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ANNUAL GROUNDWATER MONITORING REPORT (2025-2026)

Shelton C Street Landfill, Shelton, Washington

Prepared for

City of Shelton

Prepared by

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Project: 26005446

August 7, 2026

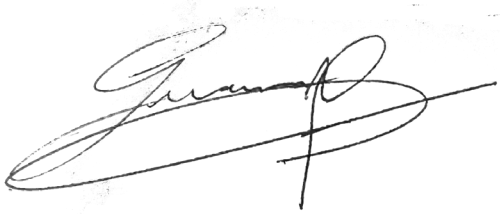
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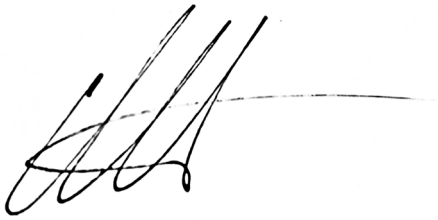
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EXECUTIVE SUMMARY

Geosyntec Consultants Inc. prepared this Annual Groundwater Monitoring Report to present the results of post-construction monitoring conducted at the Shelton C Street Landfill, a former municipal solid waste landfill, located in Shelton, Washington (Site; Figure 1). The Site is located on a 16.7-acre parcel (Property; Figure 1) owned by the City of Shelton (City). The Property is at the west end of the West C Street, just west of the overpass across U.S. Highway 101.

This Annual Groundwater Monitoring Report describes work completed between July 1, 2025, and June 30, 2026, and partially fulfills the Agreed Order No. DE 19541 (Agreed Order) between the Washington State Department of Ecology (Ecology) and the City, executed on December 20, 2021. Site cleanup activities were consistent with Ecology-approved plans prepared in accordance with the Model Toxics Control Act (MTCA), Chapter 70.105D Revised Code of Washington (RCW), and the MTCA Cleanup Regulation, Chapter 173-340 of the Washington Administrative Code (WAC).

Semiannual confirmation groundwater monitoring was completed at four monitoring wells on August 12, 2025, during seasonal low water levels, on and March 2, 2026, during seasonal high water levels, representing the fifth and sixth post-construction events, respectively.

Major findings included the following:

- Groundwater flow conditions remained consistent with historically observed conditions. Soil cap installation and stormwater drainage has not measurably affected groundwater flow direction or gradient.
- Groundwater quality remained within the historical ranges for field parameters, manganese, and arsenic. Background concentrations have been higher than groundwater quality standards, influencing compliance assessment.
- Groundwater quality for per- and polyfluoroalkyl substances (PFAS) were reliably quantified and compared to surface water quality criteria and drinking water quality criteria. Considering the low risk for PFAS to receptors, continued PFAS sampling and analysis is not recommended.
- Soil cap integrity appeared good based on visual inspections and settlement marker survey results.

Confirmation monitoring will continue for both groundwater and soil cover integrity until compliance is achieved. Groundwater compliance will be achieved when the average concentration of four consecutive sampling events is below the cleanup level or background concentration. Soil cap compliance will be achieved when the settlement is less than ½ inch every 2 years and inspections reflect stable conditions.

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ACRONYMS AND ABBREVIATIONS

6:2 FTS	6:2 Fluorotelomer sulfonic acid
Bgs	below ground surface
CAP	Cleanup Action Plan
CCR	Construction Completion Report
City	City of Shelton
DO	dissolved oxygen
DQR	Data Quality Review
Ecology	Washington Department of Ecology
EDR	Engineering Design Report
EIM	Environmental Information Management
EPA	United States Environmental Protection Agency
Geosyntec	Geosyntec Consultants
HFPO-DA	Hexafluoropropylene Oxide Dimer Acid
MCL	Maximum Contaminant Level
µg/L	micrograms per liter
MTCA	Model Toxics Control Act
ng/L	nanograms per liter
NTU	nephelometric turbidity unit
ORP	oxidation reduction potential
PFAS	per- and polyfluoroalkyl substances
PFBA	Perfluorobutanoic acid
PFBS	Perfluorobutane sulfonic acid
PFDA	Perfluorodecanoic acid
PFDoA	Perfluorodecanoic acid
PFHpA	perfluoroheptanoic acid
PFHpS	perfluoroheptane sulfonic acid
PFHxA	Perfluorohexanoic acid
PFHxS	Perfluorohexane sulfonic acid
PFNA	Perfluorononanoic acid
PFOA	Perfluorooctanoic acid

PFOS	Perfluorooctane sulfonic acid
PFPeA	perfluoropentanoic acid
PFUnA	Perfluoroundecanoic acid
QA/QC	quality assurance/quality control
RCW	Revised Code of Washington
RI/FS	Remedial Investigation/Feasibility Study
SAP	Sampling Analysis Plan
WAC	Washington Administrative Code
WWTP	wastewater treatment plant

1. INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec) prepared this Annual Groundwater Monitoring Report to present the results of confirmation monitoring conducted at the Shelton C Street Landfill, a former municipal solid waste landfill, located in Shelton, Washington (Site; Figure 1). The Site is located on a 16.7-acre parcel (Property; Figure 1) owned by the City of Shelton (City). The Property sits at the west end of West C Street, just west of the overpass across U.S. Highway 101.

This Annual Groundwater Monitoring Report describes work completed between July 1, 2025, and June 30, 2026, and partially fulfills the cleanup activities required by Agreed Order No. DE 19541 (Agreed Order) between the Washington State Department of Ecology (Ecology) and the City, executed on December 20, 2021. Work was done consistent with Ecology-approved remedial action plans prepared in accordance with the Model Toxics Control Act (MTCA), Chapter 70.105D Revised Code of Washington (RCW), and the MTCA Cleanup Regulation, Chapter 173-340 of the Washington Administrative Code (WAC).

Governing documents for Site cleanup activities include the Cleanup Action Plan (CAP; Ecology 2021) and the Engineering Design Report (EDR; Aspect 2022a and 2022b) which collectively provide the plans, specifications, and monitoring requirements for the engineering concepts of the cleanup action. Installation of the soil cap over the consolidated waste area is documented in the Construction Completion Report (CCR; Aspect 2023a). Details of groundwater monitoring are described in

- the Groundwater Sampling and Analysis Plan (hereafter "Confirmation SAP") provided in Section A.5 of the Compliance Monitoring Plan, Appendix A of the EDR (Aspect 2022b); and
- the PFAS Sampling and Analysis Plan (hereafter "PFAS SAP"; Aspect 2025a).

Details of confirmation monitoring for soil cap integrity followed the Inspection, Monitoring, and Maintenance (I, M, and M) Plan (Aspect 2023b) and Sections A.3 and A.4 of the Compliance Monitoring Plan, Appendix A of the EDR (Aspect 2022b).

1.1 Report Organization

The following sections of this report are organized as follows:

- **Section 2 – Site Background** briefly describes use history of the Property and gives an overview of the cleanup action.
- **Section 3 – Groundwater Monitoring** activities describe the purpose, scope, methods, and results of the semiannual groundwater monitoring events.
- **Section 4 – Soil Cap Integrity Assessment** describes the purpose, scope, methods, and results of semiannual soil cap inspections and settlement marker surveys.
- **Section 5 – Conclusion** briefly evaluates the groundwater monitoring results relative to cleanup goals and presents the schedule for ongoing monitoring.

- **Section 6 – References** list the documents cited in this report.
- **Section 7 – Limitations** provide guidelines for additional information governing the use of this report.

2. SITE BACKGROUND

In 2016, the City entered into Agreed Order No. DE 12929 with Ecology to perform a Remedial Investigation and Feasibility Study (RI/FS) and submit a draft CAP for the Site. The RI field work was completed in 2020, and the final RI/FS report was provided to Ecology in 2021 along with the draft CAP, fulfilling the requirements of Agreed Order No. DE 12929.

