

From: Beggs, Tauren R - DNR
Sent: Tuesday, November 1, 2022 8:11 AM
To: Emma MacAlister
Cc: marcelo.borges@tramontina.com; sarah.campbellsmith@akerman.com; otavio.carneiro@akerman.com; kate.quelch@akerman.com; Mike Berman; Jeff Tracy
Subject: RE: Site Investigation Results for Mirro Co Plt 2 (Former), BRRTS # 02-36-588656

Good morning Emma,

Thanks for submitting the analytical results.

Regards,

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Tauren R. Beggs

Phone: (920) 510-3472

Tauren.Beggs@wisconsin.gov (preferred contact method during work at home)

From: Emma MacAlister <EMacAlister@Geosyntec.com>
Sent: Wednesday, October 26, 2022 10:45 PM
To: Beggs, Tauren R - DNR <Tauren.Beggs@wisconsin.gov>
Cc: marcelo.borges@tramontina.com; sarah.campbellsmith@akerman.com; otavio.carneiro@akerman.com; kate.quelch@akerman.com; Mike Berman <MBerman@Geosyntec.com>; Jeff Tracy <JTracy@Geosyntec.com>
Subject: Site Investigation Results for Mirro Co Plt 2 (Former), BRRTS # 02-36-588656

Good Evening Tauren,

Attached we have provided the analytical results from the September 2022 Site Investigation activities at the former Mirro Plant No. 2 (BRRTS # 02-36-588656).

Please let us know if you have any questions or if we can upload the file to the RR Program Portal.

Thank you,
Emma MacAlister, R.G.
Project Geologist
[Licensed R.G. in MO]
Geosyntec Consultants, Inc.
309 N. Water Street, Suite 350
Milwaukee, WI 53202
Phone: 414.918.7483 Mobile: 414.335.2689

Table 1 – Soil Analytical Results

Mirro Co PLT 2 (Former)
2009 Mirro Drive
Manitowoc, Wisconsin

Compound	WI NR720			Sample ID Date Depth	SP-01 9/19/2022 04 - 05	SP-02 9/19/2022 05 - 06	SP-03 9/19/2022 03 - 04	SP-03 DUP 9/19/2022 03 - 04	SP-04 9/19/2022 03 - 04	SP-05 9/19/2022 03 - 04
	Non-Industrial	Industrial	Soil to GW							
	DC RCL	DC RCL		Cas No.						
Perfluoroalkyl Carboxylic Acids (ug/kg)										
Perfluorobutanoic acid (PFBA)	-	-	-	375-22-4	<0.051	<0.059	<0.057	<0.056	<0.048	<0.052
Perfluoropentanoic acid (PFPeA)	-	-	-	2706-90-3	<0.045	<0.052	<0.051	<0.050	<0.043	<0.046
Perfluorohexanoic acid (PFHxA)	-	-	-	307-24-4	<0.034	0.047 J	<0.038	<0.038	<0.032	<0.035
Perfluoroheptanoic acid (PFHpA)	-	-	-	375-85-9	<0.042	<0.048	<0.047	<0.046	0.045 J	<0.043
Perfluorooctanoic acid (PFOA)	1,260	16,400	-	335-67-1	0.50	0.98	0.88	0.63	5.6	<0.060
Perfluorononanoic acid (PFNA)	-	-	-	375-95-1	<0.024	<0.028	<0.027	<0.027	<0.023	<0.025
Perfluorodecanoic acid (PFDA)	-	-	-	335-76-2	<0.053	<0.061	<0.059	<0.059	<0.050	<0.054
Perfluoroundecanoic acid (PFUnA)	-	-	-	2058-94-8	<0.046	<0.053	<0.052	<0.051	<0.044	<0.048
Perfluorododecanoic acid (PFDoA)	-	-	-	307-55-1	<0.033	<0.038	<0.037	<0.037	<0.031	<0.034
Perfluorotridecanoic acid (PFTrDA)	-	-	-	72629-94-8	<0.023	<0.027	<0.026	<0.026	<0.022	<0.024
Perfluorotetradecanoic acid (PFTeA)	-	-	-	376-06-7	<0.041	<0.047	<0.046	<0.045	<0.038	<0.042
Perfluoroalkyl Sulfonic Acids (ug/kg)										
Perfluorobutanesulfonic acid (PFBS)	1,260,000	16,400,000	-	375-73-5	<0.042	<0.048	<0.047	<0.046	<0.039	<0.043
Perfluoropentanesulfonic acid (PFPeS)	-	-	-	2706-91-4	<0.041	<0.047	<0.046	<0.045	<0.038	<0.042
Perfluorohexanesulfonic acid (PFHxS)	-	-	-	355-46-4	<0.032	<0.037	<0.036	<0.035	<0.030	<0.033
Perfluoroheptanesulfonic acid (PFHpS)	-	-	-	375-92-8	<0.054	<0.062	<0.060	<0.060	<0.051	<0.056
Perfluorooctanesulfonic acid (PFOS)	1,260	16,400	-	1763-23-1	<0.047	<0.055	<0.053	<0.053	<0.045	<0.049
Perfluorononanesulfonic acid (PFNS)	-	-	-	68259-12-1	<0.032	<0.037	<0.036	<0.035	<0.030	<0.033
Perfluorodecanesulfonic acid (PFDS)	-	-	-	335-77-3	<0.057	<0.066	<0.064	<0.064	<0.054	<0.059
Perfluorododecanesulfonic acid (PFDoS)	-	-	-	79780-39-5	<0.052	<0.060	<0.058	<0.057	<0.049	<0.053
Polyfluoroalkyl Substances (ug/kg)										
Perfluorooctanesulfonamide (FOSA)	-	-	-	754-91-6	<0.036	0.045 J	<0.041	<0.040	<0.034	<0.037
N-Ethyl Perfluorooctane sulfonamide (NEtFOSA)	-	-	-	4151-50-2	<0.052	<0.060	<0.058	<0.057	<0.049	<0.053
N-Methyl Perfluorooctane sulfonamide (NMeFOSA)	-	-	-	31506-32-8	<0.054	<0.062	<0.060	<0.060	<0.051	<0.056
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	-	-	-	2355-31-9	<0.025	<0.029	<0.028	<0.028	<0.024	<0.026
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	-	-	-	2991-50-6	<0.053	<0.061	<0.059	<0.059	<0.050	<0.054
N-methyl perfluorooctane sulfonamidoethanol (NMeFOSE)	-	-	-	24448-09-7	<0.052	<0.060	<0.058	<0.057	<0.049	<0.053
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	-	-	-	1691-99-2	<0.031	<0.036	<0.035	<0.034	<0.029	<0.032
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	-	-	-	757124-72-4	<0.056	<0.065	<0.063	<0.062	<0.053	<0.058
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	-	-	-	27619-97-2	<0.030	<0.034	<0.033	<0.033	<0.028	<0.031
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	-	-	-	39108-34-4	<0.039	<0.045	<0.043	<0.043	<0.036	<0.040
Replacement Compounds/ Other (ug/kg)										
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	-	-	-	919005-14-4	<0.043	<0.050	<0.048	<0.048	<0.041	<0.044
Hexafluoropropylene oxide dimer acid (HFPO-DA (GenX))	-	-	-	13252-13-6	<0.045	<0.052	<0.051	<0.050	<0.043	<0.046
9-chlorohexanedecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	-	-	-	756426-58-1	<0.039	<0.045	<0.043	<0.043	<0.036	<0.040
11-chloroicosafafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	-	-	-	763051-92-9	<0.034	<0.039	<0.038	<0.038	<0.032	<0.035

Notes:

Depth - feet below ground surface
 Non-detects reported as < limit of detection and are grey text
 Bold shows sample detections
 J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
 -: no established standard
 NR 720 RR Soil RCL values from the NR 720 RR Soil RCL Worksheets current as of December 2018.
 GW - Groundwater

Acronyms:

DC RCL: direct contact soil residual contaminant level
 SP: Soil Probe
 WDNR: Wisconsin Department of Natural Resources
 ug/kg: microgram per kilogram

Table 2 - Groundwater Analytical Results

Mirro Co PLT 2 (Former)
2009 Mirro Drive
Manitowoc, Wisconsin

Compound	WI NR140				Sample ID	MW-01 9/22/2022	MW-02 9/22/2022	MW-02 DUP 9/22/2022	MW-03 9/22/2022	MW-04 9/22/2022	MW-05 9/22/2022
	Cycle 10 Recommendations		Cycle 11 Recommendations								
	ES	PAL	ES	PAL	Cas No.						
Perfluoroalkyl Carboxylic Acids (ng/L)											
Perfluorobutanoic acid (PFBA)	-	-	10,000	2,000	375-22-4	11	7.7	7.8	9.1	20	16
Perfluoropentanoic acid (PFPeA)	-	-	-	-	2706-90-3	2.7	1.7 J	2.0	4.8	12	<0.45
Perfluorohexanoic acid (PFHxA)	-	-	150,000	30,000	307-24-4	5.3	13	13	21	45	3.6
Perfluoroheptanoic acid (PFHpA)	-	-	-	-	375-85-9	7.6	21	21	15	130	2.6
Perfluorooctanoic acid (PFOA)	20	2	20*	2*	335-67-1	250	290	320	210	8000	300
Perfluorononanoic acid (PFNA)	-	-	30	3	375-95-1	0.45 J	<0.25	<0.25	<0.25	3.7	<0.25
Perfluorodecanoic acid (PFDA)	-	-	300	60	335-76-2	<0.28	<0.28	<0.29	<0.28	0.32 J	<0.29
Perfluoroundecanoic acid (PFUnA)	-	-	3,000	600	2058-94-8	<1.0	<1.0	<1.0	<1.0	<0.99	<1.0
Perfluorododecanoic acid (PFDoA)	-	-	500	100	307-55-1	<0.50	<0.50	<0.51	<0.50	<0.50	<0.51
Perfluorotridecanoic acid (PFTrDA)	-	-	-	-	72629-94-8	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
Perfluorotetradecanoic acid (PFTeA)	-	-	-	-	376-06-7	<0.66	<0.67	<0.68	<0.66	<0.66	<0.67
Perfluoroalkyl Sulfonic Acids (ng/L)											
Perfluorobutanesulfonic acid (PFBS)	-	-	450,000	90,000	375-73-5	1.3 J	0.81 J	0.84 J	0.34 J	1.8	4.1
Perfluoropentanesulfonic acid (PFPeS)	-	-	-	-	2706-91-4	<0.27	<0.28	<0.28	<0.27	<0.27	<0.28
Perfluorohexanesulfonic acid (PFHxS)	-	-	40	4	355-46-4	<0.52	<0.52	<0.53	<0.52	<0.51	0.67 J
Perfluoroheptanesulfonic acid (PFHpS)	-	-	-	-	375-92-8	<0.17	<0.17	<0.18	<0.17	<0.17	<0.18
Perfluorooctanesulfonic acid (PFOS)	20	2	20*	2*	1763-23-1	2.2 I	<0.50	0.69 J	<0.49	<0.49	<0.50
Perfluorononanesulfonic acid (PFNS)	-	-	-	-	68259-12-1	<0.34	<0.34	<0.34	<0.34	<0.33	<0.34
Perfluorodecanesulfonic acid (PFDS)	-	-	-	-	335-77-3	<0.29	<0.29	<0.30	<0.29	<0.29	<0.30
Perfluorododecanesulfonic acid (PFDoS)	-	-	-	-	79780-39-5	<0.88	<0.89	<0.90	<0.88 F1	<0.88	<0.90
Polyfluoroalkyl Substances (ng/L)											
Perfluorooctanesulfonamide (FOSA)	-	-	20*	2*	754-91-6	<0.89	<0.90	<0.91	<0.89	<0.88	<0.91
N-Ethyl Perfluorooctane sulfonamide (NETFOSA)	-	-	20*	2*	4151-50-2	<0.79	<0.80	<0.81	<0.79	<0.78	<0.80
N-Methyl Perfluorooctane sulfonamide (NMeFOSA)	-	-	-	-	31506-32-8	<0.39	<0.39	<0.40	<0.39	<0.39	<0.40
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	-	-	-	-	2355-31-9	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
N-Ethyl perfluorooctane sulfonamidoacetic acid (NETFOSAA)	-	-	20*	2*	2991-50-6	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
N-methyl perfluorooctane sulfonamidoethanol (NMeFOSE)	-	-	-	-	24448-09-7	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
N-Ethyl perfluorooctane sulfonamidoethanol (NETFOSE)	-	-	20*	2*	1691-99-2	<0.77	<0.78	<0.79	<0.77	<0.77	<0.79
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	-	-	-	-	757124-72-4	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	-	-	-	-	27619-97-2	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	-	-	-	-	39108-34-4	<0.42	<0.42	<0.43	<0.42	<0.42	<0.42
Replacement Compounds/ Other (ng/L)											
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	-	-	-	-	919005-14-4	<0.36	<0.37	<0.37	<0.36 F1	<0.36	<0.37
Hexafluoropropylene oxide dimer acid (HFPO-DA (GenX))	-	-	300	30	13252-13-6	<1.4	<1.4	<1.4	<1.4	7.7	<1.4
9-chlorohexanadecafluoro-3-oxanonane-1-sulfonic acid (9CI-PF3ONS)	-	-	-	-	756426-58-1	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
11-chloroicosadecafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3OUdS)	-	-	-	-	763051-92-9	<0.29	<0.29	<0.30	<0.29	<0.29	<0.30
Total PFAS (ng/L)											
Total PFAS (Calculated)	-	-	-	-	-	280.55	334.21	365.33	260.24	8269.52	326.97

Notes:

* DHS recommends a combined standard for NETFOSE, NETFOSA, NETFOSAA, FOSA, PFOS, and PFOA

The Wisconsin Department of Health Services (DHS) recommended NR 140 EFs and PALs were recommended by the to the DNR. The DHS Cycle 10 recommendations were rejected by the Natural Resources Board in February 2022 and a new Scope Statement is being developed. The DNR is in the rule-making process to include the Cycle 11 recommendations in NR 140.

Non-detects reported as < limit of detection and are gray text

Bold shows sample detections

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

I - Value is EMPC (estimated maximum possible concentration).

F1 - MS and/or MSD recovery exceeds control limits.

Sample detection is above a recommended enforcement standard

Sample detection is above a recommended preventative action limit

Acronyms:

ES: Enforcement Standard

PAL: Preventative Action Limit

MS/MSD: Matrix Spike/Matrix Spike Duplicate

MW: Monitoring Well

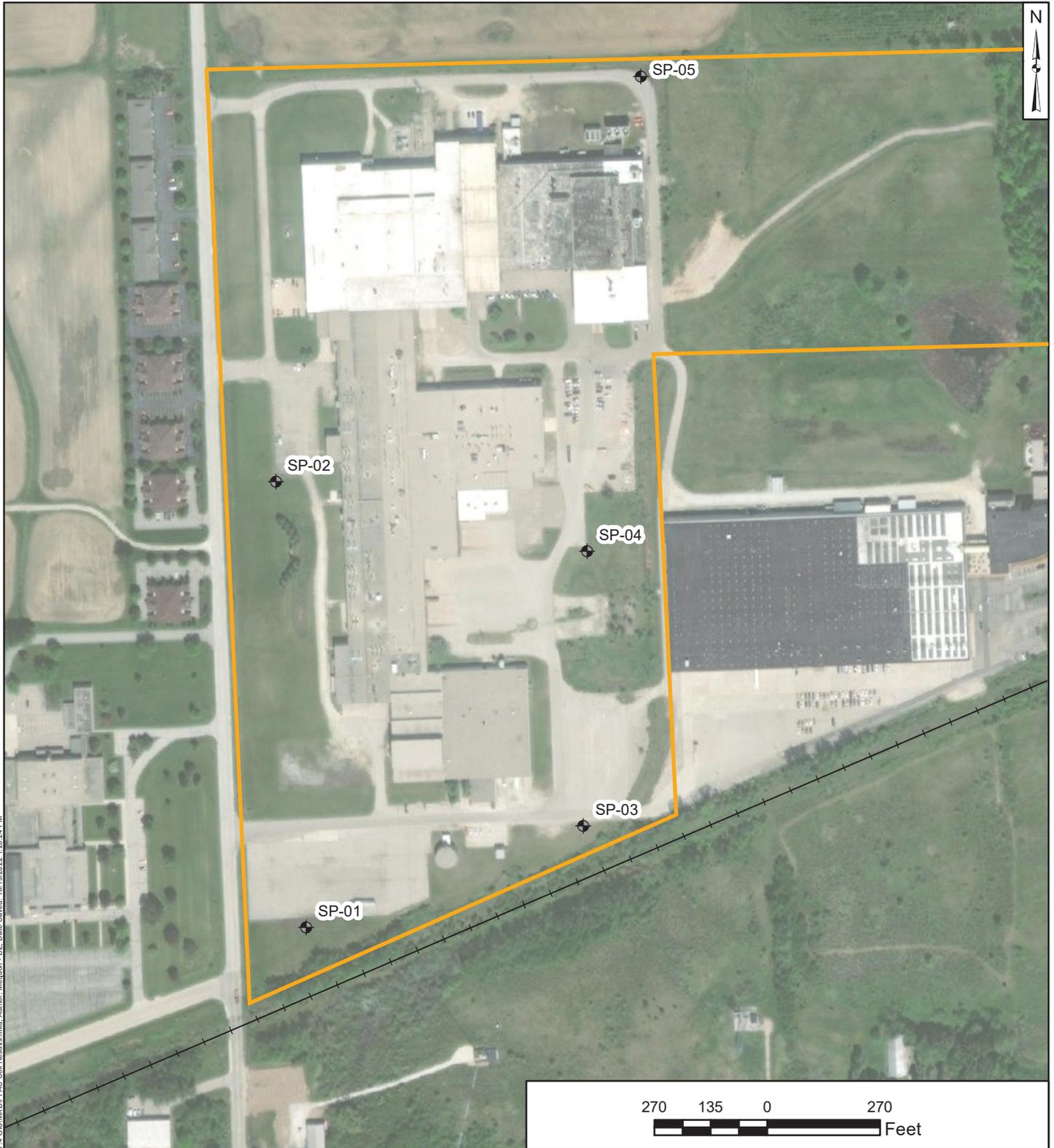
ng/L: nanogram per liter

RL: Reporting Limit

WDNR: Wisconsin Department of Natural Resources

DHS: Department of Health Services

-: No established standard



Legend

- Exceedance of NR720 RCL
- No Exceedance of NR720 RCL
- Approximate Property Boundary
- Wisconsin Central Railroad

Notes:
 Basemap Courtesy of ESRI
 PFAS: Per- and Polyfluoroalkyl Substances

Soil Analytical Results

Mirro Co Plt 2 (Former)
 BRRTS # 02-36-588656
 2009 Mirro Drive
 Manitowoc, Wisconsin

