSA	<0.81		1.9	0.81	ng/L		10/12/21 19:14	10/14/21 00:43	1
NMeFOSA	<0.40		1.9	0.40	ng/L		10/12/21 19:14	10/14/21 00:43	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		10/12/21 19:14	10/14/21 00:43	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		10/12/21 19:14	10/14/21 00:43	1
NMeFOSE	<1.3		3.7	1.3	ng/L		10/12/21 19:14	10/14/21 00:43	1
NEtFOSE	<0.79		1.9	0.79	ng/L		10/12/21 19:14	10/14/21 00:43	1
4:2 FTS	<0.22		1.9	0.22	ng/L		10/12/21 19:14	10/14/21 00:43	1
6:2 FTS	<2.3		4.7	2.3	ng/L		10/12/21 19:14	10/14/21 00:43	1
8:2 FTS	<0.43		1.9	0.43	ng/L		10/12/21 19:14	10/14/21 00:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		10/12/21 19:14	10/14/21 00:43	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		10/12/21 19:14	10/14/21 00:43	1
9Cl-PF3ONS	<0.22		1.9	0.22	ng/L		10/12/21 19:14	10/14/21 00:43	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		10/12/21 19:14	10/14/21 00:43	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*80*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C5 PFPeA	*93*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C2 PFHxA	*90*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C4 PFHpA	*93*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C4 PFOA	*96*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C5 PFNA	*92*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C2 PFDA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C2 PFUnA	*79*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C2 PFDoA	*77*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C2 PFTeDA	*72*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
13C3 PFBS	*85*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*
18O2 PFHxS	*87*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:43*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-09
Date Collected: 10/05/21 16:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-47
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	77		25 - 150	10/12/21 19:14	10/14/21 00:43	1
13C8 FOSA	84		10 - 150	10/12/21 19:14	10/14/21 00:43	1
d3-NMeFOSAA	75		25 - 150	10/12/21 19:14	10/14/21 00:43	1
d5-NEtFOSAA	75		25 - 150	10/12/21 19:14	10/14/21 00:43	1
d-N-MeFOSA-M	75		10 - 150	10/12/21 19:14	10/14/21 00:43	1
d-N-EtFOSA-M	70		10 - 150	10/12/21 19:14	10/14/21 00:43	1
d7-N-MeFOSE-M	91		10 - 150	10/12/21 19:14	10/14/21 00:43	1
d9-N-EtFOSE-M	85		10 - 150	10/12/21 19:14	10/14/21 00:43	1
M2-4:2 FTS	121		25 - 150	10/12/21 19:14	10/14/21 00:43	1
M2-6:2 FTS	104		25 - 150	10/12/21 19:14	10/14/21 00:43	1
M2-8:2 FTS	85		25 - 150	10/12/21 19:14	10/14/21 00:43	1
13C3 HFPO-DA	86		25 - 150	10/12/21 19:14	10/14/21 00:43	1
13C2 10:2 FTS	78		25 - 150	10/12/21 19:14	10/14/21 00:43	1

Client Sample ID: TW-08

Date Collected: 10/05/21 16:32
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-48

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<21		44	21	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluoropentanoic acid (PFPeA)	**13**	**J**	18	4.3	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorohexanoic acid (PFHxA)	**58**		18	5.1	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluoroheptanoic acid (PFHpA)	**120**		18	2.2	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorononanoic acid (PFNA)	<2.4		18	2.4	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorodecanoic acid (PFDA)	<2.7		18	2.7	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluoroundecanoic acid (PFUnA)	<9.7		18	9.7	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorododecanoic acid (PFDoA)	<4.9		18	4.9	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorotridecanoic acid (PFTrDA)	<11		18	11	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorotetradecanoic acid (PFTeA)	<6.5		18	6.5	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorobutanesulfonic acid (PFBS)	<1.8		18	1.8	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluoropentanesulfonic acid (PFPeS)	<2.7		18	2.7	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorohexanesulfonic acid (PFHxS)	<5.0		18	5.0	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluoroheptanesulfonic Acid (PFHpS)	<1.7		18	1.7	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorooctanesulfonic acid (PFOS)	<4.8		18	4.8	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorononanesulfonic acid (PFNS)	<3.3		18	3.3	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorodecanesulfonic acid (PFDS)	<2.8		18	2.8	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorododecanesulfonic acid (PFDoS)	<8.6		18	8.6	ng/L		10/12/21 19:14	10/14/21 01:02	10
Perfluorooctanesulfonamide (FOSA)	<8.7		18	8.7	ng/L		10/12/21 19:14	10/14/21 01:02	10
NEtFOSA	<7.7		18	7.7	ng/L		10/12/21 19:14	10/14/21 01:02	10
NMeFOSA	<3.8		18	3.8	ng/L		10/12/21 19:14	10/14/21 01:02	10
NMeFOSAA	<11		44	11	ng/L		10/12/21 19:14	10/14/21 01:02	10
NEtFOSAA	<11		44	11	ng/L		10/12/21 19:14	10/14/21 01:02	10
NMeFOSE	<12		35	12	ng/L		10/12/21 19:14	10/14/21 01:02	10
NEtFOSE	<7.5		18	7.5	ng/L		10/12/21 19:14	10/14/21 01:02	10
4:2 FTS	<2.1		18	2.1	ng/L		10/12/21 19:14	10/14/21 01:02	10
6:2 FTS	<22		44	22	ng/L		10/12/21 19:14	10/14/21 01:02	10
8:2 FTS	<4.1		18	4.1	ng/L		10/12/21 19:14	10/14/21 01:02	10
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<3.5		18	3.5	ng/L		10/12/21 19:14	10/14/21 01:02	10
HFPO-DA (GenX)	<13		35	13	ng/L		10/12/21 19:14	10/14/21 01:02	10
9Cl-PF3ONS	<2.1		18	2.1	ng/L		10/12/21 19:14	10/14/21 01:02	10
11Cl-PF3OUdS	<2.8		18	2.8	ng/L		10/12/21 19:14	10/14/21 01:02	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*87*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C5 PFPeA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C2 PFHxA	*78*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C4 PFHpA	*85*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C4 PFOA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C5 PFNA	*89*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C2 PFDA	*81*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C2 PFUnA	*77*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C2 PFDoA	*74*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C2 PFTeDA	*72*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C3 PFBS	*85*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
18O2 PFHxS	*87*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*
13C4 PFOS	*74*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:02*	*10*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-08
Date Collected: 10/05/21 16:32
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-48
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	83		10 - 150	10/12/21 19:14	10/14/21 01:02	10
d3-NMeFOSAA	76		25 - 150	10/12/21 19:14	10/14/21 01:02	10
d5-NEtFOSAA	80		25 - 150	10/12/21 19:14	10/14/21 01:02	10
d-N-MeFOSA-M	76		10 - 150	10/12/21 19:14	10/14/21 01:02	10
d-N-EtFOSA-M	64		10 - 150	10/12/21 19:14	10/14/21 01:02	10
d7-N-MeFOSE-M	99		10 - 150	10/12/21 19:14	10/14/21 01:02	10
d9-N-EtFOSE-M	87		10 - 150	10/12/21 19:14	10/14/21 01:02	10
M2-4:2 FTS	93		25 - 150	10/12/21 19:14	10/14/21 01:02	10
M2-6:2 FTS	81		25 - 150	10/12/21 19:14	10/14/21 01:02	10
M2-8:2 FTS	76		25 - 150	10/12/21 19:14	10/14/21 01:02	10
13C3 HFPO-DA	86		25 - 150	10/12/21 19:14	10/14/21 01:02	10
13C2 10:2 FTS	76		25 - 150	10/12/21 19:14	10/14/21 01:02	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	3800		35	15	ng/L		10/12/21 19:14	10/14/21 23:09	20

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	88		25 - 150	10/12/21 19:14	10/14/21 23:09	20

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-06
Date Collected: 10/05/21 17:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-49
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<21		44	21	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluoropentanoic acid (PFPeA)	**33**		18	4.3	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorohexanoic acid (PFHxA)	**51**		18	5.1	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluoroheptanoic acid (PFHpA)	**68**		18	2.2	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorooctanoic acid (PFOA)	**2900**		18	7.5	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorononanoic acid (PFNA)	<2.4		18	2.4	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorodecanoic acid (PFDA)	<2.7		18	2.7	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluoroundecanoic acid (PFUnA)	<9.7		18	9.7	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorododecanoic acid (PFDoA)	<4.8		18	4.8	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorotridecanoic acid (PFTrDA)	<11		18	11	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorotetradecanoic acid (PFTeA)	<6.4		18	6.4	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorobutanesulfonic acid (PFBS)	**1.9**	**J**	18	1.8	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluoropentanesulfonic acid (PFPeS)	<2.6		18	2.6	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorohexanesulfonic acid (PFHxS)	<5.0		18	5.0	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluoroheptanesulfonic Acid (PFHpS)	<1.7		18	1.7	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorooctanesulfonic acid (PFOS)	**7.4**	**J**	18	4.8	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorononanesulfonic acid (PFNS)	<3.3		18	3.3	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorodecanesulfonic acid (PFDS)	<2.8		18	2.8	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorododecanesulfonic acid (PFDoS)	<8.5		18	8.5	ng/L		10/12/21 19:14	10/14/21 01:38	10
Perfluorooctanesulfonamide (FOSA)	<8.6		18	8.6	ng/L		10/12/21 19:14	10/14/21 01:38	10
NEtFOSA	<7.7		18	7.7	ng/L		10/12/21 19:14	10/14/21 01:38	10
NMeFOSA	<3.8		18	3.8	ng/L		10/12/21 19:14	10/14/21 01:38	10
NMeFOSAA	<11		44	11	ng/L		10/12/21 19:14	10/14/21 01:38	10
NEtFOSAA	<11		44	11	ng/L		10/12/21 19:14	10/14/21 01:38	10
NMeFOSE	<12		35	12	ng/L		10/12/21 19:14	10/14/21 01:38	10
NEtFOSE	<7.5		18	7.5	ng/L		10/12/21 19:14	10/14/21 01:38	10
4:2 FTS	<2.1		18	2.1	ng/L		10/12/21 19:14	10/14/21 01:38	10
6:2 FTS	<22		44	22	ng/L		10/12/21 19:14	10/14/21 01:38	10
8:2 FTS	<4.0		18	4.0	ng/L		10/12/21 19:14	10/14/21 01:38	10
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<3.5		18	3.5	ng/L		10/12/21 19:14	10/14/21 01:38	10
HFPO-DA (GenX)	**15**	**J**	35	13	ng/L		10/12/21 19:14	10/14/21 01:38	10
9Cl-PF3ONS	<2.1		18	2.1	ng/L		10/12/21 19:14	10/14/21 01:38	10
11Cl-PF3OUdS	<2.8		18	2.8	ng/L		10/12/21 19:14	10/14/21 01:38	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C5 PFPeA	*88*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C2 PFHxA	*84*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C4 PFHpA	*84*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C4 PFOA	*89*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C5 PFNA	*86*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C2 PFDA	*85*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C2 PFUnA	*80*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C2 PFDoA	*75*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C2 PFTeDA	*64*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*
13C3 PFBS	*89*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:38*	*10*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-06
Date Collected: 10/05/21 17:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-49
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	91		25 - 150	10/12/21 19:14	10/14/21 01:38	10
13C4 PFOS	82		25 - 150	10/12/21 19:14	10/14/21 01:38	10
13C8 FOSA	85		10 - 150	10/12/21 19:14	10/14/21 01:38	10
d3-NMeFOSAA	78		25 - 150	10/12/21 19:14	10/14/21 01:38	10
d5-NEtFOSAA	80		25 - 150	10/12/21 19:14	10/14/21 01:38	10
d-N-MeFOSA-M	69		10 - 150	10/12/21 19:14	10/14/21 01:38	10
d-N-EtFOSA-M	70		10 - 150	10/12/21 19:14	10/14/21 01:38	10
d7-N-MeFOSE-M	85		10 - 150	10/12/21 19:14	10/14/21 01:38	10
d9-N-EtFOSE-M	79		10 - 150	10/12/21 19:14	10/14/21 01:38	10
M2-4:2 FTS	88		25 - 150	10/12/21 19:14	10/14/21 01:38	10
M2-6:2 FTS	92		25 - 150	10/12/21 19:14	10/14/21 01:38	10
M2-8:2 FTS	80		25 - 150	10/12/21 19:14	10/14/21 01:38	10
13C3 HFPO-DA	83		25 - 150	10/12/21 19:14	10/14/21 01:38	10
13C2 10:2 FTS	78		25 - 150	10/12/21 19:14	10/14/21 01:38	10

Client Sample ID: TW-05

Date Collected: 10/05/21 13:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-50

Matrix: Water

Method: 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		10/12/21 19:14	10/14/21 00:53	1
Perfluoropentanoic acid (PFPeA)	**1.0**	**J**	1.8	0.44	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorohexanoic acid (PFHxA)	**5.7**		1.8	0.52	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluoroheptanoic acid (PFHpA)	**6.4**		1.8	0.22	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorooctanoic acid (PFOA)	**94**		1.8	0.76	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluoroundecanoic acid (PFUnA)	<0.98		1.8	0.98	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorotetradecanoic acid (PFTeA)	<0.65		1.8	0.65	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		10/12/21 19:14	10/14/21 00:53	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		10/12/21 19:14	10/14/21 00:53	1
NEtFOSA	<0.78		1.8	0.78	ng/L		10/12/21 19:14	10/14/21 00:53	1
NMeFOSA	<0.38		1.8	0.38	ng/L		10/12/21 19:14	10/14/21 00:53	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		10/12/21 19:14	10/14/21 00:53	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		10/12/21 19:14	10/14/21 00:53	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/12/21 19:14	10/14/21 00:53	1
NEtFOSE	<0.76		1.8	0.76	ng/L		10/12/21 19:14	10/14/21 00:53	1
4:2 FTS	<0.21		1.8	0.21	ng/L		10/12/21 19:14	10/14/21 00:53	1
6:2 FTS	<2.2		4.5	2.2	ng/L		10/12/21 19:14	10/14/21 00:53	1
8:2 FTS	<0.41		1.8	0.41	ng/L		10/12/21 19:14	10/14/21 00:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/12/21 19:14	10/14/21 00:53	1
HFPO-DA (GenX)	<1.3		3.6	1.3	ng/L		10/12/21 19:14	10/14/21 00:53	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		10/12/21 19:14	10/14/21 00:53	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/12/21 19:14	10/14/21 00:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*82*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C5 PFPeA	*95*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C2 PFHxA	*85*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C4 PFHpA	*92*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C4 PFOA	*95*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C5 PFNA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C2 PFDA	*86*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C2 PFUnA	*80*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C2 PFDoA	*74*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C2 PFTeDA	*69*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
13C3 PFBS	*84*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*
18O2 PFHxS	*89*		*25 - 150*	*10/12/21 19:14*	*10/14/21 00:53*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-05
Date Collected: 10/05/21 13:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-50
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	78		25 - 150	10/12/21 19:14	10/14/21 00:53	1
13C8 FOSA	81		10 - 150	10/12/21 19:14	10/14/21 00:53	1
d3-NMeFOSAA	71		25 - 150	10/12/21 19:14	10/14/21 00:53	1
d5-NEtFOSAA	70		25 - 150	10/12/21 19:14	10/14/21 00:53	1
d-N-MeFOSA-M	70		10 - 150	10/12/21 19:14	10/14/21 00:53	1
d-N-EtFOSA-M	70		10 - 150	10/12/21 19:14	10/14/21 00:53	1
d7-N-MeFOSE-M	86		10 - 150	10/12/21 19:14	10/14/21 00:53	1
d9-N-EtFOSE-M	80		10 - 150	10/12/21 19:14	10/14/21 00:53	1
M2-4:2 FTS	129		25 - 150	10/12/21 19:14	10/14/21 00:53	1
M2-6:2 FTS	109		25 - 150	10/12/21 19:14	10/14/21 00:53	1
M2-8:2 FTS	84		25 - 150	10/12/21 19:14	10/14/21 00:53	1
13C3 HFPO-DA	92		25 - 150	10/12/21 19:14	10/14/21 00:53	1
13C2 10:2 FTS	75		25 - 150	10/12/21 19:14	10/14/21 00:53	1

Client Sample ID: TW-07

Date Collected: 10/05/21 14:22
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-51

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<24		50	24	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluoropentanoic acid (PFPeA)	<4.9		20	4.9	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorohexanoic acid (PFHxA)	**7.4**	**J**	20	5.7	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluoroheptanoic acid (PFHpA)	**13**	**J**	20	2.5	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorooctanoic acid (PFOA)	**780**		20	8.4	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorononanoic acid (PFNA)	<2.7		20	2.7	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorodecanoic acid (PFDA)	<3.1		20	3.1	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluoroundecanoic acid (PFUnA)	<11		20	11	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorododecanoic acid (PFDoA)	<5.5		20	5.5	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorotridecanoic acid (PFTrDA)	<13		20	13	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorotetradecanoic acid (PFTeA)	<7.2		20	7.2	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorobutanesulfonic acid (PFBS)	<2.0		20	2.0	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluoropentanesulfonic acid (PFPeS)	<3.0		20	3.0	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorohexanesulfonic acid (PFHxS)	<5.7		20	5.7	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluoroheptanesulfonic Acid (PFHpS)	<1.9		20	1.9	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorooctanesulfonic acid (PFOS)	<5.4		20	5.4	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorononanesulfonic acid (PFNS)	<3.7		20	3.7	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorodecanesulfonic acid (PFDS)	<3.2		20	3.2	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorododecanesulfonic acid (PFDoS)	<9.6		20	9.6	ng/L		10/12/21 19:14	10/14/21 01:47	10
Perfluorooctanesulfonamide (FOSA)	<9.7		20	9.7	ng/L		10/12/21 19:14	10/14/21 01:47	10
NEtFOSA	<8.6		20	8.6	ng/L		10/12/21 19:14	10/14/21 01:47	10
NMeFOSA	<4.3		20	4.3	ng/L		10/12/21 19:14	10/14/21 01:47	10
NMeFOSAA	<12		50	12	ng/L		10/12/21 19:14	10/14/21 01:47	10
NEtFOSAA	<13		50	13	ng/L		10/12/21 19:14	10/14/21 01:47	10
NMeFOSE	<14		40	14	ng/L		10/12/21 19:14	10/14/21 01:47	10
NEtFOSE	<8.4		20	8.4	ng/L		10/12/21 19:14	10/14/21 01:47	10
4:2 FTS	<2.4		20	2.4	ng/L		10/12/21 19:14	10/14/21 01:47	10
6:2 FTS	<25		50	25	ng/L		10/12/21 19:14	10/14/21 01:47	10
8:2 FTS	<4.6		20	4.6	ng/L		10/12/21 19:14	10/14/21 01:47	10
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<4.0		20	4.0	ng/L		10/12/21 19:14	10/14/21 01:47	10
HFPO-DA (GenX)	<15		40	15	ng/L		10/12/21 19:14	10/14/21 01:47	10
9Cl-PF3ONS	<2.4		20	2.4	ng/L		10/12/21 19:14	10/14/21 01:47	10
11Cl-PF3OUdS	<3.2		20	3.2	ng/L		10/12/21 19:14	10/14/21 01:47	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*88*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C5 PFPeA	*88*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C2 PFHxA	*82*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C4 PFHpA	*89*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C4 PFOA	*92*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C5 PFNA	*85*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C2 PFDA	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C2 PFUnA	*85*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C2 PFDoA	*79*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C2 PFTeDA	*69*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
13C3 PFBS	*82*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*
18O2 PFHxS	*86*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:47*	*10*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-07
Date Collected: 10/05/21 14:22
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-51
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	77		25 - 150	10/12/21 19:14	10/14/21 01:47	10
13C8 FOSA	81		10 - 150	10/12/21 19:14	10/14/21 01:47	10
d3-NMeFOSAA	81		25 - 150	10/12/21 19:14	10/14/21 01:47	10
d5-NEtFOSAA	85		25 - 150	10/12/21 19:14	10/14/21 01:47	10
d-N-MeFOSA-M	72		10 - 150	10/12/21 19:14	10/14/21 01:47	10
d-N-EtFOSA-M	71		10 - 150	10/12/21 19:14	10/14/21 01:47	10
d7-N-MeFOSE-M	99		10 - 150	10/12/21 19:14	10/14/21 01:47	10
d9-N-EtFOSE-M	87		10 - 150	10/12/21 19:14	10/14/21 01:47	10
M2-4:2 FTS	86		25 - 150	10/12/21 19:14	10/14/21 01:47	10
M2-6:2 FTS	93		25 - 150	10/12/21 19:14	10/14/21 01:47	10
M2-8:2 FTS	82		25 - 150	10/12/21 19:14	10/14/21 01:47	10
13C3 HFPO-DA	86		25 - 150	10/12/21 19:14	10/14/21 01:47	10
13C2 10:2 FTS	70		25 - 150	10/12/21 19:14	10/14/21 01:47	10

Client Sample ID: TW-04

Date Collected: 10/05/21 13:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-52