In 2021, the City entered into Agreed Order No. DE 19541 with Ecology to implement the cleanup action described in the draft CAP. The completed requirements of the 2021 Agreed Order include

- preparing the EDR with the Compliance Monitoring Plan, construction plans, and specifications between Jan 2021 and July 2022 (Aspect 2022a);
- conducting the cleanup construction;
- preparing the CCR in October 2023 (Aspect 2023a);
- conducting the first year of post-construction groundwater monitoring and sampling (Aspect 2024);
- conducting the second year of post-construction groundwater monitoring and sampling (Aspect 2025b); and
- recording the Environmental Covenant in April 2025.

In a March 20, 2025, letter to the City, Ecology identified landfills as sources of per- and polyfluoroalkyl substances (PFAS) to the environment and stated a requirement to add PFAS to the analytical program for groundwater sampling at the Site (Ecology 2025). The PFAS sampling objectives and approach were outlined and presented in the PFAS SAP (Aspect 2025a). PFAS were sampled in both the August 2025 and March 2026 sampling events. Results were screened against MTCA Modified Method B and the findings are discussed in this report.

2.1 Site Use History

The Property was purchased by the City in May 1928, including both the parcel and a perpetual easement for access; landfilling activities started the same year. In July 1931, the City sold the Property to Rainier Pulp and Paper Company but retained the right to continue to use the land as a garbage dump. Rayonier, Incorporated, successor of Rainier Pulp and Paper Company, sold the Property back to the City in July 1949.

The landfill received municipal solid waste between approximately 1928 and the mid-1980s. Early on, waste consolidation practices included open burning and on-Property incineration, common for the era (Aspect 2021). Between 1931 and 1974, the landfill received by-products, research waste, and demolition debris from nearby pulp mills. Sludge from the City's wastewater treatment plant (WWTP) was brought to the landfill between 1973 and the mid-1980s. From 1976 to 1981, fly ash from the wood-burning power plant at the Simpson Timber Company mill was mixed with the WWTP sludge and put in the landfill. The WWTP sludge was disposed of in the northwestern part of the landfill and is estimated to be up to 5 feet thick. The cover soil and WWTP sludge overlie municipal solid waste that is approximately 20 to 25 feet thick.

The Property has been generally unused since the mid-1980s, and public access to the Property and surrounding properties is restricted for safety reasons. There is no available information documenting landfill closure activities, and it is not known whether any were completed. However, the results of investigation activities suggest that some of the landfill waste was covered with imported soil.

2.2 Cleanup Action Overview

The cleanup activities were designed to improve protection of human health and the environment at the Site and are documented in the CCR (Aspect 2023a). Cleanup construction occurred between April and June 2023 and consisted of construction of a low permeability soil cap over the full extent of landfill waste, and installation of a fence with signage at the cap perimeter to restrict unauthorized access to the landfill. Cleanup action construction was substantially completed on June 14, 2023. An environmental covenant in the form of deed restriction, which prevents future unrestricted development or any other activities resulting in potential exposure to landfill waste, was recorded on April 17, 2025.

Confirmation monitoring is being conducted to verify the remedy remains protective over time. Groundwater quality is being monitored to document sustained groundwater protection, as described in the Groundwater Sampling and Analysis Plan, which is included in the Compliance Monitoring Plan (Aspect 2022). Starting in 2025, groundwater quality for PFAS is being monitored to investigate the nature and extent of this emerging contaminant, as described in the PFAS SAP (Aspect 2025a). These documents outline procedures for post-construction groundwater monitoring and sampling and periodic reporting.

The soil cap is being monitored to document sustained integrity, as described in the I, M, and M Plan (Aspect 2023b) and the Compliance Monitoring Plan (Aspect 2022a). These documents outline procedures for post-construction soil cap monitoring, which consists of annual survey of the soil cap settlement markers, periodic Site inspections, and as-needed maintenance.

3. GROUNDWATER MONITORING ACTIVITIES

Confirmation groundwater monitoring and sampling started in August 2023, approximately 2 months after substantial completion of cleanup action construction. The monitoring well network at the Site consists of four monitoring wells, AMW-1 through AMW-4, that were originally installed as part of the RI, with AMW-3 positioned upgradient of the landfill and representing background conditions. The monitoring wells are constructed with a 20-foot screened interval at the top of the water bearing zone, which is present within recessional outwash, to total depths of 105 to 120 feet below ground surface (bgs; Aspect 2021). The locations of the monitoring wells are shown relative to the landfill and other Property features on Figures 2 and 3.

3.1 Field Activities

The groundwater monitoring events consisted of measuring groundwater levels and collecting groundwater samples for laboratory analysis.

Groundwater levels were measured using an electronic water level indicator (decontaminated between wells) from the top of the north side of the well casing stickup. Each water level measurement was recorded to the nearest hundredth of a foot, relative to the top of the north side of the well casing.

A certified PFAS-free portable QED bladder pump, decontaminated between wells, and new PFAS-free tubing were used for groundwater low-flow purging and sampling during both monitoring events as per the PFAS SAP (Aspect 2025a). Groundwater samples were collected from the monitoring wells using low-flow sampling methodology following purging and stabilization of field parameters measured using equipment calibrated for temperature, specific conductivity, dissolved oxygen (DO), pH, oxidation reduction potential (ORP), and turbidity as per the Confirmation SAP (Aspect 2022).

Groundwater samples were placed on ice in a cooler and transported under standard chain-of-custody procedures to the receiving laboratories. A set of groundwater samples were delivered to Friedman & Bruya, Inc. of Seattle, Washington, for laboratory analysis of total iron and total manganese using United States Environmental Protection Agency (EPA) Method 200.8. A second set of groundwater samples were delivered to Eurofins of Sacramento, California, for laboratory analysis of PFAS using EPA Method 1633.

3.2 Quality Assurance and Quality Control

Geosyntec performed a Data Quality Review (DQR) of all analytical data for this study. Geosyntec's standard DQR is based on the EPA Stage 2A data validation, with minor modifications designed to meet Geosyntec's internal data quality and management program goals and requirements and other project-specific objectives. The results of quality assurance/quality control (QA/QC) samples (field duplicate samples as summarized in Table 1), laboratory-applied flags, and laboratory-provided analysis comments are reviewed. Qualifier flags are assigned to the data where appropriate, which indicate data usability for study goals and objectives.

Based on review of the laboratory QA/QC results, the results of Geosyntec's DQR, and review of the data qualifiers, it is Geosyntec's opinion that the data for this study are known to be of good quality and are acceptable for use for project goals, and objectives are qualified. The validated data set has been uploaded to Ecology's Environmental Information Management (EIM) System in accordance with the Agreed Order.

3.3 Confirmation Monitoring Results

This section summarizes the results of confirmation groundwater monitoring and sampling, as described in the Sampling and Analysis Plan (Aspect 2022).

3.3.1 Groundwater Levels and Flow Direction

The inferred groundwater flow conditions observed during the reporting period were consistent with historical conditions at the Site. The groundwater table is present within Quaternary recessional glacial outwash (Aspect 2021) at least 50 feet below the estimated bottom of landfill waste. Groundwater elevations ranged from 64.27 to 65.65 feet NAVD88[1] during the low-water event in August 2025, and rose over 6 feet to a range of 70.96 to 71.56 feet NAVD88 during the high-water event in March 2026. The inferred groundwater flow direction in August 2025, and in March 2026, was due south-southeast, as shown on Figures 2 and 3, respectively. Historically observed groundwater level elevations are listed on Table 1 and shown on Figure 4 (top left chart).

3.3.2 Groundwater Field Parameters

Groundwater field parameters observed during the reporting period were generally consistent with historical ranges and variability. Historically observed groundwater field parameters are listed on Table 1 and presented with a series of charts on Figure 4. The background conditions observed at upgradient well AMW-3 are indicated with lines connecting data points.

Baseline data collected to support the RI/FS show significant variability before soil cap installation. Similar variability has been observed during post-construction period. This variability potentially reflects seasonality and/or long-term influences on groundwater quality spanning Site investigation and confirmation monitoring.