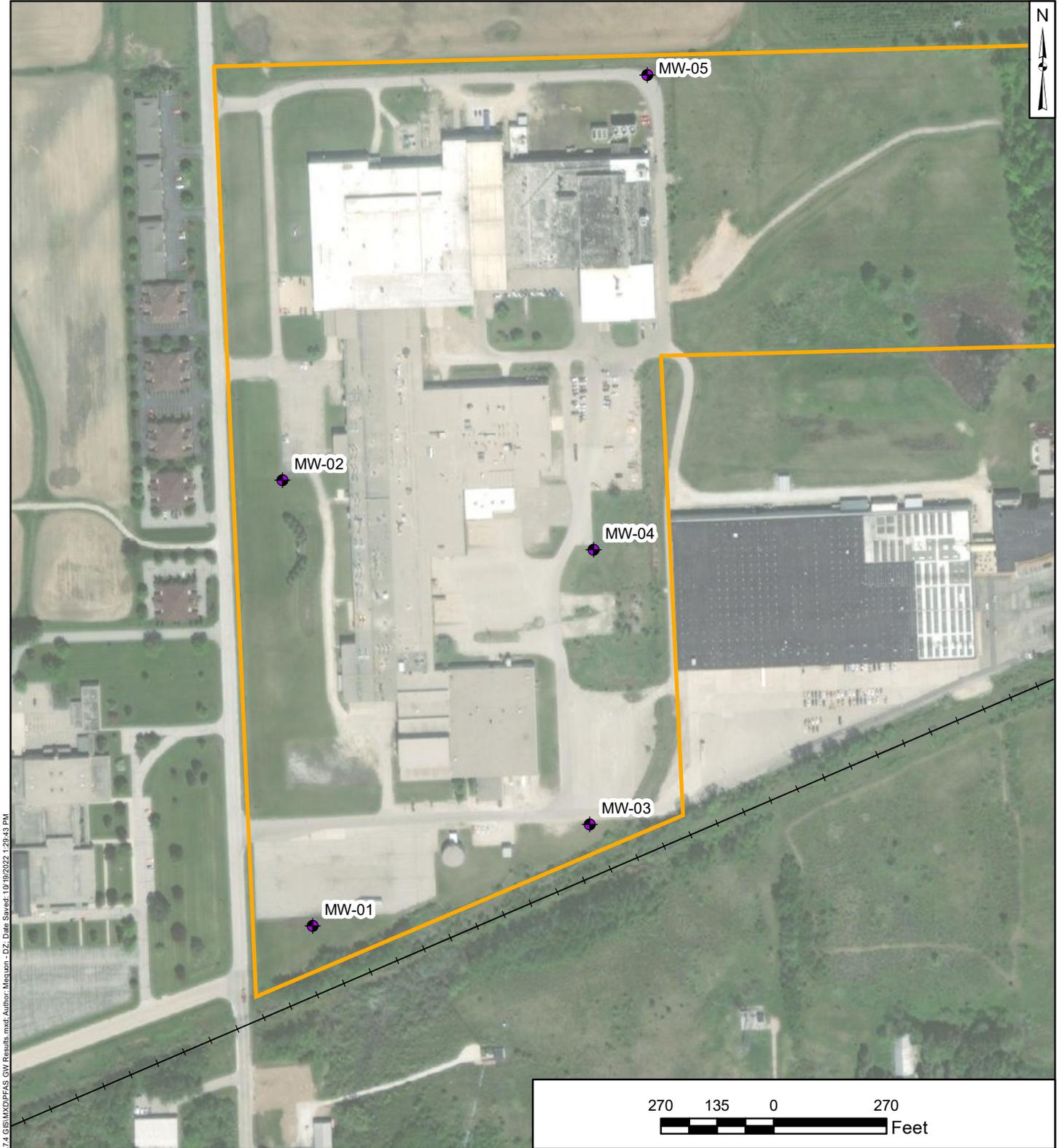
Geosyntec
 consultants

Figure

1

Milwaukee, Wisconsin

October 19, 2022



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Groundwater Analytical Results

Mirro Co Plt 2 (Former)
 BRRTS # 02-36-588656
 2009 Mirro Drive
 Manitowoc, Wisconsin

Legend

- No Exceedance of Recommended ES
- Exceedance of Recommended ES
- Approximate Property Boundary
- Wisconsin Central Railroad

Notes:
 Basemap Courtesy of ESRI
 ES: Enforcement Standard
 PFAS: Per- and Polyfluoroalkyl Substances



Figure

2

Milwaukee, Wisconsin

October 19, 2022

ANALYTICAL REPORT

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-222851-1
Client Project/Site: Project CHW8334

For:

Geosyntec Consultants, Inc.
10600 N. Port Washington Road, Suite 100
Mequon, Wisconsin 53092

Attn: Codyann Kolp



Authorized for release by:
10/16/2022 5:07:54 PM

Sandie Fredrick, Project Manager II
(920)261-1660
Sandra.Fredrick@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

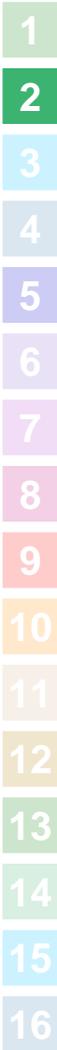


Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Detection Summary	5
Method Summary	7
Sample Summary	8
Client Sample Results	9
Definitions	39
QC Association	40
QC Sample Results	42
Chronicle	55
Certification Summary	59
Chain of Custody	60
Receipt Checklists	64
Field Data Sheets	65
Isotope Dilution Summary	67

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Job ID: 500-222851-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative 500-222851-1

Comments

No additional comments.

Receipt

The samples were received on 9/26/2022 8:48 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 9.2° C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: SP-01-20220919-04-05-001 (500-222851-1), SP-02-20220919-05-06-001 (500-222851-2), SP-03-20220919-03-04-001 (500-222851-3), SP-03-20220919-03-04-101 (500-222851-4), SP-04-20220919-03-04-001 (500-222851-5), SP-05-20220919-03-04-001 (500-222851-6), EB-01-20220919 (500-222851-7), FB-01-20220919 (500-222851-8), MW-01-2022-0923-001 (500-222851-9), MW-02-2022-0922-001 (500-222851-10), MW-02-2022-0922-101 (500-222851-11), MW-03-2022-0922-001 (500-222851-12), MW-03-2022-0922-001 (500-222851-12[MSJ]), MW-03-2022-0922-001 (500-222851-12[MSD]), MW-04-2022-0922-001 (500-222851-13), MW-05-2022-0922-001 (500-222851-14) and FB-02-20220922 (500-222851-15).

Cooler was received out of temp, as client had shipped them direct to Sacramento for Monday Delivery. All ice had melted by the time of arrival.

LCMS

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte: MW-01-2022-0923-001 (500-222851-9) and MW-05-2022-0922-001 (500-222851-14).

Method 537 (modified): The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 320-621887 and analytical batch 320-622283 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 537 (modified): Due to the high concentration of Perfluorooctanoic acid (PFOA), the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 320-621887 and analytical batch 320-622283 could not be evaluated for accuracy. The associated laboratory control sample (LCS) met acceptance criteria.

Method 537 (modified): Results for sample MW-04-2022-0922-001 (500-222851-13) were reported from the analysis of a diluted extract due to high concentration of the target analyte and the sample 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

Method 537 (modified): Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: MW-04-2022-0922-001 (500-222851-13). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries. The sample was analyzed at a dilution and the IDA was within control limits. Both sets of data are reported.

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: The following samples in preparation batch 320-621887 were light brown in color prior to extraction. MW-02-2022-0922-001 (500-222851-10) and MW-02-2022-0922-101 (500-222851-11)

Method: 3535_PFC_28D

Matrix: Aqueous

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Job ID: 500-222851-1 (Continued)

Laboratory: Eurofins Chicago (Continued)

Method 3535: The following samples in preparation batch 320-621887 were observed to have floating particulates present in the sample bottle. MW-02-2022-0922-001 (500-222851-10) and MW-02-2022-0922-101 (500-222851-11)

Method: 3535_PFC_28D

Matrix: Aqueous

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

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- 15
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Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-01-20220919-04-05-001

Lab Sample ID: 500-222851-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.50		0.22	0.059	ug/Kg	1	✳	537 (modified)	Total/NA

Client Sample ID: SP-02-20220919-05-06-001

Lab Sample ID: 500-222851-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	0.047	J	0.25	0.039	ug/Kg	1	✳	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	0.98		0.25	0.067	ug/Kg	1	✳	537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	0.045	J	0.25	0.042	ug/Kg	1	✳	537 (modified)	Total/NA

Client Sample ID: SP-03-20220919-03-04-001

Lab Sample ID: 500-222851-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.88		0.25	0.065	ug/Kg	1	✳	537 (modified)	Total/NA

Client Sample ID: SP-03-20220919-03-04-101

Lab Sample ID: 500-222851-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.63		0.24	0.065	ug/Kg	1	✳	537 (modified)	Total/NA

Client Sample ID: SP-04-20220919-03-04-001

Lab Sample ID: 500-222851-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroheptanoic acid (PFHpA)	0.045	J	0.21	0.039	ug/Kg	1	✳	537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	5.6		0.21	0.055	ug/Kg	1	✳	537 (modified)	Total/NA

Client Sample ID: SP-05-20220919-03-04-001

Lab Sample ID: 500-222851-6

No Detections.

Client Sample ID: EB-01-20220919

Lab Sample ID: 500-222851-7

No Detections.

Client Sample ID: FB-01-20220919

Lab Sample ID: 500-222851-8

No Detections.

Client Sample ID: MW-01-2022-0923-001

Lab Sample ID: 500-222851-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	11		4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.7		1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	5.3		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	7.6		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	250		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.45	J	1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.3	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2	I	1.8	0.49	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-02-2022-0922-001

Lab Sample ID: 500-222851-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.7		4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.7	J	1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	13		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	21		1.8	0.23	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Euofins Chicago

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-02-2022-0922-001 (Continued)

Lab Sample ID: 500-222851-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	290		1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.81	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-02-2022-0922-101

Lab Sample ID: 500-222851-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.8		4.7	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.0		1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	13		1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	21		1.9	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	320		1.9	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.84	J	1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.69	J	1.9	0.50	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-03-2022-0922-001

Lab Sample ID: 500-222851-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	9.1		4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	4.8		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	21		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	15		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	210		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.34	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA

Client Sample ID: MW-04-2022-0922-001

Lab Sample ID: 500-222851-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	20		4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	12		1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	45		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	130		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	3.7		1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.32	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.8		1.8	0.18	ng/L	1		537 (modified)	Total/NA
HFPO-DA (GenX)	7.7		3.6	1.4	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA) - DL	8000		90	38	ng/L	50		537 (modified)	Total/NA

Client Sample ID: MW-05-2022-0922-001

Lab Sample ID: 500-222851-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	16		4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.6		1.8	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.6		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	300		1.8	0.79	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	4.1	I	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.67	J	1.8	0.53	ng/L	1		537 (modified)	Total/NA

Client Sample ID: FB-02-20220922

Lab Sample ID: 500-222851-15

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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



Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-222851-1	SP-01-20220919-04-05-001	Soil	09/19/22 10:15	09/26/22 08:48
500-222851-2	SP-02-20220919-05-06-001	Soil	09/19/22 11:50	09/26/22 08:48
500-222851-3	SP-03-20220919-03-04-001	Soil	09/19/22 13:15	09/26/22 08:48
500-222851-4	SP-03-20220919-03-04-101	Soil	09/19/22 13:15	09/26/22 08:48
500-222851-5	SP-04-20220919-03-04-001	Soil	09/19/22 14:40	09/26/22 08:48
500-222851-6	SP-05-20220919-03-04-001	Soil	09/19/22 15:45	09/26/22 08:48
500-222851-7	EB-01-20220919	Water	09/19/22 15:50	09/26/22 08:48
500-222851-8	FB-01-20220919	Water	09/19/22 15:55	09/26/22 08:48
500-222851-9	MW-01-2022-0923-001	Water	09/23/22 10:50	09/26/22 08:48
500-222851-10	MW-02-2022-0922-001	Water	09/22/22 12:05	09/26/22 08:48
500-222851-11	MW-02-2022-0922-101	Water	09/22/22 12:05	09/26/22 08:48
500-222851-12	MW-03-2022-0922-001	Water	09/22/22 11:25	09/26/22 08:48
500-222851-13	MW-04-2022-0922-001	Water	09/22/22 13:12	09/26/22 08:48
500-222851-14	MW-05-2022-0922-001	Water	09/22/22 13:20	09/26/22 08:48
500-222851-15	FB-02-20220922	Water	09/22/22 14:20	09/26/22 08:48



Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-01-20220919-04-05-001

Lab Sample ID: 500-222851-1

Date Collected: 09/19/22 10:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 81.9

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.051		0.22	0.051	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluoropentanoic acid (PFPeA)	<0.045		0.22	0.045	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorohexanoic acid (PFHxA)	<0.034		0.22	0.034	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluoroheptanoic acid (PFHpA)	<0.042		0.22	0.042	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorooctanoic acid (PFOA)	0.50		0.22	0.059	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorononanoic acid (PFNA)	<0.024		0.22	0.024	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorodecanoic acid (PFDA)	<0.053		0.22	0.053	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluoroundecanoic acid (PFUnA)	<0.046		0.22	0.046	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorododecanoic acid (PFDoA)	<0.033		0.22	0.033	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorotridecanoic acid (PFTrDA)	<0.023		0.22	0.023	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorotetradecanoic acid (PFTeA)	<0.041		0.22	0.041	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorobutanesulfonic acid (PFBS)	<0.042		0.22	0.042	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluoropentanesulfonic acid (PFPeS)	<0.041		0.22	0.041	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorohexanesulfonic acid (PFHxS)	<0.032		0.22	0.032	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.054		0.22	0.054	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorooctanesulfonic acid (PFOS)	<0.047		0.22	0.047	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorononanesulfonic acid (PFNS)	<0.032		0.22	0.032	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorodecanesulfonic acid (PFDS)	<0.057		0.22	0.057	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorododecanesulfonic acid (PFDoS)	<0.052		0.22	0.052	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
Perfluorooctanesulfonamide (FOSA)	<0.036		0.22	0.036	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
NEtFOSA	<0.052		0.22	0.052	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
NMeFOSA	<0.054		0.22	0.054	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
NMeFOSAA	<0.025		0.22	0.025	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
NEtFOSAA	<0.053		0.22	0.053	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
NMeFOSE	<0.052		0.22	0.052	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
NEtFOSE	<0.031		0.22	0.031	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
4:2 FTS	<0.056		0.22	0.056	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
6:2 FTS	<0.030		0.22	0.030	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
8:2 FTS	<0.039		0.22	0.039	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.043		0.22	0.043	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
HFPO-DA (GenX)	<0.045		0.22	0.045	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
9Cl-PF3ONS	<0.039		0.22	0.039	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1
11Cl-PF3OUdS	<0.034		0.22	0.034	ug/Kg	☼	10/05/22 12:21	10/10/22 09:23	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	88		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C5 PFPeA	90		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C2 PFHxA	96		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C4 PFHpA	95		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C4 PFOA	93		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C5 PFNA	89		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C2 PFDA	90		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C2 PFUnA	74		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C2 PFDoA	70		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C2 PFTeDA	80		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C3 PFBS	90		25 - 150	10/05/22 12:21	10/10/22 09:23	1
18O2 PFHxS	88		25 - 150	10/05/22 12:21	10/10/22 09:23	1

Eurofins Chicago

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-01-20220919-04-05-001

Lab Sample ID: 500-222851-1

Date Collected: 09/19/22 10:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 81.9

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	82		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C8 FOSA	78		10 - 150	10/05/22 12:21	10/10/22 09:23	1
d3-NMeFOSAA	97		25 - 150	10/05/22 12:21	10/10/22 09:23	1
d5-NEtFOSAA	94		25 - 150	10/05/22 12:21	10/10/22 09:23	1
d-N-MeFOSA-M	43		10 - 150	10/05/22 12:21	10/10/22 09:23	1
d-N-EtFOSA-M	43		10 - 150	10/05/22 12:21	10/10/22 09:23	1
d7-N-MeFOSE-M	63		10 - 150	10/05/22 12:21	10/10/22 09:23	1
d9-N-EtFOSE-M	55		10 - 150	10/05/22 12:21	10/10/22 09:23	1
M2-4:2 FTS	69		25 - 150	10/05/22 12:21	10/10/22 09:23	1
M2-6:2 FTS	74		25 - 150	10/05/22 12:21	10/10/22 09:23	1
M2-8:2 FTS	76		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C3 HFPO-DA	85		25 - 150	10/05/22 12:21	10/10/22 09:23	1
13C2 10:2 FTS	60		25 - 150	10/05/22 12:21	10/10/22 09:23	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-02-20220919-05-06-001

Lab Sample ID: 500-222851-2

Date Collected: 09/19/22 11:50

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 75.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.059		0.25	0.059	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluoropentanoic acid (PFPeA)	<0.052		0.25	0.052	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorohexanoic acid (PFHxA)	0.047	J	0.25	0.039	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluoroheptanoic acid (PFHpA)	<0.048		0.25	0.048	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorooctanoic acid (PFOA)	0.98		0.25	0.067	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorononanoic acid (PFNA)	<0.028		0.25	0.028	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorodecanoic acid (PFDA)	<0.061		0.25	0.061	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluoroundecanoic acid (PFUnA)	<0.053		0.25	0.053	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorododecanoic acid (PFDoA)	<0.038		0.25	0.038	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorotridecanoic acid (PFTrDA)	<0.027		0.25	0.027	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorotetradecanoic acid (PFTeA)	<0.047		0.25	0.047	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorobutanesulfonic acid (PFBS)	<0.048		0.25	0.048	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluoropentanesulfonic acid (PFPeS)	<0.047		0.25	0.047	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorohexanesulfonic acid (PFHxS)	<0.037		0.25	0.037	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.062		0.25	0.062	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorooctanesulfonic acid (PFOS)	<0.055		0.25	0.055	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorononanesulfonic acid (PFNS)	<0.037		0.25	0.037	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorodecanesulfonic acid (PFDS)	<0.066		0.25	0.066	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorododecanesulfonic acid (PFDoS)	<0.060		0.25	0.060	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
Perfluorooctanesulfonamide (FOSA)	0.045	J	0.25	0.042	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
NEtFOSA	<0.060		0.25	0.060	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
NMeFOSA	<0.062		0.25	0.062	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
NMeFOSAA	<0.029		0.25	0.029	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
NEtFOSAA	<0.061		0.25	0.061	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
NMeFOSE	<0.060		0.25	0.060	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
NEtFOSE	<0.036		0.25	0.036	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
4:2 FTS	<0.065		0.25	0.065	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
6:2 FTS	<0.034		0.25	0.034	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
8:2 FTS	<0.045		0.25	0.045	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.050		0.25	0.050	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
HFPO-DA (GenX)	<0.052		0.25	0.052	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
9Cl-PF3ONS	<0.045		0.25	0.045	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1
11Cl-PF3OUdS	<0.039		0.25	0.039	ug/Kg	☼	10/05/22 12:21	10/10/22 09:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	119		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C5 PFPeA	115		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C2 PFHxA	122		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C4 PFHpA	119		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C4 PFOA	116		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C5 PFNA	120		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C2 PFDA	110		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C2 PFUnA	95		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C2 PFDoA	81		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C2 PFTeDA	76		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C3 PFBS	114		25 - 150	10/05/22 12:21	10/10/22 09:33	1
18O2 PFHxS	116		25 - 150	10/05/22 12:21	10/10/22 09:33	1