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<23		47	23	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluoropentanoic acid (PFPeA)	**6.3**	**J**	19	4.6	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorohexanoic acid (PFHxA)	**28**		19	5.5	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluoroheptanoic acid (PFHpA)	**40**		19	2.4	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorooctanoic acid (PFOA)	**790**		19	8.0	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorononanoic acid (PFNA)	<2.6		19	2.6	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorodecanoic acid (PFDA)	<2.9		19	2.9	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluoroundecanoic acid (PFUnA)	<10		19	10	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorododecanoic acid (PFDoA)	<5.2		19	5.2	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorotridecanoic acid (PFTrDA)	<12		19	12	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorotetradecanoic acid (PFTeA)	<6.9		19	6.9	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorobutanesulfonic acid (PFBS)	<1.9		19	1.9	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluoropentanesulfonic acid (PFPeS)	<2.8		19	2.8	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorohexanesulfonic acid (PFHxS)	<5.4		19	5.4	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluoroheptanesulfonic Acid (PFHpS)	<1.8		19	1.8	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorooctanesulfonic acid (PFOS)	<5.1		19	5.1	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorononanesulfonic acid (PFNS)	<3.5		19	3.5	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorodecanesulfonic acid (PFDS)	<3.0		19	3.0	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorododecanesulfonic acid (PFDoS)	<9.2		19	9.2	ng/L		10/12/21 19:14	10/14/21 01:56	10
Perfluorooctanesulfonamide (FOSA)	<9.3		19	9.3	ng/L		10/12/21 19:14	10/14/21 01:56	10
NEtFOSA	<8.2		19	8.2	ng/L		10/12/21 19:14	10/14/21 01:56	10
NMeFOSA	<4.1		19	4.1	ng/L		10/12/21 19:14	10/14/21 01:56	10
NMeFOSAA	<11		47	11	ng/L		10/12/21 19:14	10/14/21 01:56	10
NEtFOSAA	<12		47	12	ng/L		10/12/21 19:14	10/14/21 01:56	10
NMeFOSE	<13		38	13	ng/L		10/12/21 19:14	10/14/21 01:56	10
NEtFOSE	<8.0		19	8.0	ng/L		10/12/21 19:14	10/14/21 01:56	10
4:2 FTS	<2.3		19	2.3	ng/L		10/12/21 19:14	10/14/21 01:56	10
6:2 FTS	<24		47	24	ng/L		10/12/21 19:14	10/14/21 01:56	10
8:2 FTS	<4.3		19	4.3	ng/L		10/12/21 19:14	10/14/21 01:56	10
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<3.8		19	3.8	ng/L		10/12/21 19:14	10/14/21 01:56	10
HFPO-DA (GenX)	<14		38	14	ng/L		10/12/21 19:14	10/14/21 01:56	10
9Cl-PF3ONS	<2.3		19	2.3	ng/L		10/12/21 19:14	10/14/21 01:56	10
11Cl-PF3OUdS	<3.0		19	3.0	ng/L		10/12/21 19:14	10/14/21 01:56	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C5 PFPeA	*96*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C2 PFHxA	*87*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C4 PFHpA	*86*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C4 PFOA	*92*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C5 PFNA	*95*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C2 PFDA	*96*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C2 PFUnA	*86*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C2 PFDoA	*80*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C2 PFTeDA	*75*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
13C3 PFBS	*91*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*
18O2 PFHxS	*87*		*25 - 150*	*10/12/21 19:14*	*10/14/21 01:56*	*10*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-04
Date Collected: 10/05/21 13:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-52
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	84		25 - 150	10/12/21 19:14	10/14/21 01:56	10
13C8 FOSA	88		10 - 150	10/12/21 19:14	10/14/21 01:56	10
d3-NMeFOSAA	84		25 - 150	10/12/21 19:14	10/14/21 01:56	10
d5-NEtFOSAA	84		25 - 150	10/12/21 19:14	10/14/21 01:56	10
d-N-MeFOSA-M	74		10 - 150	10/12/21 19:14	10/14/21 01:56	10
d-N-EtFOSA-M	72		10 - 150	10/12/21 19:14	10/14/21 01:56	10
d7-N-MeFOSE-M	86		10 - 150	10/12/21 19:14	10/14/21 01:56	10
d9-N-EtFOSE-M	89		10 - 150	10/12/21 19:14	10/14/21 01:56	10
M2-4:2 FTS	102		25 - 150	10/12/21 19:14	10/14/21 01:56	10
M2-6:2 FTS	92		25 - 150	10/12/21 19:14	10/14/21 01:56	10
M2-8:2 FTS	82		25 - 150	10/12/21 19:14	10/14/21 01:56	10
13C3 HFPO-DA	87		25 - 150	10/12/21 19:14	10/14/21 01:56	10
13C2 10:2 FTS	72		25 - 150	10/12/21 19:14	10/14/21 01:56	10

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-10
Date Collected: 10/05/21 13:18
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-53
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**2.5**	**J**	4.5	2.2	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluoropentanoic acid (PFPeA)	**1.1**	**J**	1.8	0.44	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorohexanoic acid (PFHxA)	**6.5**		1.8	0.52	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluoroheptanoic acid (PFHpA)	**5.8**		1.8	0.23	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorooctanoic acid (PFOA)	**24**		1.8	0.77	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluoroundecanoic acid (PFUnA)	<0.99		1.8	0.99	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		10/12/21 19:23	10/13/21 19:06	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		10/12/21 19:23	10/13/21 19:06	1
NEtFOSA	<0.79		1.8	0.79	ng/L		10/12/21 19:23	10/13/21 19:06	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/12/21 19:23	10/13/21 19:06	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		10/12/21 19:23	10/13/21 19:06	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		10/12/21 19:23	10/13/21 19:06	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/12/21 19:23	10/13/21 19:06	1
NEtFOSE	<0.77		1.8	0.77	ng/L		10/12/21 19:23	10/13/21 19:06	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/12/21 19:23	10/13/21 19:06	1
6:2 FTS	<2.3		4.5	2.3	ng/L		10/12/21 19:23	10/13/21 19:06	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/12/21 19:23	10/13/21 19:06	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/12/21 19:23	10/13/21 19:06	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		10/12/21 19:23	10/13/21 19:06	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/12/21 19:23	10/13/21 19:06	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/12/21 19:23	10/13/21 19:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*82*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C5 PFPeA	*93*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C2 PFHxA	*87*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C4 PFHpA	*89*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C4 PFOA	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C5 PFNA	*86*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C2 PFDA	*87*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C2 PFUnA	*78*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C2 PFDoA	*73*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C2 PFTeDA	*71*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
13C3 PFBS	*80*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*
18O2 PFHxS	*81*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:06*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-10
Date Collected: 10/05/21 13:18
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-53
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	75		25 - 150	10/12/21 19:23	10/13/21 19:06	1
13C8 FOSA	77		10 - 150	10/12/21 19:23	10/13/21 19:06	1
d3-NMeFOSAA	68		25 - 150	10/12/21 19:23	10/13/21 19:06	1
d5-NEtFOSAA	70		25 - 150	10/12/21 19:23	10/13/21 19:06	1
d-N-MeFOSA-M	68		10 - 150	10/12/21 19:23	10/13/21 19:06	1
d-N-EtFOSA-M	68		10 - 150	10/12/21 19:23	10/13/21 19:06	1
d7-N-MeFOSE-M	87		10 - 150	10/12/21 19:23	10/13/21 19:06	1
d9-N-EtFOSE-M	76		10 - 150	10/12/21 19:23	10/13/21 19:06	1
M2-4:2 FTS	119		25 - 150	10/12/21 19:23	10/13/21 19:06	1
M2-6:2 FTS	100		25 - 150	10/12/21 19:23	10/13/21 19:06	1
M2-8:2 FTS	82		25 - 150	10/12/21 19:23	10/13/21 19:06	1
13C3 HFPO-DA	85		25 - 150	10/12/21 19:23	10/13/21 19:06	1
13C2 10:2 FTS	75		25 - 150	10/12/21 19:23	10/13/21 19:06	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-11
Date Collected: 10/05/21 11:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-54
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**35**		4.4	2.1	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluoropentanoic acid (PFPeA)	**20**		1.8	0.43	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorohexanoic acid (PFHxA)	**63**		1.8	0.51	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluoroheptanoic acid (PFHpA)	**79**		1.8	0.22	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorononanoic acid (PFNA)	**0.83**	**J**	1.8	0.24	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorodecanoic acid (PFDA)	<0.27		1.8	0.27	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluoroundecanoic acid (PFUnA)	<0.97		1.8	0.97	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.8	1.1	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.8	0.64	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorobutanesulfonic acid (PFBS)	**1.6**	**J**	1.8	0.18	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.8	0.26	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorohexanesulfonic acid (PFHxS)	**0.62**	**J I**	1.8	0.50	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.8	0.28	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorododecanesulfonic acid (PFDoS)	<0.86		1.8	0.86	ng/L		10/12/21 19:23	10/15/21 10:58	1
Perfluorooctanesulfonamide (FOSA)	<0.87		1.8	0.87	ng/L		10/12/21 19:23	10/15/21 10:58	1
NEtFOSA	<0.77		1.8	0.77	ng/L		10/12/21 19:23	10/15/21 10:58	1
NMeFOSA	<0.38		1.8	0.38	ng/L		10/12/21 19:23	10/15/21 10:58	1
NMeFOSAA	<1.1		4.4	1.1	ng/L		10/12/21 19:23	10/15/21 10:58	1
NEtFOSAA	<1.1		4.4	1.1	ng/L		10/12/21 19:23	10/15/21 10:58	1
NMeFOSE	<1.2		3.5	1.2	ng/L		10/12/21 19:23	10/15/21 10:58	1
NEtFOSE	<0.75		1.8	0.75	ng/L		10/12/21 19:23	10/15/21 10:58	1
4:2 FTS	<0.21		1.8	0.21	ng/L		10/12/21 19:23	10/15/21 10:58	1
6:2 FTS	<2.2		4.4	2.2	ng/L		10/12/21 19:23	10/15/21 10:58	1
8:2 FTS	<0.41		1.8	0.41	ng/L		10/12/21 19:23	10/15/21 10:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.8	0.35	ng/L		10/12/21 19:23	10/15/21 10:58	1
HFPO-DA (GenX)	<1.3		3.5	1.3	ng/L		10/12/21 19:23	10/15/21 10:58	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		10/12/21 19:23	10/15/21 10:58	1
11Cl-PF3OUdS	<0.28		1.8	0.28	ng/L		10/12/21 19:23	10/15/21 10:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*89*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C5 PFPeA	*85*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C2 PFHxA	*83*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C4 PFHpA	*95*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C5 PFNA	*91*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C2 PFDA	*85*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C2 PFUnA	*92*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C2 PFDoA	*86*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C2 PFTeDA	*89*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C3 PFBS	*81*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
18O2 PFHxS	*96*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*
13C4 PFOS	*85*		*25 - 150*	*10/12/21 19:23*	*10/15/21 10:58*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-11
Date Collected: 10/05/21 11:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-54
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 FOSA	87		10 - 150	10/12/21 19:23	10/15/21 10:58	1
d3-NMeFOSAA	74		25 - 150	10/12/21 19:23	10/15/21 10:58	1
d5-NEtFOSAA	89		25 - 150	10/12/21 19:23	10/15/21 10:58	1
d-N-MeFOSA-M	76		10 - 150	10/12/21 19:23	10/15/21 10:58	1
d-N-EtFOSA-M	69		10 - 150	10/12/21 19:23	10/15/21 10:58	1
d7-N-MeFOSE-M	74		10 - 150	10/12/21 19:23	10/15/21 10:58	1
d9-N-EtFOSE-M	90		10 - 150	10/12/21 19:23	10/15/21 10:58	1
M2-4:2 FTS	76		25 - 150	10/12/21 19:23	10/15/21 10:58	1
M2-6:2 FTS	78		25 - 150	10/12/21 19:23	10/15/21 10:58	1
M2-8:2 FTS	73		25 - 150	10/12/21 19:23	10/15/21 10:58	1
13C3 HFPO-DA	86		25 - 150	10/12/21 19:23	10/15/21 10:58	1
13C2 10:2 FTS	99		25 - 150	10/12/21 19:23	10/15/21 10:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	1800		18	7.5	ng/L		10/12/21 19:23	10/13/21 19:42	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	89		25 - 150	10/12/21 19:23	10/13/21 19:42	10

Client Sample ID: DUP-01

Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-55

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**35**		4.3	2.1	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluoropentanoic acid (PFPeA)	**18**		1.7	0.42	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorohexanoic acid (PFHxA)	**71**		1.7	0.50	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluoroheptanoic acid (PFHpA)	**94**		1.7	0.22	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorononanoic acid (PFNA)	**1.4**	**J**	1.7	0.23	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorodecanoic acid (PFDA)	<0.27		1.7	0.27	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluoroundecanoic acid (PFUnA)	<0.95		1.7	0.95	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.7	0.48	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorotetradecanoic acid (PFTeA)	<0.63		1.7	0.63	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorobutanesulfonic acid (PFBS)	**1.3**	**J**	1.7	0.17	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.7	0.26	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorohexanesulfonic acid (PFHxS)	**0.59**	**J I**	1.7	0.49	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.16		1.7	0.16	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorooctanesulfonic acid (PFOS)	<0.47		1.7	0.47	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.7	0.32	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.7	0.28	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorododecanesulfonic acid (PFDoS)	<0.84		1.7	0.84	ng/L		10/12/21 19:23	10/13/21 19:15	1
Perfluorooctanesulfonamide (FOSA)	<0.85		1.7	0.85	ng/L		10/12/21 19:23	10/13/21 19:15	1
NEtFOSA	<0.75		1.7	0.75	ng/L		10/12/21 19:23	10/13/21 19:15	1
NMeFOSA	<0.37		1.7	0.37	ng/L		10/12/21 19:23	10/13/21 19:15	1
NMeFOSAA	<1.0		4.3	1.0	ng/L		10/12/21 19:23	10/13/21 19:15	1
NEtFOSAA	<1.1		4.3	1.1	ng/L		10/12/21 19:23	10/13/21 19:15	1
NMeFOSE	<1.2		3.5	1.2	ng/L		10/12/21 19:23	10/13/21 19:15	1
NEtFOSE	<0.74		1.7	0.74	ng/L		10/12/21 19:23	10/13/21 19:15	1
4:2 FTS	<0.21		1.7	0.21	ng/L		10/12/21 19:23	10/13/21 19:15	1
6:2 FTS	<2.2		4.3	2.2	ng/L		10/12/21 19:23	10/13/21 19:15	1
8:2 FTS	<0.40		1.7	0.40	ng/L		10/12/21 19:23	10/13/21 19:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.7	0.35	ng/L		10/12/21 19:23	10/13/21 19:15	1
HFPO-DA (GenX)	<1.3		3.5	1.3	ng/L		10/12/21 19:23	10/13/21 19:15	1
9Cl-PF3ONS	<0.21		1.7	0.21	ng/L		10/12/21 19:23	10/13/21 19:15	1
11Cl-PF3OUdS	<0.28		1.7	0.28	ng/L		10/12/21 19:23	10/13/21 19:15	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C5 PFPeA	*103*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C2 PFHxA	*97*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C4 PFHpA	*95*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C4 PFOA	*90*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C5 PFNA	*97*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C2 PFDA	*94*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C2 PFUnA	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C2 PFDoA	*84*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C2 PFTeDA	*80*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
13C3 PFBS	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*
18O2 PFHxS	*89*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:15*	*1*

Client Sample ID: DUP-01

Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-55

Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	86		25 - 150	10/12/21 19:23	10/13/21 19:15	1
13C8 FOSA	88		10 - 150	10/12/21 19:23	10/13/21 19:15	1
d3-NMeFOSAA	85		25 - 150	10/12/21 19:23	10/13/21 19:15	1
d5-NEtFOSAA	84		25 - 150	10/12/21 19:23	10/13/21 19:15	1
d-N-MeFOSA-M	78		10 - 150	10/12/21 19:23	10/13/21 19:15	1
d-N-EtFOSA-M	78		10 - 150	10/12/21 19:23	10/13/21 19:15	1
d7-N-MeFOSE-M	99		10 - 150	10/12/21 19:23	10/13/21 19:15	1
d9-N-EtFOSE-M	91		10 - 150	10/12/21 19:23	10/13/21 19:15	1
M2-4:2 FTS	128		25 - 150	10/12/21 19:23	10/13/21 19:15	1
M2-6:2 FTS	83		25 - 150	10/12/21 19:23	10/13/21 19:15	1
M2-8:2 FTS	91		25 - 150	10/12/21 19:23	10/13/21 19:15	1
13C3 HFPO-DA	97		25 - 150	10/12/21 19:23	10/13/21 19:15	1
13C2 10:2 FTS	83		25 - 150	10/12/21 19:23	10/13/21 19:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	2000		17	7.4	ng/L		10/12/21 19:23	10/15/21 02:16	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	87		25 - 150	10/12/21 19:23	10/15/21 02:16	10

Client Sample ID: TW-02

Date Collected: 10/05/21 10:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-56

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<21		44	21	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluoropentanoic acid (PFPeA)	<4.3		18	4.3	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorohexanoic acid (PFHxA)	**17**	**J**	18	5.1	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluoroheptanoic acid (PFHpA)	**29**		18	2.2	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorooctanoic acid (PFOA)	**990**		18	7.5	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorononanoic acid (PFNA)	<2.4		18	2.4	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorodecanoic acid (PFDA)	<2.7		18	2.7	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluoroundecanoic acid (PFUnA)	<9.7		18	9.7	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorododecanoic acid (PFDoA)	<4.9		18	4.9	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorotridecanoic acid (PFTrDA)	<11		18	11	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorotetradecanoic acid (PFTeA)	<6.4		18	6.4	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorobutanesulfonic acid (PFBS)	<1.8		18	1.8	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluoropentanesulfonic acid (PFPeS)	<2.7		18	2.7	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorohexanesulfonic acid (PFHxS)	<5.0		18	5.0	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluoroheptanesulfonic Acid (PFHpS)	<1.7		18	1.7	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorooctanesulfonic acid (PFOS)	<4.8		18	4.8	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorononanesulfonic acid (PFNS)	<3.3		18	3.3	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorodecanesulfonic acid (PFDS)	<2.8		18	2.8	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorododecanesulfonic acid (PFDoS)	<8.6		18	8.6	ng/L		10/12/21 19:23	10/13/21 19:51	10
Perfluorooctanesulfonamide (FOSA)	<8.7		18	8.7	ng/L		10/12/21 19:23	10/13/21 19:51	10
NEtFOSA	<7.7		18	7.7	ng/L		10/12/21 19:23	10/13/21 19:51	10
NMeFOSA	<3.8		18	3.8	ng/L		10/12/21 19:23	10/13/21 19:51	10
NMeFOSAA	<11		44	11	ng/L		10/12/21 19:23	10/13/21 19:51	10
NEtFOSAA	<11		44	11	ng/L		10/12/21 19:23	10/13/21 19:51	10
NMeFOSE	<12		35	12	ng/L		10/12/21 19:23	10/13/21 19:51	10
NEtFOSE	<7.5		18	7.5	ng/L		10/12/21 19:23	10/13/21 19:51	10
4:2 FTS	<2.1		18	2.1	ng/L		10/12/21 19:23	10/13/21 19:51	10
6:2 FTS	<22		44	22	ng/L		10/12/21 19:23	10/13/21 19:51	10
8:2 FTS	<4.1		18	4.1	ng/L		10/12/21 19:23	10/13/21 19:51	10
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<3.5		18	3.5	ng/L		10/12/21 19:23	10/13/21 19:51	10
HFPO-DA (GenX)	<13		35	13	ng/L		10/12/21 19:23	10/13/21 19:51	10
9Cl-PF3ONS	<2.1		18	2.1	ng/L		10/12/21 19:23	10/13/21 19:51	10
11Cl-PF3OUdS	<2.8		18	2.8	ng/L		10/12/21 19:23	10/13/21 19:51	10

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*86*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C5 PFPeA	*85*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C2 PFHxA	*80*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C4 PFHpA	*88*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C4 PFOA	*89*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C5 PFNA	*90*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C2 PFDA	*82*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C2 PFUnA	*84*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C2 PFDoA	*75*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C2 PFTeDA	*72*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
13C3 PFBS	*87*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*
18O2 PFHxS	*85*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:51*	*10*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-02
Date Collected: 10/05/21 10:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-56
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	76		25 - 150	10/12/21 19:23	10/13/21 19:51	10
13C8 FOSA	86		10 - 150	10/12/21 19:23	10/13/21 19:51	10
d3-NMeFOSAA	81		25 - 150	10/12/21 19:23	10/13/21 19:51	10
d5-NEtFOSAA	81		25 - 150	10/12/21 19:23	10/13/21 19:51	10
d-N-MeFOSA-M	69		10 - 150	10/12/21 19:23	10/13/21 19:51	10
d-N-EtFOSA-M	70		10 - 150	10/12/21 19:23	10/13/21 19:51	10
d7-N-MeFOSE-M	93		10 - 150	10/12/21 19:23	10/13/21 19:51	10
d9-N-EtFOSE-M	88		10 - 150	10/12/21 19:23	10/13/21 19:51	10
M2-4:2 FTS	100		25 - 150	10/12/21 19:23	10/13/21 19:51	10
M2-6:2 FTS	85		25 - 150	10/12/21 19:23	10/13/21 19:51	10
M2-8:2 FTS	78		25 - 150	10/12/21 19:23	10/13/21 19:51	10
13C3 HFPO-DA	80		25 - 150	10/12/21 19:23	10/13/21 19:51	10
13C2 10:2 FTS	76		25 - 150	10/12/21 19:23	10/13/21 19:51	10