- Temperatures at the background well AMW-3 reflected lower flow rates (due to greater depth to water) and occasional influence of seasonal ambient temperatures. Other wells ranged from 9 to 16 degrees Celsius.
- Specific conductance at AMW-3 and AMW-4 showed greater variability in background or cross-gradient concentrations than AMW-1 and AMW-2 which have been stable and low over time. Downgradient specific conductance reflects limited liquid-phase transport.
- Background DO has spanned anaerobic to aerobic conditions both before and after soil cap installation. Groundwater in other wells are generally more aerobic than background conditions. Aerobic conditions are favorable for groundwater quality because iron and manganese tend to precipitate.

[1] North American Vertical Datum of 1988 (NAVD88)

- Background pH observed at AMW-3 has been distinctively neutral compared to the slightly acidic conditions observed at other monitoring wells where pH has ranged as low as 6. Iron and manganese tend to dissolve in acidic groundwater, so neutral conditions are favorable for groundwater quality. Carbon dioxide in landfill gas may be influencing soil moisture and groundwater acidity.
- Background ORP has been positive (oxidizing) and variable before and after soil cap installation. Iron and manganese tend to precipitate under oxidizing conditions, and the increasing ORP trends are favorable for groundwater quality.

3.3.3 Secondary Contaminants Analytical Results

Groundwater quality, based on observed secondary contaminants, was generally within the historical range. However, turbidity in the groundwater samples may have biased total metals concentrations on the high side as discussed below.

Groundwater samples for total iron and total manganese using EPA Method 200.8 were collected in laboratory-supplied containers with acid preservative. The acid dissolves any suspended solids in the sample. Typically, the goal during purging is to achieve turbidity less than 10 nephelometric turbidity units (NTUs) to avoid biasing total metals results high. However, the turbidity goal has frequently not been attainable within a practical timeframe due to aquifer conditions, well construction, and the use of non-dedicated sampling pumps.

The analytical results of the groundwater samples were evaluated relative to the Site-Specific cleanup levels developed during the RI/FS (Aspect 2021) and background conditions. Historical results for turbidity, total iron, and manganese are listed on Table 1 and presented in a series of charts on Figure 5. Note that the charts on Figure 5 are semi-logarithmic to show the wide range of observed turbidity and total metals concentrations relative to goals and cleanup levels. Laboratory reports are included in Appendix A.

August 2025 Results

- The background concentrations in AMW-3 could not be determined due to sampling equipment malfunction.
- Total iron concentration was below the Site-specific cleanup level of 300 micrograms per liter (µg/L) in AMW-1 (200 µg/L). Total iron concentration exceeded the Site-specific cleanup level in wells AMW-2 (400 µg/L) and AMW 4 (1,300 µg/L).
- Total manganese concentration was below the Site-specific cleanup level of 50 µg/L in AMW-1 (31 µg/L) and AMW-4 (18 µg/L). Total manganese concentration exceeded the Site-specific cleanup level in well AMW-2 (1,900 µg/L).

March 2026 Results

- Total iron background concentration in AMW-3 was 1,500 µg/L and exceeded the Site-specific cleanup level of 300 µg/L. The total iron concentration was less than background in AMW-1 (550 µg/L) and was greater than background at AMW-2 (2,200 µg/L) and AMW-4 (11,000 µg/L).

- Total manganese background concentrations in AMW-3 was 2,000 µg/L and exceeded the Site-specific cleanup levels of 50 µg/L. Total manganese concentration was less than background at AMW-1 (84 µg/L) and AMW-4 (330 µg/L) and was greater than background in AMW-2 (7,400 µg/L).

Alternative methods to evaluate iron and manganese in Site groundwater and to limit the bias of turbidity include the following sampling methods:

- collecting samples using a 0.45-micrometer filter, or
- collecting samples using dual membrane passive diffusion bag sampling equipment with 0.006-inch pores (152 micrometers).

3.4 PFAS Analytical Results

In response to Ecology's March 20, 2025, letter to the City (Ecology 2025), PFAS were sampled during both the August 2025 and March 2026 sampling events in accordance with the PFAS SAP (Geosyntec 2025). The objective of the PFAS sampling was to determine if the C Street Landfill is a source of PFAS to groundwater, and if present, evaluate if concentrations present a risk to human health or the environment. This section presents the results of the PFAS groundwater sampling and provides an evaluation of the results to meet the PFAS SAP objectives.

3.4.1 Regulatory PFAS Screening Levels

Results were screened against MTCA Modified Method B criteria for potable groundwater (Ecology 2026) and Ecology's ecological screening values for protection of freshwater receptors (Ecology 2023). MTCA Method B criteria for potable groundwater are consistent with the EPA Maximum Contaminant Levels (MCLs). Ecology's ecological screening values were developed for invertebrates, fish, and other freshwater species; the lowest of which was used as the screening level. Applicable PFAS screening levels are presented in Table A and results are provided in Table 2.

Table A: PFAS Screening Levels

PFAS Compound	MTCA Modified Method B Screening Level (nanograms per liter [ng/L])	Ecological Screening Levels Protective of Surface Water (Freshwater)b (ng/L)
Perfluorooctane sulfonic acid (PFOS)	4	2,300
Perfluorooctanoic acid (PFOA)	4	8,280
Perfluorononanoic acid (PFNA)	10	8,000
Perfluorohexanoic acid (PFHxA)	8,000	500,000
Perfluorohexane sulfonic acid (PFHxS)	0.0064a	10,000
Perfluorodecanoic acid (PFDoA)	0.032a	20,000
Perfluorobutanoic acid (PFBA)	8,000	830,000

PFAS Compound	MTCA Modified Method B Screening Level (nanograms per liter [ng/L])	Ecological Screening Levels Protective of Surface Water (Freshwater)b (ng/L)
Perfluorobutane sulfonic acid (PFBS)	4,800	108,000,000
Perfluoroundecanoic acid (PFUnA)	--	10,000
Perfluorodecanoic acid (PFDA)	--	10,000
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	10	--
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	3,200	--

Notes:

[a]The MTCA Method B screening levels for PFHxS and PFDoA are lower than the achievable laboratory detection limits. As a result, only detected concentrations were considered screening level exceedances in this evaluation.

[b]Ecological screening values were developed for freshwater invertebrates, fish, and other species; the lowest level was applied for screening purposes.

Results of the sampling are summarized by sampling event as follows:

August 2025 Results

PFAS were detected in all three wells sampled in August 2025 with the highest concentrations occurring in AMW-4 and the lowest concentrations in AMW-1. All PFAS groundwater concentrations detected during the August 2025 sampling event were below Ecology's freshwater ecological screening levels.

- The background concentrations in AMW-3 could not be determined due to sampling equipment malfunction.
- AMW-1 – PFOS and PFOA were the only PFAS compounds detected above the laboratory reporting limits.
  - PFOS was detected at a concentration of 5 ng/L above the MTCA Method B screening level of 4 ng/L.
  - PFOA was detected at a concentration below the MTCA Method B screening level.
- AMW-2 – PFOS, PFOA, and PFHxS were the only PFAS compounds detected above the laboratory reporting limits.
  - PFOS and PFHxS were detected at concentrations of 16 and 0.37J ng/L, respectively, above the respective MTCA Method B screening levels of 4 and 0.0064 ng/L.
  - PFOA was detected at a concentration below the MTCA Method B screening level.

- AMW-4 – Eight PFAS compounds (PFOS, PFOA, PFNA, PFHxA, PFHxS, PFHpA, PFBA, and perfluoropentanoic acid [PFPeA]) were detected above the laboratory reporting limits.
  - PFOS, PFOA and PFHxS were detected at concentrations of 21, 8.9, and 1.1J ng/L, respectively, above the respective MTCA Method B screening levels of 4, 4, and 0.0064 ng/L.
  - PFNA, PFHxA, PFHpA, and PFBA were detected at concentrations below their respective MTCA Method B screening levels. There is no MTCA screening level for PFPeA.