Eurofins Chicago

Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-02-20220919-05-06-001

Lab Sample ID: 500-222851-2

Date Collected: 09/19/22 11:50

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 75.8

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	111		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C8 FOSA	87		10 - 150	10/05/22 12:21	10/10/22 09:33	1
d3-NMeFOSAA	117		25 - 150	10/05/22 12:21	10/10/22 09:33	1
d5-NEtFOSAA	113		25 - 150	10/05/22 12:21	10/10/22 09:33	1
d-N-MeFOSA-M	30		10 - 150	10/05/22 12:21	10/10/22 09:33	1
d-N-EtFOSA-M	29		10 - 150	10/05/22 12:21	10/10/22 09:33	1
d7-N-MeFOSE-M	57		10 - 150	10/05/22 12:21	10/10/22 09:33	1
d9-N-EtFOSE-M	51		10 - 150	10/05/22 12:21	10/10/22 09:33	1
M2-4:2 FTS	101		25 - 150	10/05/22 12:21	10/10/22 09:33	1
M2-6:2 FTS	101		25 - 150	10/05/22 12:21	10/10/22 09:33	1
M2-8:2 FTS	97		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C3 HFPO-DA	121		25 - 150	10/05/22 12:21	10/10/22 09:33	1
13C2 10:2 FTS	67		25 - 150	10/05/22 12:21	10/10/22 09:33	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-03-20220919-03-04-001

Lab Sample ID: 500-222851-3

Date Collected: 09/19/22 13:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 79.8

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.057		0.25	0.057	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluoropentanoic acid (PFPeA)	<0.051		0.25	0.051	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorohexanoic acid (PFHxA)	<0.038		0.25	0.038	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluoroheptanoic acid (PFHpA)	<0.047		0.25	0.047	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorooctanoic acid (PFOA)	0.88		0.25	0.065	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorononanoic acid (PFNA)	<0.027		0.25	0.027	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorodecanoic acid (PFDA)	<0.059		0.25	0.059	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluoroundecanoic acid (PFUnA)	<0.052		0.25	0.052	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.25	0.037	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.25	0.026	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.046		0.25	0.046	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.047		0.25	0.047	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.046		0.25	0.046	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorohexanesulfonic acid (PFHxS)	<0.036		0.25	0.036	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.060		0.25	0.060	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.053		0.25	0.053	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorononanesulfonic acid (PFNS)	<0.036		0.25	0.036	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.25	0.064	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.058		0.25	0.058	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
Perfluorooctanesulfonamide (FOSA)	<0.041		0.25	0.041	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
NEtFOSA	<0.058		0.25	0.058	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
NMeFOSA	<0.060		0.25	0.060	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
NMeFOSAA	<0.028		0.25	0.028	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
NEtFOSAA	<0.059		0.25	0.059	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
NMeFOSE	<0.058		0.25	0.058	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
NEtFOSE	<0.035		0.25	0.035	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
4:2 FTS	<0.063		0.25	0.063	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
6:2 FTS	<0.033		0.25	0.033	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
8:2 FTS	<0.043		0.25	0.043	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.25	0.048	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
HFPO-DA (GenX)	<0.051		0.25	0.051	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
9Cl-PF3ONS	<0.043		0.25	0.043	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1
11Cl-PF3OUdS	<0.038		0.25	0.038	ug/Kg	☼	10/05/22 12:21	10/10/22 09:43	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	74		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C5 PFPeA	78		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C2 PFHxA	79		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C4 PFHpA	79		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C4 PFOA	74		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C5 PFNA	72		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C2 PFDA	63		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C2 PFUnA	54		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C2 PFDoA	52		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C2 PFTeDA	62		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C3 PFBS	73		25 - 150	10/05/22 12:21	10/10/22 09:43	1
18O2 PFHxS	75		25 - 150	10/05/22 12:21	10/10/22 09:43	1

Eurofins Chicago

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-03-20220919-03-04-001

Lab Sample ID: 500-222851-3

Date Collected: 09/19/22 13:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 79.8

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	64		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C8 FOSA	49		10 - 150	10/05/22 12:21	10/10/22 09:43	1
d3-NMeFOSAA	66		25 - 150	10/05/22 12:21	10/10/22 09:43	1
d5-NEtFOSAA	59		25 - 150	10/05/22 12:21	10/10/22 09:43	1
d-N-MeFOSA-M	25		10 - 150	10/05/22 12:21	10/10/22 09:43	1
d-N-EtFOSA-M	23		10 - 150	10/05/22 12:21	10/10/22 09:43	1
d7-N-MeFOSE-M	40		10 - 150	10/05/22 12:21	10/10/22 09:43	1
d9-N-EtFOSE-M	40		10 - 150	10/05/22 12:21	10/10/22 09:43	1
M2-4:2 FTS	58		25 - 150	10/05/22 12:21	10/10/22 09:43	1
M2-6:2 FTS	62		25 - 150	10/05/22 12:21	10/10/22 09:43	1
M2-8:2 FTS	57		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C3 HFPO-DA	74		25 - 150	10/05/22 12:21	10/10/22 09:43	1
13C2 10:2 FTS	42		25 - 150	10/05/22 12:21	10/10/22 09:43	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-03-20220919-03-04-101

Lab Sample ID: 500-222851-4

Date Collected: 09/19/22 13:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 78.0

Method: EPA 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	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluoropentanoic acid (PFPeA)	<0.050		0.24	0.050	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorohexanoic acid (PFHxA)	<0.038		0.24	0.038	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluoroheptanoic acid (PFHpA)	<0.046		0.24	0.046	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorooctanoic acid (PFOA)	0.63		0.24	0.065	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorononanoic acid (PFNA)	<0.027		0.24	0.027	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorodecanoic acid (PFDA)	<0.059		0.24	0.059	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluoroundecanoic acid (PFUnA)	<0.051		0.24	0.051	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorododecanoic acid (PFDoA)	<0.037		0.24	0.037	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorotridecanoic acid (PFTrDA)	<0.026		0.24	0.026	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorotetradecanoic acid (PFTeA)	<0.045		0.24	0.045	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorobutanesulfonic acid (PFBS)	<0.046		0.24	0.046	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluoropentanesulfonic acid (PFPeS)	<0.045		0.24	0.045	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorohexanesulfonic acid (PFHxS)	<0.035		0.24	0.035	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.060		0.24	0.060	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorooctanesulfonic acid (PFOS)	<0.053		0.24	0.053	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorononanesulfonic acid (PFNS)	<0.035		0.24	0.035	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorodecanesulfonic acid (PFDS)	<0.064		0.24	0.064	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorododecanesulfonic acid (PFDoS)	<0.057		0.24	0.057	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
Perfluorooctanesulfonamide (FOSA)	<0.040		0.24	0.040	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
NEtFOSA	<0.057		0.24	0.057	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
NMeFOSA	<0.060		0.24	0.060	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
NMeFOSAA	<0.028		0.24	0.028	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
NEtFOSAA	<0.059		0.24	0.059	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
NMeFOSE	<0.057		0.24	0.057	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
NEtFOSE	<0.034		0.24	0.034	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
4:2 FTS	<0.062		0.24	0.062	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
6:2 FTS	<0.033		0.24	0.033	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
8:2 FTS	<0.043		0.24	0.043	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.048		0.24	0.048	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
HFPO-DA (GenX)	<0.050		0.24	0.050	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
9Cl-PF3ONS	<0.043		0.24	0.043	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1
11Cl-PF3OUdS	<0.038		0.24	0.038	ug/Kg	☼	10/05/22 12:21	10/10/22 10:24	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	92		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C5 PFPeA	111		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C2 PFHxA	103		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C4 PFHpA	106		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C4 PFOA	93		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C5 PFNA	97		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C2 PFDA	86		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C2 PFUnA	75		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C2 PFDoA	79		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C2 PFTeDA	82		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C3 PFBS	92		25 - 150	10/05/22 12:21	10/10/22 10:24	1
18O2 PFHxS	97		25 - 150	10/05/22 12:21	10/10/22 10:24	1

Eurofins Chicago

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-03-20220919-03-04-101

Lab Sample ID: 500-222851-4

Date Collected: 09/19/22 13:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 78.0

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	82		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C8 FOSA	69		10 - 150	10/05/22 12:21	10/10/22 10:24	1
d3-NMeFOSAA	99		25 - 150	10/05/22 12:21	10/10/22 10:24	1
d5-NEtFOSAA	97		25 - 150	10/05/22 12:21	10/10/22 10:24	1
d-N-MeFOSA-M	24		10 - 150	10/05/22 12:21	10/10/22 10:24	1
d-N-EtFOSA-M	22		10 - 150	10/05/22 12:21	10/10/22 10:24	1
d7-N-MeFOSE-M	61		10 - 150	10/05/22 12:21	10/10/22 10:24	1
d9-N-EtFOSE-M	53		10 - 150	10/05/22 12:21	10/10/22 10:24	1
M2-4:2 FTS	79		25 - 150	10/05/22 12:21	10/10/22 10:24	1
M2-6:2 FTS	85		25 - 150	10/05/22 12:21	10/10/22 10:24	1
M2-8:2 FTS	72		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C3 HFPO-DA	93		25 - 150	10/05/22 12:21	10/10/22 10:24	1
13C2 10:2 FTS	69		25 - 150	10/05/22 12:21	10/10/22 10:24	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-04-20220919-03-04-001

Lab Sample ID: 500-222851-5

Date Collected: 09/19/22 14:40

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 86.0

Method: EPA 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	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluoropentanoic acid (PFPeA)	<0.043		0.21	0.043	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorohexanoic acid (PFHxA)	<0.032		0.21	0.032	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluoroheptanoic acid (PFHpA)	0.045	J	0.21	0.039	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorooctanoic acid (PFOA)	5.6		0.21	0.055	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorononanoic acid (PFNA)	<0.023		0.21	0.023	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorodecanoic acid (PFDA)	<0.050		0.21	0.050	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluoroundecanoic acid (PFUnA)	<0.044		0.21	0.044	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorododecanoic acid (PFDoA)	<0.031		0.21	0.031	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorotridecanoic acid (PFTrDA)	<0.022		0.21	0.022	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorotetradecanoic acid (PFTeA)	<0.038		0.21	0.038	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorobutanesulfonic acid (PFBS)	<0.039		0.21	0.039	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluoropentanesulfonic acid (PFPeS)	<0.038		0.21	0.038	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorohexanesulfonic acid (PFHxS)	<0.030		0.21	0.030	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.051		0.21	0.051	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorooctanesulfonic acid (PFOS)	<0.045		0.21	0.045	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorononanesulfonic acid (PFNS)	<0.030		0.21	0.030	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorodecanesulfonic acid (PFDS)	<0.054		0.21	0.054	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorododecanesulfonic acid (PFDoS)	<0.049		0.21	0.049	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
Perfluorooctanesulfonamide (FOSA)	<0.034		0.21	0.034	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
NEtFOSA	<0.049		0.21	0.049	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
NMeFOSA	<0.051		0.21	0.051	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
NMeFOSAA	<0.024		0.21	0.024	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
NEtFOSAA	<0.050		0.21	0.050	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
NMeFOSE	<0.049		0.21	0.049	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
NEtFOSE	<0.029		0.21	0.029	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
4:2 FTS	<0.053		0.21	0.053	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
6:2 FTS	<0.028		0.21	0.028	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
8:2 FTS	<0.036		0.21	0.036	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.041		0.21	0.041	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
HFPO-DA (GenX)	<0.043		0.21	0.043	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
9Cl-PF3ONS	<0.036		0.21	0.036	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1
11Cl-PF3OUdS	<0.032		0.21	0.032	ug/Kg	✳	10/05/22 12:21	10/10/22 10:34	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	84		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C5 PFPeA	92		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C2 PFHxA	88		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C4 PFHpA	93		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C4 PFOA	86		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C5 PFNA	82		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C2 PFDA	76		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C2 PFUnA	68		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C2 PFDoA	67		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C2 PFTeDA	79		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C3 PFBS	78		25 - 150	10/05/22 12:21	10/10/22 10:34	1
18O2 PFHxS	83		25 - 150	10/05/22 12:21	10/10/22 10:34	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-04-20220919-03-04-001

Lab Sample ID: 500-222851-5

Date Collected: 09/19/22 14:40

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 86.0

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	67		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C8 FOSA	65		10 - 150	10/05/22 12:21	10/10/22 10:34	1
d3-NMeFOSAA	83		25 - 150	10/05/22 12:21	10/10/22 10:34	1
d5-NEtFOSAA	82		25 - 150	10/05/22 12:21	10/10/22 10:34	1
d-N-MeFOSA-M	35		10 - 150	10/05/22 12:21	10/10/22 10:34	1
d-N-EtFOSA-M	37		10 - 150	10/05/22 12:21	10/10/22 10:34	1
d7-N-MeFOSE-M	61		10 - 150	10/05/22 12:21	10/10/22 10:34	1
d9-N-EtFOSE-M	56		10 - 150	10/05/22 12:21	10/10/22 10:34	1
M2-4:2 FTS	66		25 - 150	10/05/22 12:21	10/10/22 10:34	1
M2-6:2 FTS	62		25 - 150	10/05/22 12:21	10/10/22 10:34	1
M2-8:2 FTS	62		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C3 HFPO-DA	83		25 - 150	10/05/22 12:21	10/10/22 10:34	1
13C2 10:2 FTS	53		25 - 150	10/05/22 12:21	10/10/22 10:34	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-05-20220919-03-04-001

Lab Sample ID: 500-222851-6

Date Collected: 09/19/22 15:45

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 81.1

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<0.052		0.23	0.052	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluoropentanoic acid (PFPeA)	<0.046		0.23	0.046	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorohexanoic acid (PFHxA)	<0.035		0.23	0.035	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluoroheptanoic acid (PFHpA)	<0.043		0.23	0.043	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorooctanoic acid (PFOA)	<0.060		0.23	0.060	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorononanoic acid (PFNA)	<0.025		0.23	0.025	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorodecanoic acid (PFDA)	<0.054		0.23	0.054	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluoroundecanoic acid (PFUnA)	<0.048		0.23	0.048	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorododecanoic acid (PFDoA)	<0.034		0.23	0.034	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorotridecanoic acid (PFTrDA)	<0.024		0.23	0.024	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorotetradecanoic acid (PFTeA)	<0.042		0.23	0.042	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorobutanesulfonic acid (PFBS)	<0.043		0.23	0.043	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluoropentanesulfonic acid (PFPeS)	<0.042		0.23	0.042	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorohexanesulfonic acid (PFHxS)	<0.033		0.23	0.033	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.056		0.23	0.056	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorooctanesulfonic acid (PFOS)	<0.049		0.23	0.049	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorononanesulfonic acid (PFNS)	<0.033		0.23	0.033	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorodecanesulfonic acid (PFDS)	<0.059		0.23	0.059	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorododecanesulfonic acid (PFDoS)	<0.053		0.23	0.053	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
Perfluorooctanesulfonamide (FOSA)	<0.037		0.23	0.037	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
NEtFOSA	<0.053		0.23	0.053	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
NMeFOSA	<0.056		0.23	0.056	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
NMeFOSAA	<0.026		0.23	0.026	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
NEtFOSAA	<0.054		0.23	0.054	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
NMeFOSE	<0.053		0.23	0.053	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
NEtFOSE	<0.032		0.23	0.032	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
4:2 FTS	<0.058		0.23	0.058	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
6:2 FTS	<0.031		0.23	0.031	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
8:2 FTS	<0.040		0.23	0.040	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		0.23	0.044	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
HFPO-DA (GenX)	<0.046		0.23	0.046	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
9Cl-PF3ONS	<0.040		0.23	0.040	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1
11Cl-PF3OUdS	<0.035		0.23	0.035	ug/Kg	☼	10/05/22 12:21	10/10/22 10:44	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	87		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C5 PFPeA	99		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C2 PFHxA	96		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C4 PFHpA	96		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C4 PFOA	87		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C5 PFNA	93		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C2 PFDA	79		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C2 PFUnA	68		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C2 PFDoA	67		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C2 PFTeDA	77		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C3 PFBS	85		25 - 150	10/05/22 12:21	10/10/22 10:44	1
18O2 PFHxS	85		25 - 150	10/05/22 12:21	10/10/22 10:44	1

Eurofins Chicago

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-05-20220919-03-04-001

Lab Sample ID: 500-222851-6

Date Collected: 09/19/22 15:45

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 81.1

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	75		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C8 FOSA	58		10 - 150	10/05/22 12:21	10/10/22 10:44	1
d3-NMeFOSAA	83		25 - 150	10/05/22 12:21	10/10/22 10:44	1
d5-NEtFOSAA	87		25 - 150	10/05/22 12:21	10/10/22 10:44	1
d-N-MeFOSA-M	25		10 - 150	10/05/22 12:21	10/10/22 10:44	1
d-N-EtFOSA-M	27		10 - 150	10/05/22 12:21	10/10/22 10:44	1
d7-N-MeFOSE-M	53		10 - 150	10/05/22 12:21	10/10/22 10:44	1
d9-N-EtFOSE-M	45		10 - 150	10/05/22 12:21	10/10/22 10:44	1
M2-4:2 FTS	74		25 - 150	10/05/22 12:21	10/10/22 10:44	1
M2-6:2 FTS	70		25 - 150	10/05/22 12:21	10/10/22 10:44	1
M2-8:2 FTS	70		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C3 HFPO-DA	94		25 - 150	10/05/22 12:21	10/10/22 10:44	1
13C2 10:2 FTS	58		25 - 150	10/05/22 12:21	10/10/22 10:44	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: EB-01-20220919