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: DUP-02

Date Collected: 10/06/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-57

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**16**		4.7	2.2	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluoropentanoic acid (PFPeA)	**5.1**		1.9	0.46	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorohexanoic acid (PFHxA)	**2.3**		1.9	0.54	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluoroheptanoic acid (PFHpA)	**2.3**		1.9	0.23	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorooctanoic acid (PFOA)	**240**		1.9	0.80	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorobutanesulfonic acid (PFBS)	**1.3**	**J I**	1.9	0.19	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorohexanesulfonic acid (PFHxS)	**0.65**	**J**	1.9	0.53	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorooctanesulfonic acid (PFOS)	**3.7**		1.9	0.51	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorododecanesulfonic acid (PFDoS)	<0.91		1.9	0.91	ng/L		10/12/21 19:23	10/13/21 19:24	1
Perfluorooctanesulfonamide (FOSA)	<0.92		1.9	0.92	ng/L		10/12/21 19:23	10/13/21 19:24	1
NEtFOSA	<0.82		1.9	0.82	ng/L		10/12/21 19:23	10/13/21 19:24	1
NMeFOSA	<0.40		1.9	0.40	ng/L		10/12/21 19:23	10/13/21 19:24	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		10/12/21 19:23	10/13/21 19:24	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		10/12/21 19:23	10/13/21 19:24	1
NMeFOSE	<1.3		3.7	1.3	ng/L		10/12/21 19:23	10/13/21 19:24	1
NEtFOSE	<0.80		1.9	0.80	ng/L		10/12/21 19:23	10/13/21 19:24	1
4:2 FTS	<0.22		1.9	0.22	ng/L		10/12/21 19:23	10/13/21 19:24	1
6:2 FTS	<2.3		4.7	2.3	ng/L		10/12/21 19:23	10/13/21 19:24	1
8:2 FTS	<0.43		1.9	0.43	ng/L		10/12/21 19:23	10/13/21 19:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		10/12/21 19:23	10/13/21 19:24	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		10/12/21 19:23	10/13/21 19:24	1
9Cl-PF3ONS	<0.22		1.9	0.22	ng/L		10/12/21 19:23	10/13/21 19:24	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		10/12/21 19:23	10/13/21 19:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*53*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C5 PFPeA	*82*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C2 PFHxA	*90*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C4 PFHpA	*93*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C4 PFOA	*98*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C5 PFNA	*96*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C2 PFDA	*94*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C2 PFUnA	*86*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C2 PFDoA	*79*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*
13C2 PFTeDA	*72*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:24*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: DUP-02
Date Collected: 10/06/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-57
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	93		25 - 150	10/12/21 19:23	10/13/21 19:24	1
18O2 PFHxS	96		25 - 150	10/12/21 19:23	10/13/21 19:24	1
13C4 PFOS	86		25 - 150	10/12/21 19:23	10/13/21 19:24	1
13C8 FOSA	87		10 - 150	10/12/21 19:23	10/13/21 19:24	1
d3-NMeFOSAA	73		25 - 150	10/12/21 19:23	10/13/21 19:24	1
d5-NEtFOSAA	71		25 - 150	10/12/21 19:23	10/13/21 19:24	1
d-N-MeFOSA-M	80		10 - 150	10/12/21 19:23	10/13/21 19:24	1
d-N-EtFOSA-M	73		10 - 150	10/12/21 19:23	10/13/21 19:24	1
d7-N-MeFOSE-M	82		10 - 150	10/12/21 19:23	10/13/21 19:24	1
d9-N-EtFOSE-M	79		10 - 150	10/12/21 19:23	10/13/21 19:24	1
M2-4:2 FTS	144		25 - 150	10/12/21 19:23	10/13/21 19:24	1
M2-6:2 FTS	134		25 - 150	10/12/21 19:23	10/13/21 19:24	1
M2-8:2 FTS	115		25 - 150	10/12/21 19:23	10/13/21 19:24	1
13C3 HFPO-DA	83		25 - 150	10/12/21 19:23	10/13/21 19:24	1
13C2 10:2 FTS	84		25 - 150	10/12/21 19:23	10/13/21 19:24	1

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-03
Date Collected: 10/05/21 09:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-58
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**13**		5.0	2.4	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluoropentanoic acid (PFPeA)	**3.1**		2.0	0.49	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorohexanoic acid (PFHxA)	**7.9**		2.0	0.58	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluoroheptanoic acid (PFHpA)	**4.1**		2.0	0.25	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorooctanoic acid (PFOA)	**21**		2.0	0.85	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		10/12/21 19:23	10/13/21 19:33	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		10/12/21 19:23	10/13/21 19:33	1
NEtFOSA	<0.87		2.0	0.87	ng/L		10/12/21 19:23	10/13/21 19:33	1
NMeFOSA	<0.43		2.0	0.43	ng/L		10/12/21 19:23	10/13/21 19:33	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		10/12/21 19:23	10/13/21 19:33	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		10/12/21 19:23	10/13/21 19:33	1
NMeFOSE	<1.4		4.0	1.4	ng/L		10/12/21 19:23	10/13/21 19:33	1
NEtFOSE	<0.85		2.0	0.85	ng/L		10/12/21 19:23	10/13/21 19:33	1
4:2 FTS	<0.24		2.0	0.24	ng/L		10/12/21 19:23	10/13/21 19:33	1
6:2 FTS	<2.5		5.0	2.5	ng/L		10/12/21 19:23	10/13/21 19:33	1
8:2 FTS	<0.46		2.0	0.46	ng/L		10/12/21 19:23	10/13/21 19:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		10/12/21 19:23	10/13/21 19:33	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		10/12/21 19:23	10/13/21 19:33	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		10/12/21 19:23	10/13/21 19:33	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		10/12/21 19:23	10/13/21 19:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*84*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C5 PFPeA	*93*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C2 PFHxA	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C4 PFHpA	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C4 PFOA	*93*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C5 PFNA	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C2 PFDA	*86*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C2 PFUnA	*78*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C2 PFDoA	*71*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C2 PFTeDA	*69*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
13C3 PFBS	*87*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*
18O2 PFHxS	*88*		*25 - 150*	*10/12/21 19:23*	*10/13/21 19:33*	*1*

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-03
Date Collected: 10/05/21 09:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-58
Matrix: Water

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	76		25 - 150	10/12/21 19:23	10/13/21 19:33	1
13C8 FOSA	78		10 - 150	10/12/21 19:23	10/13/21 19:33	1
d3-NMeFOSAA	69		25 - 150	10/12/21 19:23	10/13/21 19:33	1
d5-NEtFOSAA	71		25 - 150	10/12/21 19:23	10/13/21 19:33	1
d-N-MeFOSA-M	65		10 - 150	10/12/21 19:23	10/13/21 19:33	1
d-N-EtFOSA-M	64		10 - 150	10/12/21 19:23	10/13/21 19:33	1
d7-N-MeFOSE-M	84		10 - 150	10/12/21 19:23	10/13/21 19:33	1
d9-N-EtFOSE-M	79		10 - 150	10/12/21 19:23	10/13/21 19:33	1
M2-4:2 FTS	126		25 - 150	10/12/21 19:23	10/13/21 19:33	1
M2-6:2 FTS	98		25 - 150	10/12/21 19:23	10/13/21 19:33	1
M2-8:2 FTS	85		25 - 150	10/12/21 19:23	10/13/21 19:33	1
13C3 HFPO-DA	91		25 - 150	10/12/21 19:23	10/13/21 19:33	1
13C2 10:2 FTS	75		25 - 150	10/12/21 19:23	10/13/21 19:33	1

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

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)
320-80070-1	SS-04	71	75	72	73	78	79	80	76
320-80070-2	GP-04 (4-6)	72	76	72	72	78	78	79	78
320-80070-3	GP-05 (0-2)	77	81	75	78	81	85	86	83
320-80070-4	GP-05 (4-6)	75	80	74	78	79	82	84	82
320-80070-5	GP-06 (0-4)	79	84	77	85	85	87	90	85
320-80070-6	GP-06 (5-7)	74	77	72	74	80	81	84	81
320-80070-7	GP-07 (0-2)	70	75	71	71	78	80	78	79
320-80070-8	GP-07 (3-5)	69	76	67	72	77	78	77	75
320-80070-9	GP-08 (0-2)	68	69	66	70	74	73	78	76
320-80070-10	GP-08 (3-5)	75	76	71	76	79	81	80	81
320-80070-11	SS-09	73	75	72	76	78	80	84	79
320-80070-12	GP-09 (5-7)	72	75	72	76	79	81	81	78
320-80070-13	GP-10 (0-2)	67	72	66	70	74	75	78	73
320-80070-14	GP-10 (3-5)	75	77	73	75	77	80	82	79
320-80070-15	GP-11 (0-2)	74	81	75	81	85	87	90	86
320-80070-16	GP-11 (4-6)	7 *5-	47	69	77	81	81	81	26
320-80070-17	GP-12 (0-2)	65	67	63	66	74	74	77	72
320-80070-18	GP-12 (4-6)	73	73	71	79	82	80	79	78
320-80070-19	SS-10	68	72	70	71	72	77	74	73
320-80070-20 - DL	GP-16 (1-3)					81			
320-80070-20	GP-16 (1-3)	72	71	75	82		77	79	82
320-80070-20 MS - DL	GP-16 (1-3)					79			
320-80070-20 MS	GP-16 (1-3)	73	75	70	80		83	82	76
320-80070-20 MSD - DL	GP-16 (1-3)					83			
320-80070-20 MSD	GP-16 (1-3)	71	78	81	85		79	79	87
320-80070-21	GP-16 (3-5)	58	67	66	68	70	71	73	69
320-80070-21 MS	GP-16 (3-5)	51	60	58	61	63	65	66	62
320-80070-21 MSD	GP-16 (3-5)	60	68	62	66	68	70	72	71
320-80070-22	DUP-S-01	54	64	61	65	67	69	70	68
320-80070-23	DUP-S-02	73	78	72	74	79	79	83	78
320-80070-24	DUP-S-03	69	79	72	77		84	85	81
320-80070-24 - DL	DUP-S-03					76			
320-80070-25	GP-17 (1-3)	66	74	70	76	77	77	80	79
320-80070-26	GP-17 (3-5)	57	65	63	65	70	68	72	71
320-80070-27	GP-13 (7-9)	56	70	65	70	75	75	75	75
320-80070-28	GP-13 (9-11)	50	60	56	57	64	62	64	62
320-80070-29	GP-14 (7-9)	62	76	71	75	77	81	83	80
320-80070-30	GP-14 (9-11)	47	51	48	51	53	54	55	55
320-80070-31	GP-15 (5-7)	57	71	65	69	72	74	76	73
320-80070-32	GP-15 (7-9)	45	56	55	59	62	62	64	62
LCS 320-533122/2-A	Lab Control Sample	68	76	73	75	76	80	82	80
LCS 320-533125/2-A	Lab Control Sample	75	78	73	73	78	79	83	81
MB 320-533122/1-A	Method Blank	66	80	71	77	79	77	77	76
MB 320-533125/1-A	Method Blank	72	73	64	72	76	76	76	73

		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)
320-80070-1	SS-04	75	67	73	74	72	73	79	78
320-80070-2	GP-04 (4-6)	77	68	66	70	68	74	75	74

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

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)
320-80070-3	GP-05 (0-2)	79	75	78	79	75	81	84	85
320-80070-4	GP-05 (4-6)	78	73	74	78	76	78	86	84
320-80070-5	GP-06 (0-4)	82	74	80	81	80	81	84	86
320-80070-6	GP-06 (5-7)	77	73	71	73	71	76	77	83
320-80070-7	GP-07 (0-2)	72	67	66	66	63	72	73	75
320-80070-8	GP-07 (3-5)	74	66	64	66	65	71	71	74
320-80070-9	GP-08 (0-2)	71	65	64	69	68	73	72	77
320-80070-10	GP-08 (3-5)	74	66	73	75	72	78	83	84
320-80070-11	SS-09	74	55	71	72	70	73	82	84
320-80070-12	GP-09 (5-7)	75	70	66	69	69	74	74	75
320-80070-13	GP-10 (0-2)	70	66	66	69	64	70	72	74
320-80070-14	GP-10 (3-5)	73	68	74	75	70	76	75	83
320-80070-15	GP-11 (0-2)	80	78	78	81	78	85	90	89
320-80070-16	GP-11 (4-6)	17 *5-	38	69	70	69	76	21 *5-	10 *5-
320-80070-17	GP-12 (0-2)	69	63	64	64	64	69	74	73
320-80070-18	GP-12 (4-6)	75	68	67	69	67	74	79	80
320-80070-19	SS-10	66	66	68	69	68	70	75	81
320-80070-20 - DL	GP-16 (1-3)								
320-80070-20	GP-16 (1-3)	76	77	63	76	72	75	78	76
320-80070-20 MS - DL	GP-16 (1-3)								
320-80070-20 MS	GP-16 (1-3)	79	79	63	74	73	75	74	80
320-80070-20 MSD - DL	GP-16 (1-3)								
320-80070-20 MSD	GP-16 (1-3)	83	80	69	77	73	80	81	81
320-80070-21	GP-16 (3-5)	66	62	68	68	66	65	65	70
320-80070-21 MS	GP-16 (3-5)	62	58	60	60	58	59	60	62
320-80070-21 MSD	GP-16 (3-5)	68	64	66	68	66	65	68	72
320-80070-22	DUP-S-01	64	62	63	65	63	64	66	68
320-80070-23	DUP-S-02	77	74	73	74	72	76	79	80
320-80070-24	DUP-S-03	79	74	73	73	69	78	81	84
320-80070-24 - DL	DUP-S-03								
320-80070-25	GP-17 (1-3)	73	69	71	74	71	76	78	78
320-80070-26	GP-17 (3-5)	68	65	68	70	65	68	72	72
320-80070-27	GP-13 (7-9)	72	69	71	71	68	70	76	82
320-80070-28	GP-13 (9-11)	61	56	57	59	56	58	61	65
320-80070-29	GP-14 (7-9)	77	72	72	72	69	74	82	82
320-80070-30	GP-14 (9-11)	54	52	54	52	52	53	57	59
320-80070-31	GP-15 (5-7)	72	68	72	73	70	71	72	76
320-80070-32	GP-15 (7-9)	61	57	62	62	58	61	63	69
LCS 320-533122/2-A	Lab Control Sample	75	73	75	76	73	75	89	87
LCS 320-533125/2-A	Lab Control Sample	77	65	74	77	74	76	86	90
MB 320-533122/1-A	Method Blank	75	69	72	75	70	75	88	87
MB 320-533125/1-A	Method Blank	71	60	70	70	66	73	82	86

		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)
320-80070-1	SS-04	75	74	86	83	88	86	87	73
320-80070-2	GP-04 (4-6)	79	81	92	87	72	70	62	74
320-80070-3	GP-05 (0-2)	80	83	96	90	88	81	78	80
320-80070-4	GP-05 (4-6)	83	81	95	88	90	79	80	79
320-80070-5	GP-06 (0-4)	83	84	97	92	98	91	81	81

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

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)
320-80070-6	GP-06 (5-7)	78	77	91	88	82	77	74	73
320-80070-7	GP-07 (0-2)	74	74	91	85	72	69	69	73
320-80070-8	GP-07 (3-5)	76	75	87	84	74	69	67	70
320-80070-9	GP-08 (0-2)	76	74	86	81	71	73	77	69
320-80070-10	GP-08 (3-5)	82	81	87	82	84	77	77	74
320-80070-11	SS-09	79	77	90	86	88	87	91	74
320-80070-12	GP-09 (5-7)	76	79	91	86	76	74	70	73
320-80070-13	GP-10 (0-2)	74	73	87	81	71	73	68	69
320-80070-14	GP-10 (3-5)	80	78	92	85	86	84	78	74
320-80070-15	GP-11 (0-2)	86	84	97	95	92	89	86	80
320-80070-16	GP-11 (4-6)	18	24	22	25	82	119	113	71
320-80070-17	GP-12 (0-2)	75	73	84	81	76	84	84	67
320-80070-18	GP-12 (4-6)	77	77	91	85	78	78	72	74
320-80070-19	SS-10	73	70	84	82	91	96	94	70
320-80070-20 - DL	GP-16 (1-3)								
320-80070-20	GP-16 (1-3)	78	67	69	74	61	58	52	78
320-80070-20 MS - DL	GP-16 (1-3)								
320-80070-20 MS	GP-16 (1-3)	69	75	74	76	64	59	53	77
320-80070-20 MSD - DL	GP-16 (1-3)								
320-80070-20 MSD	GP-16 (1-3)	78	81	66	83	65	64	58	80
320-80070-21	GP-16 (3-5)	68	69	76	74	95	68	67	69
320-80070-21 MS	GP-16 (3-5)	61	61	69	69	87	62	63	62
320-80070-21 MSD	GP-16 (3-5)	67	71	77	74	96	73	70	67
320-80070-22	DUP-S-01	64	67	73	73	101	91	89	62
320-80070-23	DUP-S-02	76	80	90	86	107	85	79	78
320-80070-24	DUP-S-03	78	82	91	89	101	67	75	78
320-80070-24 - DL	DUP-S-03								
320-80070-25	GP-17 (1-3)	77	79	87	84	99	80	79	74
320-80070-26	GP-17 (3-5)	68	71	79	76	93	79	69	68
320-80070-27	GP-13 (7-9)	72	73	83	80	99	79	79	71
320-80070-28	GP-13 (9-11)	60	63	67	66	84	72	75	61
320-80070-29	GP-14 (7-9)	74	79	87	86	95	80	78	75
320-80070-30	GP-14 (9-11)	52	55	62	60	68	61	59	52
320-80070-31	GP-15 (5-7)	70	76	81	79	99	85	80	70
320-80070-32	GP-15 (7-9)	58	62	68	66	83	75	70	57
LCS 320-533122/2-A	Lab Control Sample	79	75	91	89	99	91	81	77
LCS 320-533125/2-A	Lab Control Sample	79	79	93	93	101	91	83	77
MB 320-533122/1-A	Method Blank	77	74	90	85	97	89	80	75
MB 320-533125/1-A	Method Blank	73	71	88	86	89	85	77	69

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M102FTS (25-150)							
320-80070-1	SS-04	89							
320-80070-2	GP-04 (4-6)	70							
320-80070-3	GP-05 (0-2)	83							
320-80070-4	GP-05 (4-6)	86							
320-80070-5	GP-06 (0-4)	85							
320-80070-6	GP-06 (5-7)	77							
320-80070-7	GP-07 (0-2)	72							
320-80070-8	GP-07 (3-5)	69							

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

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)
320-80070-9	GP-08 (0-2)	77
320-80070-10	GP-08 (3-5)	82
320-80070-11	SS-09	97
320-80070-12	GP-09 (5-7)	73
320-80070-13	GP-10 (0-2)	76
320-80070-14	GP-10 (3-5)	85
320-80070-15	GP-11 (0-2)	89
320-80070-16	GP-11 (4-6)	20 *5-
320-80070-17	GP-12 (0-2)	82
320-80070-18	GP-12 (4-6)	74
320-80070-19	SS-10	84
320-80070-20 - DL	GP-16 (1-3)	
320-80070-20	GP-16 (1-3)	77
320-80070-20 MS - DL	GP-16 (1-3)	
320-80070-20 MS	GP-16 (1-3)	73
320-80070-20 MSD - DL	GP-16 (1-3)	
320-80070-20 MSD	GP-16 (1-3)	75
320-80070-21	GP-16 (3-5)	74
320-80070-21 MS	GP-16 (3-5)	68
320-80070-21 MSD	GP-16 (3-5)	75
320-80070-22	DUP-S-01	82
320-80070-23	DUP-S-02	86
320-80070-24	DUP-S-03	81
320-80070-24 - DL	DUP-S-03	
320-80070-25	GP-17 (1-3)	83
320-80070-26	GP-17 (3-5)	77
320-80070-27	GP-13 (7-9)	91
320-80070-28	GP-13 (9-11)	78
320-80070-29	GP-14 (7-9)	86
320-80070-30	GP-14 (9-11)	65
320-80070-31	GP-15 (5-7)	84
320-80070-32	GP-15 (7-9)	75
LCS 320-533122/2-A	Lab Control Sample	87
LCS 320-533125/2-A	Lab Control Sample	81
MB 320-533122/1-A	Method Blank	90
MB 320-533125/1-A	Method Blank	80

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

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

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

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)
320-80070-33	TW-01	87	98	92	92	96	92	91	84
320-80070-34	TW-12	71	88	90	94	96	92	91	83
320-80070-35	FB-01	98	99	92	101	104	102	102	99
320-80070-36	EB-01	93	99	92	93	99	101	100	94
320-80070-37	EB-02	93	97	92	93	98	102	100	90
320-80070-38	EB-03	97	99	94	99	100	105	104	98
320-80070-39	EB-04	95	95	91	94	99	101	100	93
320-80070-40	FB-02	98	99	92	98	99	102	102	97
320-80070-41	FB-03	98	99	95	98	100	106	100	98
320-80070-42	TW-13	93	102	97	101	101	101	103	97
320-80070-43	TW-14	77	91	87	91	93	91	92	81
320-80070-44	TW-15	53	80	89	95	96	93	95	85
320-80070-45	TW-17	89	103	91	100	100	96	90	88
320-80070-46	TW-16	104	107	97	104	103	105	107	102
320-80070-46 - DL	TW-16					97			
320-80070-47	TW-09	80	93	90	93	96	92	91	79
320-80070-48	TW-08	87	91	78	85	91	89	81	77
320-80070-48 - DL	TW-08					88			
320-80070-49	TW-06	89	88	84	84	89	86	85	80
320-80070-50	TW-05	82	95	85	92	95	91	86	80
320-80070-51	TW-07	88	88	82	89	92	85	91	85
320-80070-52	TW-04	90	96	87	86	92	95	96	86
320-80070-53	TW-10	82	93	87	89	91	86	87	78
320-80070-54 - DL	TW-11					89			
320-80070-54	TW-11	89	85	83	95		91	85	92
320-80070-55	DUP-01	91	103	97	95	90	97	94	91
320-80070-55 - DL	DUP-01					87			
320-80070-56	TW-02	86	85	80	88	89	90	82	84
320-80070-57	DUP-02	53	82	90	93	98	96	94	86
320-80070-58	TW-03	84	93	91	91	93	91	86	78
LCS 320-533397/2-A	Lab Control Sample	99	98	89	95	98	101	105	99
LCS 320-533400/2-A	Lab Control Sample	96	103	93	99	101	100	103	100
LCSD 320-533397/3-A	Lab Control Sample Dup	95	96	88	95	100	98	99	93
LCSD 320-533400/3-A	Lab Control Sample Dup	101	105	99	100	104	103	105	102
MB 320-533397/1-A	Method Blank	100	100	95	100	104	105	104	97
MB 320-533400/1-A	Method Blank	94	95	88	94	97	96	96	96

