

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

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

**Notification of Property Owners and Occupants:**

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

**Site Information**

Site Name		DNR ID # (BRRTS #)	
Mirro Co Plt 2 (Former)		02-36-588656	
Address	City	State	ZIP Code
2009 Mirro Drive	Manitowoc	WI	54220

**Responsible Party**

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

Property Owner

Tramontina U.S. Cookware, Inc. (as a former operator at the property) c/o Akerman LLP

Address	City	State	ZIP Code
98 Southeast Seventh Street, Suite 1100	Miami	FL	33131
Contact Person	Phone Number (include area code)		
Sarah Campbell Smith	(305) 374-5600		

Person or company that collected samples

Geosyntec Consultants, Inc.

**Sample Results (Results Attached)**

Reason for Sampling:  Routine  Other (define) horizontal characterization of groundwater impacts

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

Contaminant	In Soil?		In Groundwater?	
	Yes	No	Yes	No
Gasoline	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diesel or Fuel Oil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solvents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heavy Metals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pesticides	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: <u>PFAS</u>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

This sampling event included sampling of a drinking water well. <input type="radio"/> Yes <input checked="" type="radio"/> No
If yes, the sampled drinking water well had detectable contaminants. <input type="radio"/> Yes <input type="radio"/> No

**Contaminants in Vapor**

	Yes	No
Indoor Air	<input type="radio"/>	<input type="radio"/>
Sub-slab	<input type="radio"/>	<input type="radio"/>
Exterior Soil Gas	<input type="radio"/>	<input type="radio"/>

# Site Investigation Sample Results Notification

Form 4400-249 (R 03/14)

Page 2 of 2

## Attached are:

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

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

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

## Contact Information

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

### Environmental Consultant

Company Name		Contact Person Last Name		First Name	
Geosyntec Consultants, Inc.		Roder		Adam	
Address			City	State	ZIP Code
309 N. Water Street, Suite 350			Milwaukee	WI	53202
Phone # (inc. area code)	Email				
(414) 918-7488	adam.roder@geosyntec.com				

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

### State of Wisconsin Department of Natural Resources

Contact Person Last Name		First Name		Phone # (inc. area code)	
Beggs		Tauren		(920) 510-3472	
Address			City	State	ZIP Code
2984 Shawano Avenue			Green Bay	WI	54313
Email					
tauren.beggs@wisconsin.gov					



**Legend**

- Approximate Tax Parcel Boundary
- Wisconsin Central Railroad
- Approximate Property Boundary
- ◆ Groundwater Monitoring Well

Notes:  
 Basemap Courtesy of ESRI

**Monitoring Well Location Map**

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

**Geosyntec**  
 consultants

Figure

**2**

Milwaukee, Wisconsin

March 2024

**TABLE 2**  
**Summary of Groundwater Sample Analytical Results**  
 Mirro Co PLT 2 (Former)  
 2009 Mirro Drive  
 Manitowoc, Wisconsin

Monitoring Well Identification	Groundwater Quality Standard		CAS Number	Groundwater Monitoring Wells / Piezometers																				
				MW-01		MW-02			MW-03		MW-04		MW-05		MW-06		MW-07		MW-08	MW-09	MW-10	MW-11	MW-12	POND
				2.7 - 12.7	3.1	8.5	--	6.3	4.4	4.7	7.0	6.9	3.5	3.7	6.1 - 16.1	4.7 - 14.7	5.0 - 15.0	4.8 - 14.8	4.7 - 14.7	3.4 - 13.4	4.0 - 14.0	--		
Screen Interval (ft bgs)	PAL	ES		1.6	3.1	8.5	--	6.3	4.4	4.7	7.0	6.9	3.5	3.7	6.1 - 16.1	4.7 - 14.7	5.0 - 15.0	4.8 - 14.8	4.7 - 14.7	3.4 - 13.4	4.0 - 14.0	--		
Depth to Groundwater (ft bgs)				9/22/2022	2/29/2024	9/22/2022	9/22/22 DUP	2/29/2024	9/22/2022	2/29/2024	9/22/2022	2/29/2024	9/22/2022	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024		
Date				9/22/2022	2/29/2024	9/22/2022	9/22/22 DUP	2/29/2024	9/22/2022	2/29/2024	9/22/2022	2/29/2024	9/22/2022	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024	2/29/2024		
PFAS (ng/L)																								
<i>Carboxylic Acids</i>																								
Perfluorobutanoic acid (PFBA)	2,000	10,000	375-22-4	11	--	7.7	7.8	--	9.1	--	20	--	16	--	<2.1	8.6	9.9	3.0 J	3.6 J	7.3	8.9	7.9	5.9	
Perfluoropentanoic acid (PFPeA)	NS	NS	2706-90-3	2.7	--	1.7 J	2.0	--	4.8	--	12	--	<0.45	--	<0.42	2.3	1.8	1.8	1.4 J	1.1 J	1.5 J	0.85 J	<0.45	
Perfluorohexanoic acid (PFHxA)	30,000	150,000	307-24-4	5.3	--	13	13	--	21	--	45	--	3.6	--	0.69 J	3.6	3.7	2.1	3.8	1.9	2.4	2.2	2.2	
Perfluoroheptanoic acid (PFHpA)	NS	NS	375-85-9	7.6	--	21	21	--	15	--	130	--	2.6	--	<0.21	4.2	4.2	2.1	6.1	1.5 J	4.0	1.3 J	2.2	
Perfluorooctanoic acid (PFOA)	2	20	335-67-1	<b>250</b>	--	<b>290</b>	<b>320</b>	--	<b>210</b>	--	<b>8,000</b>	--	<b>300</b>	--	<b>2.4</b>	<b>94</b>	<b>93</b>	<b>41</b>	<b>64</b>	<b>39</b>	<b>53</b>	<b>33</b>	<b>28</b>	
Perfluorononanoic acid (PFNA)	3	30	375-95-1	0.45 J	--	<0.25	<0.25	--	<0.25	--	3.7	--	<0.25	--	<0.23	0.27 J C	<0.23	0.48 J	<0.24	<0.24	<0.24	<0.23	0.29 J	
Perfluorodecanoic acid (PFDA)	60	300	335-76-2	<0.28	--	<0.28	<0.29	--	<0.28	--	0.32	--	<0.29	--	<0.27	<0.27	<0.27	<0.27	<0.28	<0.28	<0.27	<0.26	<0.28	
Perfluoroundecanoic acid (PFUnA)	600	3,000	2058-94-8	<1.0	--	<1.0	<1.0	--	<1.0	--	<0.99	--	<1.0	--	<0.94	<0.97	<0.95	<0.96	<0.99	<1.0	<0.96	<0.94	<1.0	
Perfluorododecanoic acid (PFDoA)	100	500	307-55-1	<0.50	--	<0.50	<0.51	--	<0.50	--	<0.50	--	<0.51	--	<0.47	<0.49	<0.47	<0.48	<0.49	<0.50	<0.48	<0.47	<0.50	
Perfluorotridecanoic acid (PFTriDA)	NS	NS	72629-94-8	<1.2	--	<1.2	<1.2	--	<1.2	--	<1.2	--	<1.2	--	<1.1	<1.1	<1.1	<1.1	<1.2	<1.2	<1.1	<1.1	<1.2	
Perfluorotetradecanoic acid (PFTeA)	2,000	10,000	376-06-7	<0.66	--	<0.67	<0.68	--	<0.66	--	<0.66	--	<0.67	--	<0.63	<0.64	<0.63	<0.64	<0.66	<0.66	<0.64	<0.62	<0.67	
<i>Sulfonic Acids</i>																								
Perfluorobutanesulfonic acid (PFBS)	90,000	450,000	375-73-5	1.3 J	--	0.81 J	0.84 J	--	0.34 J	--	1.8	--	4.1 J	--	0.25 J C	1.0 J	1.1 J	2.4	1.4 J	1.2 J	1.3 J	0.71 J	0.89 J	
Perfluoropentanesulfonic acid (PFPeS)	NS	NS	2706-91-4	<0.27	--	<0.28	<0.28	--	<0.27	--	<0.27	--	<0.28	--	<0.26	<0.26	<0.26	<0.26	<0.27	<0.27	<0.26	<0.26	<0.28	
Perfluorohexanesulfonic acid (PFHxS)	4	40	355-46-4	<0.52	--	<0.52	<0.53	--	<0.52	--	<0.51	--	0.67 J	--	<0.49	<0.50	<0.49	2.1	<0.51	<0.52	0.68 J	0.53 J	<0.52	
Perfluoroheptanesulfonic acid (PFHpS)	NS	NS	375-92-8	<0.17	--	<0.17	<0.18	--	<0.17	--	<0.17	--	<0.18	--	<0.16	<0.17	<0.16	<0.17	<0.17	<0.17	<0.17	<0.16	<0.17	
Perfluorooctanesulfonic acid (PFOS)	2	20	1763-23-1	<b>2.2 J</b>	--	<0.50	0.69 J	--	<0.49	--	<0.49	--	<0.50	--	<0.46	0.67 J	<0.46	1.2 J	<0.49	<0.49	<0.47	0.46 J	0.85 J	
Perfluorononanesulfonic acid (PFNS)	NS	NS	68259-12-1	<0.34	--	<0.34	<0.34	--	<0.34	--	<0.33	--	<0.34	--	<0.32	<0.33	<0.32	<0.32	<0.33	<0.34	<0.32	<0.32	<0.34	
Perfluorodecane sulfonic acid (PFDS)	NS	NS	335-77-3	<0.29	--	<0.29	<0.30	--	<0.29	--	<0.29	--	<0.30	--	<0.27	<0.28	<0.28	<0.28	<0.29	<0.29	<0.28	<0.27	<0.29	
Perfluorododecane sulfonic acid (PFDoS)	NS	NS	79780-39-5	<0.88	--	<0.89	<0.90	--	<0.88	--	<0.88	--	<0.90	--	<0.83	<0.86	<0.84	<0.85	<0.87	<0.88	<0.85	<0.83	<0.89	
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	NS	NS	757124-72-4	<0.22	--	<0.22	<0.22	--	<0.22	--	<0.22	--	<0.22	--	<0.21	<0.21	<0.21	<0.21	<0.22	<0.22	<0.21	<0.21	<0.22	
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	NS	NS	27619-97-2	<2.3	--	<2.3	<2.3	--	<2.3	--	<2.3	--	<2.3	--	<2.1	<2.2	<2.2	<2.2	<2.2	<2.3	<2.2	<2.1	<2.3	
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	NS	NS	39108-34-4	<0.42	--	<0.42	<0.43	--	<0.42	--	<0.42	--	<0.42	--	<0.39	<0.41	<0.40	<0.40	<0.41	<0.42	<0.40	<0.39	<0.42	
<i>Sulfonamides, Sulfonamidoacetic Acids, Sulfonamidoethanols</i>																								
Perfluorooctane sulfonamide (FOSA)	2	20	754-91-6	<0.89	--	<0.9	<0.91	--	<0.89	--	<0.88	--	<0.91	--	<0.84	<0.86	<0.84	<0.86	<0.88	<0.89	<0.86	<0.84	<0.90	
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)	2	20	4151-50-2	<0.79	--	<0.8	<0.81	--	<0.79	--	<0.78	--	<0.80	--	<0.75	<0.77	<0.75	<0.76	<0.78	<0.79	<0.76	<0.74	<0.80	
N-Methyl perfluorooctane sulfonamide (NMeFOSA)	NS	NS	31506-32-8	<0.39	--	<0.39	<0.40	--	<0.39	--	<0.39	--	<0.40	--	<0.37	<0.38	<0.37	<0.38	<0.39	<0.39	<0.38	<0.37	<0.39	
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NS	NS	2355-31-9	<1.1	--	<1.1	<1.1	--	<1.1	--	<1.1	--	<1.1	--	<1.0	<1.1	<1.0	<1.1	<1.1	<1.1	<1.1	<1.0	<1.1	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	2	20	2991-50-6	<1.2	--	<1.2	<1.2	--	<1.2	--	<1.2	--	<1.2	--	<1.1	<1.1	<1.1	<1.1	<1.2	<1.2	<1.1	<1.1	<1.2	
N-Methyl perfluorooctane sulfonamidoethanol (NMeFOSE)	NS	NS	24448-09-7	<1.3	--	<1.3	<1.3	--	<1.3	--	<1.3	--	<1.3	--	<1.2	<1.2	<1.2	<1.2	<1.3	<1.3	<1.2	<1.2	<1.3	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	2	20	1691-99-2	<0.77	--	<0.78	<0.79	--	<0.77	--	<0.77	--	<0.79	--	<0.73	<0.75	<0.73	<0.75	<0.76	<0.77	<0.75	<0.73	<0.78	
<i>Replacement Chemicals</i>																								
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	600	3,000	919005-14-4	<0.36	--	<0.37	<0.37	--	<0.36	--	<0.36	--	<0.37	--	<0.34	<0.35	<0.34	<0.35	<0.36	<0.36	<0.35	<0.34	<0.37	
Hexafluoropropylene oxide dimer acid (GenX, HPFO-DA)	30	300	13252-13-6	<1.4	--	<1.4	<1.4	--	<1.4	--	7.7	--	<1.4	--	<1.3	<1.3	<1.3	<1.3	<1.3	<1.4	<1.3	<1.3	<1.4	
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	NS	NS	756426-58-1	<0.22	--	<0.22	<0.22	--	<0.22	--	<0.22	--	<0.22	--	<0.21	<0.21	<0.21	<0.21	<0.22	<0.22	<0.21	<0.21	<0.22	
11-chloroicosadecafluoro-3-oxadecane-1-sulfonic acid (11Cl-PF3OUdS)	NS	NS	763051-92-9	<0.29	--	<0.29	<0.30	--	<0.29	--	<0.29	--	<0.30	--	<0.27	<0.28	<0.28	<0.28	<0.29	<0.29	<0.28	<0.27	<0.29	
<i>Total PFAS</i>																								
Total of 6 Combined PFAS* (Calculated)	2	20	--	<b>252.2</b>	--	<b>290</b>	<b>320.69</b>	--	<b>210</b>	--	<b>8,000</b>	--	<b>300</b>	--	2.4	<b>94.67</b>	<b>93</b>	<b>42.2</b>	<b>64</b>	<b>39</b>	<b>53</b>	<b>33.46</b>	<b>28.85</b>	
<i>Field Parameters</i>																								
Temperature (deg C)	--	--	--	17.7	--	14.2	--	--	17.0	--	13.8	--	16.3	--	6.2	4.7	--	9.4	4.8	6.9	6.0	5.7	--	
pH	--	--	--	6.7	--	6.7	--	--	6.9	--	6.8	--	6.9	--	7.2	6.8	--	6.9	6.9	7.07	7.2	7.04	--	
Conductivity (mS/cm)	--	--	--	0.800	--	1.146	--	--	0.901	--	1.172	--	1.165	--	0.616	1.112	--	1.119	1.952	0.607	6.516	0.543	--	
Dissolved Oxygen (mg/L)	--	--	--	3.85	--	5.64	--	--	3.71	--	6.4	--	6.2	--	5.61	0.89	--	5.11	4.9	9.62	8.69	9.81	--	
ORP (mV)	--	--	--	150.5	--	169.4	--	--	123.3	--	199.8	--	168.6	--	166.5	119.2	--	121.5	170.4	185.5	194.8	211.6	--	