Lab Sample ID: 500-222851-7

Date Collected: 09/19/22 15:50

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.3		4.7	2.3	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluoropentanoic acid (PFPeA)	<0.46		1.9	0.46	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorooctanoic acid (PFOA)	<0.80		1.9	0.80	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.18		1.9	0.18	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorododecanesulfonic acid (PFDoS)	<0.91		1.9	0.91	ng/L		10/03/22 04:51	10/04/22 15:27	1
Perfluorooctanesulfonamide (FOSA)	<0.92		1.9	0.92	ng/L		10/03/22 04:51	10/04/22 15:27	1
NEtFOSA	<0.82		1.9	0.82	ng/L		10/03/22 04:51	10/04/22 15:27	1
NMeFOSA	<0.40		1.9	0.40	ng/L		10/03/22 04:51	10/04/22 15:27	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		10/03/22 04:51	10/04/22 15:27	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		10/03/22 04:51	10/04/22 15:27	1
NMeFOSE	<1.3		3.8	1.3	ng/L		10/03/22 04:51	10/04/22 15:27	1
NEtFOSE	<0.80		1.9	0.80	ng/L		10/03/22 04:51	10/04/22 15:27	1
4:2 FTS	<0.23		1.9	0.23	ng/L		10/03/22 04:51	10/04/22 15:27	1
6:2 FTS	<2.3		4.7	2.3	ng/L		10/03/22 04:51	10/04/22 15:27	1
8:2 FTS	<0.43		1.9	0.43	ng/L		10/03/22 04:51	10/04/22 15:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.38		1.9	0.38	ng/L		10/03/22 04:51	10/04/22 15:27	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		10/03/22 04:51	10/04/22 15:27	1
9Cl-PF3ONS	<0.23		1.9	0.23	ng/L		10/03/22 04:51	10/04/22 15:27	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		10/03/22 04:51	10/04/22 15:27	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	103		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C5 PFPeA	110		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C2 PFHxA	105		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C4 PFHpA	105		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C4 PFOA	108		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C5 PFNA	113		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C2 PFDA	109		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C2 PFUnA	111		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C2 PFDoA	104		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C2 PFTeDA	102		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C3 PFBS	110		25 - 150	10/03/22 04:51	10/04/22 15:27	1
18O2 PFHxS	114		25 - 150	10/03/22 04:51	10/04/22 15:27	1

Eurofins Chicago

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: EB-01-20220919

Lab Sample ID: 500-222851-7

Date Collected: 09/19/22 15:50

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	109		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C8 FOSA	109		10 - 150	10/03/22 04:51	10/04/22 15:27	1
d3-NMeFOSAA	123		25 - 150	10/03/22 04:51	10/04/22 15:27	1
d5-NEtFOSAA	124		25 - 150	10/03/22 04:51	10/04/22 15:27	1
d-N-MeFOSA-M	100		10 - 150	10/03/22 04:51	10/04/22 15:27	1
d-N-EtFOSA-M	98		10 - 150	10/03/22 04:51	10/04/22 15:27	1
d7-N-MeFOSE-M	100		10 - 150	10/03/22 04:51	10/04/22 15:27	1
d9-N-EtFOSE-M	95		10 - 150	10/03/22 04:51	10/04/22 15:27	1
M2-4:2 FTS	94		25 - 150	10/03/22 04:51	10/04/22 15:27	1
M2-6:2 FTS	86		25 - 150	10/03/22 04:51	10/04/22 15:27	1
M2-8:2 FTS	83		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C3 HFPO-DA	104		25 - 150	10/03/22 04:51	10/04/22 15:27	1
13C2 10:2 FTS	81		25 - 150	10/03/22 04:51	10/04/22 15:27	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: FB-01-20220919

Lab Sample ID: 500-222851-8

Date Collected: 09/19/22 15:55

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.5	2.2	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluoropentanoic acid (PFPeA)	<0.44		1.8	0.44	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorohexanoic acid (PFHxA)	<0.53		1.8	0.53	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorooctanoic acid (PFOA)	<0.77		1.8	0.77	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		10/03/22 04:51	10/04/22 15:37	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		10/03/22 04:51	10/04/22 15:37	1
NEtFOSA	<0.79		1.8	0.79	ng/L		10/03/22 04:51	10/04/22 15:37	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/03/22 04:51	10/04/22 15:37	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		10/03/22 04:51	10/04/22 15:37	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		10/03/22 04:51	10/04/22 15:37	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/03/22 04:51	10/04/22 15:37	1
NEtFOSE	<0.77		1.8	0.77	ng/L		10/03/22 04:51	10/04/22 15:37	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 15:37	1
6:2 FTS	<2.3		4.5	2.3	ng/L		10/03/22 04:51	10/04/22 15:37	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/03/22 04:51	10/04/22 15:37	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/03/22 04:51	10/04/22 15:37	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		10/03/22 04:51	10/04/22 15:37	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 15:37	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 15:37	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	103		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C5 PFPeA	110		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C2 PFHxA	105		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C4 PFHpA	107		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C4 PFOA	104		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C5 PFNA	108		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C2 PFDA	108		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C2 PFUnA	104		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C2 PFDoA	98		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C2 PFTeDA	95		25 - 150				10/03/22 04:51	10/04/22 15:37	1
13C3 PFBS	106		25 - 150				10/03/22 04:51	10/04/22 15:37	1
18O2 PFHxS	109		25 - 150				10/03/22 04:51	10/04/22 15:37	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: FB-01-20220919

Lab Sample ID: 500-222851-8

Date Collected: 09/19/22 15:55

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	106		25 - 150	10/03/22 04:51	10/04/22 15:37	1
13C8 FOSA	107		10 - 150	10/03/22 04:51	10/04/22 15:37	1
d3-NMeFOSAA	121		25 - 150	10/03/22 04:51	10/04/22 15:37	1
d5-NEtFOSAA	121		25 - 150	10/03/22 04:51	10/04/22 15:37	1
d-N-MeFOSA-M	97		10 - 150	10/03/22 04:51	10/04/22 15:37	1
d-N-EtFOSA-M	91		10 - 150	10/03/22 04:51	10/04/22 15:37	1
d7-N-MeFOSE-M	100		10 - 150	10/03/22 04:51	10/04/22 15:37	1
d9-N-EtFOSE-M	89		10 - 150	10/03/22 04:51	10/04/22 15:37	1
M2-4:2 FTS	95		25 - 150	10/03/22 04:51	10/04/22 15:37	1
M2-6:2 FTS	88		25 - 150	10/03/22 04:51	10/04/22 15:37	1
M2-8:2 FTS	80		25 - 150	10/03/22 04:51	10/04/22 15:37	1
13C3 HFPO-DA	103		25 - 150	10/03/22 04:51	10/04/22 15:37	1
13C2 10:2 FTS	69		25 - 150	10/03/22 04:51	10/04/22 15:37	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-01-2022-0923-001

Lab Sample ID: 500-222851-9

Date Collected: 09/23/22 10:50

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	11		4.6	2.2	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluoropentanoic acid (PFPeA)	2.7		1.8	0.45	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorohexanoic acid (PFHxA)	5.3		1.8	0.53	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluoroheptanoic acid (PFHpA)	7.6		1.8	0.23	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorooctanoic acid (PFOA)	250		1.8	0.77	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorononanoic acid (PFNA)	0.45	J	1.8	0.25	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorobutanesulfonic acid (PFBS)	1.3	J	1.8	0.18	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorooctanesulfonic acid (PFOS)	2.2	I	1.8	0.49	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		10/03/22 04:51	10/04/22 15:47	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		10/03/22 04:51	10/04/22 15:47	1
NEtFOSA	<0.79		1.8	0.79	ng/L		10/03/22 04:51	10/04/22 15:47	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/03/22 04:51	10/04/22 15:47	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		10/03/22 04:51	10/04/22 15:47	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		10/03/22 04:51	10/04/22 15:47	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/03/22 04:51	10/04/22 15:47	1
NEtFOSE	<0.77		1.8	0.77	ng/L		10/03/22 04:51	10/04/22 15:47	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 15:47	1
6:2 FTS	<2.3		4.6	2.3	ng/L		10/03/22 04:51	10/04/22 15:47	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/03/22 04:51	10/04/22 15:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/03/22 04:51	10/04/22 15:47	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		10/03/22 04:51	10/04/22 15:47	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 15:47	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 15:47	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	82		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C5 PFPeA	102		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C2 PFHxA	117		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C4 PFHpA	105		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C4 PFOA	105		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C5 PFNA	110		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C2 PFDA	102		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C2 PFUnA	96		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C2 PFDoA	84		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C2 PFTeDA	80		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C3 PFBS	96		25 - 150	10/03/22 04:51	10/04/22 15:47	1
18O2 PFHxS	101		25 - 150	10/03/22 04:51	10/04/22 15:47	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-01-2022-0923-001

Lab Sample ID: 500-222851-9

Date Collected: 09/23/22 10:50

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	96		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C8 FOSA	98		10 - 150	10/03/22 04:51	10/04/22 15:47	1
d3-NMeFOSAA	112		25 - 150	10/03/22 04:51	10/04/22 15:47	1
d5-NEtFOSAA	107		25 - 150	10/03/22 04:51	10/04/22 15:47	1
d-N-MeFOSA-M	86		10 - 150	10/03/22 04:51	10/04/22 15:47	1
d-N-EtFOSA-M	79		10 - 150	10/03/22 04:51	10/04/22 15:47	1
d7-N-MeFOSE-M	85		10 - 150	10/03/22 04:51	10/04/22 15:47	1
d9-N-EtFOSE-M	78		10 - 150	10/03/22 04:51	10/04/22 15:47	1
M2-4:2 FTS	100		25 - 150	10/03/22 04:51	10/04/22 15:47	1
M2-6:2 FTS	75		25 - 150	10/03/22 04:51	10/04/22 15:47	1
M2-8:2 FTS	74		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C3 HFPO-DA	105		25 - 150	10/03/22 04:51	10/04/22 15:47	1
13C2 10:2 FTS	58		25 - 150	10/03/22 04:51	10/04/22 15:47	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-02-2022-0922-001

Lab Sample ID: 500-222851-10

Date Collected: 09/22/22 12:05

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.7		4.6	2.2	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluoropentanoic acid (PFPeA)	1.7	J	1.8	0.45	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorohexanoic acid (PFHxA)	13		1.8	0.53	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluoroheptanoic acid (PFHpA)	21		1.8	0.23	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorooctanoic acid (PFOA)	290		1.8	0.78	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorobutanesulfonic acid (PFBS)	0.81	J	1.8	0.18	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.8	0.28	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.8	0.50	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorododecanesulfonic acid (PFDoS)	<0.89		1.8	0.89	ng/L		10/03/22 04:51	10/04/22 15:57	1
Perfluorooctanesulfonamide (FOSA)	<0.90		1.8	0.90	ng/L		10/03/22 04:51	10/04/22 15:57	1
NEtFOSA	<0.80		1.8	0.80	ng/L		10/03/22 04:51	10/04/22 15:57	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/03/22 04:51	10/04/22 15:57	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		10/03/22 04:51	10/04/22 15:57	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		10/03/22 04:51	10/04/22 15:57	1
NMeFOSE	<1.3		3.7	1.3	ng/L		10/03/22 04:51	10/04/22 15:57	1
NEtFOSE	<0.78		1.8	0.78	ng/L		10/03/22 04:51	10/04/22 15:57	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 15:57	1
6:2 FTS	<2.3		4.6	2.3	ng/L		10/03/22 04:51	10/04/22 15:57	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/03/22 04:51	10/04/22 15:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		10/03/22 04:51	10/04/22 15:57	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		10/03/22 04:51	10/04/22 15:57	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 15:57	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 15:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	86		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C5 PFPeA	104		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C2 PFHxA	108		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C4 PFHpA	102		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C4 PFOA	102		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C5 PFNA	99		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C2 PFDA	93		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C2 PFUnA	83		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C2 PFDoA	73		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C2 PFTeDA	53		25 - 150				10/03/22 04:51	10/04/22 15:57	1
13C3 PFBS	93		25 - 150				10/03/22 04:51	10/04/22 15:57	1
18O2 PFHxS	87		25 - 150				10/03/22 04:51	10/04/22 15:57	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-02-2022-0922-001

Lab Sample ID: 500-222851-10

Date Collected: 09/22/22 12:05

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	70		25 - 150	10/03/22 04:51	10/04/22 15:57	1
13C8 FOSA	89		10 - 150	10/03/22 04:51	10/04/22 15:57	1
d3-NMeFOSAA	98		25 - 150	10/03/22 04:51	10/04/22 15:57	1
d5-NEtFOSAA	94		25 - 150	10/03/22 04:51	10/04/22 15:57	1
d-N-MeFOSA-M	74		10 - 150	10/03/22 04:51	10/04/22 15:57	1
d-N-EtFOSA-M	62		10 - 150	10/03/22 04:51	10/04/22 15:57	1
d7-N-MeFOSE-M	73		10 - 150	10/03/22 04:51	10/04/22 15:57	1
d9-N-EtFOSE-M	57		10 - 150	10/03/22 04:51	10/04/22 15:57	1
M2-4:2 FTS	80		25 - 150	10/03/22 04:51	10/04/22 15:57	1
M2-6:2 FTS	72		25 - 150	10/03/22 04:51	10/04/22 15:57	1
M2-8:2 FTS	63		25 - 150	10/03/22 04:51	10/04/22 15:57	1
13C3 HFPO-DA	101		25 - 150	10/03/22 04:51	10/04/22 15:57	1
13C2 10:2 FTS	45		25 - 150	10/03/22 04:51	10/04/22 15:57	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-02-2022-0922-101

Lab Sample ID: 500-222851-11

Date Collected: 09/22/22 12:05

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.8		4.7	2.2	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluoropentanoic acid (PFPeA)	2.0		1.9	0.46	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorohexanoic acid (PFHxA)	13		1.9	0.54	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluoroheptanoic acid (PFHpA)	21		1.9	0.23	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorooctanoic acid (PFOA)	320		1.9	0.79	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.9	1.2	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorobutanesulfonic acid (PFBS)	0.84	J	1.9	0.19	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.53		1.9	0.53	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorooctanesulfonic acid (PFOS)	0.69	J	1.9	0.50	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.9	0.34	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.9	0.90	ng/L		10/03/22 04:51	10/04/22 16:07	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.9	0.91	ng/L		10/03/22 04:51	10/04/22 16:07	1
NEtFOSA	<0.81		1.9	0.81	ng/L		10/03/22 04:51	10/04/22 16:07	1
NMeFOSA	<0.40		1.9	0.40	ng/L		10/03/22 04:51	10/04/22 16:07	1
NMeFOSAA	<1.1		4.7	1.1	ng/L		10/03/22 04:51	10/04/22 16:07	1
NEtFOSAA	<1.2		4.7	1.2	ng/L		10/03/22 04:51	10/04/22 16:07	1
NMeFOSE	<1.3		3.7	1.3	ng/L		10/03/22 04:51	10/04/22 16:07	1
NEtFOSE	<0.79		1.9	0.79	ng/L		10/03/22 04:51	10/04/22 16:07	1
4:2 FTS	<0.22		1.9	0.22	ng/L		10/03/22 04:51	10/04/22 16:07	1
6:2 FTS	<2.3		4.7	2.3	ng/L		10/03/22 04:51	10/04/22 16:07	1
8:2 FTS	<0.43		1.9	0.43	ng/L		10/03/22 04:51	10/04/22 16:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		10/03/22 04:51	10/04/22 16:07	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		10/03/22 04:51	10/04/22 16:07	1
9Cl-PF3ONS	<0.22		1.9	0.22	ng/L		10/03/22 04:51	10/04/22 16:07	1
11Cl-PF3OUdS	<0.30		1.9	0.30	ng/L		10/03/22 04:51	10/04/22 16:07	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	85		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C5 PFPeA	100		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C2 PFHxA	104		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C4 PFHpA	100		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C4 PFOA	99		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C5 PFNA	98		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C2 PFDA	94		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C2 PFUnA	84		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C2 PFDoA	74		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C2 PFTeDA	69		25 - 150				10/03/22 04:51	10/04/22 16:07	1
13C3 PFBS	91		25 - 150				10/03/22 04:51	10/04/22 16:07	1
18O2 PFHxS	92		25 - 150				10/03/22 04:51	10/04/22 16:07	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-02-2022-0922-101

Lab Sample ID: 500-222851-11

Date Collected: 09/22/22 12:05

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	85		25 - 150	10/03/22 04:51	10/04/22 16:07	1
13C8 FOSA	92		10 - 150	10/03/22 04:51	10/04/22 16:07	1
d3-NMeFOSAA	97		25 - 150	10/03/22 04:51	10/04/22 16:07	1
d5-NEtFOSAA	93		25 - 150	10/03/22 04:51	10/04/22 16:07	1
d-N-MeFOSA-M	71		10 - 150	10/03/22 04:51	10/04/22 16:07	1
d-N-EtFOSA-M	63		10 - 150	10/03/22 04:51	10/04/22 16:07	1
d7-N-MeFOSE-M	69		10 - 150	10/03/22 04:51	10/04/22 16:07	1
d9-N-EtFOSE-M	62		10 - 150	10/03/22 04:51	10/04/22 16:07	1
M2-4:2 FTS	80		25 - 150	10/03/22 04:51	10/04/22 16:07	1
M2-6:2 FTS	70		25 - 150	10/03/22 04:51	10/04/22 16:07	1
M2-8:2 FTS	66		25 - 150	10/03/22 04:51	10/04/22 16:07	1
13C3 HFPO-DA	99		25 - 150	10/03/22 04:51	10/04/22 16:07	1
13C2 10:2 FTS	53		25 - 150	10/03/22 04:51	10/04/22 16:07	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-03-2022-0922-001

Lab Sample ID: 500-222851-12

Date Collected: 09/22/22 11:25

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	9.1		4.5	2.2	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluoropentanoic acid (PFPeA)	4.8		1.8	0.44	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorohexanoic acid (PFHxA)	21		1.8	0.53	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluoroheptanoic acid (PFHpA)	15		1.8	0.23	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorooctanoic acid (PFOA)	210		1.8	0.77	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorobutanesulfonic acid (PFBS)	0.34	J	1.8	0.18	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.52		1.8	0.52	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88	F1	1.8	0.88	ng/L		10/03/22 04:51	10/09/22 03:16	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		10/03/22 04:51	10/09/22 03:16	1
NEtFOSA	<0.79		1.8	0.79	ng/L		10/03/22 04:51	10/09/22 03:16	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/03/22 04:51	10/09/22 03:16	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		10/03/22 04:51	10/09/22 03:16	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		10/03/22 04:51	10/09/22 03:16	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/03/22 04:51	10/09/22 03:16	1
NEtFOSE	<0.77		1.8	0.77	ng/L		10/03/22 04:51	10/09/22 03:16	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/09/22 03:16	1
6:2 FTS	<2.3		4.5	2.3	ng/L		10/03/22 04:51	10/09/22 03:16	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/03/22 04:51	10/09/22 03:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36	F1	1.8	0.36	ng/L		10/03/22 04:51	10/09/22 03:16	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		10/03/22 04:51	10/09/22 03:16	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/09/22 03:16	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/09/22 03:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	90		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C5 PFPeA	102		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C2 PFHxA	108		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C4 PFHpA	96		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C4 PFOA	98		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C5 PFNA	97		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C2 PFDA	88		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C2 PFUnA	80		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C2 PFDoA	62		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C2 PFTeDA	29		25 - 150				10/03/22 04:51	10/09/22 03:16	1
13C3 PFBS	91		25 - 150				10/03/22 04:51	10/09/22 03:16	1
18O2 PFHxS	82		25 - 150				10/03/22 04:51	10/09/22 03:16	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-03-2022-0922-001