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

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	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
320-80070-33	TW-01	78	74	88	92	83	83	77	78
320-80070-34	TW-12	77	71	84	88	79	83	72	74
320-80070-35	FB-01	90	82	97	102	95	85	92	88
320-80070-36	EB-01	89	80	91	94	89	84	96	99
320-80070-37	EB-02	70	77	93	97	91	83	78	68
320-80070-38	EB-03	90	82	97	97	95	89	94	93
320-80070-39	EB-04	87	82	93	98	90	85	91	92
320-80070-40	FB-02	91	82	96	99	94	83	90	91
320-80070-41	FB-03	87	81	94	101	95	86	93	87
320-80070-42	TW-13	92	88	98	102	94	98	95	94
320-80070-43	TW-14	74	70	83	86	80	81	74	77
320-80070-44	TW-15	81	74	92	93	87	83	67	73
320-80070-45	TW-17	79	75	95	96	83	88	71	74
320-80070-46	TW-16	94	93	102	104	94	97	95	96
320-80070-46 - DL	TW-16								
320-80070-47	TW-09	77	72	85	87	77	84	75	75
320-80070-48	TW-08	74	72	85	87	74	83	76	80
320-80070-48 - DL	TW-08								
320-80070-49	TW-06	75	64	89	91	82	85	78	80
320-80070-50	TW-05	74	69	84	89	78	81	71	70
320-80070-51	TW-07	79	69	82	86	77	81	81	85
320-80070-52	TW-04	80	75	91	87	84	88	84	84
320-80070-53	TW-10	73	71	80	81	75	77	68	70
320-80070-54 - DL	TW-11								
320-80070-54	TW-11	86	89	81	96	85	87	74	89
320-80070-55	DUP-01	84	80	91	89	86	88	85	84
320-80070-55 - DL	DUP-01								
320-80070-56	TW-02	75	72	87	85	76	86	81	81
320-80070-57	DUP-02	79	72	93	96	86	87	73	71
320-80070-58	TW-03	71	69	87	88	76	78	69	71
LCS 320-533397/2-A	Lab Control Sample	93	85	93	93	93	84	94	94
LCS 320-533400/2-A	Lab Control Sample	93	88	98	102	94	87	93	92
LCSD 320-533397/3-A	Lab Control Sample Dup	87	80	89	94	85	83	90	91
LCSD 320-533400/3-A	Lab Control Sample Dup	95	88	97	100	97	83	92	88
MB 320-533397/1-A	Method Blank	88	82	95	97	89	84	93	92
MB 320-533400/1-A	Method Blank	88	80	94	94	91	80	90	86

		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)
320-80070-33	TW-01	72	70	91	83	126	106	92	87
320-80070-34	TW-12	66	63	88	82	134	111	94	89
320-80070-35	FB-01	83	81	103	97	125	113	100	97
320-80070-36	EB-01	73	72	99	94	115	111	100	93
320-80070-37	EB-02	70	61	97	82	121	113	121	92
320-80070-38	EB-03	81	83	108	99	131	113	107	94
320-80070-39	EB-04	85	82	104	95	121	112	99	93
320-80070-40	FB-02	79	76	102	93	119	117	102	96
320-80070-41	FB-03	79	79	103	97	123	119	102	99
320-80070-42	TW-13	89	86	106	95	131	109	115	95
320-80070-43	TW-14	71	68	86	81	130	106	102	84

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

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)
320-80070-44	TW-15	76	78	87	83	135	123	119	85
320-80070-45	TW-17	72	71	88	84	132	106	85	93
320-80070-46	TW-16	84	85	112	102	129	107	102	104
320-80070-46 - DL	TW-16								
320-80070-47	TW-09	75	70	91	85	121	104	85	86
320-80070-48	TW-08	76	64	99	87	93	81	76	86
320-80070-48 - DL	TW-08								
320-80070-49	TW-06	69	70	85	79	88	92	80	83
320-80070-50	TW-05	70	70	86	80	129	109	84	92
320-80070-51	TW-07	72	71	99	87	86	93	82	86
320-80070-52	TW-04	74	72	86	89	102	92	82	87
320-80070-53	TW-10	68	68	87	76	119	100	82	85
320-80070-54 - DL	TW-11								
320-80070-54	TW-11	76	69	74	90	76	78	73	86
320-80070-55	DUP-01	78	78	99	91	128	83	91	97
320-80070-55 - DL	DUP-01								
320-80070-56	TW-02	69	70	93	88	100	85	78	80
320-80070-57	DUP-02	80	73	82	79	144	134	115	83
320-80070-58	TW-03	65	64	84	79	126	98	85	91
LCS 320-533397/2-A	Lab Control Sample	75	76	103	93	116	107	102	98
LCS 320-533400/2-A	Lab Control Sample	83	82	103	98	121	109	100	99
LCSD 320-533397/3-A	Lab Control Sample Dup	78	77	100	91	116	106	101	94
LCSD 320-533400/3-A	Lab Control Sample Dup	78	75	100	97	123	112	100	103
MB 320-533397/1-A	Method Blank	76	75	103	95	120	115	103	97
MB 320-533400/1-A	Method Blank	76	76	98	92	115	97	91	91

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M102FTS (25-150)							
320-80070-33	TW-01	81							
320-80070-34	TW-12	85							
320-80070-35	FB-01	91							
320-80070-36	EB-01	99							
320-80070-37	EB-02	93							
320-80070-38	EB-03	96							
320-80070-39	EB-04	91							
320-80070-40	FB-02	88							
320-80070-41	FB-03	95							
320-80070-42	TW-13	105							
320-80070-43	TW-14	91							
320-80070-44	TW-15	92							
320-80070-45	TW-17	78							
320-80070-46	TW-16	95							
320-80070-46 - DL	TW-16								
320-80070-47	TW-09	78							
320-80070-48	TW-08	76							
320-80070-48 - DL	TW-08								
320-80070-49	TW-06	78							
320-80070-50	TW-05	75							
320-80070-51	TW-07	70							
320-80070-52	TW-04	72							

Isotope Dilution Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

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	M102FTS (25-150)						
320-80070-53	TW-10	75						
320-80070-54 - DL	TW-11							
320-80070-54	TW-11	99						
320-80070-55	DUP-01	83						
320-80070-55 - DL	DUP-01							
320-80070-56	TW-02	76						
320-80070-57	DUP-02	84						
320-80070-58	TW-03	75						
LCS 320-533397/2-A	Lab Control Sample	91						
LCS 320-533400/2-A	Lab Control Sample	94						
LCSD 320-533397/3-A	Lab Control Sample Dup	98						
LCSD 320-533400/3-A	Lab Control Sample Dup	94						
MB 320-533397/1-A	Method Blank	89						
MB 320-533400/1-A	Method Blank	87						

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

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-533122/1-A
Matrix: Solid
Analysis Batch: 533368

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.046		0.20	0.046	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg		10/11/21 18:38	10/12/21 18:26	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg		10/11/21 18:38	10/12/21 18:26	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*66*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C5 PFPeA	*80*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C2 PFHxA	*71*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C4 PFHpA	*77*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C4 PFOA	*79*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C5 PFNA	*77*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C2 PFDA	*77*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C2 PFUnA	*76*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C2 PFDoA	*75*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*
13C2 PFTeDA	*69*		*25 - 150*	*10/11/21 18:38*	*10/12/21 18:26*	*1*

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

Lab Sample ID: MB 320-533122/1-A
Matrix: Solid
Analysis Batch: 533368

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533122

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFBS	72		25 - 150	10/11/21 18:38	10/12/21 18:26	1
18O2 PFHxS	75		25 - 150	10/11/21 18:38	10/12/21 18:26	1
13C4 PFOS	70		25 - 150	10/11/21 18:38	10/12/21 18:26	1
13C8 FOSA	75		10 - 150	10/11/21 18:38	10/12/21 18:26	1
d3-NMeFOSAA	88		25 - 150	10/11/21 18:38	10/12/21 18:26	1
d5-NEtFOSAA	87		25 - 150	10/11/21 18:38	10/12/21 18:26	1
d-N-MeFOSA-M	77		10 - 150	10/11/21 18:38	10/12/21 18:26	1
d-N-EtFOSA-M	74		10 - 150	10/11/21 18:38	10/12/21 18:26	1
d7-N-MeFOSE-M	90		10 - 150	10/11/21 18:38	10/12/21 18:26	1
d9-N-EtFOSE-M	85		10 - 150	10/11/21 18:38	10/12/21 18:26	1
M2-4:2 FTS	97		25 - 150	10/11/21 18:38	10/12/21 18:26	1
M2-6:2 FTS	89		25 - 150	10/11/21 18:38	10/12/21 18:26	1
M2-8:2 FTS	80		25 - 150	10/11/21 18:38	10/12/21 18:26	1
13C3 HFPO-DA	75		25 - 150	10/11/21 18:38	10/12/21 18:26	1
13C2 10:2 FTS	90		25 - 150	10/11/21 18:38	10/12/21 18:26	1

Lab Sample ID: LCS 320-533122/2-A
Matrix: Solid
Analysis Batch: 533368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	2.00	2.03		ug/Kg		102	60 - 135
Perfluoropentanoic acid (PFPeA)	2.00	2.02		ug/Kg		101	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	2.08		ug/Kg		104	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.05		ug/Kg		102	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.09		ug/Kg		104	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.14		ug/Kg		107	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	1.86		ug/Kg		93	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	1.72		ug/Kg		86	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.10		ug/Kg		105	60 - 135
Perfluorotridecanoic acid (PFTrDA)	2.00	2.05		ug/Kg		103	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	1.98		ug/Kg		99	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.77	1.76		ug/Kg		99	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	1.85		ug/Kg		98	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.66		ug/Kg		91	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	1.90	1.98		ug/Kg		104	60 - 135
Perfluorooctanesulfonic acid (PFOS)	1.86	2.04		ug/Kg		110	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	2.01		ug/Kg		105	60 - 135
Perfluorodecanesulfonic acid (PFDS)	1.93	1.73		ug/Kg		90	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.75		ug/Kg		91	60 - 135

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

Lab Sample ID: LCS 320-533122/2-A
Matrix: Solid
Analysis Batch: 533368

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonamide (FOSA)	2.00	1.96		ug/Kg		98	60 - 135
NEtFOSA	2.00	1.74		ug/Kg		87	60 - 135
NMeFOSA	2.00	2.18		ug/Kg		109	60 - 135
NMeFOSAA	2.00	1.88		ug/Kg		94	60 - 135
NEtFOSAA	2.00	1.73		ug/Kg		86	60 - 135
NMeFOSE	2.00	2.00		ug/Kg		100	60 - 135
NEtFOSE	2.00	2.01		ug/Kg		100	60 - 135
4:2 FTS	1.87	1.79		ug/Kg		96	60 - 135
6:2 FTS	1.90	1.83		ug/Kg		97	60 - 135
8:2 FTS	1.92	2.08		ug/Kg		108	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.88	2.03		ug/Kg		108	60 - 135
HFPO-DA (GenX)	2.00	1.94		ug/Kg		97	60 - 135
9Cl-PF3ONS	1.86	1.97		ug/Kg		105	60 - 135
11Cl-PF3OUdS	1.88	1.79		ug/Kg		95	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*68*		*25 - 150*
13C5 PFPeA	*76*		*25 - 150*
13C2 PFHxA	*73*		*25 - 150*
13C4 PFHpA	*75*		*25 - 150*
13C4 PFOA	*76*		*25 - 150*
13C5 PFNA	*80*		*25 - 150*
13C2 PFDA	*82*		*25 - 150*
13C2 PFUnA	*80*		*25 - 150*
13C2 PFDoA	*75*		*25 - 150*
13C2 PFTeDA	*73*		*25 - 150*
13C3 PFBS	*75*		*25 - 150*
18O2 PFHxS	*76*		*25 - 150*
13C4 PFOS	*73*		*25 - 150*
13C8 FOSA	*75*		*10 - 150*
d3-NMeFOSAA	*89*		*25 - 150*
d5-NEtFOSAA	*87*		*25 - 150*
d-N-MeFOSA-M	*79*		*10 - 150*
d-N-EtFOSA-M	*75*		*10 - 150*
d7-N-MeFOSE-M	*91*		*10 - 150*
d9-N-EtFOSE-M	*89*		*10 - 150*
M2-4:2 FTS	*99*		*25 - 150*
M2-6:2 FTS	*91*		*25 - 150*
M2-8:2 FTS	*81*		*25 - 150*
13C3 HFPO-DA	*77*		*25 - 150*
13C2 10:2 FTS	*87*		*25 - 150*

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

Lab Sample ID: 320-80070-21 MS
Matrix: Solid
Analysis Batch: 534136

Client Sample ID: GP-16 (3-5)
Prep Type: Total/NA
Prep Batch: 533122

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	<0.050		2.28	2.29		ug/Kg	☼	100	70 - 130
Perfluoropentanoic acid (PFPeA)	<0.045		2.28	2.26		ug/Kg	☼	99	70 - 130
Perfluorohexanoic acid (PFHxA)	<0.034		2.28	2.30		ug/Kg	☼	101	70 - 130
Perfluoroheptanoic acid (PFHpA)	0.043	J	2.28	2.26		ug/Kg	☼	97	70 - 130
Perfluorooctanoic acid (PFOA)	20		2.28	23.0	E 4	ug/Kg	☼	122	70 - 130
Perfluorononanoic acid (PFNA)	0.21	J	2.28	2.55		ug/Kg	☼	102	70 - 130
Perfluorodecanoic acid (PFDA)	<0.053		2.28	2.22		ug/Kg	☼	97	70 - 130
Perfluoroundecanoic acid (PFUnA)	<0.046		2.28	2.00		ug/Kg	☼	88	70 - 130
Perfluorododecanoic acid (PFDoA)	<0.033		2.28	2.30		ug/Kg	☼	101	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<0.023		2.28	2.22		ug/Kg	☼	97	70 - 130
Perfluorotetradecanoic acid (PFTeA)	<0.040		2.28	2.23		ug/Kg	☼	98	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<0.042		2.02	1.98		ug/Kg	☼	98	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<0.040		2.14	2.09		ug/Kg	☼	98	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<0.032		2.08	1.89		ug/Kg	☼	91	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	<0.054		2.17	2.21		ug/Kg	☼	102	70 - 130
Perfluorooctanesulfonic acid (PFOS)	0.078	J	2.12	2.38		ug/Kg	☼	109	70 - 130
Perfluorononanesulfonic acid (PFNS)	<0.032		2.19	2.40		ug/Kg	☼	110	70 - 130
Perfluorodecanesulfonic acid (PFDS)	<0.057		2.20	1.98		ug/Kg	☼	90	70 - 130
Perfluorododecanesulfonic acid (PFDoS)	<0.051		2.21	2.03		ug/Kg	☼	92	70 - 130
Perfluorooctanesulfonamide (FOSA)	<0.036		2.28	2.16		ug/Kg	☼	94	70 - 130
NEtFOSA	<0.051		2.28	1.98		ug/Kg	☼	87	70 - 130
NMeFOSA	<0.054		2.28	2.35		ug/Kg	☼	103	70 - 130
NMeFOSAA	<0.025		2.28	2.10		ug/Kg	☼	92	70 - 130
NEtFOSAA	<0.053		2.28	1.98		ug/Kg	☼	87	70 - 130
NMeFOSE	<0.051		2.28	2.30		ug/Kg	☼	101	70 - 130
NEtFOSE	<0.031		2.28	2.22		ug/Kg	☼	97	70 - 130
4:2 FTS	<0.056		2.13	2.07		ug/Kg	☼	97	70 - 130
6:2 FTS	<0.030		2.16	2.09		ug/Kg	☼	96	70 - 130
8:2 FTS	<0.038		2.19	2.20		ug/Kg	☼	101	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		2.15	2.31		ug/Kg	☼	108	70 - 130
HFPO-DA (GenX)	<0.045		2.28	2.18		ug/Kg	☼	96	70 - 130
9Cl-PF3ONS	<0.038		2.13	2.30		ug/Kg	☼	108	70 - 130
11Cl-PF3OUdS	<0.034		2.15	2.01		ug/Kg	☼	93	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*51*		*25 - 150*
13C5 PFPeA	*60*		*25 - 150*
13C2 PFHxA	*58*		*25 - 150*

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

Lab Sample ID: 320-80070-21 MS
Matrix: Solid
Analysis Batch: 534136

Client Sample ID: GP-16 (3-5)
Prep Type: Total/NA
Prep Batch: 533122

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFHpA	*61*		*25 - 150*
13C4 PFOA	*63*		*25 - 150*
13C5 PFNA	*65*		*25 - 150*
13C2 PFDA	*66*		*25 - 150*
13C2 PFUnA	*62*		*25 - 150*
13C2 PFDoA	*62*		*25 - 150*
13C2 PFTeDA	*58*		*25 - 150*
13C3 PFBS	*60*		*25 - 150*
18O2 PFHxS	*60*		*25 - 150*
13C4 PFOS	*58*		*25 - 150*
13C8 FOSA	*59*		*10 - 150*
d3-NMeFOSAA	*60*		*25 - 150*
d5-NEtFOSAA	*62*		*25 - 150*
d-N-MeFOSA-M	*61*		*10 - 150*
d-N-EtFOSA-M	*61*		*10 - 150*
d7-N-MeFOSE-M	*69*		*10 - 150*
d9-N-EtFOSE-M	*69*		*10 - 150*
M2-4:2 FTS	*87*		*25 - 150*
M2-6:2 FTS	*62*		*25 - 150*
M2-8:2 FTS	*63*		*25 - 150*
13C3 HFPO-DA	*62*		*25 - 150*
13C2 10:2 FTS	*68*		*25 - 150*

Lab Sample ID: 320-80070-21 MSD
Matrix: Solid
Analysis Batch: 534136

Client Sample ID: GP-16 (3-5)
Prep Type: Total/NA
Prep Batch: 533122

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	<0.050		2.38	2.38		ug/Kg	☼	100	70 - 130	4	30
Perfluoropentanoic acid (PFPeA)	<0.045		2.38	2.34		ug/Kg	☼	99	70 - 130	3	30
Perfluorohexanoic acid (PFHxA)	<0.034		2.38	2.55		ug/Kg	☼	107	70 - 130	10	30
Perfluoroheptanoic acid (PFHpA)	0.043	J	2.38	2.43		ug/Kg	☼	100	70 - 130	7	30
Perfluorooctanoic acid (PFOA)	20		2.38	22.1	4	ug/Kg	☼	78	70 - 130	4	30
Perfluorononanoic acid (PFNA)	0.21	J	2.38	2.79		ug/Kg	☼	108	70 - 130	9	30
Perfluorodecanoic acid (PFDA)	<0.053		2.38	2.23		ug/Kg	☼	94	70 - 130	0	30
Perfluoroundecanoic acid (PFUnA)	<0.046		2.38	2.09		ug/Kg	☼	88	70 - 130	4	30
Perfluorododecanoic acid (PFDoA)	<0.033		2.38	2.40		ug/Kg	☼	101	70 - 130	4	30
Perfluorotridecanoic acid (PFTrDA)	<0.023		2.38	2.27		ug/Kg	☼	96	70 - 130	3	30
Perfluorotetradecanoic acid (PFTeA)	<0.040		2.38	2.33		ug/Kg	☼	98	70 - 130	4	30
Perfluorobutanesulfonic acid (PFBS)	<0.042		2.10	2.07		ug/Kg	☼	99	70 - 130	5	30
Perfluoropentanesulfonic acid (PFPeS)	<0.040		2.23	2.23		ug/Kg	☼	100	70 - 130	6	30
Perfluorohexanesulfonic acid (PFHxS)	<0.032		2.17	1.96		ug/Kg	☼	91	70 - 130	4	30
Perfluoroheptanesulfonic Acid (PFHpS)	<0.054		2.26	2.23		ug/Kg	☼	99	70 - 130	1	30