Notes:  
 PAL - Groundwater Preventative Action Limit recommendation (by Wisconsin Department of Health Services [WDHS]; Cycle 10 in June 2019 or Cycle 11 in November 2020)  
 ES - Groundwater Enforcement Standard recommendation (by WDHS; Cycle 10 in June 2019 or Cycle 11 in November 2020)

\* WDHS recommends a combined standard for NEtFOSE, NEtFOSA, NEtFOSAA, FOSA, PFOS, and PFOA

ft bgs - feet below groundwater surface  
 PFAS - per- and polyfluoroalkyl substances  
 ng/L - nanograms per liter (equivalent to parts per trillion, ppt)  
 mg/L - milligrams per liter (equivalent to parts per million, ppm)  
 deg C = degrees Celsius  
 mS/cm - millisiemens per centimeter  
 mV - millivolts  
 -- not analyzed, not established or not applicable

Laboratory flags -  
 J - result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value  
 I - value is estimated maximum possible concentration  
 C - Transition mass ratio for the indicated analyte was outside the established ratiolimits; analyst judgment was used to positively identify the analyte

Field blank results -  
 9/22/2022 - PFAS reported less than limit of detection  
 2/29/2024 - PFAS reported less than limit of detection except PFHxA (0.57 J ng/L)

Equipment blank results -  
 9/22/2022 - not used  
 2/29/2024 - PFAS reported less than limit of detection

Groundwater quality standard exceedances -  
**bold** = concentration exceeds WDHS-recommended ES  
*italics* = concentration exceeds WDHS-recommended PAL

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Jason Wuerch  
Geosyntec Consultants Inc  
309 N. Water Street  
Suite 350  
Milwaukee, Wisconsin 53202

Generated 3/18/2024 8:12:52 AM

## JOB DESCRIPTION

Tramontina - CHW8334

## JOB NUMBER

500-246890-1

# Eurofins Chicago

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

## Authorization



Generated  
3/18/2024 8:12:52 AM

Authorized for release by  
Sandie Fredrick, Senior Project Manager  
[Sandra.Fredrick@et.eurofinsus.com](mailto:Sandra.Fredrick@et.eurofinsus.com)  
(920)261-1660



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Method Summary . . . . .	7
Sample Summary . . . . .	8
Client Sample Results . . . . .	9
Definitions . . . . .	31
QC Association . . . . .	32
QC Sample Results . . . . .	33
Chronicle . . . . .	40
Certification Summary . . . . .	42
Chain of Custody . . . . .	43
Receipt Checklists . . . . .	47
Isotope Dilution Summary . . . . .	49

# Case Narrative

Client: Geosyntec Consultants Inc  
Project: Tramontina - CHW8334

Job ID: 500-246890-1

**Job ID: 500-246890-1**

**Eurofins Chicago**

## Job Narrative 500-246890-1

### Receipt

The samples were received on 3/2/2024 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2° C.

### LCMS

Method 537 (modified): A "C" qualifier means the transition mass ratio for the indicated analyte was outside the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty. However, analyst judgment was used to positively identify the analyte: MW-7 (500-246890-3) and MW-6 (500-246890-4).

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

### Organic Prep

Method 3535: The following samples in preparation batch 320-745000 were observed to have floating particulates present in the sample bottle. MW-6 (500-246890-4) and MW-7 Dup (500-246890-8)

Method 3535: The following samples in preparation batch 320-745000 were observed yellow in color and have floating particulates present in the sample bottle. MW-11 (500-246890-6), MW-12 (500-246890-7) and Pond (500-246890-11)

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-745000.

Method 3535: The following samples in preparation batch 320-745000 were yellow in color following extraction. MW-12 (500-246890-7) and Pond (500-246890-11)

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

Eurofins Chicago



# Detection Summary

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

## Client Sample ID: MW-9

## Lab Sample ID: 500-246890-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.6	J	4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.4	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.8		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	6.1		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	64		1.8	0.76	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.4	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: MW-8

## Lab Sample ID: 500-246890-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	3.0	J	4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.8		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.1		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.1		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	41		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.48	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.4		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.1		1.8	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.2	J	1.8	0.47	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: MW-7

## Lab Sample ID: 500-246890-3

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	8.6		4.4	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	2.3		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.6		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.2		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	94		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.27	J C	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.67	J	1.8	0.48	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: MW-6

## Lab Sample ID: 500-246890-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	0.69	J	1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	2.4		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.25	J C	1.7	0.17	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: MW-10

## Lab Sample ID: 500-246890-5

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.3		4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.1	J	1.8	0.44	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	1.9		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.5	J	1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	39		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.2	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: MW-11

## Lab Sample ID: 500-246890-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	8.9		4.4	2.1	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Detection Summary

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

## Client Sample ID: MW-11 (Continued)

Lab Sample ID: 500-246890-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	1.5	J	1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.4		1.8	0.51	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.0		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	53		1.8	0.75	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.3	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.68	J	1.8	0.50	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: MW-12

Lab Sample ID: 500-246890-7

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	7.9		4.3	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	0.85	J	1.7	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.3	J	1.7	0.21	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	33		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.71	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.53	J	1.7	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.46	J	1.7	0.46	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: MW-7 Dup

Lab Sample ID: 500-246890-8

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	9.9		4.3	2.1	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	1.8		1.7	0.42	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	3.7		1.7	0.50	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	4.2		1.7	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	93		1.7	0.73	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.7	0.17	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: Field Blank

Lab Sample ID: 500-246890-9

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanoic acid (PFHxA)	0.57	J	1.8	0.51	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: Equipment Blank

Lab Sample ID: 500-246890-10

No Detections.

## Client Sample ID: Pond

Lab Sample ID: 500-246890-11

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	5.9		4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.2		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	28		1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	0.29	J	1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.89	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.85	J	1.8	0.50	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Chicago

# Method Summary

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	EET SAC
3535	Solid-Phase Extraction (SPE)	SW846	EET SAC

**Protocol References:**

EPA = US Environmental Protection Agency

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

**Laboratory References:**

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



# Sample Summary

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-246890-1	MW-9	Water	02/29/24 09:30	03/02/24 09:20
500-246890-2	MW-8	Water	02/29/24 10:25	03/02/24 09:20
500-246890-3	MW-7	Water	02/29/24 11:35	03/02/24 09:20
500-246890-4	MW-6	Water	02/29/24 13:10	03/02/24 09:20
500-246890-5	MW-10	Water	02/29/24 14:15	03/02/24 09:20
500-246890-6	MW-11	Water	02/29/24 15:05	03/02/24 09:20
500-246890-7	MW-12	Water	02/29/24 15:40	03/02/24 09:20
500-246890-8	MW-7 Dup	Water	02/29/24 11:37	03/02/24 09:20
500-246890-9	Field Blank	Water	02/29/24 16:00	03/02/24 09:20
500-246890-10	Equipment Blank	Water	02/29/24 16:10	03/02/24 09:20
500-246890-11	Pond	Water	02/29/24 15:25	03/02/24 09:20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-9**

**Lab Sample ID: 500-246890-1**

**Date Collected: 02/29/24 09:30**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.6	J	4.5	2.2	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluoropentanoic acid (PFPeA)	1.4	J	1.8	0.44	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorohexanoic acid (PFHxA)	3.8		1.8	0.52	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluoroheptanoic acid (PFHpA)	6.1		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorooctanoic acid (PFOA)	64		1.8	0.76	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluoroundecanoic acid (PFUnA)	<0.99		1.8	0.99	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorobutanesulfonic acid (PFBS)	1.4	J	1.8	0.18	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		03/07/24 04:52	03/11/24 05:33	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		03/07/24 04:52	03/11/24 05:33	1
N-ethylperfluorooctane sulfonamide (NETFOSA)	<0.78		1.8	0.78	ng/L		03/07/24 04:52	03/11/24 05:33	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.39		1.8	0.39	ng/L		03/07/24 04:52	03/11/24 05:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.5	1.1	ng/L		03/07/24 04:52	03/11/24 05:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	<1.2		4.5	1.2	ng/L		03/07/24 04:52	03/11/24 05:33	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.3		3.6	1.3	ng/L		03/07/24 04:52	03/11/24 05:33	1
N-ethylperfluorooctane sulfonamidoethanol (NETFOSE)	<0.76		1.8	0.76	ng/L		03/07/24 04:52	03/11/24 05:33	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 05:33	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.2		4.5	2.2	ng/L		03/07/24 04:52	03/11/24 05:33	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.41		1.8	0.41	ng/L		03/07/24 04:52	03/11/24 05:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		03/07/24 04:52	03/11/24 05:33	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.3		3.6	1.3	ng/L		03/07/24 04:52	03/11/24 05:33	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 05:33	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.29		1.8	0.29	ng/L		03/07/24 04:52	03/11/24 05:33	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	75		25 - 150				03/07/24 04:52	03/11/24 05:33	1
13C5 PFPeA	88		25 - 150				03/07/24 04:52	03/11/24 05:33	1

Euofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-9**

**Lab Sample ID: 500-246890-1**

**Date Collected: 02/29/24 09:30**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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>
13C2 PFHxA	87		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C4 PFHpA	83		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C4 PFOA	100		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C5 PFNA	86		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C2 PFDA	93		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C2 PFUnA	97		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C2 PFDaA	84		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C2 PFTeDA	87		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C3 PFBS	77		25 - 150	03/07/24 04:52	03/11/24 05:33	1
18O2 PFHxS	100		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C4 PFOS	89		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C8 FOSA	95		10 - 150	03/07/24 04:52	03/11/24 05:33	1
d3-NMeFOSAA	85		25 - 150	03/07/24 04:52	03/11/24 05:33	1
d5-NEtFOSAA	86		25 - 150	03/07/24 04:52	03/11/24 05:33	1
d-N-MeFOSA-M	71		10 - 150	03/07/24 04:52	03/11/24 05:33	1
d-N-EtFOSA-M	66		10 - 150	03/07/24 04:52	03/11/24 05:33	1
d7-N-MeFOSE-M	71		10 - 150	03/07/24 04:52	03/11/24 05:33	1
d9-N-EtFOSE-M	76		10 - 150	03/07/24 04:52	03/11/24 05:33	1
13C2 4:2 FTS	72		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C2 6:2 FTS	78		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C2 8:2 FTS	85		25 - 150	03/07/24 04:52	03/11/24 05:33	1
13C3 HFPO-DA	77		25 - 150	03/07/24 04:52	03/11/24 05:33	1

# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-8**

**Lab Sample ID: 500-246890-2**

Date Collected: 02/29/24 10:25

Matrix: Water

Date Received: 03/02/24 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	3.0	J	4.4	2.1	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluoropentanoic acid (PFPeA)	1.8		1.8	0.43	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorohexanoic acid (PFHxA)	2.1		1.8	0.51	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluoroheptanoic acid (PFHpA)	2.1		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorooctanoic acid (PFOA)	41		1.8	0.75	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorononanoic acid (PFNA)	0.48	J	1.8	0.24	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorodecanoic acid (PFDA)	<0.27		1.8	0.27	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluoroundecanoic acid (PFUnA)	<0.96		1.8	0.96	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.8	0.48	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.8	1.1	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.8	0.64	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorobutanesulfonic acid (PFBS)	2.4		1.8	0.18	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.8	0.26	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorohexanesulfonic acid (PFHxS)	2.1		1.8	0.50	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorooctanesulfonic acid (PFOS)	1.2	J	1.8	0.47	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.8	0.32	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorododecanesulfonic acid (PFDoS)	<0.85		1.8	0.85	ng/L		03/07/24 04:52	03/11/24 05:43	1
Perfluorooctanesulfonamide (FOSA)	<0.86		1.8	0.86	ng/L		03/07/24 04:52	03/11/24 05:43	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<0.76		1.8	0.76	ng/L		03/07/24 04:52	03/11/24 05:43	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.38		1.8	0.38	ng/L		03/07/24 04:52	03/11/24 05:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.4	1.1	ng/L		03/07/24 04:52	03/11/24 05:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.1		4.4	1.1	ng/L		03/07/24 04:52	03/11/24 05:43	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.2		3.5	1.2	ng/L		03/07/24 04:52	03/11/24 05:43	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<0.75		1.8	0.75	ng/L		03/07/24 04:52	03/11/24 05:43	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.21		1.8	0.21	ng/L		03/07/24 04:52	03/11/24 05:43	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.2		4.4	2.2	ng/L		03/07/24 04:52	03/11/24 05:43	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.40		1.8	0.40	ng/L		03/07/24 04:52	03/11/24 05:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.8	0.35	ng/L		03/07/24 04:52	03/11/24 05:43	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.3		3.5	1.3	ng/L		03/07/24 04:52	03/11/24 05:43	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.21		1.8	0.21	ng/L		03/07/24 04:52	03/11/24 05:43	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 05:43	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	79		25 - 150	03/07/24 04:52	03/11/24 05:43	1

Eurofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-8**

**Lab Sample ID: 500-246890-2**

**Date Collected: 02/29/24 10:25**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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>
13C5 PFPeA	86		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C2 PFHxA	83		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C4 PFHpA	85		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C4 PFOA	99		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C5 PFNA	85		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C2 PFDA	90		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C2 PFUnA	91		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C2 PFDoA	75		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C2 PFTeDA	76		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C3 PFBS	74		25 - 150	03/07/24 04:52	03/11/24 05:43	1
18O2 PFHxS	101		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C4 PFOS	85		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C8 FOSA	92		10 - 150	03/07/24 04:52	03/11/24 05:43	1
d3-NMeFOSAA	74		25 - 150	03/07/24 04:52	03/11/24 05:43	1
d5-NEtFOSAA	74		25 - 150	03/07/24 04:52	03/11/24 05:43	1
d-N-MeFOSA-M	74		10 - 150	03/07/24 04:52	03/11/24 05:43	1
d-N-EtFOSA-M	71		10 - 150	03/07/24 04:52	03/11/24 05:43	1
d7-N-MeFOSE-M	65		10 - 150	03/07/24 04:52	03/11/24 05:43	1
d9-N-EtFOSE-M	67		10 - 150	03/07/24 04:52	03/11/24 05:43	1
13C2 4:2 FTS	70		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C2 6:2 FTS	72		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C2 8:2 FTS	86		25 - 150	03/07/24 04:52	03/11/24 05:43	1
13C3 HFPO-DA	77		25 - 150	03/07/24 04:52	03/11/24 05:43	1



# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-7**

**Lab Sample ID: 500-246890-3**

Date Collected: 02/29/24 11:35

Matrix: Water

Date Received: 03/02/24 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	8.6		4.4	2.1	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluoropentanoic acid (PFPeA)	2.3		1.8	0.43	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorohexanoic acid (PFHxA)	3.6		1.8	0.51	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluoroheptanoic acid (PFHpA)	4.2		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorooctanoic acid (PFOA)	94		1.8	0.75	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorononanoic acid (PFNA)	0.27	J C	1.8	0.24	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorodecanoic acid (PFDA)	<0.27		1.8	0.27	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluoroundecanoic acid (PFUnA)	<0.97		1.8	0.97	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorododecanoic acid (PFDoA)	<0.49		1.8	0.49	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.8	1.1	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.8	0.64	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorobutanesulfonic acid (PFBS)	1.0	J	1.8	0.18	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.8	0.26	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorohexanesulfonic acid (PFHxS)	<0.50		1.8	0.50	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorooctanesulfonic acid (PFOS)	0.67	J	1.8	0.48	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorododecanesulfonic acid (PFDoS)	<0.86		1.8	0.86	ng/L		03/07/24 04:52	03/11/24 05:54	1
Perfluorooctanesulfonamide (FOSA)	<0.86		1.8	0.86	ng/L		03/07/24 04:52	03/11/24 05:54	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<0.77		1.8	0.77	ng/L		03/07/24 04:52	03/11/24 05:54	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.38		1.8	0.38	ng/L		03/07/24 04:52	03/11/24 05:54	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.4	1.1	ng/L		03/07/24 04:52	03/11/24 05:54	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.1		4.4	1.1	ng/L		03/07/24 04:52	03/11/24 05:54	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.2		3.5	1.2	ng/L		03/07/24 04:52	03/11/24 05:54	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<0.75		1.8	0.75	ng/L		03/07/24 04:52	03/11/24 05:54	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.21		1.8	0.21	ng/L		03/07/24 04:52	03/11/24 05:54	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.2		4.4	2.2	ng/L		03/07/24 04:52	03/11/24 05:54	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.41		1.8	0.41	ng/L		03/07/24 04:52	03/11/24 05:54	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.8	0.35	ng/L		03/07/24 04:52	03/11/24 05:54	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.3		3.5	1.3	ng/L		03/07/24 04:52	03/11/24 05:54	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.21		1.8	0.21	ng/L		03/07/24 04:52	03/11/24 05:54	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 05:54	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	72		25 - 150				03/07/24 04:52	03/11/24 05:54	1
13C5 PFPeA	83		25 - 150				03/07/24 04:52	03/11/24 05:54	1

Euofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-7**

**Lab Sample ID: 500-246890-3**

**Date Collected: 02/29/24 11:35**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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>
13C2 PFHxA	86		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C4 PFHpA	85		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C4 PFOA	102		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C5 PFNA	88		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C2 PFDA	97		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C2 PFUnA	95		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C2 PFDaA	83		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C2 PFTeDA	76		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C3 PFBS	82		25 - 150	03/07/24 04:52	03/11/24 05:54	1
18O2 PFHxS	101		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C4 PFOS	92		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C8 FOSA	94		10 - 150	03/07/24 04:52	03/11/24 05:54	1
d3-NMeFOSAA	86		25 - 150	03/07/24 04:52	03/11/24 05:54	1
d5-NEtFOSAA	82		25 - 150	03/07/24 04:52	03/11/24 05:54	1
d-N-MeFOSA-M	73		10 - 150	03/07/24 04:52	03/11/24 05:54	1
d-N-EtFOSA-M	77		10 - 150	03/07/24 04:52	03/11/24 05:54	1
d7-N-MeFOSE-M	64		10 - 150	03/07/24 04:52	03/11/24 05:54	1
d9-N-EtFOSE-M	73		10 - 150	03/07/24 04:52	03/11/24 05:54	1
13C2 4:2 FTS	75		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C2 6:2 FTS	82		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C2 8:2 FTS	98		25 - 150	03/07/24 04:52	03/11/24 05:54	1
13C3 HFPO-DA	75		25 - 150	03/07/24 04:52	03/11/24 05:54	1

# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-6**  
**Date Collected: 02/29/24 13:10**  
**Date Received: 03/02/24 09:20**

**Lab Sample ID: 500-246890-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.1		4.3	2.1	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluoropentanoic acid (PFPeA)	<0.42		1.7	0.42	ng/L		03/07/24 04:52	03/11/24 06:04	1
<b>Perfluorohexanoic acid (PFHxA)</b>	<b>0.69</b>	<b>J</b>	1.7	0.50	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluoroheptanoic acid (PFHpA)	<0.21		1.7	0.21	ng/L		03/07/24 04:52	03/11/24 06:04	1
<b>Perfluorooctanoic acid (PFOA)</b>	<b>2.4</b>		1.7	0.73	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorononanoic acid (PFNA)	<0.23		1.7	0.23	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorodecanoic acid (PFDA)	<0.27		1.7	0.27	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluoroundecanoic acid (PFUnA)	<0.94		1.7	0.94	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorododecanoic acid (PFDoA)	<0.47		1.7	0.47	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorotetradecanoic acid (PFTeA)	<0.63		1.7	0.63	ng/L		03/07/24 04:52	03/11/24 06:04	1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>0.25</b>	<b>J C</b>	1.7	0.17	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.7	0.26	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorohexanesulfonic acid (PFHxS)	<0.49		1.7	0.49	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.16		1.7	0.16	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorooctanesulfonic acid (PFOS)	<0.46		1.7	0.46	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.7	0.32	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorodecanesulfonic acid (PFDS)	<0.27		1.7	0.27	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorododecanesulfonic acid (PFDoS)	<0.83		1.7	0.83	ng/L		03/07/24 04:52	03/11/24 06:04	1
Perfluorooctanesulfonamide (FOSA)	<0.84		1.7	0.84	ng/L		03/07/24 04:52	03/11/24 06:04	1
N-ethylperfluorooctane sulfonamide (NETFOSA)	<0.75		1.7	0.75	ng/L		03/07/24 04:52	03/11/24 06:04	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.37		1.7	0.37	ng/L		03/07/24 04:52	03/11/24 06:04	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.0		4.3	1.0	ng/L		03/07/24 04:52	03/11/24 06:04	1
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	<1.1		4.3	1.1	ng/L		03/07/24 04:52	03/11/24 06:04	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.2		3.4	1.2	ng/L		03/07/24 04:52	03/11/24 06:04	1
N-ethylperfluorooctane sulfonamidoethanol (NETFOSE)	<0.73		1.7	0.73	ng/L		03/07/24 04:52	03/11/24 06:04	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.21		1.7	0.21	ng/L		03/07/24 04:52	03/11/24 06:04	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.1		4.3	2.1	ng/L		03/07/24 04:52	03/11/24 06:04	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.39		1.7	0.39	ng/L		03/07/24 04:52	03/11/24 06:04	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.34		1.7	0.34	ng/L		03/07/24 04:52	03/11/24 06:04	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.3		3.4	1.3	ng/L		03/07/24 04:52	03/11/24 06:04	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.21		1.7	0.21	ng/L		03/07/24 04:52	03/11/24 06:04	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.27		1.7	0.27	ng/L		03/07/24 04:52	03/11/24 06:04	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	89		25 - 150				03/07/24 04:52	03/11/24 06:04	1
13C5 PFPeA	107		25 - 150				03/07/24 04:52	03/11/24 06:04	1

Eurofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-6**

**Lab Sample ID: 500-246890-4**

**Date Collected: 02/29/24 13:10**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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>
13C2 PFHxA	101		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C4 PFHpA	95		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C4 PFOA	108		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C5 PFNA	102		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C2 PFDA	110		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C2 PFUnA	114		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C2 PFDaA	98		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C2 PFTeDA	89		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C3 PFBS	95		25 - 150	03/07/24 04:52	03/11/24 06:04	1
18O2 PFHxS	123		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C4 PFOS	111		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C8 FOSA	114		10 - 150	03/07/24 04:52	03/11/24 06:04	1
d3-NMeFOSAA	96		25 - 150	03/07/24 04:52	03/11/24 06:04	1
d5-NEtFOSAA	98		25 - 150	03/07/24 04:52	03/11/24 06:04	1
d-N-MeFOSA-M	72		10 - 150	03/07/24 04:52	03/11/24 06:04	1
d-N-EtFOSA-M	78		10 - 150	03/07/24 04:52	03/11/24 06:04	1
d7-N-MeFOSE-M	68		10 - 150	03/07/24 04:52	03/11/24 06:04	1
d9-N-EtFOSE-M	78		10 - 150	03/07/24 04:52	03/11/24 06:04	1
13C2 4:2 FTS	118		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C2 6:2 FTS	90		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C2 8:2 FTS	116		25 - 150	03/07/24 04:52	03/11/24 06:04	1
13C3 HFPO-DA	86		25 - 150	03/07/24 04:52	03/11/24 06:04	1

# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-10**

**Lab Sample ID: 500-246890-5**

**Date Collected: 02/29/24 14:15**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.3		4.5	2.2	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluoropentanoic acid (PFPeA)	1.1	J	1.8	0.44	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorohexanoic acid (PFHxA)	1.9		1.8	0.53	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluoroheptanoic acid (PFHpA)	1.5	J	1.8	0.23	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorooctanoic acid (PFOA)	39		1.8	0.77	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorobutanesulfonic acid (PFBS)	1.2	J	1.8	0.18	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		03/07/24 04:52	03/11/24 06:14	1
Perfluorooctanesulfonamide (FOSA)	<0.89		1.8	0.89	ng/L		03/07/24 04:52	03/11/24 06:14	1
N-ethylperfluorooctane sulfonamide (NETFOSA)	<0.79		1.8	0.79	ng/L		03/07/24 04:52	03/11/24 06:14	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.39		1.8	0.39	ng/L		03/07/24 04:52	03/11/24 06:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.5	1.1	ng/L		03/07/24 04:52	03/11/24 06:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	<1.2		4.5	1.2	ng/L		03/07/24 04:52	03/11/24 06:14	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.3		3.6	1.3	ng/L		03/07/24 04:52	03/11/24 06:14	1
N-ethylperfluorooctane sulfonamidoethanol (NETFOSE)	<0.77		1.8	0.77	ng/L		03/07/24 04:52	03/11/24 06:14	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 06:14	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.3		4.5	2.3	ng/L		03/07/24 04:52	03/11/24 06:14	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.42		1.8	0.42	ng/L		03/07/24 04:52	03/11/24 06:14	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		03/07/24 04:52	03/11/24 06:14	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.4		3.6	1.4	ng/L		03/07/24 04:52	03/11/24 06:14	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 06:14	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.29		1.8	0.29	ng/L		03/07/24 04:52	03/11/24 06:14	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	87		25 - 150				03/07/24 04:52	03/11/24 06:14	1
13C5 PFPeA	94		25 - 150				03/07/24 04:52	03/11/24 06:14	1

Euofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-10**

**Lab Sample ID: 500-246890-5**

**Date Collected: 02/29/24 14:15**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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>
13C2 PFHxA	94		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C4 PFHpA	94		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C4 PFOA	106		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C5 PFNA	98		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C2 PFDA	107		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C2 PFUnA	107		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C2 PFDaA	92		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C2 PFTeDA	87		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C3 PFBS	86		25 - 150	03/07/24 04:52	03/11/24 06:14	1
18O2 PFHxS	113		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C4 PFOS	106		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C8 FOSA	106		10 - 150	03/07/24 04:52	03/11/24 06:14	1
d3-NMeFOSAA	87		25 - 150	03/07/24 04:52	03/11/24 06:14	1
d5-NEtFOSAA	98		25 - 150	03/07/24 04:52	03/11/24 06:14	1
d-N-MeFOSA-M	70		10 - 150	03/07/24 04:52	03/11/24 06:14	1
d-N-EtFOSA-M	78		10 - 150	03/07/24 04:52	03/11/24 06:14	1
d7-N-MeFOSE-M	69		10 - 150	03/07/24 04:52	03/11/24 06:14	1
d9-N-EtFOSE-M	75		10 - 150	03/07/24 04:52	03/11/24 06:14	1
13C2 4:2 FTS	82		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C2 6:2 FTS	86		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C2 8:2 FTS	116		25 - 150	03/07/24 04:52	03/11/24 06:14	1
13C3 HFPO-DA	85		25 - 150	03/07/24 04:52	03/11/24 06:14	1

# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-11**

**Lab Sample ID: 500-246890-6**

**Date Collected: 02/29/24 15:05**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	8.9		4.4	2.1	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluoropentanoic acid (PFPeA)	1.5	J	1.8	0.43	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorohexanoic acid (PFHxA)	2.4		1.8	0.51	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluoroheptanoic acid (PFHpA)	4.0		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorooctanoic acid (PFOA)	53		1.8	0.75	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorodecanoic acid (PFDA)	<0.27		1.8	0.27	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluoroundecanoic acid (PFUnA)	<0.96		1.8	0.96	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.8	0.48	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.8	1.1	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.8	0.64	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorobutanesulfonic acid (PFBS)	1.3	J	1.8	0.18	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.8	0.26	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorohexanesulfonic acid (PFHxS)	0.68	J	1.8	0.50	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorooctanesulfonic acid (PFOS)	<0.47		1.8	0.47	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.8	0.32	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorododecanesulfonic acid (PFDoS)	<0.85		1.8	0.85	ng/L		03/07/24 04:52	03/11/24 06:44	1
Perfluorooctanesulfonamide (FOSA)	<0.86		1.8	0.86	ng/L		03/07/24 04:52	03/11/24 06:44	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<0.76		1.8	0.76	ng/L		03/07/24 04:52	03/11/24 06:44	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.38		1.8	0.38	ng/L		03/07/24 04:52	03/11/24 06:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.4	1.1	ng/L		03/07/24 04:52	03/11/24 06:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.1		4.4	1.1	ng/L		03/07/24 04:52	03/11/24 06:44	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.2		3.5	1.2	ng/L		03/07/24 04:52	03/11/24 06:44	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<0.75		1.8	0.75	ng/L		03/07/24 04:52	03/11/24 06:44	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.21		1.8	0.21	ng/L		03/07/24 04:52	03/11/24 06:44	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.2		4.4	2.2	ng/L		03/07/24 04:52	03/11/24 06:44	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.40		1.8	0.40	ng/L		03/07/24 04:52	03/11/24 06:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.8	0.35	ng/L		03/07/24 04:52	03/11/24 06:44	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.3		3.5	1.3	ng/L		03/07/24 04:52	03/11/24 06:44	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.21		1.8	0.21	ng/L		03/07/24 04:52	03/11/24 06:44	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 06:44	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	26		25 - 150				03/07/24 04:52	03/11/24 06:44	1
13C5 PFPeA	72		25 - 150				03/07/24 04:52	03/11/24 06:44	1

Euofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-11**  
**Date Collected: 02/29/24 15:05**  
**Date Received: 03/02/24 09:20**

**Lab Sample ID: 500-246890-6**  
**Matrix: Water**

**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>
13C2 PFHxA	83		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C4 PFHpA	87		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C4 PFOA	104		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C5 PFNA	89		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C2 PFDA	99		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C2 PFUnA	108		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C2 PFDaA	90		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C2 PFTeDA	88		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C3 PFBS	79		25 - 150	03/07/24 04:52	03/11/24 06:44	1
18O2 PFHxS	100		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C4 PFOS	97		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C8 FOSA	100		10 - 150	03/07/24 04:52	03/11/24 06:44	1
d3-NMeFOSAA	77		25 - 150	03/07/24 04:52	03/11/24 06:44	1
d5-NEtFOSAA	96		25 - 150	03/07/24 04:52	03/11/24 06:44	1
d-N-MeFOSA-M	60		10 - 150	03/07/24 04:52	03/11/24 06:44	1
d-N-EtFOSA-M	84		10 - 150	03/07/24 04:52	03/11/24 06:44	1
d7-N-MeFOSE-M	64		10 - 150	03/07/24 04:52	03/11/24 06:44	1
d9-N-EtFOSE-M	85		10 - 150	03/07/24 04:52	03/11/24 06:44	1
13C2 4:2 FTS	63		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C2 6:2 FTS	84		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C2 8:2 FTS	119		25 - 150	03/07/24 04:52	03/11/24 06:44	1
13C3 HFPO-DA	73		25 - 150	03/07/24 04:52	03/11/24 06:44	1



# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-12**

**Lab Sample ID: 500-246890-7**

**Date Collected: 02/29/24 15:40**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	7.9		4.3	2.1	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluoropentanoic acid (PFPeA)	0.85	J	1.7	0.42	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorohexanoic acid (PFHxA)	2.2		1.7	0.50	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluoroheptanoic acid (PFHpA)	1.3	J	1.7	0.21	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorooctanoic acid (PFOA)	33		1.7	0.73	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorononanoic acid (PFNA)	<0.23		1.7	0.23	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorodecanoic acid (PFDA)	<0.26		1.7	0.26	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluoroundecanoic acid (PFUnA)	<0.94		1.7	0.94	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorododecanoic acid (PFDoA)	<0.47		1.7	0.47	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorotetradecanoic acid (PFTeA)	<0.62		1.7	0.62	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorobutanesulfonic acid (PFBS)	0.71	J	1.7	0.17	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.7	0.26	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorohexanesulfonic acid (PFHxS)	0.53	J	1.7	0.49	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.16		1.7	0.16	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorooctanesulfonic acid (PFOS)	0.46	J	1.7	0.46	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.7	0.32	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorodecanesulfonic acid (PFDS)	<0.27		1.7	0.27	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorododecanesulfonic acid (PFDoS)	<0.83		1.7	0.83	ng/L		03/07/24 04:52	03/11/24 06:55	1
Perfluorooctanesulfonamide (FOSA)	<0.84		1.7	0.84	ng/L		03/07/24 04:52	03/11/24 06:55	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<0.74		1.7	0.74	ng/L		03/07/24 04:52	03/11/24 06:55	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.37		1.7	0.37	ng/L		03/07/24 04:52	03/11/24 06:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.0		4.3	1.0	ng/L		03/07/24 04:52	03/11/24 06:55	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.1		4.3	1.1	ng/L		03/07/24 04:52	03/11/24 06:55	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.2		3.4	1.2	ng/L		03/07/24 04:52	03/11/24 06:55	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<0.73		1.7	0.73	ng/L		03/07/24 04:52	03/11/24 06:55	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.21		1.7	0.21	ng/L		03/07/24 04:52	03/11/24 06:55	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.1		4.3	2.1	ng/L		03/07/24 04:52	03/11/24 06:55	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.39		1.7	0.39	ng/L		03/07/24 04:52	03/11/24 06:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.34		1.7	0.34	ng/L		03/07/24 04:52	03/11/24 06:55	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.3		3.4	1.3	ng/L		03/07/24 04:52	03/11/24 06:55	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.21		1.7	0.21	ng/L		03/07/24 04:52	03/11/24 06:55	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.27		1.7	0.27	ng/L		03/07/24 04:52	03/11/24 06:55	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	76		25 - 150	03/07/24 04:52	03/11/24 06:55	1

Eurofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-12**

**Lab Sample ID: 500-246890-7**

**Date Collected: 02/29/24 15:40**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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>
13C5 PFPeA	91		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C2 PFHxA	92		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C4 PFHpA	91		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C4 PFOA	104		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C5 PFNA	94		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C2 PFDA	102		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C2 PFUnA	107		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C2 PFDoA	82		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C2 PFTeDA	76		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C3 PFBS	82		25 - 150	03/07/24 04:52	03/11/24 06:55	1
18O2 PFHxS	115		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C4 PFOS	98		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C8 FOSA	101		10 - 150	03/07/24 04:52	03/11/24 06:55	1
d3-NMeFOSAA	72		25 - 150	03/07/24 04:52	03/11/24 06:55	1
d5-NEtFOSAA	96		25 - 150	03/07/24 04:52	03/11/24 06:55	1
d-N-MeFOSA-M	53		10 - 150	03/07/24 04:52	03/11/24 06:55	1
d-N-EtFOSA-M	75		10 - 150	03/07/24 04:52	03/11/24 06:55	1
d7-N-MeFOSE-M	53		10 - 150	03/07/24 04:52	03/11/24 06:55	1
d9-N-EtFOSE-M	73		10 - 150	03/07/24 04:52	03/11/24 06:55	1
13C2 4:2 FTS	97		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C2 6:2 FTS	93		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C2 8:2 FTS	133		25 - 150	03/07/24 04:52	03/11/24 06:55	1
13C3 HFPO-DA	77		25 - 150	03/07/24 04:52	03/11/24 06:55	1

# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-7 Dup**

**Lab Sample ID: 500-246890-8**

Date Collected: 02/29/24 11:37

Matrix: Water

Date Received: 03/02/24 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	9.9		4.3	2.1	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluoropentanoic acid (PFPeA)	1.8		1.7	0.42	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorohexanoic acid (PFHxA)	3.7		1.7	0.50	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluoroheptanoic acid (PFHpA)	4.2		1.7	0.22	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorooctanoic acid (PFOA)	93		1.7	0.73	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorononanoic acid (PFNA)	<0.23		1.7	0.23	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorodecanoic acid (PFDA)	<0.27		1.7	0.27	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluoroundecanoic acid (PFUnA)	<0.95		1.7	0.95	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorododecanoic acid (PFDoA)	<0.47		1.7	0.47	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.7	1.1	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorotetradecanoic acid (PFTeA)	<0.63		1.7	0.63	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.7	0.17	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.7	0.26	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorohexanesulfonic acid (PFHxS)	<0.49		1.7	0.49	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.16		1.7	0.16	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorooctanesulfonic acid (PFOS)	<0.46		1.7	0.46	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorononanesulfonic acid (PFNS)	<0.32		1.7	0.32	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.7	0.28	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorododecanesulfonic acid (PFDoS)	<0.84		1.7	0.84	ng/L		03/07/24 04:52	03/11/24 07:05	1
Perfluorooctanesulfonamide (FOSA)	<0.84		1.7	0.84	ng/L		03/07/24 04:52	03/11/24 07:05	1
N-ethylperfluorooctane sulfonamide (NETFOSA)	<0.75		1.7	0.75	ng/L		03/07/24 04:52	03/11/24 07:05	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.37		1.7	0.37	ng/L		03/07/24 04:52	03/11/24 07:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.0		4.3	1.0	ng/L		03/07/24 04:52	03/11/24 07:05	1
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	<1.1		4.3	1.1	ng/L		03/07/24 04:52	03/11/24 07:05	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.2		3.4	1.2	ng/L		03/07/24 04:52	03/11/24 07:05	1
N-ethylperfluorooctane sulfonamidoethanol (NETFOSE)	<0.73		1.7	0.73	ng/L		03/07/24 04:52	03/11/24 07:05	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.21		1.7	0.21	ng/L		03/07/24 04:52	03/11/24 07:05	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.2		4.3	2.2	ng/L		03/07/24 04:52	03/11/24 07:05	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.40		1.7	0.40	ng/L		03/07/24 04:52	03/11/24 07:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.34		1.7	0.34	ng/L		03/07/24 04:52	03/11/24 07:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.3		3.4	1.3	ng/L		03/07/24 04:52	03/11/24 07:05	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.21		1.7	0.21	ng/L		03/07/24 04:52	03/11/24 07:05	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.28		1.7	0.28	ng/L		03/07/24 04:52	03/11/24 07:05	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	70		25 - 150				03/07/24 04:52	03/11/24 07:05	1
13C5 PFPeA	85		25 - 150				03/07/24 04:52	03/11/24 07:05	1

Eurofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: MW-7 Dup**

**Lab Sample ID: 500-246890-8**

**Date Collected: 02/29/24 11:37**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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>
13C2 PFHxA	86		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C4 PFHpA	87		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C4 PFOA	103		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C5 PFNA	88		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C2 PFDA	97		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C2 PFUnA	100		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C2 PFDaA	81		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C2 PFTeDA	77		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C3 PFBS	83		25 - 150	03/07/24 04:52	03/11/24 07:05	1
18O2 PFHxS	109		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C4 PFOS	91		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C8 FOSA	96		10 - 150	03/07/24 04:52	03/11/24 07:05	1
d3-NMeFOSAA	85		25 - 150	03/07/24 04:52	03/11/24 07:05	1
d5-NEtFOSAA	80		25 - 150	03/07/24 04:52	03/11/24 07:05	1
d-N-MeFOSA-M	77		10 - 150	03/07/24 04:52	03/11/24 07:05	1
d-N-EtFOSA-M	72		10 - 150	03/07/24 04:52	03/11/24 07:05	1
d7-N-MeFOSE-M	71		10 - 150	03/07/24 04:52	03/11/24 07:05	1
d9-N-EtFOSE-M	74		10 - 150	03/07/24 04:52	03/11/24 07:05	1
13C2 4:2 FTS	77		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C2 6:2 FTS	82		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C2 8:2 FTS	95		25 - 150	03/07/24 04:52	03/11/24 07:05	1
13C3 HFPO-DA	76		25 - 150	03/07/24 04:52	03/11/24 07:05	1

# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: Field Blank**

**Lab Sample ID: 500-246890-9**

**Date Collected: 02/29/24 16:00**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.1		4.4	2.1	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluoropentanoic acid (PFPeA)	<0.43		1.8	0.43	ng/L		03/07/24 04:52	03/11/24 07:15	1
<b>Perfluorohexanoic acid (PFHxA)</b>	<b>0.57</b>	<b>J</b>	1.8	0.51	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluoroheptanoic acid (PFHpA)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorooctanoic acid (PFOA)	<0.75		1.8	0.75	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorodecanoic acid (PFDA)	<0.27		1.8	0.27	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluoroundecanoic acid (PFUnA)	<0.97		1.8	0.97	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorododecanoic acid (PFDoA)	<0.48		1.8	0.48	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorotridecanoic acid (PFTrDA)	<1.1		1.8	1.1	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorotetradecanoic acid (PFTeA)	<0.64		1.8	0.64	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluoropentanesulfonic acid (PFPeS)	<0.26		1.8	0.26	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorohexanesulfonic acid (PFHxS)	<0.50		1.8	0.50	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorooctanesulfonic acid (PFOS)	<0.48		1.8	0.48	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorodecanesulfonic acid (PFDS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorododecanesulfonic acid (PFDoS)	<0.85		1.8	0.85	ng/L		03/07/24 04:52	03/11/24 07:15	1
Perfluorooctanesulfonamide (FOSA)	<0.86		1.8	0.86	ng/L		03/07/24 04:52	03/11/24 07:15	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<0.77		1.8	0.77	ng/L		03/07/24 04:52	03/11/24 07:15	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.38		1.8	0.38	ng/L		03/07/24 04:52	03/11/24 07:15	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.4	1.1	ng/L		03/07/24 04:52	03/11/24 07:15	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.1		4.4	1.1	ng/L		03/07/24 04:52	03/11/24 07:15	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.2		3.5	1.2	ng/L		03/07/24 04:52	03/11/24 07:15	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<0.75		1.8	0.75	ng/L		03/07/24 04:52	03/11/24 07:15	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.21		1.8	0.21	ng/L		03/07/24 04:52	03/11/24 07:15	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.2		4.4	2.2	ng/L		03/07/24 04:52	03/11/24 07:15	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.40		1.8	0.40	ng/L		03/07/24 04:52	03/11/24 07:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.35		1.8	0.35	ng/L		03/07/24 04:52	03/11/24 07:15	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.3		3.5	1.3	ng/L		03/07/24 04:52	03/11/24 07:15	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.21		1.8	0.21	ng/L		03/07/24 04:52	03/11/24 07:15	1
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 07:15	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	101		25 - 150				03/07/24 04:52	03/11/24 07:15	1
13C5 PFPeA	107		25 - 150				03/07/24 04:52	03/11/24 07:15	1
13C2 PFHxA	98		25 - 150				03/07/24 04:52	03/11/24 07:15	1

Eurofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: Field Blank**

**Lab Sample ID: 500-246890-9**

**Date Collected: 02/29/24 16:00**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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 PFHpA	99		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C4 PFOA	117		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C5 PFNA	109		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C2 PFDA	122		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C2 PFUnA	127		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C2 PFDoA	109		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C2 PFTeDA	111		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C3 PFBS	93		25 - 150	03/07/24 04:52	03/11/24 07:15	1
18O2 PFHxS	120		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C4 PFOS	117		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C8 FOSA	118		10 - 150	03/07/24 04:52	03/11/24 07:15	1
d3-NMeFOSAA	101		25 - 150	03/07/24 04:52	03/11/24 07:15	1
d5-NEtFOSAA	105		25 - 150	03/07/24 04:52	03/11/24 07:15	1
d-N-MeFOSA-M	101		10 - 150	03/07/24 04:52	03/11/24 07:15	1
d-N-EtFOSA-M	101		10 - 150	03/07/24 04:52	03/11/24 07:15	1
d7-N-MeFOSE-M	96		10 - 150	03/07/24 04:52	03/11/24 07:15	1
d9-N-EtFOSE-M	101		10 - 150	03/07/24 04:52	03/11/24 07:15	1
13C2 4:2 FTS	88		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C2 6:2 FTS	89		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C2 8:2 FTS	111		25 - 150	03/07/24 04:52	03/11/24 07:15	1
13C3 HFPO-DA	92		25 - 150	03/07/24 04:52	03/11/24 07:15	1

# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: Equipment Blank**

**Lab Sample ID: 500-246890-10**

**Date Collected: 02/29/24 16:10**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.5	2.2	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluoropentanoic acid (PFPeA)	<0.44		1.8	0.44	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorohexanoic acid (PFHxA)	<0.52		1.8	0.52	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.8	0.23	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorooctanoic acid (PFOA)	<0.77		1.8	0.77	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorononanoic acid (PFNA)	<0.24		1.8	0.24	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluoroundecanoic acid (PFUnA)	<0.99		1.8	0.99	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorobutanesulfonic acid (PFBS)	<0.18		1.8	0.18	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorohexanesulfonic acid (PFHxS)	<0.51		1.8	0.51	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorooctanesulfonic acid (PFOS)	<0.49		1.8	0.49	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorononanesulfonic acid (PFNS)	<0.33		1.8	0.33	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorododecanesulfonic acid (PFDoS)	<0.87		1.8	0.87	ng/L		03/07/24 04:52	03/11/24 07:25	1
Perfluorooctanesulfonamide (FOSA)	<0.88		1.8	0.88	ng/L		03/07/24 04:52	03/11/24 07:25	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<0.78		1.8	0.78	ng/L		03/07/24 04:52	03/11/24 07:25	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.39		1.8	0.39	ng/L		03/07/24 04:52	03/11/24 07:25	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.5	1.1	ng/L		03/07/24 04:52	03/11/24 07:25	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.2		4.5	1.2	ng/L		03/07/24 04:52	03/11/24 07:25	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.3		3.6	1.3	ng/L		03/07/24 04:52	03/11/24 07:25	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<0.77		1.8	0.77	ng/L		03/07/24 04:52	03/11/24 07:25	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 07:25	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.3		4.5	2.3	ng/L		03/07/24 04:52	03/11/24 07:25	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.41		1.8	0.41	ng/L		03/07/24 04:52	03/11/24 07:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		03/07/24 04:52	03/11/24 07:25	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.4		3.6	1.4	ng/L		03/07/24 04:52	03/11/24 07:25	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 07:25	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.29		1.8	0.29	ng/L		03/07/24 04:52	03/11/24 07:25	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	99		25 - 150				03/07/24 04:52	03/11/24 07:25	1
13C5 PFPeA	109		25 - 150				03/07/24 04:52	03/11/24 07:25	1
13C2 PFHxA	100		25 - 150				03/07/24 04:52	03/11/24 07:25	1

Eurofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: Equipment Blank**

**Lab Sample ID: 500-246890-10**

**Date Collected: 02/29/24 16:10**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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 PFHpA	102		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C4 PFOA	112		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C5 PFNA	110		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C2 PFDA	122		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C2 PFUnA	130		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C2 PFDoA	112		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C2 PFTeDA	105		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C3 PFBS	98		25 - 150	03/07/24 04:52	03/11/24 07:25	1
18O2 PFHxS	121		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C4 PFOS	111		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C8 FOSA	115		10 - 150	03/07/24 04:52	03/11/24 07:25	1
d3-NMeFOSAA	105		25 - 150	03/07/24 04:52	03/11/24 07:25	1
d5-NEtFOSAA	113		25 - 150	03/07/24 04:52	03/11/24 07:25	1
d-N-MeFOSA-M	91		10 - 150	03/07/24 04:52	03/11/24 07:25	1
d-N-EtFOSA-M	101		10 - 150	03/07/24 04:52	03/11/24 07:25	1
d7-N-MeFOSE-M	89		10 - 150	03/07/24 04:52	03/11/24 07:25	1
d9-N-EtFOSE-M	98		10 - 150	03/07/24 04:52	03/11/24 07:25	1
13C2 4:2 FTS	89		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C2 6:2 FTS	89		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C2 8:2 FTS	119		25 - 150	03/07/24 04:52	03/11/24 07:25	1
13C3 HFPO-DA	94		25 - 150	03/07/24 04:52	03/11/24 07:25	1



# Client Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: Pond**

**Lab Sample ID: 500-246890-11**

Date Collected: 02/29/24 15:25

Matrix: Water

Date Received: 03/02/24 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
<b>Perfluorobutanoic acid (PFBA)</b>	<b>5.9</b>		4.6	2.2	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.8	0.45	ng/L		03/07/24 04:52	03/11/24 07:35	1
<b>Perfluorohexanoic acid (PFHxA)</b>	<b>2.2</b>		1.8	0.53	ng/L		03/07/24 04:52	03/11/24 07:35	1
<b>Perfluoroheptanoic acid (PFHpA)</b>	<b>2.2</b>		1.8	0.23	ng/L		03/07/24 04:52	03/11/24 07:35	1
<b>Perfluorooctanoic acid (PFOA)</b>	<b>28</b>		1.8	0.78	ng/L		03/07/24 04:52	03/11/24 07:35	1
<b>Perfluorononanoic acid (PFNA)</b>	<b>0.29 J</b>		1.8	0.25	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorodecanoic acid (PFDA)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorotridecanoic acid (PFTrDA)	<1.2		1.8	1.2	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorotetradecanoic acid (PFTeA)	<0.67		1.8	0.67	ng/L		03/07/24 04:52	03/11/24 07:35	1
<b>Perfluorobutanesulfonic acid (PFBS)</b>	<b>0.89 J</b>		1.8	0.18	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.8	0.28	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorohexanesulfonic acid (PFHxS)	<0.52		1.8	0.52	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/07/24 04:52	03/11/24 07:35	1
<b>Perfluorooctanesulfonic acid (PFOS)</b>	<b>0.85 J</b>		1.8	0.50	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorododecanesulfonic acid (PFDoS)	<0.89		1.8	0.89	ng/L		03/07/24 04:52	03/11/24 07:35	1
Perfluorooctanesulfonamide (FOSA)	<0.90		1.8	0.90	ng/L		03/07/24 04:52	03/11/24 07:35	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<0.80		1.8	0.80	ng/L		03/07/24 04:52	03/11/24 07:35	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.39		1.8	0.39	ng/L		03/07/24 04:52	03/11/24 07:35	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.1		4.6	1.1	ng/L		03/07/24 04:52	03/11/24 07:35	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.2		4.6	1.2	ng/L		03/07/24 04:52	03/11/24 07:35	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.3		3.7	1.3	ng/L		03/07/24 04:52	03/11/24 07:35	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<0.78		1.8	0.78	ng/L		03/07/24 04:52	03/11/24 07:35	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 07:35	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.3		4.6	2.3	ng/L		03/07/24 04:52	03/11/24 07:35	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.42		1.8	0.42	ng/L		03/07/24 04:52	03/11/24 07:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.8	0.37	ng/L		03/07/24 04:52	03/11/24 07:35	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.4		3.7	1.4	ng/L		03/07/24 04:52	03/11/24 07:35	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.22		1.8	0.22	ng/L		03/07/24 04:52	03/11/24 07:35	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.29		1.8	0.29	ng/L		03/07/24 04:52	03/11/24 07:35	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	58		25 - 150				03/07/24 04:52	03/11/24 07:35	1
13C5 PFPeA	84		25 - 150				03/07/24 04:52	03/11/24 07:35	1

Eurofins Chicago

# Client Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

**Client Sample ID: Pond**

**Lab Sample ID: 500-246890-11**

**Date Collected: 02/29/24 15:25**

**Matrix: Water**

**Date Received: 03/02/24 09:20**

**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>
13C2 PFHxA	89		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C4 PFHpA	91		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C4 PFOA	105		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C5 PFNA	94		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C2 PFDA	101		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C2 PFUnA	107		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C2 PFDaA	80		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C2 PFTeDA	40		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C3 PFBS	78		25 - 150	03/07/24 04:52	03/11/24 07:35	1
18O2 PFHxS	103		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C4 PFOS	96		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C8 FOSA	101		10 - 150	03/07/24 04:52	03/11/24 07:35	1
d3-NMeFOSAA	90		25 - 150	03/07/24 04:52	03/11/24 07:35	1
d5-NEtFOSAA	91		25 - 150	03/07/24 04:52	03/11/24 07:35	1
d-N-MeFOSA-M	78		10 - 150	03/07/24 04:52	03/11/24 07:35	1
d-N-EtFOSA-M	73		10 - 150	03/07/24 04:52	03/11/24 07:35	1
d7-N-MeFOSE-M	70		10 - 150	03/07/24 04:52	03/11/24 07:35	1
d9-N-EtFOSE-M	65		10 - 150	03/07/24 04:52	03/11/24 07:35	1
13C2 4:2 FTS	92		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C2 6:2 FTS	92		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C2 8:2 FTS	104		25 - 150	03/07/24 04:52	03/11/24 07:35	1
13C3 HFPO-DA	76		25 - 150	03/07/24 04:52	03/11/24 07:35	1

# Definitions/Glossary

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
C	See Case Narrative
J	Reported value was between the limit of detection and the limit of quantitation.

## 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: Tramontina - CHW8334

Job ID: 500-246890-1

## LCMS

### Prep Batch: 745000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-246890-1	MW-9	Total/NA	Water	3535	
500-246890-2	MW-8	Total/NA	Water	3535	
500-246890-3	MW-7	Total/NA	Water	3535	
500-246890-4	MW-6	Total/NA	Water	3535	
500-246890-5	MW-10	Total/NA	Water	3535	
500-246890-6	MW-11	Total/NA	Water	3535	
500-246890-7	MW-12	Total/NA	Water	3535	
500-246890-8	MW-7 Dup	Total/NA	Water	3535	
500-246890-9	Field Blank	Total/NA	Water	3535	
500-246890-10	Equipment Blank	Total/NA	Water	3535	
500-246890-11	Pond	Total/NA	Water	3535	
MB 320-745000/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-745000/3-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-745000/4-A	Lab Control Sample Dup	Total/NA	Water	3535	
LLCS 320-745000/2-A	Lab Control Sample	Total/NA	Water	3535	

### Analysis Batch: 745893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-246890-1	MW-9	Total/NA	Water	537 (modified)	745000
500-246890-2	MW-8	Total/NA	Water	537 (modified)	745000
500-246890-3	MW-7	Total/NA	Water	537 (modified)	745000
500-246890-4	MW-6	Total/NA	Water	537 (modified)	745000
500-246890-5	MW-10	Total/NA	Water	537 (modified)	745000
500-246890-6	MW-11	Total/NA	Water	537 (modified)	745000
500-246890-7	MW-12	Total/NA	Water	537 (modified)	745000
500-246890-8	MW-7 Dup	Total/NA	Water	537 (modified)	745000
500-246890-9	Field Blank	Total/NA	Water	537 (modified)	745000
500-246890-10	Equipment Blank	Total/NA	Water	537 (modified)	745000
500-246890-11	Pond	Total/NA	Water	537 (modified)	745000
MB 320-745000/1-A	Method Blank	Total/NA	Water	537 (modified)	745000
LCS 320-745000/3-A	Lab Control Sample	Total/NA	Water	537 (modified)	745000
LCSD 320-745000/4-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	745000
LLCS 320-745000/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	745000

# QC Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

**Lab Sample ID: MB 320-745000/1-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorotridecanoic acid (PFTrDA)	<1.3		2.0	1.3	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.19		2.0	0.19	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		03/07/24 04:52	03/11/24 04:53	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		03/07/24 04:52	03/11/24 04:53	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	<0.87		2.0	0.87	ng/L		03/07/24 04:52	03/11/24 04:53	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	<0.43		2.0	0.43	ng/L		03/07/24 04:52	03/11/24 04:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<1.2		5.0	1.2	ng/L		03/07/24 04:52	03/11/24 04:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<1.3		5.0	1.3	ng/L		03/07/24 04:52	03/11/24 04:53	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	<1.4		4.0	1.4	ng/L		03/07/24 04:52	03/11/24 04:53	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	<0.85		2.0	0.85	ng/L		03/07/24 04:52	03/11/24 04:53	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.24		2.0	0.24	ng/L		03/07/24 04:52	03/11/24 04:53	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.5		5.0	2.5	ng/L		03/07/24 04:52	03/11/24 04:53	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.46		2.0	0.46	ng/L		03/07/24 04:52	03/11/24 04:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		03/07/24 04:52	03/11/24 04:53	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.5		4.0	1.5	ng/L		03/07/24 04:52	03/11/24 04:53	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.24		2.0	0.24	ng/L		03/07/24 04:52	03/11/24 04:53	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.32		2.0	0.32	ng/L		03/07/24 04:52	03/11/24 04:53	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	94		25 - 150	03/07/24 04:52	03/11/24 04:53	1

Eurofins Chicago

# QC Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

**Lab Sample ID: MB 320-745000/1-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C5 PFPeA	101		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C2 PFHxA	95		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C4 PFHpA	101		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C4 PFOA	108		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C5 PFNA	104		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C2 PFDA	110		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C2 PFUnA	116		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C2 PFDoA	103		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C2 PFTeDA	95		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C3 PFBS	89		25 - 150	03/07/24 04:52	03/11/24 04:53	1
18O2 PFHxS	113		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C4 PFOS	103		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C8 FOSA	100		10 - 150	03/07/24 04:52	03/11/24 04:53	1
d3-NMeFOSAA	91		25 - 150	03/07/24 04:52	03/11/24 04:53	1
d5-NEtFOSAA	95		25 - 150	03/07/24 04:52	03/11/24 04:53	1
d-N-MeFOSA-M	87		10 - 150	03/07/24 04:52	03/11/24 04:53	1
d-N-EtFOSA-M	83		10 - 150	03/07/24 04:52	03/11/24 04:53	1
d7-N-MeFOSE-M	87		10 - 150	03/07/24 04:52	03/11/24 04:53	1
d9-N-EtFOSE-M	88		10 - 150	03/07/24 04:52	03/11/24 04:53	1
13C2 4:2 FTS	78		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C2 6:2 FTS	84		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C2 8:2 FTS	97		25 - 150	03/07/24 04:52	03/11/24 04:53	1
13C3 HFPO-DA	89		25 - 150	03/07/24 04:52	03/11/24 04:53	1