Lab Sample ID: 500-222851-12

Date Collected: 09/22/22 11:25

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	55		25 - 150	10/03/22 04:51	10/09/22 03:16	1
13C8 FOSA	86		10 - 150	10/03/22 04:51	10/09/22 03:16	1
d3-NMeFOSAA	95		25 - 150	10/03/22 04:51	10/09/22 03:16	1
d5-NEtFOSAA	88		25 - 150	10/03/22 04:51	10/09/22 03:16	1
d-N-MeFOSA-M	63		10 - 150	10/03/22 04:51	10/09/22 03:16	1
d-N-EtFOSA-M	47		10 - 150	10/03/22 04:51	10/09/22 03:16	1
d7-N-MeFOSE-M	55		10 - 150	10/03/22 04:51	10/09/22 03:16	1
d9-N-EtFOSE-M	33		10 - 150	10/03/22 04:51	10/09/22 03:16	1
M2-4:2 FTS	83		25 - 150	10/03/22 04:51	10/09/22 03:16	1
M2-6:2 FTS	73		25 - 150	10/03/22 04:51	10/09/22 03:16	1
M2-8:2 FTS	68		25 - 150	10/03/22 04:51	10/09/22 03:16	1
13C3 HFPO-DA	100		25 - 150	10/03/22 04:51	10/09/22 03:16	1
13C2 10:2 FTS	42		25 - 150	10/03/22 04:51	10/09/22 03:16	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-04-2022-0922-001

Lab Sample ID: 500-222851-13

Date Collected: 09/22/22 13:12

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	20		4.5	2.2	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluoropentanoic acid (PFPeA)	12		1.8	0.44	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorohexanoic acid (PFHxA)	45		1.8	0.52	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluoroheptanoic acid (PFHpA)	130		1.8	0.23	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorononanoic acid (PFNA)	3.7		1.8	0.24	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorodecanoic acid (PFDA)	0.32	J	1.8	0.28	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluoroundecanoic acid (PFUnA)	<0.99		1.8	0.99	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorobutanesulfonic acid (PFBS)	1.8		1.8	0.18	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		10/03/22 04:51	10/04/22 17:18	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		10/03/22 04:51	10/04/22 17:18	1
NEtFOSA	<0.78		1.8	0.78	ng/L		10/03/22 04:51	10/04/22 17:18	1
NMeFOSA	<0.39		1.8	0.39	ng/L		10/03/22 04:51	10/04/22 17:18	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		10/03/22 04:51	10/04/22 17:18	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		10/03/22 04:51	10/04/22 17:18	1
NMeFOSE	<1.3		3.6	1.3	ng/L		10/03/22 04:51	10/04/22 17:18	1
NEtFOSE	<0.77		1.8	0.77	ng/L		10/03/22 04:51	10/04/22 17:18	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 17:18	1
6:2 FTS	<2.3		4.5	2.3	ng/L		10/03/22 04:51	10/04/22 17:18	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/03/22 04:51	10/04/22 17:18	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/03/22 04:51	10/04/22 17:18	1
HFPO-DA (GenX)	7.7		3.6	1.4	ng/L		10/03/22 04:51	10/04/22 17:18	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 17:18	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 17:18	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	97		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C5 PFPeA	138		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C2 PFHxA	162	*5+	25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C4 PFHpA	149		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C4 PFOA	88		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C5 PFNA	146		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C2 PFDA	134		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C2 PFUnA	127		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C2 PFDoA	108		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C2 PFTeDA	103		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C3 PFBS	132		25 - 150				10/03/22 04:51	10/04/22 17:18	1
18O2 PFHxS	135		25 - 150				10/03/22 04:51	10/04/22 17:18	1
13C4 PFOS	127		25 - 150				10/03/22 04:51	10/04/22 17:18	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-04-2022-0922-001

Lab Sample ID: 500-222851-13

Date Collected: 09/22/22 13:12

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C8 FOSA	132		10 - 150	10/03/22 04:51	10/04/22 17:18	1
d3-NMeFOSAA	142		25 - 150	10/03/22 04:51	10/04/22 17:18	1
d5-NEtFOSAA	141		25 - 150	10/03/22 04:51	10/04/22 17:18	1
d-N-MeFOSA-M	110		10 - 150	10/03/22 04:51	10/04/22 17:18	1
d-N-EtFOSA-M	103		10 - 150	10/03/22 04:51	10/04/22 17:18	1
d7-N-MeFOSE-M	116		10 - 150	10/03/22 04:51	10/04/22 17:18	1
d9-N-EtFOSE-M	100		10 - 150	10/03/22 04:51	10/04/22 17:18	1
M2-4:2 FTS	133		25 - 150	10/03/22 04:51	10/04/22 17:18	1
M2-6:2 FTS	55		25 - 150	10/03/22 04:51	10/04/22 17:18	1
M2-8:2 FTS	100		25 - 150	10/03/22 04:51	10/04/22 17:18	1
13C3 HFPO-DA	143		25 - 150	10/03/22 04:51	10/04/22 17:18	1
13C2 10:2 FTS	76		25 - 150	10/03/22 04:51	10/04/22 17:18	1

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

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Perfluorooctanoic acid (PFOA)	8000		90	38	ng/L		10/03/22 04:51	10/07/22 19:39	50

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFHxA	80		25 - 150	10/03/22 04:51	10/07/22 19:39	50
13C4 PFOS	74		25 - 150	10/03/22 04:51	10/07/22 19:39	50

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-05-2022-0922-001

Lab Sample ID: 500-222851-14

Date Collected: 09/22/22 13:20

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	16		4.6	2.2	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.8	0.45	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorohexanoic acid (PFHxA)	3.6		1.8	0.54	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluoroheptanoic acid (PFHpA)	2.6		1.8	0.23	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorooctanoic acid (PFOA)	300		1.8	0.79	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorononanoic acid (PFNA)	<0.25		1.8	0.25	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorodecanoic acid (PFDA)	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.8	0.51	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorobutanesulfonic acid (PFBS)	4.1	I	1.8	0.18	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.8	0.28	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorohexanesulfonic acid (PFHxS)	0.67	J	1.8	0.53	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.18		1.8	0.18	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.8	0.50	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.8	0.30	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.8	0.90	ng/L		10/03/22 04:51	10/04/22 17:28	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.8	0.91	ng/L		10/03/22 04:51	10/04/22 17:28	1
NEtFOSA	<0.80		1.8	0.80	ng/L		10/03/22 04:51	10/04/22 17:28	1
NMeFOSA	<0.40		1.8	0.40	ng/L		10/03/22 04:51	10/04/22 17:28	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		10/03/22 04:51	10/04/22 17:28	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		10/03/22 04:51	10/04/22 17:28	1
NMeFOSE	<1.3		3.7	1.3	ng/L		10/03/22 04:51	10/04/22 17:28	1
NEtFOSE	<0.79		1.8	0.79	ng/L		10/03/22 04:51	10/04/22 17:28	1
4:2 FTS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 17:28	1
6:2 FTS	<2.3		4.6	2.3	ng/L		10/03/22 04:51	10/04/22 17:28	1
8:2 FTS	<0.42		1.8	0.42	ng/L		10/03/22 04:51	10/04/22 17:28	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		10/03/22 04:51	10/04/22 17:28	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		10/03/22 04:51	10/04/22 17:28	1
9Cl-PF3ONS	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 17:28	1
11Cl-PF3OUdS	<0.30		1.8	0.30	ng/L		10/03/22 04:51	10/04/22 17:28	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	62		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C5 PFPeA	86		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C2 PFHxA	113		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C4 PFHpA	100		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C4 PFOA	103		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C5 PFNA	104		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C2 PFDA	100		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C2 PFUnA	92		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C2 PFDoA	83		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C2 PFTeDA	80		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C3 PFBS	97		25 - 150	10/03/22 04:51	10/04/22 17:28	1
18O2 PFHxS	103		25 - 150	10/03/22 04:51	10/04/22 17:28	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-05-2022-0922-001

Lab Sample ID: 500-222851-14

Date Collected: 09/22/22 13:20

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	102		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C8 FOSA	104		10 - 150	10/03/22 04:51	10/04/22 17:28	1
d3-NMeFOSAA	103		25 - 150	10/03/22 04:51	10/04/22 17:28	1
d5-NEtFOSAA	102		25 - 150	10/03/22 04:51	10/04/22 17:28	1
d-N-MeFOSA-M	87		10 - 150	10/03/22 04:51	10/04/22 17:28	1
d-N-EtFOSA-M	79		10 - 150	10/03/22 04:51	10/04/22 17:28	1
d7-N-MeFOSE-M	83		10 - 150	10/03/22 04:51	10/04/22 17:28	1
d9-N-EtFOSE-M	75		10 - 150	10/03/22 04:51	10/04/22 17:28	1
M2-4:2 FTS	98		25 - 150	10/03/22 04:51	10/04/22 17:28	1
M2-6:2 FTS	104		25 - 150	10/03/22 04:51	10/04/22 17:28	1
M2-8:2 FTS	75		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C3 HFPO-DA	96		25 - 150	10/03/22 04:51	10/04/22 17:28	1
13C2 10:2 FTS	56		25 - 150	10/03/22 04:51	10/04/22 17:28	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: FB-02-20220922

Lab Sample ID: 500-222851-15

Date Collected: 09/22/22 14:20

Matrix: Water

Date Received: 09/26/22 08:48

Method: EPA 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.1		4.5	2.1	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluoropentanoic acid (PFPeA)	<0.44		1.8	0.44	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorohexanoic acid (PFHxA)	<0.52		1.8	0.52	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.8	0.22	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorooctanoic acid (PFOA)	<0.76		1.8	0.76	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluoroundecanoic acid (PFUnA)	<0.98		1.8	0.98	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorotetradecanoic acid (PFTeA)	<0.65		1.8	0.65	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorododecanesulfonic acid (PFDoS)	<0.86		1.8	0.86	ng/L		10/03/22 04:51	10/04/22 17:38	1
Perfluorooctanesulfonamide (FOSA)	<0.87		1.8	0.87	ng/L		10/03/22 04:51	10/04/22 17:38	1
NEtFOSA	<0.78		1.8	0.78	ng/L		10/03/22 04:51	10/04/22 17:38	1
NMeFOSA	<0.38		1.8	0.38	ng/L		10/03/22 04:51	10/04/22 17:38	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		10/03/22 04:51	10/04/22 17:38	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		10/03/22 04:51	10/04/22 17:38	1
NMeFOSE	<1.2		3.6	1.2	ng/L		10/03/22 04:51	10/04/22 17:38	1
NEtFOSE	<0.76		1.8	0.76	ng/L		10/03/22 04:51	10/04/22 17:38	1
4:2 FTS	<0.21		1.8	0.21	ng/L		10/03/22 04:51	10/04/22 17:38	1
6:2 FTS	<2.2		4.5	2.2	ng/L		10/03/22 04:51	10/04/22 17:38	1
8:2 FTS	<0.41		1.8	0.41	ng/L		10/03/22 04:51	10/04/22 17:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		10/03/22 04:51	10/04/22 17:38	1
HFPO-DA (GenX)	<1.3		3.6	1.3	ng/L		10/03/22 04:51	10/04/22 17:38	1
9Cl-PF3ONS	<0.21		1.8	0.21	ng/L		10/03/22 04:51	10/04/22 17:38	1
11Cl-PF3OUdS	<0.29		1.8	0.29	ng/L		10/03/22 04:51	10/04/22 17:38	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	105		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C5 PFPeA	113		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C2 PFHxA	110		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C4 PFHpA	107		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C4 PFOA	108		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C5 PFNA	109		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C2 PFDA	111		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C2 PFUnA	108		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C2 PFDoA	103		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C2 PFTeDA	97		25 - 150				10/03/22 04:51	10/04/22 17:38	1
13C3 PFBS	111		25 - 150				10/03/22 04:51	10/04/22 17:38	1
18O2 PFHxS	116		25 - 150				10/03/22 04:51	10/04/22 17:38	1

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Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: FB-02-20220922

Lab Sample ID: 500-222851-15

Date Collected: 09/22/22 14:20

Matrix: Water

Date Received: 09/26/22 08:48

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

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFOS	109		25 - 150	10/03/22 04:51	10/04/22 17:38	1
13C8 FOSA	110		10 - 150	10/03/22 04:51	10/04/22 17:38	1
d3-NMeFOSAA	125		25 - 150	10/03/22 04:51	10/04/22 17:38	1
d5-NEtFOSAA	126		25 - 150	10/03/22 04:51	10/04/22 17:38	1
d-N-MeFOSA-M	102		10 - 150	10/03/22 04:51	10/04/22 17:38	1
d-N-EtFOSA-M	98		10 - 150	10/03/22 04:51	10/04/22 17:38	1
d7-N-MeFOSE-M	99		10 - 150	10/03/22 04:51	10/04/22 17:38	1
d9-N-EtFOSE-M	92		10 - 150	10/03/22 04:51	10/04/22 17:38	1
M2-4:2 FTS	99		25 - 150	10/03/22 04:51	10/04/22 17:38	1
M2-6:2 FTS	86		25 - 150	10/03/22 04:51	10/04/22 17:38	1
M2-8:2 FTS	81		25 - 150	10/03/22 04:51	10/04/22 17:38	1
13C3 HFPO-DA	104		25 - 150	10/03/22 04:51	10/04/22 17:38	1
13C2 10:2 FTS	69		25 - 150	10/03/22 04:51	10/04/22 17:38	1

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high 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.
F1	MS and/or MSD recovery exceeds control limits.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

LCMS

Prep Batch: 621887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222851-7	EB-01-20220919	Total/NA	Water	3535	
500-222851-8	FB-01-20220919	Total/NA	Water	3535	
500-222851-9	MW-01-2022-0923-001	Total/NA	Water	3535	
500-222851-10	MW-02-2022-0922-001	Total/NA	Water	3535	
500-222851-11	MW-02-2022-0922-101	Total/NA	Water	3535	
500-222851-12	MW-03-2022-0922-001	Total/NA	Water	3535	
500-222851-13	MW-04-2022-0922-001	Total/NA	Water	3535	
500-222851-13 - DL	MW-04-2022-0922-001	Total/NA	Water	3535	
500-222851-14	MW-05-2022-0922-001	Total/NA	Water	3535	
500-222851-15	FB-02-20220922	Total/NA	Water	3535	
MB 320-621887/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-621887/2-A	Lab Control Sample	Total/NA	Water	3535	
500-222851-12 MS	MW-03-2022-0922-001	Total/NA	Water	3535	
500-222851-12 MSD	MW-03-2022-0922-001	Total/NA	Water	3535	

Analysis Batch: 622283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222851-7	EB-01-20220919	Total/NA	Water	537 (modified)	621887
500-222851-8	FB-01-20220919	Total/NA	Water	537 (modified)	621887
500-222851-9	MW-01-2022-0923-001	Total/NA	Water	537 (modified)	621887
500-222851-10	MW-02-2022-0922-001	Total/NA	Water	537 (modified)	621887
500-222851-11	MW-02-2022-0922-101	Total/NA	Water	537 (modified)	621887
500-222851-13	MW-04-2022-0922-001	Total/NA	Water	537 (modified)	621887
500-222851-14	MW-05-2022-0922-001	Total/NA	Water	537 (modified)	621887
500-222851-15	FB-02-20220922	Total/NA	Water	537 (modified)	621887
MB 320-621887/1-A	Method Blank	Total/NA	Water	537 (modified)	621887
LCS 320-621887/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	621887
500-222851-12 MS	MW-03-2022-0922-001	Total/NA	Water	537 (modified)	621887
500-222851-12 MSD	MW-03-2022-0922-001	Total/NA	Water	537 (modified)	621887

Prep Batch: 622504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222851-1	SP-01-20220919-04-05-001	Total/NA	Soil	SHAKE	
500-222851-2	SP-02-20220919-05-06-001	Total/NA	Soil	SHAKE	
500-222851-3	SP-03-20220919-03-04-001	Total/NA	Soil	SHAKE	
500-222851-4	SP-03-20220919-03-04-101	Total/NA	Soil	SHAKE	
500-222851-5	SP-04-20220919-03-04-001	Total/NA	Soil	SHAKE	
500-222851-6	SP-05-20220919-03-04-001	Total/NA	Soil	SHAKE	
MB 320-622504/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 320-622504/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
500-222851-6 MS	SP-05-20220919-03-04-001	Total/NA	Soil	SHAKE	
500-222851-6 MSD	SP-05-20220919-03-04-001	Total/NA	Soil	SHAKE	

Analysis Batch: 623421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222851-13 - DL	MW-04-2022-0922-001	Total/NA	Water	537 (modified)	621887

Analysis Batch: 623527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222851-1	SP-01-20220919-04-05-001	Total/NA	Soil	537 (modified)	622504
500-222851-2	SP-02-20220919-05-06-001	Total/NA	Soil	537 (modified)	622504

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QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

LCMS (Continued)

Analysis Batch: 623527 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222851-3	SP-03-20220919-03-04-001	Total/NA	Soil	537 (modified)	622504
500-222851-4	SP-03-20220919-03-04-101	Total/NA	Soil	537 (modified)	622504
500-222851-5	SP-04-20220919-03-04-001	Total/NA	Soil	537 (modified)	622504
500-222851-6	SP-05-20220919-03-04-001	Total/NA	Soil	537 (modified)	622504
MB 320-622504/1-A	Method Blank	Total/NA	Solid	537 (modified)	622504
LCS 320-622504/2-A	Lab Control Sample	Total/NA	Solid	537 (modified)	622504
500-222851-6 MS	SP-05-20220919-03-04-001	Total/NA	Soil	537 (modified)	622504
500-222851-6 MSD	SP-05-20220919-03-04-001	Total/NA	Soil	537 (modified)	622504