March 2026 Results

PFAS were not detected in background well AMW-3 at laboratory reporting limits. PFAS were detected in the other three wells sampled in March 2026 with the highest concentrations occurring in AMW-4 and the lowest concentrations in AMW-1. All PFAS groundwater concentrations detected during the March 2026 sampling event were below Ecology's freshwater ecological screening levels.

- AMW-1 – PFOS and PFHxS were the only PFAS compounds detected above the laboratory reporting limits.
  - PFHxS was detected at a concentration of 0.37J ng/L above the MTCA Method B screening level of 0.0064 ng/L.
  - PFOS was detected at a concentration below the MTCA Method B screening level.
- AMW-2 – Five PFAS compounds (PFOS, PFOA, PFNA, 6:2 FTS, and PFPeA) were detected above the laboratory reporting limits.
  - PFOS was detected at a concentration of 12 ng/L above the MTCA Method B screening levels of 4 ng/L.
  - PFOA, PFNA, 6:2 FTS, and PFPeA were detected at concentrations below their respective MTCA Method B screening levels. There is no MTCA screening level for PFPeA.
- AMW-4 – Nine PFAS compounds (PFOS, PFOA, PFNA, PFHxA, PFHxS, PFBA, perfluoroheptanoic acid [PFHpA], perfluoroheptane sulfonic acid [PFHpS], and PFPeA) were detected above the laboratory reporting limits.
  - PFOS, PFOA and PFHxS were detected at concentrations of 46, 18, and 1.4J ng/L, respectively, above the respective MTCA Method B screening levels of 4, 4, and 0.0064 ng/L.
  - PFNA, PFHxA, and PFBA were detected at concentrations below their respective MTCA Method B screening levels. There is no MTCA screening level for PFHpA, PFHpS, and PFPeA.

Results from the semiannual groundwater sampling events are provided in Table 2. Laboratory reports are included in Appendix A.

3.4.2 PFAS Comparison to Leachate Study

PFAS results indicate that the landfill is likely a source of PFAS to groundwater based on detections in the downgradient (AMW-2) and cross-gradient wells (AMW-1 and AMW-4) and the absence of PFAS in the upgradient well, AMW-3. However, the concentrations in groundwater do not indicate the landfill leachate is a substantial source of PFAS. The sum of PFAS concentrations detected in AMW-4 (the well with the highest detections) was 70.74 ng/L which is approximately 450 times lower than the mean total PFAS concentrations observed in Ecology's statewide landfill leachate study (Ecology 2022). Considering the C Street Landfill does not have an active leachate extraction system, the PFAS concentrations detected in groundwater suggest that overall PFAS mass in the landfill is low relative to landfills included in Ecology's 2022 study.

3.4.3 PFAS Risk Assessment for Drinking Water

Although the PFAS groundwater results do not indicate a significant source, the concentrations for PFOS, PFOA, and PFHxS exceed MTCA Method B criteria for potable groundwater indicating a human health risk if a potential complete pathway to drinking water is identified. A complete pathway is possible if drinking water wells are identified that meet all of the following criteria:

1. The well is located downgradient (east-southeast) of the landfill and north of Goldsborough Creek, where shallow groundwater is assumed to discharge.
2. The well is screened in the shallow aquifer.
3. The well is actively used as a drinking water source.

A desktop review of potential drinking water sources (i.e., drinking water wells) within a 2-mile radius of the landfill was performed using Ecology's well log database (Ecology 2026). Results indicated 15 drinking water wells within the 2-mile radius; however, only four wells are located downgradient to the east or southeast of the Site north of Goldsborough Creek, where shallow groundwater beneath the landfill is assumed to discharge.

- The nearest to the property is a well owned by Rayonier, likely for industrial usage. It was completed in 1942, reaches 742 feet bgs into the deep aquifer (commonly referred to as Unit F), and exhibits flowing or artesian conditions (GeoEngineers 2013).
- To the southeast, the second well is owned by Exceptional Foresters for domestic usage. It was drilled in 1984 to a depth of 190 feet bgs, and had a static water level 70 feet bgs at the time of drilling.
- The third well is owned by Leroy Saboe, presumably for domestic use. It was drilled in 1983 to a depth of 208 feet bgs, and had a static water level at 14 feet bgs.
- The last well is an industrial supply well owned by Scott Hilburn. It was drilled to 230 feet bgs, and had a static water level at 15 feet bgs at the time of drilling.

Other residential properties located downgradient between the landfill and Goldsborough Creek are within the City water service area (Appendix B) which is sourced from Shelton Springs and from the Unit F aquifer (greater than 600 feet bgs) through two deep wells that are located approximately 1.5 miles northeast of the Site (Northwest Land and Water 2005). Therefore, initial review of potential drinking water receptors downgradient of the landfill indicates that a complete drinking water pathway from the landfill to human receptors is not present.

3.4.4 PFAS Ecological Risk Assessment for Surface Water

All PFAS groundwater concentrations detected during the August 2025 and March 2026 sampling events were below Ecology's freshwater ecological screening levels. Ecological risk associated with Site groundwater discharge to Goldsborough Creek is not a concern.

3.4.5 PFAS Site Characterization

PFAS in groundwater have been adequately characterized within the context of Ecology's requirement. Despite the presence of selected PFAS above MTCA Method B criteria, the PFAS concentrations in groundwater do not pose a risk to human health or the environment. Existing groundwater wells are completed at elevations substantially below the water table where selected PFAS were detected. PFAS concentrations were substantially lower than ecological screening levels protective of freshwater surface water. Therefore, additional PFAS sampling for characterization is not warranted at this time.

4. SOIL CAP INTEGRITY ASSESSMENT

The soil cap integrity appears to be good based on visual inspection and settlement is decreasing over time. This section documents the annual visual inspection and settlement marker survey results completed per the I, M, and M Plan (Aspect 2023b) and the Compliance Monitoring Report (Aspect 2022).

4.1 Visual Cap Inspection

The cleanup action for the C Street Landfill Site relies on containment of contaminated soils and municipal solid waste below a soil cap. Annual inspections occur to verify the integrity of the soil cap and physical barriers and to identify maintenance and/or repair needs as per the I, M, and M Plan (Aspect 2023b). The results of the annual inspection during the reporting period are described below. The visual inspection photo log is presented in Appendix C.

4.1.1 Observed Soil Cap Conditions

Geosyntec conducted an inspection on June 25, 2026. The vegetation growing on the cap consisted of mostly brown, green, and red grass that appeared abundant, alive, healthy, and without large patches of discoloration. Two thirds of the grass on the cap of the landfill had been mowed recently. In the grass area that had not been mowed, small scotch broom bushes were noted along with tall grasses and daisies. No other woody vegetation was noted (App C. Photos 5-9). Blackberry bushes and other vegetation observed near AMW-1, AMW-2, and AMW-4 have grown to encompass the well bollards and the well monuments (App C. Photos 1-4) indicated on the Site Plan with a “V”. Vegetation maintenance should be performed to ensure continued access to AMW-1, AMW-2, and AMW-4, and to mitigate risk of compromising the soil cap.