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

Lab Sample ID: 320-80070-21 MSD
Matrix: Solid
Analysis Batch: 534136

Client Sample ID: GP-16 (3-5)
Prep Type: Total/NA
Prep Batch: 533122

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	0.078	J	2.21	2.42		ug/Kg	☼	106	70 - 130	2	30
Perfluorononanesulfonic acid (PFNS)	<0.032		2.28	2.40		ug/Kg	☼	105	70 - 130	0	30
Perfluorodecanesulfonic acid (PFDS)	<0.057		2.29	2.07		ug/Kg	☼	90	70 - 130	4	30
Perfluorododecanesulfonic acid (PFDoS)	<0.051		2.30	2.11		ug/Kg	☼	92	70 - 130	4	30
Perfluorooctanesulfonamide (FOSA)	<0.036		2.38	2.37		ug/Kg	☼	100	70 - 130	10	30
NEtFOSA	<0.051		2.38	2.20		ug/Kg	☼	92	70 - 130	11	30
NMeFOSA	<0.054		2.38	2.51		ug/Kg	☼	105	70 - 130	7	30
NMeFOSAA	<0.025		2.38	2.35		ug/Kg	☼	99	70 - 130	11	30
NEtFOSAA	<0.053		2.38	2.01		ug/Kg	☼	84	70 - 130	1	30
NMeFOSE	<0.051		2.38	2.40		ug/Kg	☼	101	70 - 130	5	30
NEtFOSE	<0.031		2.38	2.40		ug/Kg	☼	101	70 - 130	8	30
4:2 FTS	<0.056		2.22	2.15		ug/Kg	☼	97	70 - 130	4	30
6:2 FTS	<0.030		2.26	2.07		ug/Kg	☼	92	70 - 130	1	30
8:2 FTS	<0.038		2.28	2.19		ug/Kg	☼	96	70 - 130	0	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		2.24	2.33		ug/Kg	☼	104	70 - 130	1	30
HFPO-DA (GenX)	<0.045		2.38	2.31		ug/Kg	☼	97	70 - 130	6	30
9Cl-PF3ONS	<0.038		2.22	2.35		ug/Kg	☼	106	70 - 130	2	30
11Cl-PF3OUdS	<0.034		2.24	2.14		ug/Kg	☼	96	70 - 130	6	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*60*		*25 - 150*
13C5 PFPeA	*68*		*25 - 150*
13C2 PFHxA	*62*		*25 - 150*
13C4 PFHpA	*66*		*25 - 150*
13C4 PFOA	*68*		*25 - 150*
13C5 PFNA	*70*		*25 - 150*
13C2 PFDA	*72*		*25 - 150*
13C2 PFUnA	*71*		*25 - 150*
13C2 PFDoA	*68*		*25 - 150*
13C2 PFTeDA	*64*		*25 - 150*
13C3 PFBS	*66*		*25 - 150*
18O2 PFHxS	*68*		*25 - 150*
13C4 PFOS	*66*		*25 - 150*
13C8 FOSA	*65*		*10 - 150*
d3-NMeFOSAA	*68*		*25 - 150*
d5-NEtFOSAA	*72*		*25 - 150*
d-N-MeFOSA-M	*67*		*10 - 150*
d-N-EtFOSA-M	*71*		*10 - 150*
d7-N-MeFOSE-M	*77*		*10 - 150*
d9-N-EtFOSE-M	*74*		*10 - 150*
M2-4:2 FTS	*96*		*25 - 150*
M2-6:2 FTS	*73*		*25 - 150*
M2-8:2 FTS	*70*		*25 - 150*
13C3 HFPO-DA	*67*		*25 - 150*

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

Lab Sample ID: 320-80070-21 MSD
Matrix: Solid
Analysis Batch: 534136

Client Sample ID: GP-16 (3-5)
Prep Type: Total/NA
Prep Batch: 533122

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C2 10:2 FTS	75		25 - 150

Lab Sample ID: MB 320-533125/1-A
Matrix: Solid
Analysis Batch: 533377

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.046		0.20	0.046	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorotridecanoic acid (PFTrDA)	<0.021		0.20	0.021	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
9Cl-PF3ONS	<0.035		0.20	0.035	ug/Kg		10/11/21 18:38	10/12/21 22:14	1
11Cl-PF3OUdS	<0.031		0.20	0.031	ug/Kg		10/11/21 18:38	10/12/21 22:14	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	72		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C5 PFPeA	73		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C2 PFHxA	64		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C4 PFHpA	72		25 - 150	10/11/21 18:38	10/12/21 22:14	1

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

Lab Sample ID: MB 320-533125/1-A
Matrix: Solid
Analysis Batch: 533377

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533125

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	76		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C5 PFNA	76		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C2 PFDA	76		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C2 PFUnA	73		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C2 PFDoA	71		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C2 PFTeDA	60		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C3 PFBS	70		25 - 150	10/11/21 18:38	10/12/21 22:14	1
18O2 PFHxS	70		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C4 PFOS	66		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C8 FOSA	73		10 - 150	10/11/21 18:38	10/12/21 22:14	1
d3-NMeFOSAA	82		25 - 150	10/11/21 18:38	10/12/21 22:14	1
d5-NEtFOSAA	86		25 - 150	10/11/21 18:38	10/12/21 22:14	1
d-N-MeFOSA-M	73		10 - 150	10/11/21 18:38	10/12/21 22:14	1
d-N-EtFOSA-M	71		10 - 150	10/11/21 18:38	10/12/21 22:14	1
d7-N-MeFOSE-M	88		10 - 150	10/11/21 18:38	10/12/21 22:14	1
d9-N-EtFOSE-M	86		10 - 150	10/11/21 18:38	10/12/21 22:14	1
M2-4:2 FTS	89		25 - 150	10/11/21 18:38	10/12/21 22:14	1
M2-6:2 FTS	85		25 - 150	10/11/21 18:38	10/12/21 22:14	1
M2-8:2 FTS	77		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C3 HFPO-DA	69		25 - 150	10/11/21 18:38	10/12/21 22:14	1
13C2 10:2 FTS	80		25 - 150	10/11/21 18:38	10/12/21 22:14	1

Lab Sample ID: LCS 320-533125/2-A
Matrix: Solid
Analysis Batch: 533377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	2.00	1.96		ug/Kg		98	60 - 135
Perfluoropentanoic acid (PFPeA)	2.00	1.99		ug/Kg		100	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	2.04		ug/Kg		102	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.06		ug/Kg		103	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.04		ug/Kg		102	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.14		ug/Kg		107	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	1.82		ug/Kg		91	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	1.70		ug/Kg		85	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.04		ug/Kg		102	60 - 135
Perfluorotridecanoic acid (PFTrDA)	2.00	1.89		ug/Kg		94	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	1.94		ug/Kg		97	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.77	1.79		ug/Kg		101	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	1.85		ug/Kg		98	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.60		ug/Kg		88	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	1.90	1.88		ug/Kg		99	60 - 135

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

Lab Sample ID: LCS 320-533125/2-A
Matrix: Solid
Analysis Batch: 533377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonic acid (PFOS)	1.86	1.97		ug/Kg		106	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	1.96		ug/Kg		102	60 - 135
Perfluorodecanesulfonic acid (PFDS)	1.93	1.67		ug/Kg		87	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.46		ug/Kg		75	60 - 135
Perfluorooctanesulfonamide (FOSA)	2.00	1.91		ug/Kg		95	60 - 135
NEtFOSA	2.00	1.64		ug/Kg		82	60 - 135
NMeFOSA	2.00	2.11		ug/Kg		106	60 - 135
NMeFOSAA	2.00	2.00		ug/Kg		100	60 - 135
NEtFOSAA	2.00	1.75		ug/Kg		88	60 - 135
NMeFOSE	2.00	1.99		ug/Kg		99	60 - 135
NEtFOSE	2.00	1.92		ug/Kg		96	60 - 135
4:2 FTS	1.87	1.80		ug/Kg		96	60 - 135
6:2 FTS	1.90	1.83		ug/Kg		97	60 - 135
8:2 FTS	1.92	1.92		ug/Kg		100	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.88	1.96		ug/Kg		104	60 - 135
HFPO-DA (GenX)	2.00	1.98		ug/Kg		99	60 - 135
9Cl-PF3ONS	1.86	1.89		ug/Kg		101	60 - 135
11Cl-PF3OUdS	1.88	1.72		ug/Kg		91	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*75*		*25 - 150*
13C5 PFPeA	*78*		*25 - 150*
13C2 PFHxA	*73*		*25 - 150*
13C4 PFHpA	*73*		*25 - 150*
13C4 PFOA	*78*		*25 - 150*
13C5 PFNA	*79*		*25 - 150*
13C2 PFDA	*83*		*25 - 150*
13C2 PFUnA	*81*		*25 - 150*
13C2 PFDoA	*77*		*25 - 150*
13C2 PFTeDA	*65*		*25 - 150*
13C3 PFBS	*74*		*25 - 150*
18O2 PFHxS	*77*		*25 - 150*
13C4 PFOS	*74*		*25 - 150*
13C8 FOSA	*76*		*10 - 150*
d3-NMeFOSAA	*86*		*25 - 150*
d5-NEtFOSAA	*90*		*25 - 150*
d-N-MeFOSA-M	*79*		*10 - 150*
d-N-EtFOSA-M	*79*		*10 - 150*
d7-N-MeFOSE-M	*93*		*10 - 150*
d9-N-EtFOSE-M	*93*		*10 - 150*
M2-4:2 FTS	*101*		*25 - 150*
M2-6:2 FTS	*91*		*25 - 150*
M2-8:2 FTS	*83*		*25 - 150*
13C3 HFPO-DA	*77*		*25 - 150*

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

Lab Sample ID: LCS 320-533125/2-A
Matrix: Solid
Analysis Batch: 533377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533125

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2 10:2 FTS	81		25 - 150

Lab Sample ID: 320-80070-20 MS
Matrix: Solid
Analysis Batch: 534252

Client Sample ID: GP-16 (1-3)
Prep Type: Total/NA
Prep Batch: 533125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	<0.050		2.23	2.25		ug/Kg	☼	101	70 - 130
Perfluoropentanoic acid (PFPeA)	<0.044		2.23	2.19		ug/Kg	☼	98	70 - 130
Perfluorohexanoic acid (PFHxA)	<0.033		2.23	2.33		ug/Kg	☼	104	70 - 130
Perfluoroheptanoic acid (PFHpA)	<0.041		2.23	2.20		ug/Kg	☼	99	70 - 130
Perfluorononanoic acid (PFNA)	0.059	J	2.23	2.34		ug/Kg	☼	102	70 - 130
Perfluorodecanoic acid (PFDA)	<0.052		2.23	2.01		ug/Kg	☼	90	70 - 130
Perfluoroundecanoic acid (PFUnA)	<0.045		2.23	2.39		ug/Kg	☼	107	70 - 130
Perfluorododecanoic acid (PFDoA)	<0.032		2.23	2.38		ug/Kg	☼	107	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<0.023		2.23	2.28		ug/Kg	☼	102	70 - 130
Perfluorotetradecanoic acid (PFTeA)	<0.040		2.23	2.19		ug/Kg	☼	98	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<0.041		1.97	1.90		ug/Kg	☼	96	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<0.040		2.10	2.41		ug/Kg	☼	115	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<0.031		2.03	2.01		ug/Kg	☼	99	70 - 130
Perfluoroheptanesulfonic Acid (PFHpS)	<0.053		2.13	2.09		ug/Kg	☼	98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<0.046		2.07	2.01		ug/Kg	☼	97	70 - 130
Perfluorononanesulfonic acid (PFNS)	<0.031		2.14	1.98		ug/Kg	☼	92	70 - 130
Perfluorodecanesulfonic acid (PFDS)	<0.056		2.15	2.11		ug/Kg	☼	98	70 - 130
Perfluorododecanesulfonic acid (PFDoS)	<0.051		2.16	2.11		ug/Kg	☼	98	70 - 130
Perfluorooctanesulfonamide (FOSA)	<0.036		2.23	2.27		ug/Kg	☼	102	70 - 130
NEtFOSA	<0.051		2.23	1.82		ug/Kg	☼	81	70 - 130
NMeFOSA	<0.053		2.23	2.34		ug/Kg	☼	105	70 - 130
NMeFOSAA	<0.025		2.23	2.28		ug/Kg	☼	102	70 - 130
NEtFOSAA	<0.052		2.23	1.90		ug/Kg	☼	85	70 - 130
NMeFOSE	<0.051		2.23	2.16		ug/Kg	☼	97	70 - 130
NEtFOSE	<0.030		2.23	2.22		ug/Kg	☼	99	70 - 130
4:2 FTS	<0.055		2.09	1.86		ug/Kg	☼	89	70 - 130
6:2 FTS	<0.029		2.12	1.96		ug/Kg	☼	93	70 - 130
8:2 FTS	<0.038		2.14	2.23		ug/Kg	☼	104	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		2.10	2.33		ug/Kg	☼	111	70 - 130
HFPO-DA (GenX)	<0.044		2.23	2.09		ug/Kg	☼	93	70 - 130
9Cl-PF3ONS	<0.038		2.08	1.93		ug/Kg	☼	93	70 - 130

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

Lab Sample ID: 320-80070-20 MS
Matrix: Solid
Analysis Batch: 534252

Client Sample ID: GP-16 (1-3)
Prep Type: Total/NA
Prep Batch: 533125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
11Cl-PF3OUdS	<0.033		2.10	2.37		ug/Kg	☼	112	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*73*		*25 - 150*
13C5 PFPeA	*75*		*25 - 150*
13C2 PFHxA	*70*		*25 - 150*
13C4 PFHpA	*80*		*25 - 150*
13C5 PFNA	*83*		*25 - 150*
13C2 PFDA	*82*		*25 - 150*
13C2 PFUnA	*76*		*25 - 150*
13C2 PFDoA	*79*		*25 - 150*
13C2 PFTeDA	*79*		*25 - 150*
13C3 PFBS	*63*		*25 - 150*
18O2 PFHxS	*74*		*25 - 150*
13C4 PFOS	*73*		*25 - 150*
13C8 FOSA	*75*		*10 - 150*
d3-NMeFOSAA	*74*		*25 - 150*
d5-NEtFOSAA	*80*		*25 - 150*
d-N-MeFOSA-M	*69*		*10 - 150*
d-N-EtFOSA-M	*75*		*10 - 150*
d7-N-MeFOSE-M	*74*		*10 - 150*
d9-N-EtFOSE-M	*76*		*10 - 150*
M2-4:2 FTS	*64*		*25 - 150*
M2-6:2 FTS	*59*		*25 - 150*
M2-8:2 FTS	*53*		*25 - 150*
13C3 HFPO-DA	*77*		*25 - 150*
13C2 10:2 FTS	*73*		*25 - 150*

Lab Sample ID: 320-80070-20 MSD
Matrix: Solid
Analysis Batch: 534252

Client Sample ID: GP-16 (1-3)
Prep Type: Total/NA
Prep Batch: 533125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	<0.050		2.09	2.20		ug/Kg	☼	105	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	<0.044		2.09	2.06		ug/Kg	☼	98	70 - 130	6	30
Perfluorohexanoic acid (PFHxA)	<0.033		2.09	2.02		ug/Kg	☼	97	70 - 130	14	30
Perfluoroheptanoic acid (PFHpA)	<0.041		2.09	2.05		ug/Kg	☼	98	70 - 130	7	30
Perfluorononanoic acid (PFNA)	0.059	J	2.09	2.15		ug/Kg	☼	100	70 - 130	8	30
Perfluorodecanoic acid (PFDA)	<0.052		2.09	2.11		ug/Kg	☼	101	70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)	<0.045		2.09	1.90		ug/Kg	☼	91	70 - 130	23	30
Perfluorododecanoic acid (PFDoA)	<0.032		2.09	2.29		ug/Kg	☼	110	70 - 130	4	30
Perfluorotridecanoic acid (PFTrDA)	<0.023		2.09	2.18		ug/Kg	☼	104	70 - 130	4	30
Perfluorotetradecanoic acid (PFTeA)	<0.040		2.09	2.12		ug/Kg	☼	101	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)	<0.041		1.85	1.87		ug/Kg	☼	101	70 - 130	2	30

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

Lab Sample ID: 320-80070-20 MSD
Matrix: Solid
Analysis Batch: 534252

Client Sample ID: GP-16 (1-3)
Prep Type: Total/NA
Prep Batch: 533125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluoropentanesulfonic acid (PFPeS)	<0.040		1.96	2.26		ug/Kg	☼	115	70 - 130	6	30
Perfluorohexanesulfonic acid (PFHxS)	<0.031		1.90	1.90		ug/Kg	☼	100	70 - 130	5	30
Perfluoroheptanesulfonic Acid (PFHpS)	<0.053		1.99	2.09		ug/Kg	☼	105	70 - 130	0	30
Perfluorooctanesulfonic acid (PFOS)	<0.046		1.94	1.95		ug/Kg	☼	100	70 - 130	3	30
Perfluorononanesulfonic acid (PFNS)	<0.031		2.01	2.04		ug/Kg	☼	102	70 - 130	3	30
Perfluorodecanesulfonic acid (PFDS)	<0.056		2.02	2.16		ug/Kg	☼	107	70 - 130	2	30
Perfluorododecanesulfonic acid (PFDoS)	<0.051		2.02	2.26		ug/Kg	☼	112	70 - 130	7	30
Perfluorooctanesulfonamide (FOSA)	<0.036		2.09	2.00		ug/Kg	☼	96	70 - 130	13	30
NEtFOSA	<0.051		2.09	1.79		ug/Kg	☼	86	70 - 130	1	30
NMeFOSA	<0.053		2.09	2.01		ug/Kg	☼	96	70 - 130	15	30
NMeFOSAA	<0.025		2.09	1.92		ug/Kg	☼	92	70 - 130	17	30
NEtFOSAA	<0.052		2.09	2.05		ug/Kg	☼	98	70 - 130	8	30
NMeFOSE	<0.051		2.09	2.25		ug/Kg	☼	107	70 - 130	4	30
NEtFOSE	<0.030		2.09	1.89		ug/Kg	☼	90	70 - 130	16	30
4:2 FTS	<0.055		1.95	1.92		ug/Kg	☼	98	70 - 130	3	30
6:2 FTS	<0.029		1.98	1.79		ug/Kg	☼	90	70 - 130	9	30
8:2 FTS	<0.038		2.00	2.18		ug/Kg	☼	109	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.042		1.97	2.29		ug/Kg	☼	116	70 - 130	1	30
HFPO-DA (GenX)	<0.044		2.09	2.07		ug/Kg	☼	99	70 - 130	1	30
9Cl-PF3ONS	<0.038		1.95	2.17		ug/Kg	☼	111	70 - 130	11	30
11Cl-PF3OUdS	<0.033		1.97	2.26		ug/Kg	☼	115	70 - 130	5	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*71*		*25 - 150*
13C5 PFPeA	*78*		*25 - 150*
13C2 PFHxA	*81*		*25 - 150*
13C4 PFHpA	*85*		*25 - 150*
13C5 PFNA	*79*		*25 - 150*
13C2 PFDA	*79*		*25 - 150*
13C2 PFUnA	*87*		*25 - 150*
13C2 PFDoA	*83*		*25 - 150*
13C2 PFTeDA	*80*		*25 - 150*
13C3 PFBS	*69*		*25 - 150*
18O2 PFHxS	*77*		*25 - 150*
13C4 PFOS	*73*		*25 - 150*
13C8 FOSA	*80*		*10 - 150*
d3-NMeFOSAA	*81*		*25 - 150*
d5-NEtFOSAA	*81*		*25 - 150*
d-N-MeFOSA-M	*78*		*10 - 150*
d-N-EtFOSA-M	*81*		*10 - 150*
d7-N-MeFOSE-M	*66*		*10 - 150*
d9-N-EtFOSE-M	*83*		*10 - 150*

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

Lab Sample ID: 320-80070-20 MSD
Matrix: Solid
Analysis Batch: 534252

Client Sample ID: GP-16 (1-3)
Prep Type: Total/NA
Prep Batch: 533125

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
M2-4:2 FTS	65		25 - 150
M2-6:2 FTS	64		25 - 150
M2-8:2 FTS	58		25 - 150
13C3 HFPO-DA	80		25 - 150
13C2 10:2 FTS	75		25 - 150

Lab Sample ID: MB 320-533397/1-A
Matrix: Water
Analysis Batch: 533823

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533397

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		10/12/21 19:14	10/13/21 21:41	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		10/12/21 19:14	10/13/21 21:41	1
NEtFOSA	<0.87		2.0	0.87	ng/L		10/12/21 19:14	10/13/21 21:41	1
NMeFOSA	<0.43		2.0	0.43	ng/L		10/12/21 19:14	10/13/21 21:41	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		10/12/21 19:14	10/13/21 21:41	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		10/12/21 19:14	10/13/21 21:41	1
NMeFOSE	<1.4		4.0	1.4	ng/L		10/12/21 19:14	10/13/21 21:41	1
NEtFOSE	<0.85		2.0	0.85	ng/L		10/12/21 19:14	10/13/21 21:41	1
4:2 FTS	<0.24		2.0	0.24	ng/L		10/12/21 19:14	10/13/21 21:41	1
6:2 FTS	<2.5		5.0	2.5	ng/L		10/12/21 19:14	10/13/21 21:41	1
8:2 FTS	<0.46		2.0	0.46	ng/L		10/12/21 19:14	10/13/21 21:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		10/12/21 19:14	10/13/21 21:41	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		10/12/21 19:14	10/13/21 21:41	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		10/12/21 19:14	10/13/21 21:41	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		10/12/21 19:14	10/13/21 21:41	1

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

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	100		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C5 PFPeA	100		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C2 PFHxA	95		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C4 PFHpA	100		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C4 PFOA	104		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C5 PFNA	105		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C2 PFDA	104		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C2 PFUnA	97		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C2 PFDoA	88		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C2 PFTeDA	82		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C3 PFBS	95		25 - 150	10/12/21 19:14	10/13/21 21:41	1
18O2 PFHxS	97		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C4 PFOS	89		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C8 FOSA	84		10 - 150	10/12/21 19:14	10/13/21 21:41	1
d3-NMeFOSAA	93		25 - 150	10/12/21 19:14	10/13/21 21:41	1
d5-NEtFOSAA	92		25 - 150	10/12/21 19:14	10/13/21 21:41	1
d-N-MeFOSA-M	76		10 - 150	10/12/21 19:14	10/13/21 21:41	1
d-N-EtFOSA-M	75		10 - 150	10/12/21 19:14	10/13/21 21:41	1
d7-N-MeFOSE-M	103		10 - 150	10/12/21 19:14	10/13/21 21:41	1
d9-N-EtFOSE-M	95		10 - 150	10/12/21 19:14	10/13/21 21:41	1
M2-4:2 FTS	120		25 - 150	10/12/21 19:14	10/13/21 21:41	1
M2-6:2 FTS	115		25 - 150	10/12/21 19:14	10/13/21 21:41	1
M2-8:2 FTS	103		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C3 HFPO-DA	97		25 - 150	10/12/21 19:14	10/13/21 21:41	1
13C2 10:2 FTS	89		25 - 150	10/12/21 19:14	10/13/21 21:41	1