Analysis Batch: 623539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222851-12	MW-03-2022-0922-001	Total/NA	Water	537 (modified)	621887

General Chemistry

Analysis Batch: 620408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-222851-1	SP-01-20220919-04-05-001	Total/NA	Soil	Moisture	
500-222851-2	SP-02-20220919-05-06-001	Total/NA	Soil	Moisture	
500-222851-3	SP-03-20220919-03-04-001	Total/NA	Soil	Moisture	
500-222851-4	SP-03-20220919-03-04-101	Total/NA	Soil	Moisture	
500-222851-5	SP-04-20220919-03-04-001	Total/NA	Soil	Moisture	
500-222851-6	SP-05-20220919-03-04-001	Total/NA	Soil	Moisture	
500-222851-1 DU	SP-01-20220919-04-05-001	Total/NA	Soil	Moisture	

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-621887/1-A
Matrix: Water
Analysis Batch: 622283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 621887

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.19		2.0	0.19	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		10/03/22 04:51	10/04/22 14:56	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		10/03/22 04:51	10/04/22 14:56	1
NEtFOSA	<0.87		2.0	0.87	ng/L		10/03/22 04:51	10/04/22 14:56	1
NMeFOSA	<0.43		2.0	0.43	ng/L		10/03/22 04:51	10/04/22 14:56	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		10/03/22 04:51	10/04/22 14:56	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		10/03/22 04:51	10/04/22 14:56	1
NMeFOSE	<1.4		4.0	1.4	ng/L		10/03/22 04:51	10/04/22 14:56	1
NEtFOSE	<0.85		2.0	0.85	ng/L		10/03/22 04:51	10/04/22 14:56	1
4:2 FTS	<0.24		2.0	0.24	ng/L		10/03/22 04:51	10/04/22 14:56	1
6:2 FTS	<2.5		5.0	2.5	ng/L		10/03/22 04:51	10/04/22 14:56	1
8:2 FTS	<0.46		2.0	0.46	ng/L		10/03/22 04:51	10/04/22 14:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		10/03/22 04:51	10/04/22 14:56	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		10/03/22 04:51	10/04/22 14:56	1
9Cl-PF3ONS	<0.24		2.0	0.24	ng/L		10/03/22 04:51	10/04/22 14:56	1
11Cl-PF3OUdS	<0.32		2.0	0.32	ng/L		10/03/22 04:51	10/04/22 14:56	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	113		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C5 PFPeA	122		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C2 PFHxA	108		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C4 PFHpA	115		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C4 PFOA	112		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C5 PFNA	115		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C2 PFDA	114		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C2 PFUnA	108		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C2 PFDoA	105		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C2 PFTeDA	101		25 - 150	10/03/22 04:51	10/04/22 14:56	1

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QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: MB 320-621887/1-A
Matrix: Water
Analysis Batch: 622283

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 621887

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C3 PFBS	118		25 - 150	10/03/22 04:51	10/04/22 14:56	1
18O2 PFHxS	118		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C4 PFOS	108		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C8 FOSA	106		10 - 150	10/03/22 04:51	10/04/22 14:56	1
d3-NMeFOSAA	126		25 - 150	10/03/22 04:51	10/04/22 14:56	1
d5-NEtFOSAA	122		25 - 150	10/03/22 04:51	10/04/22 14:56	1
d-N-MeFOSA-M	97		10 - 150	10/03/22 04:51	10/04/22 14:56	1
d-N-EtFOSA-M	97		10 - 150	10/03/22 04:51	10/04/22 14:56	1
d7-N-MeFOSE-M	102		10 - 150	10/03/22 04:51	10/04/22 14:56	1
d9-N-EtFOSE-M	90		10 - 150	10/03/22 04:51	10/04/22 14:56	1
M2-4:2 FTS	93		25 - 150	10/03/22 04:51	10/04/22 14:56	1
M2-6:2 FTS	89		25 - 150	10/03/22 04:51	10/04/22 14:56	1
M2-8:2 FTS	87		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C3 HFPO-DA	111		25 - 150	10/03/22 04:51	10/04/22 14:56	1
13C2 10:2 FTS	71		25 - 150	10/03/22 04:51	10/04/22 14:56	1

Lab Sample ID: LCS 320-621887/2-A
Matrix: Water
Analysis Batch: 622283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 621887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec
							Limits
Perfluorobutanoic acid (PFBA)	40.0	44.8		ng/L		112	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	41.8		ng/L		105	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	43.2		ng/L		108	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	41.9		ng/L		105	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	44.8		ng/L		112	60 - 135
Perfluorononanoic acid (PFNA)	40.0	41.6		ng/L		104	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	39.6		ng/L		99	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	42.0		ng/L		105	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	45.3		ng/L		113	60 - 135
Perfluorotridecanoic acid (PFTrDA)	40.0	42.8		ng/L		107	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	41.5		ng/L		104	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.5	35.8		ng/L		101	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	39.3		ng/L		105	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.5	36.0		ng/L		99	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	38.2	40.6		ng/L		106	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.2	38.8		ng/L		104	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.5	42.8		ng/L		111	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	39.0		ng/L		101	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.8	35.2		ng/L		91	60 - 135

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QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: LCS 320-621887/2-A
Matrix: Water
Analysis Batch: 622283

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 621887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonamide (FOSA)	40.0	43.3		ng/L		108	60 - 135
NEtFOSA	40.0	45.5		ng/L		114	60 - 135
NMeFOSA	40.0	41.2		ng/L		103	60 - 135
NMeFOSAA	40.0	35.6		ng/L		89	60 - 135
NEtFOSAA	40.0	43.3		ng/L		108	60 - 135
NMeFOSE	40.0	40.4		ng/L		101	60 - 135
NEtFOSE	40.0	40.6		ng/L		102	60 - 135
4:2 FTS	37.5	37.6		ng/L		100	60 - 135
6:2 FTS	38.1	36.5		ng/L		96	60 - 135
8:2 FTS	38.4	41.4		ng/L		108	60 - 135
4,8-Dioxa-3H-perfluoronanoic acid (ADONA)	37.8	40.5		ng/L		107	60 - 135
HFPO-DA (GenX)	40.0	42.3		ng/L		106	60 - 135
9Cl-PF3ONS	37.4	37.8		ng/L		101	60 - 135
11Cl-PF3OUdS	37.8	37.3		ng/L		99	60 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	105		25 - 150
13C5 PFPeA	116		25 - 150
13C2 PFHxA	112		25 - 150
13C4 PFHpA	111		25 - 150
13C4 PFOA	108		25 - 150
13C5 PFNA	110		25 - 150
13C2 PFDA	109		25 - 150
13C2 PFUnA	109		25 - 150
13C2 PFDoA	98		25 - 150
13C2 PFTeDA	97		25 - 150
13C3 PFBS	112		25 - 150
18O2 PFHxS	112		25 - 150
13C4 PFOS	112		25 - 150
13C8 FOSA	109		10 - 150
d3-NMeFOSAA	126		25 - 150
d5-NEtFOSAA	119		25 - 150
d-N-MeFOSA-M	99		10 - 150
d-N-EtFOSA-M	88		10 - 150
d7-N-MeFOSE-M	99		10 - 150
d9-N-EtFOSE-M	94		10 - 150
M2-4:2 FTS	91		25 - 150
M2-6:2 FTS	84		25 - 150
M2-8:2 FTS	77		25 - 150
13C3 HFPO-DA	109		25 - 150
13C2 10:2 FTS	69		25 - 150

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: 500-222851-12 MS
Matrix: Water
Analysis Batch: 622283

Client Sample ID: MW-03-2022-0922-001
Prep Type: Total/NA
Prep Batch: 621887

<i>Isotope Dilution</i>	<i>MS</i>	<i>MS</i>	<i>Limits</i>
<i>%Recovery</i>	<i>Qualifier</i>		
13C4 PFHpA	102		25 - 150
13C4 PFOA	101		25 - 150
13C5 PFNA	99		25 - 150
13C2 PFDA	93		25 - 150
13C2 PFUnA	89		25 - 150
13C2 PFDaA	75		25 - 150
13C2 PFTeDA	70		25 - 150
13C3 PFBS	95		25 - 150
18O2 PFHxS	96		25 - 150
13C4 PFOS	86		25 - 150
13C8 FOSA	93		10 - 150
d3-NMeFOSAA	101		25 - 150
d5-NEtFOSAA	98		25 - 150
d-N-MeFOSA-M	79		10 - 150
d-N-EtFOSA-M	68		10 - 150
d7-N-MeFOSE-M	77		10 - 150
d9-N-EtFOSE-M	64		10 - 150
M2-4:2 FTS	86		25 - 150
M2-6:2 FTS	70		25 - 150
M2-8:2 FTS	63		25 - 150
13C3 HFPO-DA	100		25 - 150
13C2 10:2 FTS	51		25 - 150

Lab Sample ID: 500-222851-12 MSD
Matrix: Water
Analysis Batch: 622283

Client Sample ID: MW-03-2022-0922-001
Prep Type: Total/NA
Prep Batch: 621887

<i>Analyte</i>	<i>Sample</i>	<i>Sample</i>	<i>Spike</i>	<i>MSD</i>	<i>MSD</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i>	<i>RPD</i>	<i>Limit</i>
	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>				<i>Limits</i>		
Perfluorobutanoic acid (PFBA)	9.1		35.6	46.5		ng/L		110	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	4.8		35.6	40.1		ng/L		99	70 - 130	9	30
Perfluorohexanoic acid (PFHxA)	21		35.6	54.9		ng/L		96	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)	15		35.6	53.1		ng/L		104	70 - 130	2	30
Perfluorooctanoic acid (PFOA)	210		35.6	226	4	ng/L		31	70 - 130	5	30
Perfluorononanoic acid (PFNA)	<0.25		35.6	37.3		ng/L		105	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<0.28		35.6	35.3		ng/L		99	70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)	<1.0		35.6	38.0		ng/L		107	70 - 130	1	30
Perfluorododecanoic acid (PFDaA)	<0.50		35.6	38.9		ng/L		109	70 - 130	6	30
Perfluorotridecanoic acid (PFTTrDA)	<1.2		35.6	35.7		ng/L		100	70 - 130	3	30
Perfluorotetradecanoic acid (PFTeA)	<0.66		35.6	36.3		ng/L		102	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)	0.34	J	31.6	34.6		ng/L		108	70 - 130	0	30
Perfluoropentanesulfonic acid (PFPeS)	<0.27		33.4	34.9		ng/L		105	70 - 130	5	30
Perfluorohexanesulfonic acid (PFHxS)	<0.52		32.4	32.1		ng/L		99	70 - 130	9	30
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		33.9	38.4		ng/L		113	70 - 130	2	30

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QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: 500-222851-12 MSD

Client Sample ID: MW-03-2022-0922-001

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 622283

Prep Batch: 621887

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	<0.49		33.1	36.4		ng/L		110	70 - 130	2	30
Perfluorononanesulfonic acid (PFNS)	<0.34		34.2	34.6		ng/L		101	70 - 130	1	30
Perfluorodecanesulfonic acid (PFDS)	<0.29		34.3	29.3		ng/L		85	70 - 130	6	30
Perfluorododecanesulfonic acid (PFDoS)	<0.88		34.5	18.7	F1	ng/L		54	70 - 130	12	30
Perfluorooctanesulfonamide (FOSA)	<0.89		35.6	38.3		ng/L		108	70 - 130	4	30
NEtFOSA	<0.79		35.6	38.1		ng/L		107	70 - 130	2	30
NMeFOSA	<0.39		35.6	36.2		ng/L		102	70 - 130	1	30
NMeFOSAA	<1.1		35.6	33.1		ng/L		93	70 - 130	3	30
NEtFOSAA	<1.2		35.6	37.7		ng/L		106	70 - 130	2	30
NMeFOSE	<1.3		35.6	37.4		ng/L		105	70 - 130	1	30
NEtFOSE	<0.77		35.6	38.6		ng/L		108	70 - 130	6	30
4:2 FTS	<0.22		33.4	36.4		ng/L		109	70 - 130	1	30
6:2 FTS	<2.3		33.9	32.9		ng/L		97	70 - 130	8	30
8:2 FTS	<0.42		34.2	37.5		ng/L		110	70 - 130	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		33.6	43.6		ng/L		130	70 - 130	6	30
HFPO-DA (GenX)	<1.4		35.6	39.1		ng/L		110	70 - 130	3	30
9Cl-PF3ONS	<0.22		33.2	32.4		ng/L		98	70 - 130	2	30
11Cl-PF3OUdS	<0.29		33.6	23.4		ng/L		70	70 - 130	8	30

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	86		25 - 150
13C5 PFPeA	105		25 - 150
13C2 PFHxA	111		25 - 150
13C4 PFHpA	102		25 - 150
13C4 PFOA	101		25 - 150
13C5 PFNA	103		25 - 150
13C2 PFDA	100		25 - 150
13C2 PFUnA	91		25 - 150
13C2 PFDoA	79		25 - 150
13C2 PFTeDA	71		25 - 150
13C3 PFBS	97		25 - 150
18O2 PFHxS	100		25 - 150
13C4 PFOS	88		25 - 150
13C8 FOSA	99		10 - 150
d3-NMeFOSAA	102		25 - 150
d5-NEtFOSAA	102		25 - 150
d-N-MeFOSA-M	83		10 - 150
d-N-EtFOSA-M	73		10 - 150
d7-N-MeFOSE-M	80		10 - 150
d9-N-EtFOSE-M	68		10 - 150
M2-4:2 FTS	80		25 - 150
M2-6:2 FTS	72		25 - 150
M2-8:2 FTS	68		25 - 150
13C3 HFPO-DA	101		25 - 150

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QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: 500-222851-12 MSD

Matrix: Water

Analysis Batch: 622283

Client Sample ID: MW-03-2022-0922-001

Prep Type: Total/NA

Prep Batch: 621887

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C2 10:2 FTS	51		25 - 150

Lab Sample ID: MB 320-622504/1-A

Matrix: Solid

Analysis Batch: 623527

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 622504

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<0.046		0.20	0.046	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluoropentanoic acid (PFPeA)	<0.041		0.20	0.041	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorohexanoic acid (PFHxA)	<0.031		0.20	0.031	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluoroheptanoic acid (PFHpA)	<0.038		0.20	0.038	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorooctanoic acid (PFOA)	<0.053		0.20	0.053	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorononanoic acid (PFNA)	<0.022		0.20	0.022	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorodecanoic acid (PFDA)	<0.048		0.20	0.048	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluoroundecanoic acid (PFUnA)	<0.042		0.20	0.042	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorododecanoic acid (PFDoA)	<0.030		0.20	0.030	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorotridecanoic acid (PFTTrDA)	<0.021		0.20	0.021	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorotetradecanoic acid (PFTeA)	<0.037		0.20	0.037	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorobutanesulfonic acid (PFBS)	<0.038		0.20	0.038	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluoropentanesulfonic acid (PFPeS)	<0.037		0.20	0.037	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorohexanesulfonic acid (PFHxS)	<0.029		0.20	0.029	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.049		0.20	0.049	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorooctanesulfonic acid (PFOS)	<0.043		0.20	0.043	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorononanesulfonic acid (PFNS)	<0.029		0.20	0.029	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorodecanesulfonic acid (PFDS)	<0.052		0.20	0.052	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorododecanesulfonic acid (PFDoS)	<0.047		0.20	0.047	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Perfluorooctanesulfonamide (FOSA)	<0.033		0.20	0.033	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
NEtFOSA	<0.047		0.20	0.047	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
NMeFOSA	<0.049		0.20	0.049	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
NMeFOSAA	<0.023		0.20	0.023	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
NEtFOSAA	<0.048		0.20	0.048	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
NMeFOSE	<0.047		0.20	0.047	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
NEtFOSE	<0.028		0.20	0.028	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
4:2 FTS	<0.051		0.20	0.051	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
6:2 FTS	<0.027		0.20	0.027	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
8:2 FTS	<0.035		0.20	0.035	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.039		0.20	0.039	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
HFPO-DA (GenX)	<0.041		0.20	0.041	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
9CI-PF3ONS	<0.035		0.20	0.035	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
11CI-PF3OUdS	<0.031		0.20	0.031	ug/Kg		10/05/22 12:21	10/10/22 08:12	1
Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
13C4 PFBA	96		25 - 150	10/05/22 12:21	10/10/22 08:12	1			
13C5 PFPeA	111		25 - 150	10/05/22 12:21	10/10/22 08:12	1			
13C2 PFHxA	101		25 - 150	10/05/22 12:21	10/10/22 08:12	1			
13C4 PFHpA	106		25 - 150	10/05/22 12:21	10/10/22 08:12	1			

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QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: MB 320-622504/1-A
Matrix: Solid
Analysis Batch: 623527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 622504

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFOA	100		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C5 PFNA	104		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C2 PFDA	95		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C2 PFUnA	98		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C2 PFDoA	105		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C2 PFTeDA	113		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C3 PFBS	92		25 - 150	10/05/22 12:21	10/10/22 08:12	1
18O2 PFHxS	95		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C4 PFOS	100		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C8 FOSA	98		10 - 150	10/05/22 12:21	10/10/22 08:12	1
d3-NMeFOSAA	114		25 - 150	10/05/22 12:21	10/10/22 08:12	1
d5-NEtFOSAA	126		25 - 150	10/05/22 12:21	10/10/22 08:12	1
d-N-MeFOSA-M	70		10 - 150	10/05/22 12:21	10/10/22 08:12	1
d-N-EtFOSA-M	75		10 - 150	10/05/22 12:21	10/10/22 08:12	1
d7-N-MeFOSE-M	89		10 - 150	10/05/22 12:21	10/10/22 08:12	1
d9-N-EtFOSE-M	86		10 - 150	10/05/22 12:21	10/10/22 08:12	1
M2-4:2 FTS	85		25 - 150	10/05/22 12:21	10/10/22 08:12	1
M2-6:2 FTS	87		25 - 150	10/05/22 12:21	10/10/22 08:12	1
M2-8:2 FTS	86		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C3 HFPO-DA	96		25 - 150	10/05/22 12:21	10/10/22 08:12	1
13C2 10:2 FTS	98		25 - 150	10/05/22 12:21	10/10/22 08:12	1