Other observations during the inspection included the following:

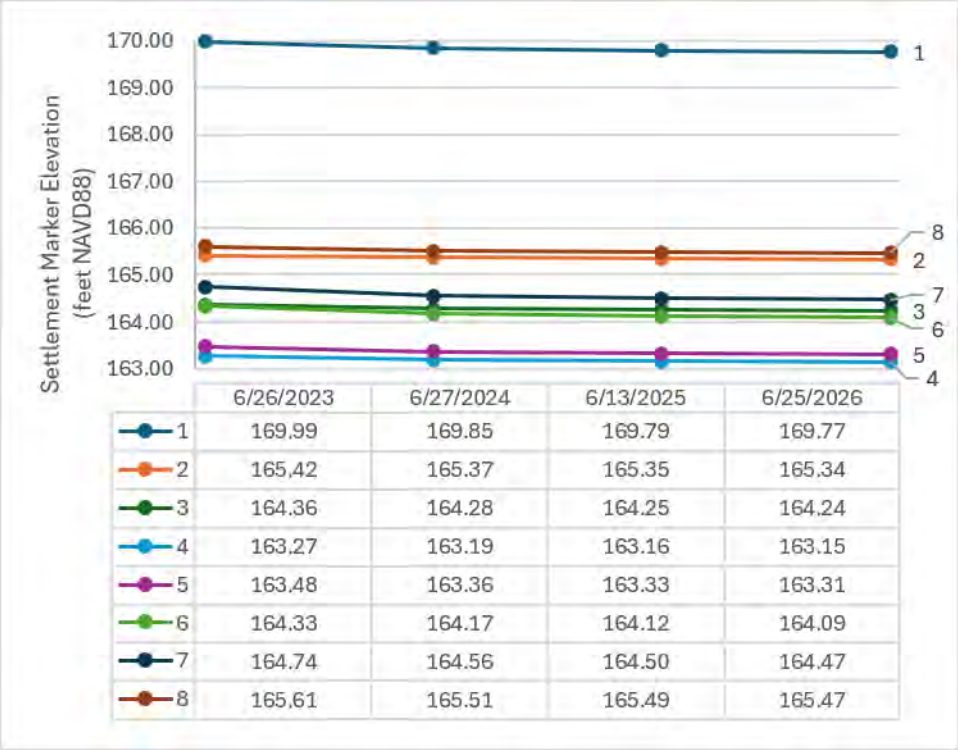
- Along the north fence line near the entrance gate, the tire ruts observed during the prior inspection are still visible. They appear filled in with topsoil from prior maintenance activities by the City, but vegetation has not yet fully re-established, as seen in Photo 9 and indicated on the Site Plan with a “M”. Vegetation appears to be re-establishing, so no additional maintenance is warranted at this time.
- There were no observed cracks, soil erosion, or changes to the vegetative soil layer on-site.
- There were no intrusions, holes, or wildlife trails observed on the cap caused by animals.
- There were no other damages or disturbances observed on the cap.
- Settlement markers and groundwater monitoring wells appeared to be in good condition. Geosyntec noted that new settlement marker stakes had been added.

4.1.2 Condition of Fencing and Signage

The fencing surrounding the cap appeared to be of good integrity. No holes or other damage were observed. Signage indicating that the area within the fence is restricted and providing contact information at the Ecology was observed near the main entrance gate (Photo 11).

4.2 Annual Settlement Marker Survey

The annual survey of eight settlement markers was conducted on the morning of June 25, 2026, by Apex Engineering (Appendix D). Survey results since soil cap construction are summarized in Figure 6.



	6/26/2023	6/27/2024	6/13/2025	6/25/2026
1	169.99	169.85	169.79	169.77
2	165.42	165.37	165.35	165.34
3	164.36	164.28	164.25	164.24
4	163.27	163.19	163.16	163.15
5	163.48	163.36	163.33	163.31
6	164.33	164.17	164.12	164.09
7	164.74	164.56	164.50	164.47
8	165.61	165.51	165.49	165.47

Figure 6: Topographic Survey Results

Settlement at each marker was calculated by subtracting survey results from the prior year's measurements. Figure 7 provides settlement for the eight settlement markers since soil cap construction. Ecology guidance provides the criterion for establishing "little to no settlement" as less than ½ inch over a 2-year period, or 0.02 feet per year. Based on the 2026 survey results, the soil cap settlement has decreased to less than or equal to 0.03 feet per year, just over the criterion. Based on the changes in settlement shown in Figure 7, settlement monitoring will continue at least one more year until the criterion for "little to no settlement" is demonstrated.

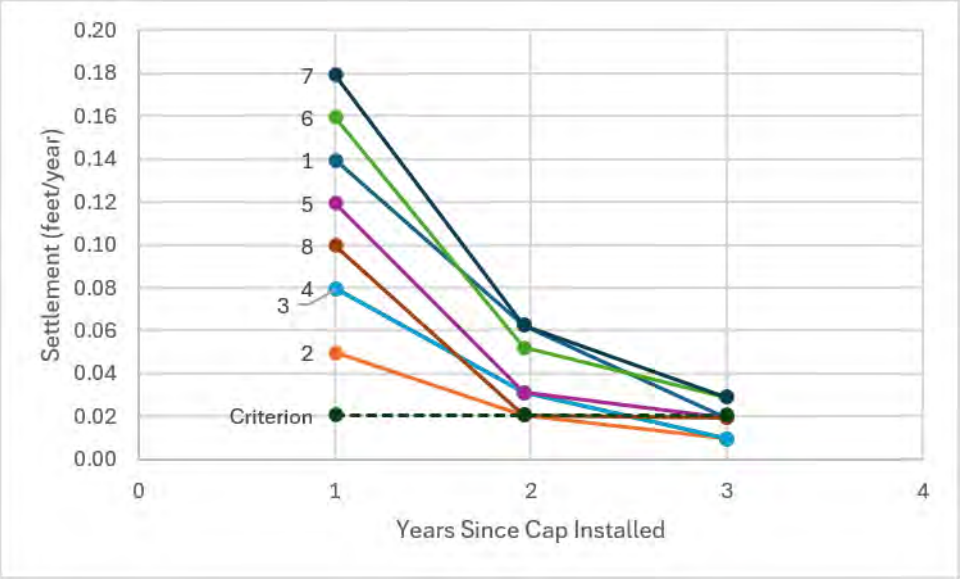


Figure 7: Time-Series of Soil Cap Settlement

5. CONCLUSIONS

Groundwater monitoring results during the reporting period were observed above Site cleanup levels in the background well (AMW-3) and in compliance wells during one or both events in August 2025 and March 2026. Iron and manganese are secondary contaminates in the groundwater that are attributable to slightly acidic conditions resulting in dissolution of naturally occurring constituents from native soils (Aspect 2021). Associated with the use of a non-dedicated sampling pump, the turbidity goal could not be achieved, and total iron and total manganese results may be biased high. We recommend using a field filter or passive diffusion bags to reduce turbidity for future monitoring events. Groundwater monitoring will continue on a semiannual basis to evaluate post-construction trends in groundwater quality for a minimum period of 5 years (through February 2028).

PFAS in groundwater have been adequately characterized within the context of Ecology's requirement. Despite the presence of selected PFAS above MTCA Method B criteria, the PFAS concentrations in groundwater do not pose a risk to human health or the environment. Documented groundwater wells are completed at elevations substantially below the water table where selected PFAS were detected. PFAS concentrations were substantially lower than ecological screening levels protective of freshwater surface water. Therefore, additional PFAS sampling for characterization is not warranted at this time.

The soil cap integrity appears to be good based on visual inspection and settlement has reached or is approaching Ecology's guidance criterion for "little to no settlement". Institutional controls, including fencing and signage, are all in good condition. On-going vegetation control is the only maintenance warranted at this time.

6. REFERENCES

Aspect Consulting, LLC (Aspect). 2021. Final Remedial Investigation and Feasibility Study Report, Shelton C Street Landfill, Shelton, Washington, December 16, 2021.

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Washington State Department of Ecology (Ecology). 2021. Cleanup Action Plan, Shelton C Street Landfill, City of Shelton, August 10, 2021.

Washington State Department of Ecology (Ecology). 2025. Letter to Mark Ziegler, City Manager, City of Shelton, from Steve Teel, LHG, Cleanup Project Manager/ Hydrogeologist regarding Requirement for PFAS Evaluation in Groundwater, Shelton C Street Landfill, March 20, 2025.

7. LIMITATIONS

Work for this project was performed for Name of Client (Client), and this letter was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This letter does not represent a legal opinion. No other warranty, expressed or implied, is made.