Lab Sample ID: LCS 320-533397/2-A
Matrix: Water
Analysis Batch: 533823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	38.0		ng/L		95	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	39.2		ng/L		98	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	40.6		ng/L		102	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	39.3		ng/L		98	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	39.3		ng/L		98	60 - 135
Perfluorononanoic acid (PFNA)	40.0	41.1		ng/L		103	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	36.0		ng/L		90	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	33.8		ng/L		85	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	39.6		ng/L		99	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	37.2		ng/L		93	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	38.3		ng/L		96	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	34.7		ng/L		98	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	36.1		ng/L		96	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	33.5		ng/L		92	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.1		ng/L		95	60 - 135

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

Lab Sample ID: LCS 320-533397/2-A
Matrix: Water
Analysis Batch: 533823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533397

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorooctanesulfonic acid (PFOS)	37.1	37.8		ng/L		102	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	37.7		ng/L		98	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	33.4		ng/L		87	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	30.8		ng/L		80	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	37.2		ng/L		93	60 - 135
NEtFOSA	40.0	31.1		ng/L		78	60 - 135
NMeFOSA	40.0	41.5		ng/L		104	60 - 135
NMeFOSAA	40.0	39.4		ng/L		99	60 - 135
NEtFOSAA	40.0	33.2		ng/L		83	60 - 135
NMeFOSE	40.0	37.8		ng/L		94	60 - 135
NEtFOSE	40.0	40.4		ng/L		101	60 - 135
4:2 FTS	37.4	35.8		ng/L		96	60 - 135
6:2 FTS	37.9	36.4		ng/L		96	60 - 135
8:2 FTS	38.3	38.3		ng/L		100	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	39.5		ng/L		105	60 - 135
HFPO-DA (GenX)	40.0	35.9		ng/L		90	60 - 135
9Cl-PF3ONS	37.3	35.9		ng/L		96	60 - 135
11Cl-PF3OUdS	37.7	33.0		ng/L		88	60 - 135

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*99*		*25 - 150*
13C5 PFPeA	*98*		*25 - 150*
13C2 PFHxA	*89*		*25 - 150*
13C4 PFHpA	*95*		*25 - 150*
13C4 PFOA	*98*		*25 - 150*
13C5 PFNA	*101*		*25 - 150*
13C2 PFDA	*105*		*25 - 150*
13C2 PFUnA	*99*		*25 - 150*
13C2 PFDoA	*93*		*25 - 150*
13C2 PFTeDA	*85*		*25 - 150*
13C3 PFBS	*93*		*25 - 150*
18O2 PFHxS	*93*		*25 - 150*
13C4 PFOS	*93*		*25 - 150*
13C8 FOSA	*84*		*10 - 150*
d3-NMeFOSAA	*94*		*25 - 150*
d5-NEtFOSAA	*94*		*25 - 150*
d-N-MeFOSA-M	*75*		*10 - 150*
d-N-EtFOSA-M	*76*		*10 - 150*
d7-N-MeFOSE-M	*103*		*10 - 150*
d9-N-EtFOSE-M	*93*		*10 - 150*
M2-4:2 FTS	*116*		*25 - 150*
M2-6:2 FTS	*107*		*25 - 150*
M2-8:2 FTS	*102*		*25 - 150*
13C3 HFPO-DA	*98*		*25 - 150*

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

Lab Sample ID: LCS 320-533397/2-A
Matrix: Water
Analysis Batch: 533823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533397

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2 10:2 FTS	91		25 - 150

Lab Sample ID: LCSD 320-533397/3-A
Matrix: Water
Analysis Batch: 533823

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533397

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	38.4		ng/L		96	60 - 135	1	30
Perfluoropentanoic acid (PFPeA)			40.0	39.7		ng/L		99	60 - 135	1	30
Perfluorohexanoic acid (PFHxA)			40.0	40.8		ng/L		102	60 - 135	0	30
Perfluoroheptanoic acid (PFHpA)			40.0	36.7		ng/L		92	60 - 135	7	30
Perfluorooctanoic acid (PFOA)			40.0	39.0		ng/L		98	60 - 135	1	30
Perfluorononanoic acid (PFNA)			40.0	40.6		ng/L		101	60 - 135	1	30
Perfluorodecanoic acid (PFDA)			40.0	36.7		ng/L		92	60 - 135	2	30
Perfluoroundecanoic acid (PFUnA)			40.0	33.3		ng/L		83	60 - 135	1	30
Perfluorododecanoic acid (PFDoA)			40.0	40.3		ng/L		101	60 - 135	2	30
Perfluorotridecanoic acid (PFTrDA)			40.0	37.8		ng/L		94	60 - 135	2	30
Perfluorotetradecanoic acid (PFTeA)			40.0	38.4		ng/L		96	60 - 135	0	30
Perfluorobutanesulfonic acid (PFBS)			35.4	34.4		ng/L		97	60 - 135	1	30
Perfluoropentanesulfonic acid (PFPeS)			37.5	36.5		ng/L		97	60 - 135	1	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	31.5		ng/L		86	60 - 135	6	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	38.8		ng/L		102	60 - 135	7	30
Perfluorooctanesulfonic acid (PFOS)			37.1	38.9		ng/L		105	60 - 135	3	30
Perfluorononanesulfonic acid (PFNS)			38.4	39.1		ng/L		102	60 - 135	4	30
Perfluorodecanesulfonic acid (PFDS)			38.6	34.2		ng/L		89	60 - 135	2	30
Perfluorododecanesulfonic acid (PFDoS)			38.7	31.8		ng/L		82	60 - 135	3	30
Perfluorooctanesulfonamide (FOSA)			40.0	37.2		ng/L		93	60 - 135	0	30
NEtFOSA			40.0	32.6		ng/L		82	60 - 135	5	30
NMeFOSA			40.0	39.3		ng/L		98	60 - 135	5	30
NMeFOSAA			40.0	38.6		ng/L		97	60 - 135	2	30
NEtFOSAA			40.0	33.5		ng/L		84	60 - 135	1	30
NMeFOSE			40.0	38.9		ng/L		97	60 - 135	3	30
NEtFOSE			40.0	38.9		ng/L		97	60 - 135	4	30
4:2 FTS			37.4	35.6		ng/L		95	60 - 135	1	30
6:2 FTS			37.9	34.9		ng/L		92	60 - 135	4	30
8:2 FTS			38.3	38.5		ng/L		100	60 - 135	0	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			37.7	41.0		ng/L		109	60 - 135	4	30
HFPO-DA (GenX)			40.0	37.7		ng/L		94	60 - 135	5	30

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

Lab Sample ID: LCSD 320-533397/3-A
Matrix: Water
Analysis Batch: 533823

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533397

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
9Cl-PF3ONS			37.3	36.8		ng/L		99	60 - 135	2	30
11Cl-PF3OUdS			37.7	33.1		ng/L		88	60 - 135	0	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*95*		*25 - 150*
13C5 PFPeA	*96*		*25 - 150*
13C2 PFHxA	*88*		*25 - 150*
13C4 PFHpA	*95*		*25 - 150*
13C4 PFOA	*100*		*25 - 150*
13C5 PFNA	*98*		*25 - 150*
13C2 PFDA	*99*		*25 - 150*
13C2 PFUnA	*93*		*25 - 150*
13C2 PFDoA	*87*		*25 - 150*
13C2 PFTeDA	*80*		*25 - 150*
13C3 PFBS	*89*		*25 - 150*
18O2 PFHxS	*94*		*25 - 150*
13C4 PFOS	*85*		*25 - 150*
13C8 FOSA	*83*		*10 - 150*
d3-NMeFOSAA	*90*		*25 - 150*
d5-NEtFOSAA	*91*		*25 - 150*
d-N-MeFOSA-M	*78*		*10 - 150*
d-N-EtFOSA-M	*77*		*10 - 150*
d7-N-MeFOSE-M	*100*		*10 - 150*
d9-N-EtFOSE-M	*91*		*10 - 150*
M2-4:2 FTS	*116*		*25 - 150*
M2-6:2 FTS	*106*		*25 - 150*
M2-8:2 FTS	*101*		*25 - 150*
13C3 HFPO-DA	*94*		*25 - 150*
13C2 10:2 FTS	*98*		*25 - 150*

Lab Sample ID: MB 320-533400/1-A
Matrix: Water
Analysis Batch: 533817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		10/12/21 19:23	10/13/21 18:38	1

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

Lab Sample ID: MB 320-533400/1-A
Matrix: Water
Analysis Batch: 533817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533400

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		10/12/21 19:23	10/13/21 18:38	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		10/12/21 19:23	10/13/21 18:38	1
NEtFOSA	<0.87		2.0	0.87	ng/L		10/12/21 19:23	10/13/21 18:38	1
NMeFOSA	<0.43		2.0	0.43	ng/L		10/12/21 19:23	10/13/21 18:38	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		10/12/21 19:23	10/13/21 18:38	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		10/12/21 19:23	10/13/21 18:38	1
NMeFOSE	<1.4		4.0	1.4	ng/L		10/12/21 19:23	10/13/21 18:38	1
NEtFOSE	<0.85		2.0	0.85	ng/L		10/12/21 19:23	10/13/21 18:38	1
4:2 FTS	<0.24		2.0	0.24	ng/L		10/12/21 19:23	10/13/21 18:38	1
6:2 FTS	<2.5		5.0	2.5	ng/L		10/12/21 19:23	10/13/21 18:38	1
8:2 FTS	<0.46		2.0	0.46	ng/L		10/12/21 19:23	10/13/21 18:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		10/12/21 19:23	10/13/21 18:38	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		10/12/21 19:23	10/13/21 18:38	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		10/12/21 19:23	10/13/21 18:38	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		10/12/21 19:23	10/13/21 18:38	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*94*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C5 PFPeA	*95*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C2 PFHxA	*88*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C4 PFHpA	*94*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C4 PFOA	*97*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C5 PFNA	*96*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C2 PFDA	*96*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C2 PFUnA	*96*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C2 PFDoA	*88*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C2 PFTeDA	*80*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C3 PFBS	*94*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
18O2 PFHxS	*94*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C4 PFOS	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C8 FOSA	*80*		*10 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
d3-NMeFOSAA	*90*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
d5-NEtFOSAA	*86*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
d-N-MeFOSA-M	*76*		*10 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
d-N-EtFOSA-M	*76*		*10 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
d7-N-MeFOSE-M	*98*		*10 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
d9-N-EtFOSE-M	*92*		*10 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
M2-4:2 FTS	*115*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
M2-6:2 FTS	*97*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
M2-8:2 FTS	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*
13C3 HFPO-DA	*91*		*25 - 150*	*10/12/21 19:23*	*10/13/21 18:38*	*1*

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

Lab Sample ID: MB 320-533400/1-A
Matrix: Water
Analysis Batch: 533817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 533400

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 10:2 FTS	87		25 - 150	10/12/21 19:23	10/13/21 18:38	1

Lab Sample ID: LCS 320-533400/2-A
Matrix: Water
Analysis Batch: 533817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533400

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutanoic acid (PFBA)	40.0	37.4		ng/L		93	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	37.3		ng/L		93	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	40.0		ng/L		100	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	37.5		ng/L		94	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	38.7		ng/L		97	60 - 135
Perfluorononanoic acid (PFNA)	40.0	40.6		ng/L		102	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	36.0		ng/L		90	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	33.1		ng/L		83	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	39.5		ng/L		99	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	38.1		ng/L		95	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	37.9		ng/L		95	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	33.0		ng/L		93	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	34.3		ng/L		91	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	30.6		ng/L		84	60 - 135
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.8		ng/L		97	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	38.6		ng/L		104	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	38.1		ng/L		99	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	33.8		ng/L		88	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	32.4		ng/L		84	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	37.6		ng/L		94	60 - 135
NEtFOSA	40.0	31.7		ng/L		79	60 - 135
NMeFOSA	40.0	41.0		ng/L		103	60 - 135
NMeFOSAA	40.0	38.2		ng/L		95	60 - 135
NEtFOSAA	40.0	33.0		ng/L		83	60 - 135
NMeFOSE	40.0	38.7		ng/L		97	60 - 135
NEtFOSE	40.0	38.4		ng/L		96	60 - 135
4:2 FTS	37.4	35.0		ng/L		94	60 - 135
6:2 FTS	37.9	34.6		ng/L		91	60 - 135
8:2 FTS	38.3	37.5		ng/L		98	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	37.5		ng/L		100	60 - 135
HFPO-DA (GenX)	40.0	37.3		ng/L		93	60 - 135

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

Lab Sample ID: LCS 320-533400/2-A
Matrix: Water
Analysis Batch: 533817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 533400

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
9Cl-PF3ONS			37.3	36.9		ng/L		99	60 - 135		
11Cl-PF3OUdS			37.7	33.6		ng/L		89	60 - 135		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*96*		*25 - 150*
13C5 PFPeA	*103*		*25 - 150*
13C2 PFHxA	*93*		*25 - 150*
13C4 PFHpA	*99*		*25 - 150*
13C4 PFOA	*101*		*25 - 150*
13C5 PFNA	*100*		*25 - 150*
13C2 PFDA	*103*		*25 - 150*
13C2 PFUnA	*100*		*25 - 150*
13C2 PFDoA	*93*		*25 - 150*
13C2 PFTeDA	*88*		*25 - 150*
13C3 PFBS	*98*		*25 - 150*
18O2 PFHxS	*102*		*25 - 150*
13C4 PFOS	*94*		*25 - 150*
13C8 FOSA	*87*		*10 - 150*
d3-NMeFOSAA	*93*		*25 - 150*
d5-NEtFOSAA	*92*		*25 - 150*
d-N-MeFOSA-M	*83*		*10 - 150*
d-N-EtFOSA-M	*82*		*10 - 150*
d7-N-MeFOSE-M	*103*		*10 - 150*
d9-N-EtFOSE-M	*98*		*10 - 150*
M2-4:2 FTS	*121*		*25 - 150*
M2-6:2 FTS	*109*		*25 - 150*
M2-8:2 FTS	*100*		*25 - 150*
13C3 HFPO-DA	*99*		*25 - 150*
13C2 10:2 FTS	*94*		*25 - 150*

Lab Sample ID: LCSD 320-533400/3-A
Matrix: Water
Analysis Batch: 533817

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533400

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			40.0	35.7		ng/L		89	60 - 135	4	30
Perfluoropentanoic acid (PFPeA)			40.0	34.9		ng/L		87	60 - 135	7	30
Perfluorohexanoic acid (PFHxA)			40.0	37.9		ng/L		95	60 - 135	6	30
Perfluoroheptanoic acid (PFHpA)			40.0	36.1		ng/L		90	60 - 135	4	30
Perfluorooctanoic acid (PFOA)			40.0	37.4		ng/L		93	60 - 135	4	30
Perfluorononanoic acid (PFNA)			40.0	40.1		ng/L		100	60 - 135	1	30
Perfluorodecanoic acid (PFDA)			40.0	35.9		ng/L		90	60 - 135	0	30
Perfluoroundecanoic acid (PFUnA)			40.0	32.1		ng/L		80	60 - 135	3	30
Perfluorododecanoic acid (PFDoA)			40.0	37.4		ng/L		94	60 - 135	5	30
Perfluorotridecanoic acid (PFTrDA)			40.0	36.0		ng/L		90	60 - 135	6	30
Perfluorotetradecanoic acid (PFTeA)			40.0	36.9		ng/L		92	60 - 135	3	30

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

Lab Sample ID: LCSD 320-533400/3-A
Matrix: Water
Analysis Batch: 533817

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533400

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)			35.4	32.5		ng/L		92	60 - 135	2	30
Perfluoropentanesulfonic acid (PFPeS)			37.5	34.4		ng/L		92	60 - 135	0	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	30.3		ng/L		83	60 - 135	1	30
Perfluoroheptanesulfonic Acid (PFHpS)			38.1	34.8		ng/L		91	60 - 135	6	30
Perfluorooctanesulfonic acid (PFOS)			37.1	36.5		ng/L		98	60 - 135	5	30
Perfluorononanesulfonic acid (PFNS)			38.4	35.5		ng/L		93	60 - 135	7	30
Perfluorodecanesulfonic acid (PFDS)			38.6	30.2		ng/L		78	60 - 135	11	30
Perfluorododecanesulfonic acid (PFDoS)			38.7	30.1		ng/L		78	60 - 135	7	30
Perfluorooctanesulfonamide (FOSA)			40.0	36.8		ng/L		92	60 - 135	2	30
NEtFOSA			40.0	29.4		ng/L		73	60 - 135	8	30
NMeFOSA			40.0	40.4		ng/L		101	60 - 135	2	30
NMeFOSAA			40.0	36.9		ng/L		92	60 - 135	3	30
NEtFOSAA			40.0	31.4		ng/L		78	60 - 135	5	30
NMeFOSE			40.0	37.3		ng/L		93	60 - 135	4	30
NEtFOSE			40.0	36.1		ng/L		90	60 - 135	6	30
4:2 FTS			37.4	34.1		ng/L		91	60 - 135	3	30
6:2 FTS			37.9	34.1		ng/L		90	60 - 135	1	30
8:2 FTS			38.3	36.2		ng/L		94	60 - 135	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			37.7	36.3		ng/L		96	60 - 135	3	30
HFPO-DA (GenX)			40.0	35.6		ng/L		89	60 - 135	5	30
9Cl-PF3ONS			37.3	35.5		ng/L		95	60 - 135	4	30
11Cl-PF3OUdS			37.7	30.5		ng/L		81	60 - 135	10	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*101*		*25 - 150*
13C5 PFPeA	*105*		*25 - 150*
13C2 PFHxA	*99*		*25 - 150*
13C4 PFHpA	*100*		*25 - 150*
13C4 PFOA	*104*		*25 - 150*
13C5 PFNA	*103*		*25 - 150*
13C2 PFDA	*105*		*25 - 150*
13C2 PFUnA	*102*		*25 - 150*
13C2 PFDoA	*95*		*25 - 150*
13C2 PFTeDA	*88*		*25 - 150*
13C3 PFBS	*97*		*25 - 150*
18O2 PFHxS	*100*		*25 - 150*
13C4 PFOS	*97*		*25 - 150*
13C8 FOSA	*83*		*10 - 150*
d3-NMeFOSAA	*92*		*25 - 150*
d5-NEtFOSAA	*88*		*25 - 150*
d-N-MeFOSA-M	*78*		*10 - 150*

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

Lab Sample ID: LCSD 320-533400/3-A
Matrix: Water
Analysis Batch: 533817

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 533400

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
d-N-EtFOSA-M	75		10 - 150
d7-N-MeFOSE-M	100		10 - 150
d9-N-EtFOSE-M	97		10 - 150
M2-4:2 FTS	123		25 - 150
M2-6:2 FTS	112		25 - 150
M2-8:2 FTS	100		25 - 150
13C3 HFPO-DA	103		25 - 150
13C2 10:2 FTS	94		25 - 150

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

Lab Sample ID: 320-80070-20 MS
Matrix: Solid
Analysis Batch: 533940

Client Sample ID: GP-16 (1-3)
Prep Type: Total/NA
Prep Batch: 533125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perfluorooctanoic acid (PFOA) - DL	85		2.23	70.4	4	ug/Kg	☼	-658	70 - 130		

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C4 PFOA - DL	79		25 - 150

Lab Sample ID: 320-80070-20 MSD
Matrix: Solid
Analysis Batch: 533940

Client Sample ID: GP-16 (1-3)
Prep Type: Total/NA
Prep Batch: 533125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctanoic acid (PFOA) - DL	85		2.09	72.8	4	ug/Kg	☼	-591	70 - 130	3	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C4 PFOA - DL	83		25 - 150

Method: Moisture - Percent Moisture

Lab Sample ID: 320-80070-1 DU
Matrix: Solid
Analysis Batch: 533031

Client Sample ID: SS-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	25.3			25.4		%				0.5	20
Percent Solids	74.7			74.6		%				0.2	20

Lab Sample ID: 320-80070-20 DU
Matrix: Solid
Analysis Batch: 533032

Client Sample ID: GP-16 (1-3)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	10.5			9.6		%				8	20
Percent Solids	89.5			90.4		%				0.9	20

LCMS

Prep Batch: 533122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-21	GP-16 (3-5)	Total/NA	Solid	SHAKE	
320-80070-22	DUP-S-01	Total/NA	Solid	SHAKE	
320-80070-23	DUP-S-02	Total/NA	Solid	SHAKE	
320-80070-24	DUP-S-03	Total/NA	Solid	SHAKE	
320-80070-24 - DL	DUP-S-03	Total/NA	Solid	SHAKE	
320-80070-25	GP-17 (1-3)	Total/NA	Solid	SHAKE	
320-80070-26	GP-17 (3-5)	Total/NA	Solid	SHAKE	
320-80070-27	GP-13 (7-9)	Total/NA	Solid	SHAKE	
320-80070-28	GP-13 (9-11)	Total/NA	Solid	SHAKE	
320-80070-29	GP-14 (7-9)	Total/NA	Solid	SHAKE	
320-80070-30	GP-14 (9-11)	Total/NA	Solid	SHAKE	
320-80070-31	GP-15 (5-7)	Total/NA	Solid	SHAKE	
320-80070-32	GP-15 (7-9)	Total/NA	Solid	SHAKE	
MB 320-533122/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-533122/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
320-80070-21 MS	GP-16 (3-5)	Total/NA	Solid	SHAKE	
320-80070-21 MSD	GP-16 (3-5)	Total/NA	Solid	SHAKE	