Lab Sample ID: LCS 320-622504/2-A
Matrix: Solid
Analysis Batch: 623527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 622504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanoic acid (PFPeA)	2.00	1.97		ug/Kg		98	60 - 135
Perfluorohexanoic acid (PFHxA)	2.00	1.95		ug/Kg		98	60 - 135
Perfluoroheptanoic acid (PFHpA)	2.00	2.00		ug/Kg		100	60 - 135
Perfluorooctanoic acid (PFOA)	2.00	2.09		ug/Kg		105	60 - 135
Perfluorononanoic acid (PFNA)	2.00	2.02		ug/Kg		101	60 - 135
Perfluorodecanoic acid (PFDA)	2.00	1.98		ug/Kg		99	60 - 135
Perfluoroundecanoic acid (PFUnA)	2.00	1.96		ug/Kg		98	60 - 135
Perfluorododecanoic acid (PFDoA)	2.00	2.08		ug/Kg		104	60 - 135
Perfluorotridecanoic acid (PFTTrDA)	2.00	1.90		ug/Kg		95	60 - 135
Perfluorotetradecanoic acid (PFTeA)	2.00	2.17		ug/Kg		109	60 - 135
Perfluorobutanesulfonic acid (PFBS)	1.78	1.90		ug/Kg		107	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	1.88	2.12		ug/Kg		113	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.78		ug/Kg		97	60 - 135
Perfluoroheptanesulfonic acid (PFHpS)	1.91	2.04		ug/Kg		107	60 - 135

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QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: LCS 320-622504/2-A
Matrix: Solid
Analysis Batch: 623527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 622504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	1.86	1.85		ug/Kg		99	60 - 135
Perfluorononanesulfonic acid (PFNS)	1.92	1.81		ug/Kg		94	60 - 135
Perfluorodecanesulfonic acid (PFDS)	1.93	1.91		ug/Kg		99	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	1.94	1.70		ug/Kg		88	60 - 135
Perfluorooctanesulfonamide (FOSA)	2.00	2.17		ug/Kg		109	60 - 135
NEtFOSA	2.00	2.36		ug/Kg		118	60 - 135
NMeFOSA	2.00	2.03		ug/Kg		102	60 - 135
NMeFOSAA	2.00	1.88		ug/Kg		94	60 - 135
NEtFOSAA	2.00	2.02		ug/Kg		101	60 - 135
NMeFOSE	2.00	1.95		ug/Kg		97	60 - 135
NEtFOSE	2.00	2.05		ug/Kg		103	60 - 135
4:2 FTS	1.88	1.86		ug/Kg		99	60 - 135
6:2 FTS	1.90	1.78		ug/Kg		93	60 - 135
8:2 FTS	1.92	2.08		ug/Kg		108	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	2.07		ug/Kg		110	60 - 135
HFPO-DA (GenX)	2.00	1.86		ug/Kg		93	60 - 135
9Cl-PF3ONS	1.87	1.76		ug/Kg		94	60 - 135
11Cl-PF3OUdS	1.89	1.59		ug/Kg		84	60 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	97		25 - 150
13C5 PFPeA	109		25 - 150
13C2 PFHxA	99		25 - 150
13C4 PFHpA	102		25 - 150
13C4 PFOA	101		25 - 150
13C5 PFNA	106		25 - 150
13C2 PFDA	97		25 - 150
13C2 PFUnA	91		25 - 150
13C2 PFDoA	96		25 - 150
13C2 PFTeDA	104		25 - 150
13C3 PFBS	95		25 - 150
18O2 PFHxS	100		25 - 150
13C4 PFOS	98		25 - 150
13C8 FOSA	97		10 - 150
d3-NMeFOSAA	113		25 - 150
d5-NEtFOSAA	115		25 - 150
d-N-MeFOSA-M	46		10 - 150
d-N-EtFOSA-M	44		10 - 150
d7-N-MeFOSE-M	82		10 - 150
d9-N-EtFOSE-M	77		10 - 150
M2-4:2 FTS	76		25 - 150
M2-6:2 FTS	88		25 - 150
M2-8:2 FTS	80		25 - 150
13C3 HFPO-DA	94		25 - 150

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: LCS 320-622504/2-A
Matrix: Solid
Analysis Batch: 623527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 622504

<i>Isotope Dilution</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
<i>%Recovery</i>	<i>Qualifier</i>		
13C2 10:2 FTS	89		25 - 150

Lab Sample ID: 500-222851-6 MS
Matrix: Soil
Analysis Batch: 623527

Client Sample ID: SP-05-20220919-03-04-001
Prep Type: Total/NA
Prep Batch: 622504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	<0.052		2.25	2.60		ug/Kg	✱	115	70 - 130
Perfluoropentanoic acid (PFPeA)	<0.046		2.25	2.26		ug/Kg	✱	100	70 - 130
Perfluorohexanoic acid (PFHxA)	<0.035		2.25	2.33		ug/Kg	✱	103	70 - 130
Perfluoroheptanoic acid (PFHpA)	<0.043		2.25	2.36		ug/Kg	✱	105	70 - 130
Perfluorooctanoic acid (PFOA)	<0.060		2.25	2.48		ug/Kg	✱	110	70 - 130
Perfluorononanoic acid (PFNA)	<0.025		2.25	2.20		ug/Kg	✱	98	70 - 130
Perfluorodecanoic acid (PFDA)	<0.054		2.25	2.30		ug/Kg	✱	102	70 - 130
Perfluoroundecanoic acid (PFUnA)	<0.048		2.25	2.32		ug/Kg	✱	103	70 - 130
Perfluorododecanoic acid (PFDoA)	<0.034		2.25	2.32		ug/Kg	✱	103	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<0.024		2.25	1.94		ug/Kg	✱	86	70 - 130
Perfluorotetradecanoic acid (PFTeA)	<0.042		2.25	2.46		ug/Kg	✱	109	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<0.043		2.00	2.05		ug/Kg	✱	102	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<0.042		2.11	2.38		ug/Kg	✱	113	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<0.033		2.06	1.97		ug/Kg	✱	96	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<0.056		2.15	2.29		ug/Kg	✱	106	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<0.049		2.10	2.19		ug/Kg	✱	104	70 - 130
Perfluorononanesulfonic acid (PFNS)	<0.033		2.17	2.08		ug/Kg	✱	96	70 - 130
Perfluorodecanesulfonic acid (PFDS)	<0.059		2.17	1.93		ug/Kg	✱	89	70 - 130
Perfluorododecanesulfonic acid (PFDoS)	<0.053		2.19	1.71		ug/Kg	✱	78	70 - 130
Perfluorooctanesulfonamide (FOSA)	<0.037		2.25	2.49		ug/Kg	✱	111	70 - 130
NEtFOSA	<0.053		2.25	2.46		ug/Kg	✱	109	70 - 130
NMeFOSA	<0.056		2.25	2.26		ug/Kg	✱	100	70 - 130
NMeFOSAA	<0.026		2.25	2.06		ug/Kg	✱	91	70 - 130
NEtFOSAA	<0.054		2.25	2.44		ug/Kg	✱	108	70 - 130
NMeFOSE	<0.053		2.25	2.10		ug/Kg	✱	93	70 - 130
NEtFOSE	<0.032		2.25	2.31		ug/Kg	✱	102	70 - 130
4:2 FTS	<0.058		2.11	2.22		ug/Kg	✱	105	70 - 130
6:2 FTS	<0.031		2.15	2.19		ug/Kg	✱	102	70 - 130
8:2 FTS	<0.040		2.16	2.24		ug/Kg	✱	104	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		2.13	2.53		ug/Kg	✱	119	70 - 130
HFPO-DA (GenX)	<0.046		2.25	2.04		ug/Kg	✱	90	70 - 130

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: 500-222851-6 MS

Client Sample ID: SP-05-20220919-03-04-001

Matrix: Soil

Prep Type: Total/NA

Analysis Batch: 623527

Prep Batch: 622504

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
9CI-PF3ONS	<0.040		2.11	1.97		ug/Kg	⊛	94		70 - 130
11CI-PF3OUdS	<0.035		2.13	1.73		ug/Kg	⊛	81		70 - 130
		MS	MS							
Isotope Dilution	%Recovery	Qualifier	Limits							
13C4 PFBA	85		25 - 150							
13C5 PFPeA	104		25 - 150							
13C2 PFHxA	92		25 - 150							
13C4 PFHpA	95		25 - 150							
13C4 PFOA	90		25 - 150							
13C5 PFNA	97		25 - 150							
13C2 PFDA	86		25 - 150							
13C2 PFUnA	78		25 - 150							
13C2 PFDoA	80		25 - 150							
13C2 PFTeDA	82		25 - 150							
13C3 PFBS	86		25 - 150							
18O2 PFHxS	88		25 - 150							
13C4 PFOS	84		25 - 150							
13C8 FOSA	77		10 - 150							
d3-NMeFOSAA	103		25 - 150							
d5-NEtFOSAA	97		25 - 150							
d-N-MeFOSA-M	42		10 - 150							
d-N-EtFOSA-M	40		10 - 150							
d7-N-MeFOSE-M	61		10 - 150							
d9-N-EtFOSE-M	55		10 - 150							
M2-4:2 FTS	69		25 - 150							
M2-6:2 FTS	73		25 - 150							
M2-8:2 FTS	72		25 - 150							
13C3 HFPO-DA	86		25 - 150							
13C2 10:2 FTS	66		25 - 150							

Lab Sample ID: 500-222851-6 MSD

Client Sample ID: SP-05-20220919-03-04-001

Matrix: Soil

Prep Type: Total/NA

Analysis Batch: 623527

Prep Batch: 622504

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<0.052		2.26	2.49		ug/Kg	⊛	110		70 - 130	5	30
Perfluoropentanoic acid (PFPeA)	<0.046		2.26	2.09		ug/Kg	⊛	93		70 - 130	8	30
Perfluorohexanoic acid (PFHxA)	<0.035		2.26	2.22		ug/Kg	⊛	98		70 - 130	5	30
Perfluoroheptanoic acid (PFHpA)	<0.043		2.26	2.28		ug/Kg	⊛	101		70 - 130	3	30
Perfluorooctanoic acid (PFOA)	<0.060		2.26	2.51		ug/Kg	⊛	111		70 - 130	1	30
Perfluorononanoic acid (PFNA)	<0.025		2.26	2.24		ug/Kg	⊛	99		70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<0.054		2.26	2.24		ug/Kg	⊛	99		70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)	<0.048		2.26	2.25		ug/Kg	⊛	99		70 - 130	3	30
Perfluorododecanoic acid (PFDoA)	<0.034		2.26	2.38		ug/Kg	⊛	105		70 - 130	3	30
Perfluorotridecanoic acid (PFTTrDA)	<0.024		2.26	2.11		ug/Kg	⊛	93		70 - 130	8	30
Perfluorotetradecanoic acid (PFTeA)	<0.042		2.26	2.31		ug/Kg	⊛	102		70 - 130	6	30

Eurofins Chicago

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: 500-222851-6 MSD

Client Sample ID: SP-05-20220919-03-04-001

Matrix: Soil

Prep Type: Total/NA

Analysis Batch: 623527

Prep Batch: 622504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanesulfonic acid (PFBS)	<0.043		2.01	2.18		ug/Kg	☼	108	70 - 130	6	30
Perfluoropentanesulfonic acid (PFPeS)	<0.042		2.12	2.32		ug/Kg	☼	109	70 - 130	3	30
Perfluorohexanesulfonic acid (PFHxS)	<0.033		2.06	1.92		ug/Kg	☼	93	70 - 130	3	30
Perfluoroheptanesulfonic acid (PFHpS)	<0.056		2.16	2.29		ug/Kg	☼	106	70 - 130	0	30
Perfluorooctanesulfonic acid (PFOS)	<0.049		2.10	2.12		ug/Kg	☼	101	70 - 130	3	30
Perfluorononanesulfonic acid (PFNS)	<0.033		2.18	2.04		ug/Kg	☼	94	70 - 130	2	30
Perfluorodecanesulfonic acid (PFDS)	<0.059		2.18	1.93		ug/Kg	☼	88	70 - 130	0	30
Perfluorododecanesulfonic acid (PFDoS)	<0.053		2.19	1.86		ug/Kg	☼	85	70 - 130	9	30
Perfluorooctanesulfonamide (FOSA)	<0.037		2.26	2.49		ug/Kg	☼	110	70 - 130	0	30
NEtFOSA	<0.053		2.26	2.47		ug/Kg	☼	109	70 - 130	0	30
NMeFOSA	<0.056		2.26	2.23		ug/Kg	☼	98	70 - 130	1	30
NMeFOSAA	<0.026		2.26	2.16		ug/Kg	☼	96	70 - 130	5	30
NEtFOSAA	<0.054		2.26	2.40		ug/Kg	☼	106	70 - 130	2	30
NMeFOSE	<0.053		2.26	2.15		ug/Kg	☼	95	70 - 130	2	30
NEtFOSE	<0.032		2.26	2.36		ug/Kg	☼	104	70 - 130	2	30
4:2 FTS	<0.058		2.12	2.02		ug/Kg	☼	95	70 - 130	10	30
6:2 FTS	<0.031		2.15	2.14		ug/Kg	☼	99	70 - 130	2	30
8:2 FTS	<0.040		2.17	2.08		ug/Kg	☼	96	70 - 130	7	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.044		2.14	2.61		ug/Kg	☼	122	70 - 130	3	30
HFPO-DA (GenX)	<0.046		2.26	1.86		ug/Kg	☼	82	70 - 130	9	30
9CI-PF3ONS	<0.040		2.11	2.09		ug/Kg	☼	99	70 - 130	6	30
11CI-PF3OUdS	<0.035		2.14	1.69		ug/Kg	☼	79	70 - 130	2	30

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	83		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	86		25 - 150
13C4 PFHpA	89		25 - 150
13C4 PFOA	84		25 - 150
13C5 PFNA	88		25 - 150
13C2 PFDA	79		25 - 150
13C2 PFUnA	72		25 - 150
13C2 PFDoA	72		25 - 150
13C2 PFTeDA	82		25 - 150
13C3 PFBS	79		25 - 150
18O2 PFHxS	83		25 - 150
13C4 PFOS	76		25 - 150
13C8 FOSA	66		10 - 150
d3-NMeFOSAA	79		25 - 150
d5-NEtFOSAA	80		25 - 150
d-N-MeFOSA-M	37		10 - 150

Eurofins Chicago

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Lab Sample ID: 500-222851-6 MSD

Client Sample ID: SP-05-20220919-03-04-001

Matrix: Soil

Prep Type: Total/NA

Analysis Batch: 623527

Prep Batch: 622504

<i>Isotope Dilution</i>	<i>MSD MSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>d-N-EtFOSA-M</i>	35		10 - 150
<i>d7-N-MeFOSE-M</i>	60		10 - 150
<i>d9-N-EtFOSE-M</i>	53		10 - 150
<i>M2-4:2 FTS</i>	65		25 - 150
<i>M2-6:2 FTS</i>	68		25 - 150
<i>M2-8:2 FTS</i>	72		25 - 150
<i>13C3 HFPO-DA</i>	88		25 - 150
<i>13C2 10:2 FTS</i>	63		25 - 150

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-01-20220919-04-05-001

Lab Sample ID: 500-222851-1

Date Collected: 09/19/22 10:15

Matrix: Soil

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	620408	DAN	EET SAC	09/27/22 12:22

Client Sample ID: SP-01-20220919-04-05-001

Lab Sample ID: 500-222851-1

Date Collected: 09/19/22 10:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			622504	RAC	EET SAC	10/05/22 12:21
Total/NA	Analysis	537 (modified)		1	623527	RS1	EET SAC	10/10/22 09:23

Client Sample ID: SP-02-20220919-05-06-001

Lab Sample ID: 500-222851-2

Date Collected: 09/19/22 11:50

Matrix: Soil

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	620408	DAN	EET SAC	09/27/22 12:22

Client Sample ID: SP-02-20220919-05-06-001

Lab Sample ID: 500-222851-2

Date Collected: 09/19/22 11:50

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			622504	RAC	EET SAC	10/05/22 12:21
Total/NA	Analysis	537 (modified)		1	623527	RS1	EET SAC	10/10/22 09:33

Client Sample ID: SP-03-20220919-03-04-001

Lab Sample ID: 500-222851-3

Date Collected: 09/19/22 13:15

Matrix: Soil

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	620408	DAN	EET SAC	09/27/22 12:22

Client Sample ID: SP-03-20220919-03-04-001

Lab Sample ID: 500-222851-3

Date Collected: 09/19/22 13:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			622504	RAC	EET SAC	10/05/22 12:21
Total/NA	Analysis	537 (modified)		1	623527	RS1	EET SAC	10/10/22 09:43

Client Sample ID: SP-03-20220919-03-04-101

Lab Sample ID: 500-222851-4

Date Collected: 09/19/22 13:15

Matrix: Soil

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	620408	DAN	EET SAC	09/27/22 12:22

Eurofins Chicago

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: SP-03-20220919-03-04-101

Lab Sample ID: 500-222851-4

Date Collected: 09/19/22 13:15

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			622504	RAC	EET SAC	10/05/22 12:21
Total/NA	Analysis	537 (modified)		1	623527	RS1	EET SAC	10/10/22 10:24

Client Sample ID: SP-04-20220919-03-04-001

Lab Sample ID: 500-222851-5

Date Collected: 09/19/22 14:40

Matrix: Soil

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	620408	DAN	EET SAC	09/27/22 12:22

Client Sample ID: SP-04-20220919-03-04-001

Lab Sample ID: 500-222851-5

Date Collected: 09/19/22 14:40

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			622504	RAC	EET SAC	10/05/22 12:21
Total/NA	Analysis	537 (modified)		1	623527	RS1	EET SAC	10/10/22 10:34

Client Sample ID: SP-05-20220919-03-04-001

Lab Sample ID: 500-222851-6

Date Collected: 09/19/22 15:45

Matrix: Soil

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	620408	DAN	EET SAC	09/27/22 12:22

Client Sample ID: SP-05-20220919-03-04-001

Lab Sample ID: 500-222851-6

Date Collected: 09/19/22 15:45

Matrix: Soil

Date Received: 09/26/22 08:48

Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			622504	RAC	EET SAC	10/05/22 12:21
Total/NA	Analysis	537 (modified)		1	623527	RS1	EET SAC	10/10/22 10:44

Client Sample ID: EB-01-20220919

Lab Sample ID: 500-222851-7

Date Collected: 09/19/22 15:50

Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	622283	S1M	EET SAC	10/04/22 15:27

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: FB-01-20220919

Lab Sample ID: 500-222851-8

Date Collected: 09/19/22 15:55

Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	622283	S1M	EET SAC	10/04/22 15:37

Client Sample ID: MW-01-2022-0923-001

Lab Sample ID: 500-222851-9

Date Collected: 09/23/22 10:50

Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	622283	S1M	EET SAC	10/04/22 15:47

Client Sample ID: MW-02-2022-0922-001

Lab Sample ID: 500-222851-10

Date Collected: 09/22/22 12:05

Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	622283	S1M	EET SAC	10/04/22 15:57