**Lab Sample ID: LCS 320-745000/3-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanoic acid (PFPeA)	40.0	34.7		ng/L		87	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	38.0		ng/L		95	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	37.4		ng/L		93	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	37.3		ng/L		93	60 - 135
Perfluorononanoic acid (PFNA)	40.0	37.7		ng/L		94	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	37.5		ng/L		94	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	35.9		ng/L		90	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	35.0		ng/L		87	60 - 135
Perfluorotridecanoic acid (PFTTrDA)	40.0	31.0		ng/L		78	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	34.2		ng/L		86	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.5	32.8		ng/L		92	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.6	36.3		ng/L		97	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.5	28.7		ng/L		79	60 - 135

Eurofins Chicago

# QC Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

**Lab Sample ID: LCS 320-745000/3-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanesulfonic acid (PFHpS)	38.2	40.0		ng/L		105	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.2	32.8		ng/L		88	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.5	35.8		ng/L		93	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	32.0		ng/L		83	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.8	28.9		ng/L		75	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	39.0		ng/L		97	60 - 135
N-ethylperfluorooctane sulfonamide (NETFOSA)	40.0	38.0		ng/L		95	60 - 135
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	36.7		ng/L		92	60 - 135
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	38.1		ng/L		95	60 - 135
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	40.0	43.4		ng/L		109	60 - 135
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	40.0	35.8		ng/L		90	60 - 135
N-ethylperfluorooctane sulfonamidoethanol (NETFOSE)	40.0	36.5		ng/L		91	60 - 135
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	37.5	34.5		ng/L		92	60 - 135
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	38.1	33.6		ng/L		88	60 - 135
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	38.4	37.3		ng/L		97	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	36.1		ng/L		95	60 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	40.0	39.1		ng/L		98	60 - 135
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	37.4	33.5		ng/L		90	60 - 135
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	37.8	32.3		ng/L		85	60 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	90		25 - 150
13C5 PFPeA	98		25 - 150
13C2 PFHxA	90		25 - 150
13C4 PFHpA	97		25 - 150
13C4 PFOA	102		25 - 150
13C5 PFNA	95		25 - 150
13C2 PFDA	111		25 - 150
13C2 PFUnA	105		25 - 150
13C2 PFDoA	102		25 - 150
13C2 PFTeDA	93		25 - 150
13C3 PFBS	93		25 - 150
18O2 PFHxS	114		25 - 150

Eurofins Chicago

# QC Sample Results

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

**Lab Sample ID: LCS 320-745000/3-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
13C4 PFOS	102		25 - 150
13C8 FOSA	96		10 - 150
d3-NMeFOSAA	86		25 - 150
d5-NEtFOSAA	85		25 - 150
d-N-MeFOSA-M	90		10 - 150
d-N-EtFOSA-M	86		10 - 150
d7-N-MeFOSE-M	84		10 - 150
d9-N-EtFOSE-M	80		10 - 150
13C2 4:2 FTS	86		25 - 150
13C2 6:2 FTS	86		25 - 150
13C2 8:2 FTS	98		25 - 150
13C3 HFPO-DA	81		25 - 150

**Lab Sample ID: LCSD 320-745000/4-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	RPD Limit
							Limits	RPD		
Perfluorobutanoic acid (PFBA)	40.0	39.1		ng/L		98	60 - 135	4	30	
Perfluoropentanoic acid (PFPeA)	40.0	37.7		ng/L		94	60 - 135	8	30	
Perfluorohexanoic acid (PFHxA)	40.0	36.1		ng/L		90	60 - 135	5	30	
Perfluoroheptanoic acid (PFHpA)	40.0	38.2		ng/L		95	60 - 135	2	30	
Perfluorooctanoic acid (PFOA)	40.0	38.2		ng/L		95	60 - 135	2	30	
Perfluorononanoic acid (PFNA)	40.0	37.7		ng/L		94	60 - 135	0	30	
Perfluorodecanoic acid (PFDA)	40.0	40.3		ng/L		101	60 - 135	7	30	
Perfluoroundecanoic acid (PFUnA)	40.0	35.4		ng/L		88	60 - 135	2	30	
Perfluorododecanoic acid (PFDoA)	40.0	35.5		ng/L		89	60 - 135	1	30	
Perfluorotridecanoic acid (PFTrDA)	40.0	31.9		ng/L		80	60 - 135	3	30	
Perfluorotetradecanoic acid (PFTeA)	40.0	37.4		ng/L		93	60 - 135	9	30	
Perfluorobutanesulfonic acid (PFBS)	35.5	34.4		ng/L		97	60 - 135	5	30	
Perfluoropentanesulfonic acid (PFPeS)	37.6	36.9		ng/L		98	60 - 135	2	30	
Perfluorohexanesulfonic acid (PFHxS)	36.5	28.5		ng/L		78	60 - 135	1	30	
Perfluoroheptanesulfonic acid (PFHpS)	38.2	39.9		ng/L		105	60 - 135	0	30	
Perfluorooctanesulfonic acid (PFOS)	37.2	33.1		ng/L		89	60 - 135	1	30	
Perfluorononanesulfonic acid (PFNS)	38.5	35.0		ng/L		91	60 - 135	2	30	
Perfluorodecanesulfonic acid (PFDS)	38.6	33.0		ng/L		86	60 - 135	3	30	
Perfluorododecanesulfonic acid (PFDoS)	38.8	29.4		ng/L		76	60 - 135	2	30	
Perfluorooctanesulfonamide (FOSA)	40.0	39.9		ng/L		100	60 - 135	2	30	

Eurofins Chicago



# QC Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

**Lab Sample ID: LCSD 320-745000/4-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-ethylperfluorooctane sulfonamide (NEtFOSA)	40.0	36.8		ng/L		92	60 - 135	3	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	36.7		ng/L		92	60 - 135	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	42.1		ng/L		105	60 - 135	10	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	45.5		ng/L		114	60 - 135	5	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	40.0	38.0		ng/L		95	60 - 135	6	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	40.0	38.1		ng/L		95	60 - 135	4	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	37.5	36.8		ng/L		98	60 - 135	7	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	38.1	33.2		ng/L		87	60 - 135	1	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	38.4	36.5		ng/L		95	60 - 135	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	37.4		ng/L		99	60 - 135	4	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	40.0	39.9		ng/L		100	60 - 135	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	37.4	33.3		ng/L		89	60 - 135	0	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	37.8	33.8		ng/L		90	60 - 135	5	30

Isotope Dilution	LCSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	93		25 - 150
13C5 PFPeA	99		25 - 150
13C2 PFHxA	97		25 - 150
13C4 PFHpA	97		25 - 150
13C4 PFOA	104		25 - 150
13C5 PFNA	102		25 - 150
13C2 PFDA	108		25 - 150
13C2 PFUnA	112		25 - 150
13C2 PFDoA	109		25 - 150
13C2 PFTeDA	102		25 - 150
13C3 PFBS	92		25 - 150
18O2 PFHxS	115		25 - 150
13C4 PFOS	102		25 - 150
13C8 FOSA	98		10 - 150
d3-NMeFOSAA	85		25 - 150
d5-NEtFOSAA	83		25 - 150
d-N-MeFOSA-M	86		10 - 150
d-N-EtFOSA-M	84		10 - 150
d7-N-MeFOSE-M	83		10 - 150
d9-N-EtFOSE-M	81		10 - 150
13C2 4:2 FTS	76		25 - 150
13C2 6:2 FTS	90		25 - 150

# QC Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

**Lab Sample ID: LCSD 320-745000/4-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Isotope Dilution	LCSD LCSD		Limits
	%Recovery	Qualifier	
13C2 8:2 FTS	96		25 - 150
13C3 HFPO-DA	85		25 - 150

**Lab Sample ID: LLCS 320-745000/2-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	8.00	7.68		ng/L		96	50 - 150
Perfluoropentanoic acid (PFPeA)	8.00	7.50		ng/L		94	50 - 150
Perfluorohexanoic acid (PFHxA)	8.00	8.86		ng/L		111	50 - 150
Perfluoroheptanoic acid (PFHpA)	8.00	8.53		ng/L		107	50 - 150
Perfluorooctanoic acid (PFOA)	8.00	7.88		ng/L		98	50 - 150
Perfluorononanoic acid (PFNA)	8.00	8.11		ng/L		101	50 - 150
Perfluorodecanoic acid (PFDA)	8.00	8.74		ng/L		109	50 - 150
Perfluoroundecanoic acid (PFUnA)	8.00	7.59		ng/L		95	50 - 150
Perfluorododecanoic acid (PFDoA)	8.00	8.09		ng/L		101	50 - 150
Perfluorotridecanoic acid (PFTTrDA)	8.00	6.44		ng/L		81	50 - 150
Perfluorotetradecanoic acid (PFTeA)	8.00	6.36		ng/L		79	50 - 150
Perfluorobutanesulfonic acid (PFBS)	7.10	6.91		ng/L		97	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	7.52	7.44		ng/L		99	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	7.30	5.82		ng/L		80	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	7.63	7.69		ng/L		101	50 - 150
Perfluorooctanesulfonic acid (PFOS)	7.44	6.37		ng/L		86	50 - 150
Perfluorononanesulfonic acid (PFNS)	7.70	6.91		ng/L		90	50 - 150
Perfluorodecanesulfonic acid (PFDS)	7.71	6.41		ng/L		83	50 - 150
Perfluorododecanesulfonic acid (PFDoS)	7.76	5.75		ng/L		74	50 - 150
Perfluorooctanesulfonamide (FOSA)	8.00	8.21		ng/L		103	50 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	8.00	7.67		ng/L		96	50 - 150
N-methylperfluorooctane sulfonamide (NMeFOSA)	8.00	6.62		ng/L		83	50 - 150
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	8.00	7.72		ng/L		97	50 - 150
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	8.00	8.70		ng/L		109	50 - 150
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	8.00	7.92		ng/L		99	50 - 150
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	8.00	7.31		ng/L		91	50 - 150

Eurofins Chicago

# QC Sample Results

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

**Lab Sample ID: LLCS 320-745000/2-A**  
**Matrix: Water**  
**Analysis Batch: 745893**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 745000**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	7.50	6.97		ng/L		93	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	7.62	6.82		ng/L		89	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.68	7.11		ng/L		93	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.57	6.68		ng/L		88	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	8.00	7.75		ng/L		97	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	7.47	6.99		ng/L		94	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	7.55	6.77		ng/L		90	50 - 150

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C4 PFBA	95		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	93		25 - 150
13C4 PFHpA	95		25 - 150
13C4 PFOA	108		25 - 150
13C5 PFNA	99		25 - 150
13C2 PFDA	108		25 - 150
13C2 PFUnA	115		25 - 150
13C2 PFDoA	104		25 - 150
13C2 PFTeDA	92		25 - 150
13C3 PFBS	92		25 - 150
18O2 PFHxS	116		25 - 150
13C4 PFOS	108		25 - 150
13C8 FOSA	106		10 - 150
d3-NMeFOSAA	92		25 - 150
d5-NEtFOSAA	93		25 - 150
d-N-MeFOSA-M	92		10 - 150
d-N-EtFOSA-M	92		10 - 150
d7-N-MeFOSE-M	88		10 - 150
d9-N-EtFOSE-M	86		10 - 150
13C2 4:2 FTS	84		25 - 150
13C2 6:2 FTS	90		25 - 150
13C2 8:2 FTS	100		25 - 150
13C3 HFPO-DA	88		25 - 150