Prep Batch: 533125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-1	SS-04	Total/NA	Solid	SHAKE	
320-80070-2	GP-04 (4-6)	Total/NA	Solid	SHAKE	
320-80070-3	GP-05 (0-2)	Total/NA	Solid	SHAKE	
320-80070-4	GP-05 (4-6)	Total/NA	Solid	SHAKE	
320-80070-5	GP-06 (0-4)	Total/NA	Solid	SHAKE	
320-80070-6	GP-06 (5-7)	Total/NA	Solid	SHAKE	
320-80070-7	GP-07 (0-2)	Total/NA	Solid	SHAKE	
320-80070-8	GP-07 (3-5)	Total/NA	Solid	SHAKE	
320-80070-9	GP-08 (0-2)	Total/NA	Solid	SHAKE	
320-80070-10	GP-08 (3-5)	Total/NA	Solid	SHAKE	
320-80070-11	SS-09	Total/NA	Solid	SHAKE	
320-80070-12	GP-09 (5-7)	Total/NA	Solid	SHAKE	
320-80070-13	GP-10 (0-2)	Total/NA	Solid	SHAKE	
320-80070-14	GP-10 (3-5)	Total/NA	Solid	SHAKE	
320-80070-15	GP-11 (0-2)	Total/NA	Solid	SHAKE	
320-80070-16	GP-11 (4-6)	Total/NA	Solid	SHAKE	
320-80070-17	GP-12 (0-2)	Total/NA	Solid	SHAKE	
320-80070-18	GP-12 (4-6)	Total/NA	Solid	SHAKE	
320-80070-19	SS-10	Total/NA	Solid	SHAKE	
320-80070-20 - DL	GP-16 (1-3)	Total/NA	Solid	SHAKE	
320-80070-20	GP-16 (1-3)	Total/NA	Solid	SHAKE	
MB 320-533125/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-533125/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
320-80070-20 MS - DL	GP-16 (1-3)	Total/NA	Solid	SHAKE	
320-80070-20 MS	GP-16 (1-3)	Total/NA	Solid	SHAKE	
320-80070-20 MSD - DL	GP-16 (1-3)	Total/NA	Solid	SHAKE	
320-80070-20 MSD	GP-16 (1-3)	Total/NA	Solid	SHAKE	

Analysis Batch: 533368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-533122/1-A	Method Blank	Total/NA	Solid	537 (modified)	533122

LCMS (Continued)

Analysis Batch: 533368 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-533122/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	533122

Analysis Batch: 533377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-533125/1-A	Method Blank	Total/NA	Solid	537 (modified)	533125
LCS 320-533125/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	533125

Prep Batch: 533397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-33	TW-01	Total/NA	Water	3535	
320-80070-34	TW-12	Total/NA	Water	3535	
320-80070-35	FB-01	Total/NA	Water	3535	
320-80070-36	EB-01	Total/NA	Water	3535	
320-80070-37	EB-02	Total/NA	Water	3535	
320-80070-38	EB-03	Total/NA	Water	3535	
320-80070-39	EB-04	Total/NA	Water	3535	
320-80070-40	FB-02	Total/NA	Water	3535	
320-80070-41	FB-03	Total/NA	Water	3535	
320-80070-42	TW-13	Total/NA	Water	3535	
320-80070-43	TW-14	Total/NA	Water	3535	
320-80070-44	TW-15	Total/NA	Water	3535	
320-80070-45	TW-17	Total/NA	Water	3535	
320-80070-46	TW-16	Total/NA	Water	3535	
320-80070-46 - DL	TW-16	Total/NA	Water	3535	
320-80070-47	TW-09	Total/NA	Water	3535	
320-80070-48	TW-08	Total/NA	Water	3535	
320-80070-48 - DL	TW-08	Total/NA	Water	3535	
320-80070-49	TW-06	Total/NA	Water	3535	
320-80070-50	TW-05	Total/NA	Water	3535	
320-80070-51	TW-07	Total/NA	Water	3535	
320-80070-52	TW-04	Total/NA	Water	3535	
MB 320-533397/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-533397/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-533397/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Prep Batch: 533400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-53	TW-10	Total/NA	Water	3535	
320-80070-54 - DL	TW-11	Total/NA	Water	3535	
320-80070-54	TW-11	Total/NA	Water	3535	
320-80070-55	DUP-01	Total/NA	Water	3535	
320-80070-55 - DL	DUP-01	Total/NA	Water	3535	
320-80070-56	TW-02	Total/NA	Water	3535	
320-80070-57	DUP-02	Total/NA	Water	3535	
320-80070-58	TW-03	Total/NA	Water	3535	
MB 320-533400/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-533400/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-533400/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

LCMS

Analysis Batch: 533817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-53	TW-10	Total/NA	Water	537 (modified)	533400
320-80070-54 - DL	TW-11	Total/NA	Water	537 (modified)	533400
320-80070-55	DUP-01	Total/NA	Water	537 (modified)	533400
320-80070-56	TW-02	Total/NA	Water	537 (modified)	533400
320-80070-57	DUP-02	Total/NA	Water	537 (modified)	533400
320-80070-58	TW-03	Total/NA	Water	537 (modified)	533400
MB 320-533400/1-A	Method Blank	Total/NA	Water	537 (modified)	533400
LCS 320-533400/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	533400
LCSD 320-533400/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	533400

Analysis Batch: 533823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-33	TW-01	Total/NA	Water	537 (modified)	533397
320-80070-34	TW-12	Total/NA	Water	537 (modified)	533397
320-80070-35	FB-01	Total/NA	Water	537 (modified)	533397
320-80070-36	EB-01	Total/NA	Water	537 (modified)	533397
320-80070-37	EB-02	Total/NA	Water	537 (modified)	533397
320-80070-38	EB-03	Total/NA	Water	537 (modified)	533397
320-80070-39	EB-04	Total/NA	Water	537 (modified)	533397
320-80070-40	FB-02	Total/NA	Water	537 (modified)	533397
320-80070-41	FB-03	Total/NA	Water	537 (modified)	533397
320-80070-42	TW-13	Total/NA	Water	537 (modified)	533397
320-80070-43	TW-14	Total/NA	Water	537 (modified)	533397
320-80070-44	TW-15	Total/NA	Water	537 (modified)	533397
320-80070-45	TW-17	Total/NA	Water	537 (modified)	533397
320-80070-46	TW-16	Total/NA	Water	537 (modified)	533397
320-80070-47	TW-09	Total/NA	Water	537 (modified)	533397
320-80070-48	TW-08	Total/NA	Water	537 (modified)	533397
320-80070-49	TW-06	Total/NA	Water	537 (modified)	533397
320-80070-50	TW-05	Total/NA	Water	537 (modified)	533397
320-80070-51	TW-07	Total/NA	Water	537 (modified)	533397
320-80070-52	TW-04	Total/NA	Water	537 (modified)	533397
MB 320-533397/1-A	Method Blank	Total/NA	Water	537 (modified)	533397
LCS 320-533397/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	533397
LCSD 320-533397/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	533397

Analysis Batch: 533829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-1	SS-04	Total/NA	Solid	537 (modified)	533125
320-80070-2	GP-04 (4-6)	Total/NA	Solid	537 (modified)	533125
320-80070-3	GP-05 (0-2)	Total/NA	Solid	537 (modified)	533125
320-80070-4	GP-05 (4-6)	Total/NA	Solid	537 (modified)	533125
320-80070-5	GP-06 (0-4)	Total/NA	Solid	537 (modified)	533125
320-80070-6	GP-06 (5-7)	Total/NA	Solid	537 (modified)	533125
320-80070-7	GP-07 (0-2)	Total/NA	Solid	537 (modified)	533125
320-80070-8	GP-07 (3-5)	Total/NA	Solid	537 (modified)	533125
320-80070-9	GP-08 (0-2)	Total/NA	Solid	537 (modified)	533125
320-80070-10	GP-08 (3-5)	Total/NA	Solid	537 (modified)	533125
320-80070-11	SS-09	Total/NA	Solid	537 (modified)	533125
320-80070-12	GP-09 (5-7)	Total/NA	Solid	537 (modified)	533125
320-80070-13	GP-10 (0-2)	Total/NA	Solid	537 (modified)	533125

LCMS (Continued)

Analysis Batch: 533829 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-14	GP-10 (3-5)	Total/NA	Solid	537 (modified)	533125
320-80070-15	GP-11 (0-2)	Total/NA	Solid	537 (modified)	533125
320-80070-16	GP-11 (4-6)	Total/NA	Solid	537 (modified)	533125
320-80070-17	GP-12 (0-2)	Total/NA	Solid	537 (modified)	533125
320-80070-18	GP-12 (4-6)	Total/NA	Solid	537 (modified)	533125
320-80070-19	SS-10	Total/NA	Solid	537 (modified)	533125

Analysis Batch: 533940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-20 - DL	GP-16 (1-3)	Total/NA	Solid	537 (modified)	533125
320-80070-20 MS - DL	GP-16 (1-3)	Total/NA	Solid	537 (modified)	533125
320-80070-20 MSD - DL	GP-16 (1-3)	Total/NA	Solid	537 (modified)	533125

Analysis Batch: 534084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-46 - DL	TW-16	Total/NA	Water	537 (modified)	533397
320-80070-48 - DL	TW-08	Total/NA	Water	537 (modified)	533397

Analysis Batch: 534136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-21	GP-16 (3-5)	Total/NA	Solid	537 (modified)	533122
320-80070-22	DUP-S-01	Total/NA	Solid	537 (modified)	533122
320-80070-23	DUP-S-02	Total/NA	Solid	537 (modified)	533122
320-80070-24	DUP-S-03	Total/NA	Solid	537 (modified)	533122
320-80070-25	GP-17 (1-3)	Total/NA	Solid	537 (modified)	533122
320-80070-26	GP-17 (3-5)	Total/NA	Solid	537 (modified)	533122
320-80070-27	GP-13 (7-9)	Total/NA	Solid	537 (modified)	533122
320-80070-28	GP-13 (9-11)	Total/NA	Solid	537 (modified)	533122
320-80070-29	GP-14 (7-9)	Total/NA	Solid	537 (modified)	533122
320-80070-30	GP-14 (9-11)	Total/NA	Solid	537 (modified)	533122
320-80070-31	GP-15 (5-7)	Total/NA	Solid	537 (modified)	533122
320-80070-32	GP-15 (7-9)	Total/NA	Solid	537 (modified)	533122
320-80070-21 MS	GP-16 (3-5)	Total/NA	Solid	537 (modified)	533122
320-80070-21 MSD	GP-16 (3-5)	Total/NA	Solid	537 (modified)	533122

Analysis Batch: 534139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-55 - DL	DUP-01	Total/NA	Water	537 (modified)	533400

Analysis Batch: 534252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-20	GP-16 (1-3)	Total/NA	Solid	537 (modified)	533125
320-80070-24 - DL	DUP-S-03	Total/NA	Solid	537 (modified)	533122
320-80070-54	TW-11	Total/NA	Water	537 (modified)	533400
320-80070-20 MS	GP-16 (1-3)	Total/NA	Solid	537 (modified)	533125
320-80070-20 MSD	GP-16 (1-3)	Total/NA	Solid	537 (modified)	533125

General Chemistry

Analysis Batch: 533031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-1	SS-04	Total/NA	Solid	Moisture	
320-80070-2	GP-04 (4-6)	Total/NA	Solid	Moisture	
320-80070-3	GP-05 (0-2)	Total/NA	Solid	Moisture	
320-80070-4	GP-05 (4-6)	Total/NA	Solid	Moisture	
320-80070-5	GP-06 (0-4)	Total/NA	Solid	Moisture	
320-80070-6	GP-06 (5-7)	Total/NA	Solid	Moisture	
320-80070-7	GP-07 (0-2)	Total/NA	Solid	Moisture	
320-80070-8	GP-07 (3-5)	Total/NA	Solid	Moisture	
320-80070-9	GP-08 (0-2)	Total/NA	Solid	Moisture	
320-80070-10	GP-08 (3-5)	Total/NA	Solid	Moisture	
320-80070-11	SS-09	Total/NA	Solid	Moisture	
320-80070-12	GP-09 (5-7)	Total/NA	Solid	Moisture	
320-80070-13	GP-10 (0-2)	Total/NA	Solid	Moisture	
320-80070-14	GP-10 (3-5)	Total/NA	Solid	Moisture	
320-80070-15	GP-11 (0-2)	Total/NA	Solid	Moisture	
320-80070-16	GP-11 (4-6)	Total/NA	Solid	Moisture	
320-80070-17	GP-12 (0-2)	Total/NA	Solid	Moisture	
320-80070-18	GP-12 (4-6)	Total/NA	Solid	Moisture	
320-80070-19	SS-10	Total/NA	Solid	Moisture	
320-80070-1 DU	SS-04	Total/NA	Solid	Moisture	

Analysis Batch: 533032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-80070-20	GP-16 (1-3)	Total/NA	Solid	Moisture	
320-80070-21	GP-16 (3-5)	Total/NA	Solid	Moisture	
320-80070-22	DUP-S-01	Total/NA	Solid	Moisture	
320-80070-23	DUP-S-02	Total/NA	Solid	Moisture	
320-80070-24	DUP-S-03	Total/NA	Solid	Moisture	
320-80070-25	GP-17 (1-3)	Total/NA	Solid	Moisture	
320-80070-26	GP-17 (3-5)	Total/NA	Solid	Moisture	
320-80070-27	GP-13 (7-9)	Total/NA	Solid	Moisture	
320-80070-28	GP-13 (9-11)	Total/NA	Solid	Moisture	
320-80070-29	GP-14 (7-9)	Total/NA	Solid	Moisture	
320-80070-30	GP-14 (9-11)	Total/NA	Solid	Moisture	
320-80070-31	GP-15 (5-7)	Total/NA	Solid	Moisture	
320-80070-32	GP-15 (7-9)	Total/NA	Solid	Moisture	
320-80070-20 DU	GP-16 (1-3)	Total/NA	Solid	Moisture	

Client Sample ID: SS-04
Date Collected: 10/05/21 11:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: SS-04
Date Collected: 10/05/21 11:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-1
Matrix: Solid
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.41 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 04:33	SK	TAL SAC

Client Sample ID: GP-04 (4-6)
Date Collected: 10/05/21 10:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-04 (4-6)
Date Collected: 10/05/21 10:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-2
Matrix: Solid
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.00 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 04:42	SK	TAL SAC

Client Sample ID: GP-05 (0-2)
Date Collected: 10/05/21 12:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-05 (0-2)
Date Collected: 10/05/21 12:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-3
Matrix: Solid
Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.44 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 04:51	SK	TAL SAC

Client Sample ID: GP-05 (4-6)
Date Collected: 10/05/21 12:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-05 (4-6)
Date Collected: 10/05/21 12:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-4
Matrix: Solid
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.25 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 05:00	SK	TAL SAC

Client Sample ID: GP-06 (0-4)
Date Collected: 10/05/21 12:35
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-06 (0-4)
Date Collected: 10/05/21 12:35
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-5
Matrix: Solid
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.03 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 05:09	SK	TAL SAC

Client Sample ID: GP-06 (5-7)
Date Collected: 10/05/21 12:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-06 (5-7)
Date Collected: 10/05/21 12:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-6
Matrix: Solid
Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.15 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 05:18	SK	TAL SAC

Client Sample ID: GP-07 (0-2)
Date Collected: 10/05/21 11:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-07 (0-2)
Date Collected: 10/05/21 11:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-7
Matrix: Solid
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.07 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 05:27	SK	TAL SAC

Client Sample ID: GP-07 (3-5)
Date Collected: 10/05/21 11:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-07 (3-5)
Date Collected: 10/05/21 11:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-8
Matrix: Solid
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.25 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 05:37	SK	TAL SAC

Client Sample ID: GP-08 (0-2)
Date Collected: 10/05/21 13:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-08 (0-2)
Date Collected: 10/05/21 13:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-9
Matrix: Solid
Percent Solids: 85.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.00 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 05:46	SK	TAL SAC

Client Sample ID: GP-08 (3-5)
Date Collected: 10/05/21 13:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-08 (3-5)
Date Collected: 10/05/21 13:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-10
Matrix: Solid
Percent Solids: 82.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.22 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 05:55	SK	TAL SAC

Client Sample ID: SS-09
Date Collected: 10/05/21 13:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: SS-09
Date Collected: 10/05/21 13:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-11
Matrix: Solid
Percent Solids: 64.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.31 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 06:31	SK	TAL SAC

Client Sample ID: GP-09 (5-7)
Date Collected: 10/05/21 13:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-09 (5-7)
Date Collected: 10/05/21 13:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-12
Matrix: Solid
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.23 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 06:40	SK	TAL SAC

Client Sample ID: GP-10 (0-2)
Date Collected: 10/04/21 16:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-10 (0-2)
Date Collected: 10/04/21 16:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-13
Matrix: Solid
Percent Solids: 82.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.26 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 06:50	SK	TAL SAC

Client Sample ID: GP-10 (3-5)
Date Collected: 10/04/21 16:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-10 (3-5)
Date Collected: 10/04/21 16:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-14
Matrix: Solid
Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.14 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 06:59	SK	TAL SAC

Client Sample ID: GP-11 (0-2)
Date Collected: 10/04/21 15:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-11 (0-2)
Date Collected: 10/04/21 15:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-15
Matrix: Solid
Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.35 g	10.0 mL	533125	10/11/21 18:38	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 07:08	SK	TAL SAC

Client Sample ID: GP-11 (4-6)
Date Collected: 10/04/21 15:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-11 (4-6)
Date Collected: 10/04/21 15:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-16
Matrix: Solid
Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.14 g	10.0 mL	533125	10/11/21 19:03	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 07:17	SK	TAL SAC

Client Sample ID: GP-12 (0-2)
Date Collected: 10/04/21 14:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-12 (0-2)
Date Collected: 10/04/21 14:05
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-17
Matrix: Solid
Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.17 g	10.0 mL	533125	10/11/21 19:03	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 07:26	SK	TAL SAC

Client Sample ID: GP-12 (4-6)
Date Collected: 10/04/21 14:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Client Sample ID: GP-12 (4-6)
Date Collected: 10/04/21 14:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-18
Matrix: Solid
Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.19 g	10.0 mL	533125	10/11/21 19:03	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 07:35	SK	TAL SAC

Client Sample ID: SS-10
Date Collected: 10/05/21 15:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533031	10/11/21 15:57	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: SS-10
Date Collected: 10/05/21 15:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-19
Matrix: Solid
Percent Solids: 63.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.14 g	10.0 mL	533125	10/11/21 19:03	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			533829	10/14/21 07:44	SK	TAL SAC

Client Sample ID: GP-16 (1-3)
Date Collected: 10/05/21 15:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: GP-16 (1-3)
Date Collected: 10/05/21 15:20
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-20
Matrix: Solid
Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE	DL		5.17 g	10.0 mL	533125	10/11/21 19:03	FX	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10			533940	10/14/21 09:37	SK	TAL SAC
Total/NA	Prep	SHAKE			5.17 g	10.0 mL	533125	10/11/21 19:03	FX	TAL SAC
Total/NA	Analysis	537 (modified)		1			534252	10/15/21 11:08	JY1	TAL SAC

Client Sample ID: GP-16 (3-5)
Date Collected: 10/05/21 15:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: GP-16 (3-5)
Date Collected: 10/05/21 15:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-21
Matrix: Solid
Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.63 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 22:00	JY1	TAL SAC

Client Sample ID: DUP-S-01
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: DUP-S-01
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-22
Matrix: Solid
Percent Solids: 74.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.59 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 22:27	JY1	TAL SAC

Client Sample ID: DUP-S-02
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: DUP-S-02
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-23
Matrix: Solid
Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.24 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 22:37	JY1	TAL SAC

Client Sample ID: DUP-S-03
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: DUP-S-03
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-24
Matrix: Solid
Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.29 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 22:46	JY1	TAL SAC
Total/NA	Prep	SHAKE	DL		5.29 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10			534252	10/15/21 10:47	JY1	TAL SAC

Client Sample ID: GP-17 (1-3)
Date Collected: 10/05/21 15:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-17 (1-3)
Date Collected: 10/05/21 15:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-25
Matrix: Solid
Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.55 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 22:55	JY1	TAL SAC

Client Sample ID: GP-17 (3-5)
Date Collected: 10/05/21 15:50
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: GP-17 (3-5)
Date Collected: 10/05/21 15:50
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-26
Matrix: Solid
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.28 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 23:04	JY1	TAL SAC

Client Sample ID: GP-13 (7-9)
Date Collected: 10/05/21 18:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: GP-13 (7-9)
Date Collected: 10/05/21 18:15
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-27
Matrix: Solid
Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.05 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 23:40	JY1	TAL SAC

Client Sample ID: GP-13 (9-11)
Date Collected: 10/05/21 18:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

Client Sample ID: GP-13 (9-11)
Lab Sample ID: 320-80070-28
Date Collected: 10/05/21 18:25
Matrix: Solid
Date Received: 10/08/21 10:35
Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.25 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 23:50	JY1	TAL SAC

Client Sample ID: GP-14 (7-9)
Lab Sample ID: 320-80070-29
Date Collected: 10/05/21 18:45
Matrix: Solid
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: GP-14 (7-9)
Lab Sample ID: 320-80070-29
Date Collected: 10/05/21 18:45
Matrix: Solid
Date Received: 10/08/21 10:35
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.15 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/14/21 23:59	JY1	TAL SAC