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TABLES

Table 1. Secondary Contaminants Analytical Results
2025-26 Annual Groundwater Monitoring Report
C Street Landfill, Shelton, Washington

Confidential Attorney Client Privilege

					Field Parameters						Metals	
Analyte Group												
Measured Parameter			Depth to Water	Groundwater Elevation	Temperature	Specific Conductance	Dissolved Oxygen	pH	Oxidation Reduction Potential	Turbidity	Iron, total	Manganese, total
Unit			(feet bTOC)	(feet NAVD88)	(deg C)	(uS/cm)	(mg/L)	(pH units)	(mV)	(NTU)	(ug/L)	(ug/L)
Site-Specific Cleanup Level			na	na	na	na	na	na	na	na	300	50
Location	**Sample**	**Date**										
AMW-1	AMW-1-011218	1/12/2018	83.07	72.83	10.1	219.8	2.67	6.81	106.6	2.73	**233**	**71.4**
	AMW-5-011218*	1/12/2018	83.07	72.83	10.1	219.8	2.67	6.81	106.6	2.73	**234**	**68.3**
	AMW-1-122018	12/20/2018	89.13	66.77	10.1	271.1	5.22	6.45	78.6	4.68	**274**	**15.9**
	AMW-1-040119	4/1/2019	87.65	68.25	10	301.3	5.3	6.22	234.5	4.88	**129**	**1.8**
	AMW-5-070119*	7/1/2019	91.53	64.37	11.9	359.7	0.76	6.28	171.7	12.8	**339**	**41.9**
	AMW-1-070119	7/1/2019	91.53	64.37	11.9	359.7	0.76	6.28	171.7	12.8	**348**	**46.5**
	AMW-1-080323	8/3/2023	90.85	65.05	13.95	296.24	0.45	6.34	156.1	13.4	**703**	**1010**
	AMW-5-080323*	8/3/2023	90.85	65.05	13.95	296.24	0.45	6.34	156.1	13.4	**768**	**873**
	AMW-1-020624	2/6/2024	83.22	72.68	10.08	214.35	5.7	6.16	127.8	2.37	**193**	**20**
	AMW-1-092324	9/23/2024	92.8	63.1	13.91	243.65	0.54	6.25	200.5	51.8	**1900**	**590**
	AMW-1-020425	2/4/2025	84.99	70.91	9.88	227.18	4.83	6.09	143.7	6.91	**360**	**59**
	AMW-5-081225*	8/12/2025	91.25	64.65	12.34	225	0.193	6.047	215.3	6.62	**210**	**30**
	AMW-1-081225	8/12/2025	91.25	64.65	12.34	225	0.193	6.047	215.3	6.62	**200**	**31**
	AMW-1-030226	3/2/2026	84.34	71.56	12.83	240.3	2.887	6.138	261.6	10.8	**550**	**84**
		Baseline	87.7	68.2	10.7	288.6	2.9	6.5	145.0	6.8	260	41
		Confirmation	88.7	67.2	12.4	246.0	1.9	6.2	184.6	14.0	330	51
	AMW-2-011218	1/12/2018	83.3	72.24	10.1	232.6	0.26	6.91	41.2	1.47	**566**	**1250**
	AMW-2-122018	12/20/2018	88.52	67.02	9.9	245.5	0.23	6.83	57.6	0.93	**279**	**1970**
	AMW-5-122018*	12/20/2018	88.52	67.02	9.9	245.5	0.23	6.83	57.6	0.93	**317**	**1910**
	AMW-2-040119	4/1/2019	87.17	68.37	10.2	258.3	3.3	6.47	218.2	4.66	**149**	**464**
	AMW-2-070119	7/1/2019	90.95	64.59	11.8	266	3.01	6.47	181	15.2	**463**	**759**

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2025-26 Annual Groundwater Monitoring Report
C Street Landfill, Shelton, Washington

					Field Parameters						Metals	
Analyte Group												
Measured Parameter			Depth to Water (feet bTOC)	Groundwater Elevation (feet NAVD88)	Temperature (deg C)	Specific Conductance (uS/cm)	Dissolved Oxygen (mg/L)	pH (pH units)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Iron, total (ug/L)	Manganese, total (ug/L)
Unit												
Site-Specific Cleanup Level			na	na	na	na	na	na	na	na	300	50
Location	**Sample**	**Date**										
AMW-2	AMW-2-080323	8/3/2023	90.83	64.71	13.94	229.4	3.37	6.17	200.7	6	**325**	**1220**
	AMW-2-020624	2/6/2024	83.48	72.06	9.68	233.17	0.87	6.45	141.5	2.03	**181**	**1290**
	AMW-5-092324*	9/23/2024	92.81	62.73	13.2	247.95	0.94	6.48	178.7	29.4	**970**	**2400**
	AMW-2-092324	9/23/2024	92.81	62.73	13.2	247.95	0.94	6.48	178.7	29.4	**1000**	**2800**
	AMW-5-020425*	2/4/2025	85.19	70.35	9.04	246.47	0.37	6.3	144.4	44.4	**2000**	**4000**
	AMW-2-020425	2/4/2025	85.19	70.35	9.04	246.47	0.37	6.3	144.4	44.4	**2300**	**4300**
	AMW-2-081225	8/12/2025	91.27	64.27	13.27	237	2.148	6.358	204.8	64.1	**1300**	**1900**
	AMW-5-030226*	3/2/2026	84.58	70.96	13.94	222.7	2.363	6.257	206.9	59.8	**2000**	**7700**
	AMW-2-030226	3/2/2026	84.58	70.96	13.94	222.7	2.363	6.257	206.9	59.8	**2200**	**7400**
		Baseline	87.7	67.8	10.4	249.6	1.4	6.7	111.1	4.6	355	1271
		Confirmation	87.9	67.7	12.1	237.1	1.5	6.3	178.6	37.7	1681	4357
AMW-3	AMW-3-011218	1/12/2018	100.1	72.84	10.3	252.2	6.25	7.07	146.7	3.89	**241**	**130**
	AMW-3-122018	12/20/2018	104.97	67.97	9.8	465.4	2.71	7.52	68.7	4.31	**574**	**2560**
	AMW-3-040119	4/1/2019	104.83	68.11	10.6	770	0.98	7.25	204.4	4.6	**289**	**757**
	AMW-3-070119	7/1/2019	107.75	65.19	11.9	830	0.27	7.13	173.4	16.4	**486**	**2350**
	AMW-3-080323	8/3/2023	107.2	65.74	18.9	708.35	0.29	7.35	189.8	7.94	**1030**	**2880**
	AMW-3-020624	2/6/2024	100.32	72.62	9.76	579.59	1.05	7.2	146.5	4.34	**360**	**864**
	AMW-3-092324	9/23/2024	108.7	64.24	12.81	708.4	0.33	7.31	119.6	21.3	**1600**	**6100**
	AMW-3-020425	2/4/2025	102.12	70.82	4.53	637.62	0.7	7.23	164.7	21	**1900**	**8000**
	No sample	8/12/2025	107.46	65.48								
	AMW-3-030326	3/3/2026	101.42	71.52	10.84	337.5	4.82	7.064	283.8	9.8	**1500**	**2000**
		Baseline	104.4	68.5	10.7	579.4	2.6	7.2	148.3	7.3	398	1449
		Confirmation	104.5	68.4	11.4	594.3	1.4	7.2	180.9	12.9	1340	4241
	AMW-4-011218	1/12/2018	81.22	72.46	10.3	730	2.52	6.87	191.4	130	**3250**	**402**
	AMW-4-122018	12/20/2018	86.56	67.12	10.1	504.4	0.42	6.07	116.7	2.66	**1390**	**84**
	AMW-5-040119*	4/1/2019	85.19	68.49	10.5	900	3.13	6.63	224.7	5.1	**860**	**19.9**

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2025-26 Annual Groundwater Monitoring Report
C Street Landfill, Shelton, Washington