Client Sample ID: MW-02-2022-0922-101

Lab Sample ID: 500-222851-11

Date Collected: 09/22/22 12:05

Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	622283	S1M	EET SAC	10/04/22 16:07

Client Sample ID: MW-03-2022-0922-001

Lab Sample ID: 500-222851-12

Date Collected: 09/22/22 11:25

Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	623539	S1M	EET SAC	10/09/22 03:16

Client Sample ID: MW-04-2022-0922-001

Lab Sample ID: 500-222851-13

Date Collected: 09/22/22 13:12

Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	622283	S1M	EET SAC	10/04/22 17:18
Total/NA	Prep	3535	DL		621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)	DL	50	623421	K1S	EET SAC	10/07/22 19:39

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Client Sample ID: MW-05-2022-0922-001

Lab Sample ID: 500-222851-14

Date Collected: 09/22/22 13:20

Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	622283	S1M	EET SAC	10/04/22 17:28

Client Sample ID: FB-02-20220922

Lab Sample ID: 500-222851-15

Date Collected: 09/22/22 14:20

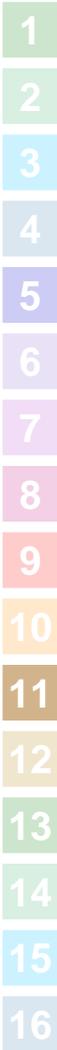
Matrix: Water

Date Received: 09/26/22 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			621887	EJR	EET SAC	10/03/22 04:51
Total/NA	Analysis	537 (modified)		1	622283	S1M	EET SAC	10/04/22 17:38

Laboratory References:

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



Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Laboratory: Eurofins Sacramento

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

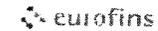
Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-23

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Eurofins Chicago

2417 B and Street
 Olive City Park, IL 60454
 Phone 708-594-5200 Fax 708-594-5211

Chain of Custody Record



Client Information Client: C. Kolp / M. Erisch Contact: Cod, Ann Kup Company: Geosy Inc Address: 1060 N Port Washington Road Suite 200 City: Mequon State: WI 53092 Phone: 414-918-4931 Email: CKolp@Geosy Inc.com Project Name: Project CHW8134 Site: Tramontina		Sampler: C. Kolp / M. Erisch Phone: 414 918 7482 Lab PM: Fredrick Sandie E-Mail: Sandra.Fredrick@eurofins.com Carrier Tracking No: _____ State of Origin: WI CQC No: 500-105572-45021 1 Page: Page 1 of 2 Job #: 600-222851																																																																																																																									
Due Date Requested: _____ TAT Requested (days): Standard Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: _____ Purchase Order Requested: _____ WO #: _____ Project #: 50020636 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 Na2SO3 G Amchlor S H2SO4 H Acetic Acid T TSP Dodecahydrate Ice U Acetone J DI Water V MCAA K EDTA W - pH 4-5 L EDA Y Trizma Z other (specify) _____ Other: _____																																																																																																																									
Sample Identification <table border="1"> <thead> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=waste/sludg)</th> <th>BT=Trace, AA=As</th> <th>Field Filtered Samples (Yes or No)</th> <th>PFC, IDA, MI - PFAS, Standard List (33 analytes)</th> <th>Total Number of Containers</th> <th>Special Instructions/Note</th> </tr> </thead> <tbody> <tr> <td>SP-01-20220919-04-05-001</td> <td>9/19/22</td> <td>1015</td> <td>G</td> <td>Solid</td> <td>NN</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SP-02-20220919-05-16-001</td> <td>9/19/22</td> <td>1150</td> <td></td> <td>Solid</td> <td>NN</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SP-03-20220919-03-04-001</td> <td>9/19/22</td> <td>1315</td> <td></td> <td>Solid</td> <td>NN</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SP-03-20220919-03-04-101</td> <td>9/19/22</td> <td>1315</td> <td></td> <td>Solid</td> <td>NN</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SP-04-20220919-03-04-001</td> <td>9/19/22</td> <td>1440</td> <td></td> <td>Solid</td> <td>NN</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td>SP-05-20220919-03-04-001</td> <td>9/19/22</td> <td>1545</td> <td></td> <td>Solid</td> <td>NN</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td>EB-01-20220919</td> <td>9/19/22</td> <td>1550</td> <td></td> <td>W Solid</td> <td>NN</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td>FB-01-20220919</td> <td>9/19/22</td> <td>1555</td> <td></td> <td>W Solid</td> <td>NN</td> <td>X</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Solid</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/sludg)	BT=Trace, AA=As	Field Filtered Samples (Yes or No)	PFC, IDA, MI - PFAS, Standard List (33 analytes)	Total Number of Containers	Special Instructions/Note	SP-01-20220919-04-05-001	9/19/22	1015	G	Solid	NN	X				SP-02-20220919-05-16-001	9/19/22	1150		Solid	NN	X				SP-03-20220919-03-04-001	9/19/22	1315		Solid	NN	X				SP-03-20220919-03-04-101	9/19/22	1315		Solid	NN	X				SP-04-20220919-03-04-001	9/19/22	1440		Solid	NN	X				SP-05-20220919-03-04-001	9/19/22	1545		Solid	NN	X				EB-01-20220919	9/19/22	1550		W Solid	NN	X				FB-01-20220919	9/19/22	1555		W Solid	NN	X								Solid										Water										Water						Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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 Cod Ann Kup Date/Time 9/23/22 1330 Company Eurofins Relinquished by Sandra Fredrick Date/Time 9/23/22 1330 Company Eurofins Relinquished by Ann Kup Date/Time 9/23/22 1700 Company Eurofins Relinquished by Sandra Fredrick Date/Time 9/26/22 045 Company Eurofins Relinquished by _____ Date/Time _____ Company _____ Relinquished by _____ Date/Time _____ Company _____ Custody Seal's Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No: 108 1160 Cooler Temperature (s): _____ Date/Time 9/23/22	
Sample ID	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/sludg)	BT=Trace, AA=As	Field Filtered Samples (Yes or No)	PFC, IDA, MI - PFAS, Standard List (33 analytes)	Total Number of Containers	Special Instructions/Note																																																																																																																		
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SP-02-20220919-05-16-001	9/19/22	1150		Solid	NN	X																																																																																																																					
SP-03-20220919-03-04-001	9/19/22	1315		Solid	NN	X																																																																																																																					
SP-03-20220919-03-04-101	9/19/22	1315		Solid	NN	X																																																																																																																					
SP-04-20220919-03-04-001	9/19/22	1440		Solid	NN	X																																																																																																																					
SP-05-20220919-03-04-001	9/19/22	1545		Solid	NN	X																																																																																																																					
EB-01-20220919	9/19/22	1550		W Solid	NN	X																																																																																																																					
FB-01-20220919	9/19/22	1555		W Solid	NN	X																																																																																																																					
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Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 500-222851-1

Login Number: 222851

List Number: 2

Creator: Her, David A

List Source: Eurofins Sacramento

List Creation: 09/27/22 09:14 AM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2051160
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.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	9.2 c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing America

Sacramento Sample Receiving Notes



500-222851 Field Sheet

Tracking #: 6058 8696 0619

Job: _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSO / OnTrac / Goldstreak / USPS / Other _____

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

Therm. ID: <u>L-02</u>	Corr. Factor: (+/-) _____ °C	Notes: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
Ice _____	Wet <input checked="" type="checkbox"/>	
Cooler Custody Seal: <u>2051160</u>		
Cooler ID: _____		
Temp Observed: <u>9.2</u> °C	Corrected: <u>9.2</u> °C	
From: Temp Blank <input type="checkbox"/>	Sample <input checked="" type="checkbox"/>	
Opening/Processing The Shipment	Yes No NA	
Cooler compromised/tampered with?	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
Cooler Temperature is acceptable?	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
Frozen samples show signs of thaw?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
Initials: <u>DH</u>	Date: <u>9/26/22</u>	
Unpacking/Labeling The Samples	Yes No NA	Trizma Lot #(s): _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
COC is complete w/o discrepancies?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Samples compromised/tampered with?	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
Containers are not broken or leaking?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Sample custody seal?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
Sample containers have legible labels?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Sample date/times are provided?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Appropriate containers are used?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Sample bottles are completely filled?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Sample preservatives verified?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
Is the Field Sampler's name on COC?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Samples require splitting/compositing?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
Samples w/o discrepancies?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Zero headspace?*	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
Alkalinity has no headspace?	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
Perchlorate has headspace? (Methods 314, 331, 6850)	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
Multiphasic samples are not present?	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")		
Initials: <u>DH</u>	Date: <u>9/26/22</u>	Initials: <u>DH</u> Date: <u>9/26/22</u>

Environment Testing
TestAmerica
eurofins
2051160

Custody Seal
DATE
SIGNATURE
eurofins
Environment Testing
TestAmerica
2051160

ORIGIN ID: RRLA (262) 202-5955
IAN EVANS
EUROFINS TESTAMERICA
4125 N 124TH ST.
SUITE F (REAR)
BROOKFIELD, WI 53005
UNITED STATES US

SHIP DATE: 23SEP22
ACTWTG: 44.95 LB
CAD: 0269688/CAFE3616

BILL RECIPIENT

TO **SAMPLE RECEIPT**
EUROFINS
880 RIVERSIDE PARKWAY

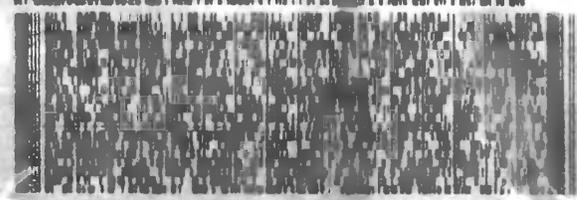
WEST SACRAMENTO CA 95605

(262) 202 - 5955
TEL: PG1

REF:

DEPT:

0269688/CAFE3616

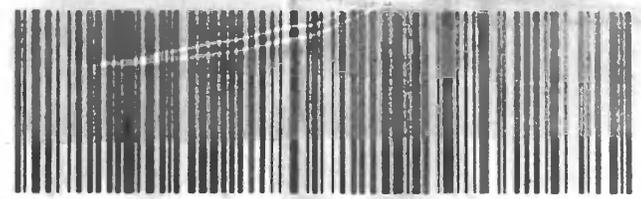


MON - 23 SEP 10:30A
PRIORITY OVERNIGHT

TRACKING
0201 6053 8696 0819

TP BLUA

95605
CA - US **SMF**



Part # 150469-434 INTV EXP 01/23

9237/0001/0001

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Isotope Dilution Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Soil

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-222851-1	SP-01-20220919-04-05-001	88	90	96	95	93	89	90	74
500-222851-2	SP-02-20220919-05-06-001	119	115	122	119	116	120	110	95
500-222851-3	SP-03-20220919-03-04-001	74	78	79	79	74	72	63	54
500-222851-4	SP-03-20220919-03-04-101	92	111	103	106	93	97	86	75
500-222851-5	SP-04-20220919-03-04-001	84	92	88	93	86	82	76	68
500-222851-6	SP-05-20220919-03-04-001	87	99	96	96	87	93	79	68
500-222851-6 MS	SP-05-20220919-03-04-001	85	104	92	95	90	97	86	78
500-222851-6 MSD	SP-05-20220919-03-04-001	83	102	86	89	84	88	79	72

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-222851-1	SP-01-20220919-04-05-001	70	80	90	88	82	78	97	94
500-222851-2	SP-02-20220919-05-06-001	81	76	114	116	111	87	117	113
500-222851-3	SP-03-20220919-03-04-001	52	62	73	75	64	49	66	59
500-222851-4	SP-03-20220919-03-04-101	79	82	92	97	82	69	99	97
500-222851-5	SP-04-20220919-03-04-001	67	79	78	83	67	65	83	82
500-222851-6	SP-05-20220919-03-04-001	67	77	85	85	75	58	83	87
500-222851-6 MS	SP-05-20220919-03-04-001	80	82	86	88	84	77	103	97
500-222851-6 MSD	SP-05-20220919-03-04-001	72	82	79	83	76	66	79	80

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-222851-1	SP-01-20220919-04-05-001	43	43	63	55	69	74	76	85
500-222851-2	SP-02-20220919-05-06-001	30	29	57	51	101	101	97	121
500-222851-3	SP-03-20220919-03-04-001	25	23	40	40	58	62	57	74
500-222851-4	SP-03-20220919-03-04-101	24	22	61	53	79	85	72	93
500-222851-5	SP-04-20220919-03-04-001	35	37	61	56	66	62	62	83
500-222851-6	SP-05-20220919-03-04-001	25	27	53	45	74	70	70	94
500-222851-6 MS	SP-05-20220919-03-04-001	42	40	61	55	69	73	72	86
500-222851-6 MSD	SP-05-20220919-03-04-001	37	35	60	53	65	68	72	88

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M102FTS (25-150)							
500-222851-1	SP-01-20220919-04-05-001	60							
500-222851-2	SP-02-20220919-05-06-001	67							
500-222851-3	SP-03-20220919-03-04-001	42							
500-222851-4	SP-03-20220919-03-04-101	69							
500-222851-5	SP-04-20220919-03-04-001	53							
500-222851-6	SP-05-20220919-03-04-001	58							
500-222851-6 MS	SP-05-20220919-03-04-001	66							
500-222851-6 MSD	SP-05-20220919-03-04-001	63							

Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- C4PFHA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA

Eurofins Chicago

Isotope Dilution Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

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)
LCS 320-622504/2-A	Lab Control Sample	97	109	99	102	101	106	97	91
MB 320-622504/1-A	Method Blank	96	111	101	106	100	104	95	98

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)
LCS 320-622504/2-A	Lab Control Sample	96	104	95	100	98	97	113	115
MB 320-622504/1-A	Method Blank	105	113	92	95	100	98	114	126

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)
LCS 320-622504/2-A	Lab Control Sample	46	44	82	77	76	88	80	94
MB 320-622504/1-A	Method Blank	70	75	89	86	85	87	86	96

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M102FTS (25-150)
LCS 320-622504/2-A	Lab Control Sample	89
MB 320-622504/1-A	Method Blank	98

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

Eurofins Chicago

Isotope Dilution Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-222851-7	EB-01-20220919	103	110	105	105	108	113	109	111
500-222851-8	FB-01-20220919	103	110	105	107	104	108	108	104
500-222851-9	MW-01-2022-0923-001	82	102	117	105	105	110	102	96
500-222851-10	MW-02-2022-0922-001	86	104	108	102	102	99	93	83
500-222851-11	MW-02-2022-0922-101	85	100	104	100	99	98	94	84
500-222851-12	MW-03-2022-0922-001	90	102	108	96	98	97	88	80
500-222851-12 MS	MW-03-2022-0922-001	85	105	111	102	101	99	93	89
500-222851-12 MSD	MW-03-2022-0922-001	86	105	111	102	101	103	100	91
500-222851-13	MW-04-2022-0922-001	97	138	162 *5+	149	88	146	134	127
500-222851-13 - DL	MW-04-2022-0922-001			80					
500-222851-14	MW-05-2022-0922-001	62	86	113	100	103	104	100	92
500-222851-15	FB-02-20220922	105	113	110	107	108	109	111	108
LCS 320-621887/2-A	Lab Control Sample	105	116	112	111	108	110	109	109
MB 320-621887/1-A	Method Blank	113	122	108	115	112	115	114	108

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-222851-7	EB-01-20220919	104	102	110	114	109	109	123	124
500-222851-8	FB-01-20220919	98	95	106	109	106	107	121	121
500-222851-9	MW-01-2022-0923-001	84	80	96	101	96	98	112	107
500-222851-10	MW-02-2022-0922-001	73	53	93	87	70	89	98	94
500-222851-11	MW-02-2022-0922-101	74	69	91	92	85	92	97	93
500-222851-12	MW-03-2022-0922-001	62	29	91	82	55	86	95	88
500-222851-12 MS	MW-03-2022-0922-001	75	70	95	96	86	93	101	98
500-222851-12 MSD	MW-03-2022-0922-001	79	71	97	100	88	99	102	102
500-222851-13	MW-04-2022-0922-001	108	103	132	135	127	132	142	141
500-222851-13 - DL	MW-04-2022-0922-001					74			
500-222851-14	MW-05-2022-0922-001	83	80	97	103	102	104	103	102
500-222851-15	FB-02-20220922	103	97	111	116	109	110	125	126
LCS 320-621887/2-A	Lab Control Sample	98	97	112	112	112	109	126	119
MB 320-621887/1-A	Method Blank	105	101	118	118	108	106	126	122

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFm (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-222851-7	EB-01-20220919	100	98	100	95	94	86	83	104

Eurofins Chicago

Isotope Dilution Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Project CHW8334

Job ID: 500-222851-1

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NFMF (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
500-222851-8	FB-01-20220919	97	91	100	89	95	88	80	103
500-222851-9	MW-01-2022-0923-001	86	79	85	78	100	75	74	105
500-222851-10	MW-02-2022-0922-001	74	62	73	57	80	72	63	101
500-222851-11	MW-02-2022-0922-101	71	63	69	62	80	70	66	99
500-222851-12	MW-03-2022-0922-001	63	47	55	33	83	73	68	100
500-222851-12 MS	MW-03-2022-0922-001	79	68	77	64	86	70	63	100
500-222851-12 MSD	MW-03-2022-0922-001	83	73	80	68	80	72	68	101
500-222851-13	MW-04-2022-0922-001	110	103	116	100	133	55	100	143
500-222851-13 - DL	MW-04-2022-0922-001								
500-222851-14	MW-05-2022-0922-001	87	79	83	75	98	104	75	96
500-222851-15	FB-02-20220922	102	98	99	92	99	86	81	104
LCS 320-621887/2-A	Lab Control Sample	99	88	99	94	91	84	77	109
MB 320-621887/1-A	Method Blank	97	97	102	90	93	89	87	111

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M102FTS (25-150)
500-222851-7	EB-01-20220919	81
500-222851-8	FB-01-20220919	69
500-222851-9	MW-01-2022-0923-001	58
500-222851-10	MW-02-2022-0922-001	45
500-222851-11	MW-02-2022-0922-101	53
500-222851-12	MW-03-2022-0922-001	42
500-222851-12 MS	MW-03-2022-0922-001	51
500-222851-12 MSD	MW-03-2022-0922-001	51
500-222851-13	MW-04-2022-0922-001	76
500-222851-13 - DL	MW-04-2022-0922-001	
500-222851-14	MW-05-2022-0922-001	56
500-222851-15	FB-02-20220922	69
LCS 320-621887/2-A	Lab Control Sample	69
MB 320-621887/1-A	Method Blank	71

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
- PFDaA = 13C2 PFDaA
- 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

Isotope Dilution Summary

Client: Geosyntec Consultants, Inc.

Project/Site: Project CHW8334

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

Job ID: 500-222851-1

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