Client Sample ID: GP-14 (9-11)
Lab Sample ID: 320-80070-30
Date Collected: 10/05/21 18:55
Matrix: Solid
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: GP-14 (9-11)
Lab Sample ID: 320-80070-30
Date Collected: 10/05/21 18:55
Matrix: Solid
Date Received: 10/08/21 10:35
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.36 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/15/21 00:08	JY1	TAL SAC

Client Sample ID: GP-15 (5-7)
Lab Sample ID: 320-80070-31
Date Collected: 10/06/21 10:00
Matrix: Solid
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: GP-15 (5-7)
Date Collected: 10/06/21 10:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-31
Matrix: Solid
Percent Solids: 77.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.24 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/15/21 00:17	JY1	TAL SAC

Client Sample ID: GP-15 (7-9)
Date Collected: 10/06/21 10:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			533032	10/11/21 16:01	JCB	TAL SAC

Client Sample ID: GP-15 (7-9)
Date Collected: 10/06/21 10:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-32
Matrix: Solid
Percent Solids: 76.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SHAKE			5.17 g	10.0 mL	533122	10/11/21 18:38	AM	TAL SAC
Total/NA	Analysis	537 (modified)		1			534136	10/15/21 00:26	JY1	TAL SAC

Client Sample ID: TW-01
Date Collected: 10/04/21 16:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-33
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			256 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 22:08	RS1	TAL SAC

Client Sample ID: TW-12
Date Collected: 10/04/21 16:35
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-34
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			282.8 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 22:17	RS1	TAL SAC

Client Sample ID: FB-01
Date Collected: 10/05/21 10:21
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-35
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			272.7 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 22:27	RS1	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: EB-01
Date Collected: 10/04/21 11:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-36
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			254.3 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 22:36	RS1	TAL SAC

Client Sample ID: EB-02
Date Collected: 10/05/21 10:08
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-37
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			257.8 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 22:45	RS1	TAL SAC

Client Sample ID: EB-03
Date Collected: 10/05/21 10:16
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-38
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			285.9 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 22:54	RS1	TAL SAC

Client Sample ID: EB-04
Date Collected: 10/05/21 11:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-39
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274.2 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 23:03	RS1	TAL SAC

Client Sample ID: FB-02
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-40
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274.9 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 23:39	RS1	TAL SAC

Client Sample ID: FB-03
Date Collected: 10/06/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-41
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			268.4 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 23:49	RS1	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

Client Sample ID: TW-13
Lab Sample ID: 320-80070-42
Date Collected: 10/06/21 12:20
Matrix: Water
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			5.0 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/13/21 23:58	RS1	TAL SAC

Client Sample ID: TW-14
Lab Sample ID: 320-80070-43
Date Collected: 10/06/21 13:05
Matrix: Water
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			279.8 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/14/21 00:07	RS1	TAL SAC

Client Sample ID: TW-15
Lab Sample ID: 320-80070-44
Date Collected: 10/06/21 12:40
Matrix: Water
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			284.4 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/14/21 00:16	RS1	TAL SAC

Client Sample ID: TW-17
Lab Sample ID: 320-80070-45
Date Collected: 10/05/21 17:08
Matrix: Water
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			232 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/14/21 00:25	RS1	TAL SAC

Client Sample ID: TW-16
Lab Sample ID: 320-80070-46
Date Collected: 10/05/21 16:50
Matrix: Water
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			5.0 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/14/21 00:34	RS1	TAL SAC
Total/NA	Prep	3535	DL		5.0 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)	DL	5			534084	10/14/21 22:59	S1M	TAL SAC

Client Sample ID: TW-09
Lab Sample ID: 320-80070-47
Date Collected: 10/05/21 16:40
Matrix: Water
Date Received: 10/08/21 10:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			268.6 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/14/21 00:43	RS1	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-08
Date Collected: 10/05/21 16:32
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-48
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			282.8 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		10			533823	10/14/21 01:02	RS1	TAL SAC
Total/NA	Prep	3535	DL		282.8 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)	DL	20			534084	10/14/21 23:09	S1M	TAL SAC

Client Sample ID: TW-06
Date Collected: 10/05/21 17:30
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			284.2 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		10			533823	10/14/21 01:38	RS1	TAL SAC

Client Sample ID: TW-05
Date Collected: 10/05/21 13:40
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-50
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			279.3 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533823	10/14/21 00:53	RS1	TAL SAC

Client Sample ID: TW-07
Date Collected: 10/05/21 14:22
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-51
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			252.2 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		10			533823	10/14/21 01:47	RS1	TAL SAC

Client Sample ID: TW-04
Date Collected: 10/05/21 13:25
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-52
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			264.7 mL	10.0 mL	533397	10/12/21 19:14	PV	TAL SAC
Total/NA	Analysis	537 (modified)		10			533823	10/14/21 01:56	RS1	TAL SAC

Client Sample ID: TW-10
Date Collected: 10/05/21 13:18
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-53
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			276.7 mL	10.0 mL	533400	10/12/21 19:23	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533817	10/13/21 19:06	S1M	TAL SAC

Lab Chronicle

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Client Sample ID: TW-11
Date Collected: 10/05/21 11:10
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-54
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	DL		283.2 mL	10.0 mL	533400	10/12/21 19:23	PV	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10			533817	10/13/21 19:42	S1M	TAL SAC
Total/NA	Prep	3535			283.2 mL	10.0 mL	533400	10/12/21 19:23	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			534252	10/15/21 10:58	JY1	TAL SAC

Client Sample ID: DUP-01
Date Collected: 10/05/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-55
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			288.4 mL	10.0 mL	533400	10/12/21 19:23	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533817	10/13/21 19:15	S1M	TAL SAC
Total/NA	Prep	3535	DL		288.4 mL	10.0 mL	533400	10/12/21 19:23	PV	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10			534139	10/15/21 02:16	JY1	TAL SAC

Client Sample ID: TW-02
Date Collected: 10/05/21 10:55
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-56
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			283 mL	10.0 mL	533400	10/12/21 19:23	PV	TAL SAC
Total/NA	Analysis	537 (modified)		10			533817	10/13/21 19:51	S1M	TAL SAC

Client Sample ID: DUP-02
Date Collected: 10/06/21 00:00
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-57
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			266.8 mL	10.0 mL	533400	10/12/21 19:23	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533817	10/13/21 19:24	S1M	TAL SAC

Client Sample ID: TW-03
Date Collected: 10/05/21 09:45
Date Received: 10/08/21 10:35

Lab Sample ID: 320-80070-58
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			249.2 mL	10.0 mL	533400	10/12/21 19:23	PV	TAL SAC
Total/NA	Analysis	537 (modified)		1			533817	10/13/21 19:33	S1M	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

Client: TRC Environmental Corporation
Job ID: 320-80070-1
Project/Site: Project Peace – Manitowoc 462253

Laboratory: Eurofins TestAmerica, Sacramento

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-22

Method Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

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

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

Sample Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80070-1	SS-04	Solid	10/05/21 11:15	10/08/21 10:35
320-80070-2	GP-04 (4-6)	Solid	10/05/21 10:30	10/08/21 10:35
320-80070-3	GP-05 (0-2)	Solid	10/05/21 12:05	10/08/21 10:35
320-80070-4	GP-05 (4-6)	Solid	10/05/21 12:15	10/08/21 10:35
320-80070-5	GP-06 (0-4)	Solid	10/05/21 12:35	10/08/21 10:35
320-80070-6	GP-06 (5-7)	Solid	10/05/21 12:40	10/08/21 10:35
320-80070-7	GP-07 (0-2)	Solid	10/05/21 11:15	10/08/21 10:35
320-80070-8	GP-07 (3-5)	Solid	10/05/21 11:25	10/08/21 10:35
320-80070-9	GP-08 (0-2)	Solid	10/05/21 13:10	10/08/21 10:35
320-80070-10	GP-08 (3-5)	Solid	10/05/21 13:20	10/08/21 10:35
320-80070-11	SS-09	Solid	10/05/21 13:40	10/08/21 10:35
320-80070-12	GP-09 (5-7)	Solid	10/05/21 13:45	10/08/21 10:35
320-80070-13	GP-10 (0-2)	Solid	10/04/21 16:20	10/08/21 10:35
320-80070-14	GP-10 (3-5)	Solid	10/04/21 16:30	10/08/21 10:35
320-80070-15	GP-11 (0-2)	Solid	10/04/21 15:20	10/08/21 10:35
320-80070-16	GP-11 (4-6)	Solid	10/04/21 15:30	10/08/21 10:35
320-80070-17	GP-12 (0-2)	Solid	10/04/21 14:05	10/08/21 10:35
320-80070-18	GP-12 (4-6)	Solid	10/04/21 14:10	10/08/21 10:35
320-80070-19	SS-10	Solid	10/05/21 15:00	10/08/21 10:35
320-80070-20	GP-16 (1-3)	Solid	10/05/21 15:20	10/08/21 10:35
320-80070-21	GP-16 (3-5)	Solid	10/05/21 15:30	10/08/21 10:35
320-80070-22	DUP-S-01	Solid	10/05/21 00:00	10/08/21 10:35
320-80070-23	DUP-S-02	Solid	10/05/21 00:00	10/08/21 10:35
320-80070-24	DUP-S-03	Solid	10/05/21 00:00	10/08/21 10:35
320-80070-25	GP-17 (1-3)	Solid	10/05/21 15:55	10/08/21 10:35
320-80070-26	GP-17 (3-5)	Solid	10/05/21 15:50	10/08/21 10:35
320-80070-27	GP-13 (7-9)	Solid	10/05/21 18:15	10/08/21 10:35
320-80070-28	GP-13 (9-11)	Solid	10/05/21 18:25	10/08/21 10:35
320-80070-29	GP-14 (7-9)	Solid	10/05/21 18:45	10/08/21 10:35
320-80070-30	GP-14 (9-11)	Solid	10/05/21 18:55	10/08/21 10:35
320-80070-31	GP-15 (5-7)	Solid	10/06/21 10:00	10/08/21 10:35
320-80070-32	GP-15 (7-9)	Solid	10/06/21 10:10	10/08/21 10:35
320-80070-33	TW-01	Water	10/04/21 16:10	10/08/21 10:35
320-80070-34	TW-12	Water	10/04/21 16:35	10/08/21 10:35
320-80070-35	FB-01	Water	10/05/21 10:21	10/08/21 10:35
320-80070-36	EB-01	Water	10/04/21 11:45	10/08/21 10:35
320-80070-37	EB-02	Water	10/05/21 10:08	10/08/21 10:35
320-80070-38	EB-03	Water	10/05/21 10:16	10/08/21 10:35
320-80070-39	EB-04	Water	10/05/21 11:45	10/08/21 10:35
320-80070-40	FB-02	Water	10/05/21 00:00	10/08/21 10:35
320-80070-41	FB-03	Water	10/06/21 00:00	10/08/21 10:35
320-80070-42	TW-13	Water	10/06/21 12:20	10/08/21 10:35
320-80070-43	TW-14	Water	10/06/21 13:05	10/08/21 10:35
320-80070-44	TW-15	Water	10/06/21 12:40	10/08/21 10:35
320-80070-45	TW-17	Water	10/05/21 17:08	10/08/21 10:35
320-80070-46	TW-16	Water	10/05/21 16:50	10/08/21 10:35
320-80070-47	TW-09	Water	10/05/21 16:40	10/08/21 10:35
320-80070-48	TW-08	Water	10/05/21 16:32	10/08/21 10:35
320-80070-49	TW-06	Water	10/05/21 17:30	10/08/21 10:35
320-80070-50	TW-05	Water	10/05/21 13:40	10/08/21 10:35
320-80070-51	TW-07	Water	10/05/21 14:22	10/08/21 10:35
320-80070-52	TW-04	Water	10/05/21 13:25	10/08/21 10:35
320-80070-53	TW-10	Water	10/05/21 13:18	10/08/21 10:35
320-80070-54	TW-11	Water	10/05/21 11:10	10/08/21 10:35

Sample Summary

Client: TRC Environmental Corporation
Project/Site: Project Peace – Manitowoc 462253

Job ID: 320-80070-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-80070-55	DUP-01	Water	10/05/21 00:00	10/08/21 10:35
320-80070-56	TW-02	Water	10/05/21 10:55	10/08/21 10:35
320-80070-57	DUP-02	Water	10/06/21 00:00	10/08/21 10:35
320-80070-58	TW-03	Water	10/05/21 09:45	10/08/21 10:35

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Ben Wachholz	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-95517-42260.2
Client Contact: Ben Wachholz	Phone: (608) 354-3923	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: WI	Page: Page ~~2 of 2~~ 1 of 6
Company: TRC Environmental Corporation	PWSID:			Job #:
Address: 708 Heartland Trail Suite 3000	Due Date Requested:			
City: Madison	TAT Requested (days): 5 days			
State, Zip: WI, 53717	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested			
Email: BWachholz@trccompanies.com	WO #:			
Project Name: Project Peace – Manitowoc 462253	Project #: 50019442			
Site:	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
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)	8082A - PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N		
~~GP-01~~ SS-04	10/5/21	11:15	G	Solid			X			
GP-04 (4-6)	10/5/21	10:30	G	Solid			X			
GP-05 (0-2)	10/5/21	12:05	G	Solid			X			
GP-05 (4-6)	10/5/21	12:15	G	Solid			X			
GP-06 (0-4)	10/5/21	12:35	G	Solid			X			
GP-06 (5-7)	10/5/21	12:40	G	Solid			X			
GP-07 (0-2)	10/5/21	11:15	G	S			X			
GP-07 (3-5)	10/5/21	11:25	G	S			X			
GP-08 (0-2)	10/5/21	13:10	G	S			X			
GP-08 (3-5)	10/5/21	13:20	G	S			X			
SS-09	10/5/21	13:40	G	S			X			

320-80070 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	Ben Wachholz	10/6/21 16:45	TRC		10/8/21 1035	Eurofins
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.: 1600999 / 1600998 / 1600057 / 1600056

Cooler Temperature(s) °C and Other Remarks: 1.7 / 1.6

Ver: 06/08/2021

Page 185 of 191

10/15/2021

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Ben Wachholz	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-95458-42240 1
Client Contact: Ben Wachholz	Phone: (608) 354-3923	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: WI	Page: Page ~~1 of 6~~ 2 of 6
Company: TRC Environmental Corporation	PWSID:			Job #:
Address: 708 Heartland Trail Suite 3000	Due Date Requested:			
City: Madison	TAT Requested (days): 5 days			
State, Zip: WI, 53717	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested			
Email: BWachholz@trccompanies.com	WO #:			
Project Name: Project Peace – Manitowoc 462253	Project #: 50019442			
Site:	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, 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		
GP-09 (5-7)	10/5/21	13:45	G	Solid			X		
GP-10 (0-2)	10/4/21	16:20	G	Solid			X		
GP-10 (3-5)	10/4/21	16:30	G	Solid			X		
GP-11 (0-2)	10/4/21	15:20	G	Solid			X		
GP-11 (4-6)	10/4/21	15:30	G	Solid			X		
GP 12 (0-2)	10/4/21	14:05	G	Solid			X		
GP 12 (4-6)	10/4/21	14:10	G	Solid			X		
SS-10	10/5/21	15:00	G	Solid			X		
GP-16 (1-3)	10/5/21	15:20	G	Solid			X		
GP-16 (3-5)	10/5/21	15:30	G	Solid			X		
Dup-5-01	10/5/21	–	G	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	Ben Wachholz	10/6/21 16:45	TRC		10/8/21 1035	Eurofins
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.: 1600994/1600998/1601057/1601056 | Cooler Temperature(s) °C and Other Remarks: 1.7 | 1.6

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Ben Wachholz	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-95458-42240 2
Client Contact: Ben Wachholz	Phone: (608) 354-3923	E-Mail: sandra.fredrick@eurofinset.com	State of Origin: WI	Page: Page ~~2 of 6~~ 3of6
Company: TRC Environmental Corporation	PWSID:			Job #:
Address: 708 Heartland Trail Suite 3000	Due Date Requested:			
City: Madison	TAT Requested (days): 5 days			
State, Zip: WI, 53717	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested			
Email: BWachholz@trccompanies.com	WO #:			
Project Name: Project Peace – Manitowoc 462253	Project #: 50019442			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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		
DUP-S-02	10/5/21	–	G	Solid			X		
DUP-S-03	10/5/21	–	G	Solid			X		
GP-17 (1-3)	10/5/21	1555	G	Solid			X		
GP-17 (3-5)	10/5/21	15:50	G	Solid			X		
~~GP-19~~ GP-13 (7-9)	10/5/21	18:15	G	Solid			X		
~~GP-19~~ GP-13 (9-11)	10/5/21	18:25	G	Solid			X		
~~GP-20~~ GP-14 (7-9)	10/5/21	18:45	G	Solid			X		
~~GP-20~~ GP-14 (9-11)	10/5/21	18:55	G	Solid			X		
~~GP-21~~ GP-15 (5-7)	10/6/21	10:00	G	Solid			X		
~~GP-21~~ GP-15 (7-9)	10/6/21	10:10	G	Solid			X		
TW-01	10/4/21	16:10	G	W ~~Solid~~	N		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
	Ben Wachholz	10/6/21 16:45	TRC		10/8/21 1035	Eurofins
	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 (Yes circled)
Custody Seal No.: 1600999 / 1600998 / 1601053 / 1600656
Cooler Temperature(s) °C and Other Remarks: 1.2/1.6

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Ben Wachholz	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-95458-42240.3
Client Contact: Ben Wachholz	Phone: (608) 354-3923	E-Mail: sandra.fredrick@eurofinset.com	State of Origin:	Page: Page ~~3 of 5~~ 4 of 6
Company: TRC Environmental Corporation	PWSID:	Analysis Requested		Job #:
Address: 708 Heartland Trail Suite 3000	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, Z - other (specify)
City: Madison	TAT Requested (days): 5 days			
State, Zip: WI, 53717	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested			Other:
Email: BWachholz@trccompanies.com	WO #:			
Project Name: Project Peace – Manitowoc 462253	Project #: 50019442			
Site:	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		
TW-12	10/4/21	16:35	~~H=3~~ G	~~W Solid~~	N		X		
FB-01	10/5/21	10:21	G	~~W Solid~~	N		X		
EB-01	10/4/21	11:45	G	Water	N		X		
EB-02	10/5/21	10:08	G	Water	N		X		
EB-03	10/5/21	10:16	G	Water	N		X		
EB-04	10/5/21	11:45	G	Water	N		X		
FB-02	10/5/21	–	G	Water	N		X		
FB-03	10/6/21	–	G	Water	N		X		
TW-13	10/6/21	12:20	G	Water	N		X		
TW-14	10/6/21	13:05	G	Water	N		X		
TW-15	10/6/21	12:40	G	Water	N		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	Ben Wachholz	10/6/21 16:45	TRC		10/8/21 1035	ETA
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.: 1600999 / 1600998 / 1601053 / 1601056

Cooler Temperature(s) °C and Other Remarks: 1.7/1.6

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Ross Hartwick	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-95458-42240.5
Client Contact: Ben Wachholz	Phone: (414) 640-7677	E-Mail: sandra.fredrick@eurofinset.com	State of Origin:	Page: Page ~~5 of 5~~ 5 of 6
Company: TRC Environmental Corporation	PWSID:	Analysis Requested		Job #:
Address: 708 Heartland Trail Suite 3000	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, Z - other (specify)
City: Madison	TAT Requested (days): 5 days			
State, Zip: WI, 53717	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested			Other:
Email: BWachholz@trccompanies.com	WO #:			
Project Name: Project Peace – Manitowoc 462253	Project #: 50019442			
Site:	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		N		
TW-17	10/5/21	1708	G	Water	N		X		
TW-16		1650		Water			X		
TW-09		1640		Water			X		
TW-08		1632		Water			X		
TW-06		1730		Water			X		
TW-05		1340		Water			X		
TW-07		1422		Water			X		
TW-04		1325		W			X		
TW-10		1318					X		
TW-11		1110					X		
Dup-01		—					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
Ben Wachholz	10/6/21 16:45	TRC	[signature]	10/8/21 1035	ETAS
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.: 1600992 / 1600998 / 1601057 / 1601056

Cooler Temperature(s) °C and Other Remarks: 1.2 / 1.6

Ver: 06/08/2021

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

Chain of Custody Record

eurofins

Client Information	Sampler: Ross Hartwick	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-95458-42240.3
Client Contact: Ben Wachholz	Phone: (414) 640-7677	E-Mail: sandra.fredrick@eurofinset.com	State of Origin:	Page: Page ~~3 of 5~~ 6 of 6
Company: TRC Environmental Corporation	PWSID:			Job #:
Address: 708 Heartland Trail Suite 3000	Due Date Requested:			
City: Madison	TAT Requested (days): 5 days			
State, Zip: WI, 53717	Compliance Project: Δ Yes Δ No			
Phone:	PO #: Purchase Order Requested			
Email: BWachholz@trccompanies.com	WO #:			
Project Name: Project Peace – Manitowoc 462253	Project #: 50019442			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	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			
TW-02	10/5/21	1055	G	Solid	N		X		
DUP-02	10/6/21	-	G	Solid	N		X		
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				Water					
				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
	Ben Wachholz	10/6/21 16:45	TRC		10/8/21 1035	Eurofins
	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.: 1600999/1600998/1601054/1601054

Cooler Temperature(s) °C and Other Remarks: 1.2 | 1.6

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: TRC Environmental Corporation

Job Number: 320-80070-1

Login Number: 80070
List Number: 1
Creator: Oropeza, Salvador

List Source: Eurofins TestAmerica, Sacramento

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	1600999/1600998/1601057/1601056
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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
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	