					Analyte Group	Field Parameters					Metals	
		Measured Parameter	Depth to Water (feet bTOC)	Groundwater Elevation (feet NAVD88)	Temperature (deg C)	Specific Conductance (uS/cm)	Dissolved Oxygen (mg/L)	pH (pH units)	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Iron, total (ug/L)	Manganese, total (ug/L)
		Unit	bTOC	NAVD88	deg C	uS/cm	mg/L	pH units	mV	NTU	ug/L	ug/L
		Site-Specific Cleanup Level	na	na	na	na	na	na	na	na	300	50
Location	**Sample**	**Date**										
AMW-4	AMW-4-040119	4/1/2019	85.19	68.49	10.5	900	3.13	6.63	224.7	5.1	**1180**	**31.4**
	AMW-4-070119	7/1/2019	88.98	64.7	14.1	870	2.81	6.43	213.8	61.3	**5630**	**176**
	AMW-4-080323	8/3/2023	88.7	64.98	15.84	841.1	2.83	6.55	186.9	38	**2670**	**95.6**
	AMW-4-020624	2/6/2024	81.12	72.56	10.56	831.35	3.49	6.69	140.8	24.1	**1150**	**25.4**
	AMW-5-020624*	2/6/2024	81.12	72.56	10.56	831.35	3.49	6.69	140.8	24.1	**1120**	**25.4**
	AMW-4-092324	9/23/2024	89.62	64.06	16.17	520.96	1.92	6.59	246.7	537	**14000**	**450**
	AMW-4-020425	2/4/2025	82.89	70.79	10.01	744.17	2.84	6.62	165.5	91.5	**3300**	**120**
	AMW-4-081225	8/12/2025	89.03	64.65	14.9	480.6	0.877	6.588	222.5	16	**400**	**18**
	AMW-4-030326	3/3/2026	82.23	71.45	12.64	615.9	4.047	6.694	241.8	400	**11000**	**330**
		Baseline	85.4	68.3	11.1	780.9	2.4	6.5	194.3	40.8	2462	143
		Confirmation	85.0	68.7	13.0	695.1	2.8	6.6	192.1	161.5	7175	230

Notes:

Bold indicates a detected concentration

Gray shading indicates a concentration that exceeds the Site-specific screening level.

mg/L = milligrams per liter

ug/L = micrograms per liter

deg C = degrees Celsius

uS/cm = microSiemens per centimeter

mV = millivolts

na = not applicable

NTU = Nephelometric Turbidity Units

DTW = Depth to Water

bTOC = below Top of Casing

NAVD88 = North American Vertical Datum of 1988

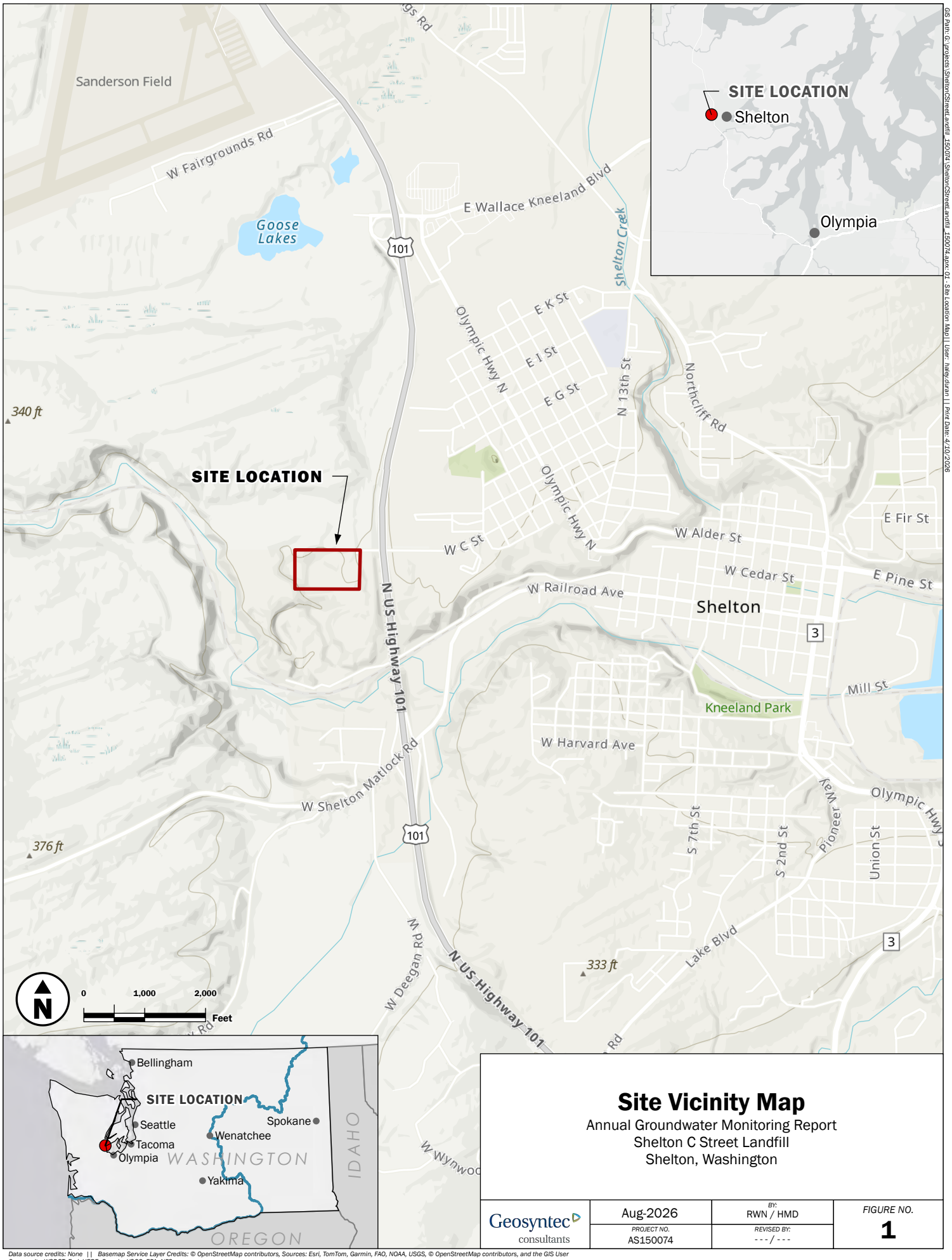
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Table 2. PFAS Analytical Results
Annual Groundwater Monitoring Report (2025-2026) C
Street Landfill
Shelton, Washington