# Lab Chronicle

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

## Client Sample ID: MW-9

Date Collected: 02/29/24 09:30

Date Received: 03/02/24 09:20

## Lab Sample ID: 500-246890-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 05:33

## Client Sample ID: MW-8

Date Collected: 02/29/24 10:25

Date Received: 03/02/24 09:20

## Lab Sample ID: 500-246890-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 05:43

## Client Sample ID: MW-7

Date Collected: 02/29/24 11:35

Date Received: 03/02/24 09:20

## Lab Sample ID: 500-246890-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 05:54

## Client Sample ID: MW-6

Date Collected: 02/29/24 13:10

Date Received: 03/02/24 09:20

## Lab Sample ID: 500-246890-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 06:04

## Client Sample ID: MW-10

Date Collected: 02/29/24 14:15

Date Received: 03/02/24 09:20

## Lab Sample ID: 500-246890-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 06:14

## Client Sample ID: MW-11

Date Collected: 02/29/24 15:05

Date Received: 03/02/24 09:20

## Lab Sample ID: 500-246890-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 06:44

# Lab Chronicle

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

## Client Sample ID: MW-12

Date Collected: 02/29/24 15:40

Date Received: 03/02/24 09:20

Lab Sample ID: 500-246890-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 06:55

## Client Sample ID: MW-7 Dup

Date Collected: 02/29/24 11:37

Date Received: 03/02/24 09:20

Lab Sample ID: 500-246890-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 07:05

## Client Sample ID: Field Blank

Date Collected: 02/29/24 16:00

Date Received: 03/02/24 09:20

Lab Sample ID: 500-246890-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 07:15

## Client Sample ID: Equipment Blank

Date Collected: 02/29/24 16:10

Date Received: 03/02/24 09:20

Lab Sample ID: 500-246890-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 07:25

## Client Sample ID: Pond

Date Collected: 02/29/24 15:25

Date Received: 03/02/24 09:20

Lab Sample ID: 500-246890-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3535			745000	HJA	EET SAC	03/07/24 04:52
Total/NA	Analysis	537 (modified)		1	745893	RS1	EET SAC	03/11/24 07:35

### 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: Tramontina - CHW8334

Job ID: 500-246890-1

## Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998204680	08-31-24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



IAN EVANS  
EUROFINS  
4125 N 124TH STREET  
BROOKFIELD, WI 53005  
UNITED STATES US

ACTWGT: 53.95 LB  
CAD: 0780307/CAFE3755

BILL RECIPIENT

Part # 159498-434 M/TW EXP 03/24  
S66CC/70595



500-246890 Waybi

TO **SAMPLE RECEIPT**  
**EUROFINS - CHICAGO**  
**2417 BOND ST.**

**3.7+3.2**

**UNIVERSITY PARK IL 60484**

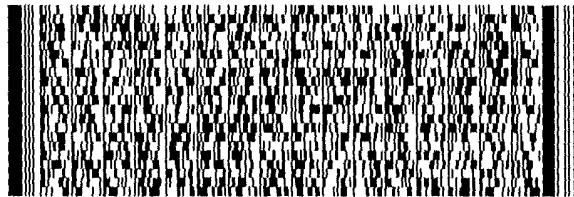
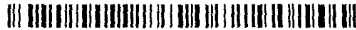
(708) 684-6200

REF:

DEPT:

IRU:

PO:



**FedEx**  
Express



AN 1071590208227

2 of 4

**SATURDAY 12:00P**

MPS# **7252 5234 1600**

**PRIORITY OVERNIGHT**

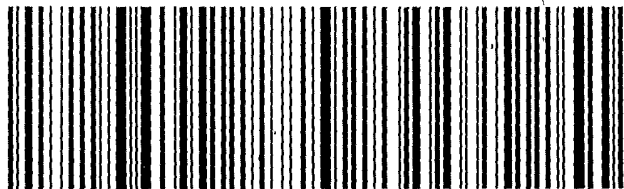
Mstr# 7252 5234 1596

0201

**XO JOTA**

**60484**

IL-US **ORD**



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



**Eurofins Chicago**

2417 Bond Street  
 University Park, IL 60484  
 Phone: 708-534-5200 Fax: 708-534-5211

**Chain of Custody Record**



Environment Testing

<b>Client Information (Sub Contract Lab)</b>		Sampler	Lab PM:		Carrier Tracking No(s).		COC No:			
Client Contact		Phone:	Fredrick, Sandie		State of Origin:		500-185264.1			
Shipping/Receiving			E-Mail:		Wisconsin		Page:			
Company		Accreditations Required (See note):				Job #:				
Eurofins Environment Testing Northern Ca		State - Wisconsin				500-246890-1				
Address:		Due Date Requested		<b>Analysis Requested</b>					<b>Preservation Codes:</b>	
880 Riverside Parkway,		3/25/2024								
City:		TAT Requested (days):								
West Sacramento										
State, Zip:		PO #:								
CA, 95605				Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		PFC IDA, WJ13535_PFC_28D PFAS, Standard List (33 analytes)		
Phone:		WO #:		Total Number of containers		A - HCL		M - Hexane		
916-373-5600(Tel) 916-372-1059(Fax)						B - NaOH		N - None		
Email:						C - Zn Acetate		O - AsNaO2		
						D - Nitric Acid		P - Na2O4S		
Project Name:		Project #:				E - NaHSO4		Q Na2SO3		
Tramontna - CHW8334		50022825				F - MeOH		R Na2S2O3		
Site:		SSOW#:				G - Amchlor		S H2SO4		
						H - Ascorbic Acid		T TSP Dodecahydrate		
						I - Ice		U - Acetone		
						J - DI Water		V MCAA		
						K - EDTA		W - pH 4-5		
						L - EDA		Y Trizma		
								Z - other (specify)		
								Other:		
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=grab)</b>	<b>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>			<b>Special Instructions/Note</b>		
MW-9 (500-246890-1)		2/29/24	09 30 Central	Water	Water	X			2	
MW-8 (500-246890-2)		2/29/24	10 25 Central	Water	Water	X			2	
MW-7 (500-246890-3)		2/29/24	11 35 Central	Water	Water	X			2	
MW-6 (500-246890-4)		2/29/24	13 10 Central	Water	Water	X			2	
MW-10 (500-246890-5)		2/29/24	14 15 Central	Water	Water	X			2	
MW-11 (500-246890-6)		2/29/24	15 05 Central	Water	Water	X			2	
MW-12 (500-246890-7)		2/29/24	15 40 Central	Water	Water	X			2	
MW-7 Dup (500-246890-8)		2/29/24	11 37 Central	Water	Water	X			2	
Field Blank (500-246890-9)		2/29/24	16 00 Central	Water	Water	X			2	

Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.

<b>Possible Hazard Identification</b>		<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>	
Unconfirmed		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested I, II, III, IV Other (specify)		Special Instructions/QC Requirements	
Primary Deliverable Rank: 2			

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by: <i>Shirley Scott</i>		Date/Time: 3/4/24 08:30	Company:	Received by: <i>[Signature]</i>	
Relinquished by:		Date/Time:	Company:	Date/Time: 3/6/24 9:00	
Relinquished by:		Date/Time:	Company:	Company:	

Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No: <i>2370549</i>	Cooler Temperature(s) °C and Other Remarks: <i>1.7c</i>
---	---------------------------------	---





# Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 500-246890-1

**Login Number: 246890**

**List Number: 1**

**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2
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.	True	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 500-246890-1

**Login Number: 246890**

**List Number: 2**

**Creator: Simmons, Jason C**

**List Source: Eurofins Sacramento**

**List Creation: 03/06/24 04:19 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	2370549
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7c
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Isotope Dilution Summary

Client: Geosyntec Consultants Inc  
Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-246890-1	MW-9	75	88	87	83	100	86	93	97
500-246890-2	MW-8	79	86	83	85	99	85	90	91
500-246890-3	MW-7	72	83	86	85	102	88	97	95
500-246890-4	MW-6	89	107	101	95	108	102	110	114
500-246890-5	MW-10	87	94	94	94	106	98	107	107
500-246890-6	MW-11	26	72	83	87	104	89	99	108
500-246890-7	MW-12	76	91	92	91	104	94	102	107
500-246890-8	MW-7 Dup	70	85	86	87	103	88	97	100
500-246890-9	Field Blank	101	107	98	99	117	109	122	127
500-246890-10	Equipment Blank	99	109	100	102	112	110	122	130
500-246890-11	Pond	58	84	89	91	105	94	101	107
LCS 320-745000/3-A	Lab Control Sample	90	98	90	97	102	95	111	105
LCS 320-745000/4-A	Lab Control Sample Dup	93	99	97	97	104	102	108	112
LLCS 320-745000/2-A	Lab Control Sample	95	102	93	95	108	99	108	115
MB 320-745000/1-A	Method Blank	94	101	95	101	108	104	110	116

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
500-246890-1	MW-9	84	87	77	100	89	95	85	86
500-246890-2	MW-8	75	76	74	101	85	92	74	74
500-246890-3	MW-7	83	76	82	101	92	94	86	82
500-246890-4	MW-6	98	89	95	123	111	114	96	98
500-246890-5	MW-10	92	87	86	113	106	106	87	98
500-246890-6	MW-11	90	88	79	100	97	100	77	96
500-246890-7	MW-12	82	76	82	115	98	101	72	96
500-246890-8	MW-7 Dup	81	77	83	109	91	96	85	80
500-246890-9	Field Blank	109	111	93	120	117	118	101	105
500-246890-10	Equipment Blank	112	105	98	121	111	115	105	113
500-246890-11	Pond	80	40	78	103	96	101	90	91
LCS 320-745000/3-A	Lab Control Sample	102	93	93	114	102	96	86	85
LCS 320-745000/4-A	Lab Control Sample Dup	109	102	92	115	102	98	85	83
LLCS 320-745000/2-A	Lab Control Sample	104	92	92	116	108	106	92	93
MB 320-745000/1-A	Method Blank	103	95	89	113	103	100	91	95

		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)
500-246890-1	MW-9	71	66	71	76	72	78	85	77
500-246890-2	MW-8	74	71	65	67	70	72	86	77
500-246890-3	MW-7	73	77	64	73	75	82	98	75
500-246890-4	MW-6	72	78	68	78	118	90	116	86
500-246890-5	MW-10	70	78	69	75	82	86	116	85
500-246890-6	MW-11	60	84	64	85	63	84	119	73
500-246890-7	MW-12	53	75	53	73	97	93	133	77
500-246890-8	MW-7 Dup	77	72	71	74	77	82	95	76
500-246890-9	Field Blank	101	101	96	101	88	89	111	92
500-246890-10	Equipment Blank	91	101	89	98	89	89	119	94
500-246890-11	Pond	78	73	70	65	92	92	104	76
LCS 320-745000/3-A	Lab Control Sample	90	86	84	80	86	86	98	81
LCS 320-745000/4-A	Lab Control Sample Dup	86	84	83	81	76	90	96	85

# Isotope Dilution Summary

Client: Geosyntec Consultants Inc  
 Project/Site: Tramontina - CHW8334

Job ID: 500-246890-1

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

Matrix: Water

Prep Type: Total/NA

### Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)	HFPODA (25-150)
LLCS 320-745000/2-A	Lab Control Sample	92	92	88	86	84	90	100	88
MB 320-745000/1-A	Method Blank	87	83	87	88	78	84	97	89

### Surrogate Legend

PFBA = 13C4 PFBA  
 PFPeA = 13C5 PFPeA  
 PFHxA = 13C2 PFHxA  
 C4PFHA = 13C4 PFHpA  
 PFOA = 13C4 PFOA  
 PFNA = 13C5 PFNA  
 PFDA = 13C2 PFDA  
 PFUnA = 13C2 PFUnA  
 PFDoA = 13C2 PFDoA  
 PFTDA = 13C2 PFTeDA  
 C3PFBS = 13C3 PFBS  
 PFHxS = 18O2 PFHxS  
 PFOS = 13C4 PFOS  
 PFOSA = 13C8 FOSA  
 d3NMFOS = d3-NMeFOSAA  
 d5NEFOS = d5-NEtFOSAA  
 dMeFOSA = d-N-MeFOSA-M  
 dEtFOSA = d-N-EtFOSA-M  
 NMFM = d7-N-MeFOSE-M  
 NEFM = d9-N-EtFOSE-M  
 M242FTS = 13C2 4:2 FTS  
 M262FTS = 13C2 6:2 FTS  
 M282FTS = 13C2 8:2 FTS  
 HFPODA = 13C3 HFPO-DA