Analyte	Unit	Ground Water Method B Potable Groundwater Cleanup Level (Target for Soil to GW Pathway)	AMW-1 08/12/2025 FD	AMW-1 08/12/2025 N	AMW-1 03/02/2026 N	AMW-2 08/12/2025 N	AMW-2 03/02/2026 FD	AMW-2 03/02/2026 N	AMW-3 03/03/2026 N	AMW-4 08/12/2025 N	AMW-4 03/03/2026 N	BLANK 08/12/2025 RB	BLANK 08/12/2025 FB	BLANK 03/03/2026 RB	BLANK 03/03/2026 FB
PFAS															
11Cl-PF3OUdS	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
3:3 FTCA	ng/L		2.8	2.9	2.9 U	2.8	3.0 U	3.0 U	3.1 U	2.9	3.0 U	3 U	2.9 U	2.8 U	3.0 U
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
4:2 Fluorotelomer sulfonic acid	ng/L		2.8	2.9	2.9 U	2.8	3.0 U	3.0 U	3.1 U	2.9	3.0 U	3 U	2.9 U	2.8 U	3.0 U
5:3 FTCA	ng/L		7.1	7.2	7.2 U	7.1	7.5 U	7.5 U	7.9 U	7.2	7.4 U	7.6 U	7.4 U	7.0 U	7.5 U
6:2 Fluorotelomer sulfonic acid	ng/L	3200	2.8	2.9	2.9 U	2.8	**4.1 J**	3.0 U	3.1 U	2.9	3.0 U	3 U	2.9 U	**2.0 J**	3.0 U
7:3 FTCA	ng/L		7.1	7.2	7.2 U	7.1	7.5 U	7.5 U	7.9 U	7.2	7.4 U	7.6 U	7.4 U	7.0 U	7.5 U
8:2 Fluorotelomer sulfonic acid	ng/L		2.8	2.9	2.9 U	2.8	3.0 U	3.0 U	3.1 U	2.9	3.0 U	3 U	2.9 U	2.8 U	3.0 U
9Cl-PF3ONS	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ng/L	10	1.1	1.1	1.1 U	1.1	1.1 U	1.1 U	1.2 U	1.1	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
N-Ethyl perfluorooctane sulfonamide	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
N-Ethyl perfluorooctane sulfonamidoacetic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
N-Ethyl perfluorooctane sulfonamidoethanol	ng/L		7.1	7.2	7.2 U	7.1	7.5 U	7.5 U	7.9 U	7.2	7.4 U	7.6 U	7.4 U	7.0 U	7.5 U
NFDHA	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
N-Methyl perfluorooctane sulfonamide	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
N-Methyl perfluorooctane sulfonamidoacetic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
N-Methyl perfluorooctane sulfonamidoethanol	ng/L		7.1	7.2	7.2 U	7.1	7.5 U	7.5 U	7.9 U	7.2	7.4 U	7.6 U	7.4 U	7.0 U	7.5 U
Perfluorobutane sulfonic acid (PFBS)	ng/L	4800	1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorobutanoic acid (PFBA)	ng/L	8000	2.8	2.9	2.9 U	2.8	3.0 U	3.0 U	3.1 U	**1.3 J**	**1.5 J**	3 U	2.9 U	2.8 U	3.0 U
Perfluorodecane sulfonic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorodecanoic acid	ng/L	0.032	1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorododecanesulfonic acid (PFDoS)	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorododecanoic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluoroheptane sulfonic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	**0.62 J**	1.5 U	1.5 U	1.4 U	1.5 U
Perfluoroheptanoic acid (PFHpA)	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	**0.96 J**	**1.2 J**	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorohexane sulfonic acid (PFHxS)	ng/L	0.0064	1.4	1.4	**0.37 J**	**0.37 J**	1.5 U	1.5 U	1.6 U	**1.1 J**	**1.4 J**	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorohexanoic acid	ng/L	8000	1.4	1.4	1.4 U	1.4	**0.60 J**	1.5 U	1.6 U	**0.62 J**	**0.71 J**	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorononane sulfonic acid (PFNS)	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorononanoic acid (PFNA)	ng/L	10	1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	**0.47 J**	**0.87 J**	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorooctane sulfonamide	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorooctane sulfonic acid (PFOS)	ng/L	4	**4.9**	**5**	**1.7 J**	**16**	**12**	**11**	1.6 U	**21**	**46**	1.5 U	1.5 U	**0.60 J**	1.5 U
Perfluorooctanoic acid (PFOA)	ng/L	4	**3.9**	**3.8**	1.4 U	**0.61 J**	**0.69 J**	**0.77 J**	1.6 U	**8.9**	**18**	1.5 U	1.5 U	1.4 U	1.5 U
Perfluoropentane sulfonic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	**0.44 J**	1.5 U	1.5 U	1.4 U	1.5 U
Perfluoropentanoic acid	ng/L		1.4	1.4	1.4 U	1.4	**0.44 J**	1.5 U	1.6 U	**0.93 J**	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorotetradecanoic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluorotridecanoic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
Perfluoroundecanoic acid	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
PFEESA	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
PFMBA	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U
PFMPA	ng/L		1.4	1.4	1.4 U	1.4	1.5 U	1.5 U	1.6 U	1.4	1.5 U	1.5 U	1.5 U	1.4 U	1.5 U

Bold - detected
Blue Shaded - Detected result exceeded screening level
U - Analyte not detected at or above Reporting Limit (RL) shown
J - Result value estimated
ng/L - nanograms per liter

FIGURES



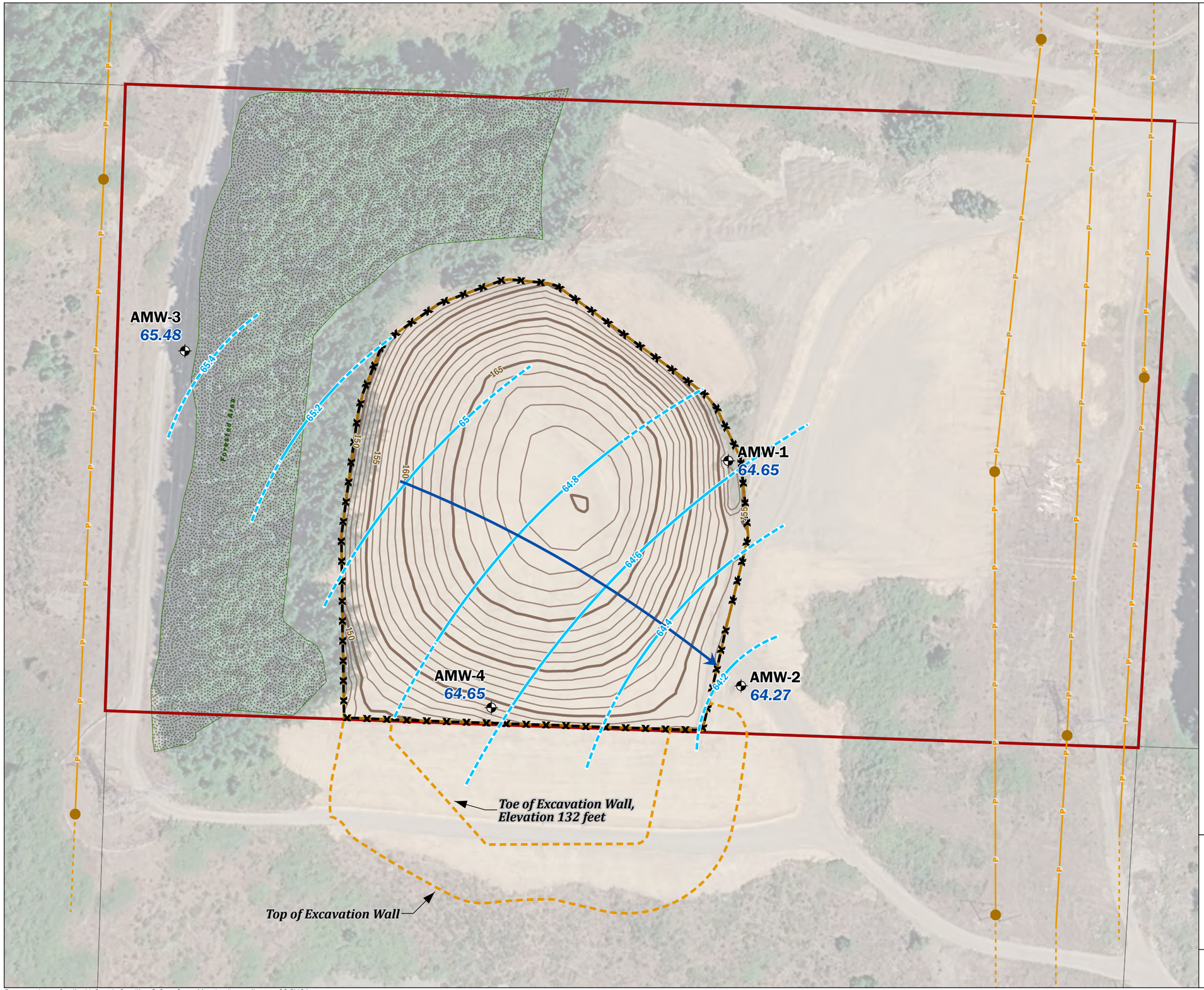
Site Vicinity Map

Annual Groundwater Monitoring Report
Shelton C Street Landfill
Shelton, Washington

Geosyntec consultants	Aug-2026	BY: RWN / HMD	FIGURE NO. 1
	PROJECT NO. AS150074	REVISED BY: ---/---	

GIS Path: G:\projects\SheltonCStreetLandfill_150074\SheltonCStreetLandfill_150074.aprx, 01 - Site Location Map | User: haley.duran | Print Date: 4/10/2026

Data source credits: None | | Basemap Service Layer Credits: © OpenStreetMap contributors, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, WSDOT, Esri, HERE, Garmin, USGS, EPA, NPS



Compliance Groundwater Monitoring Well

Transmission Tower

Transmission Line

Chain Link Fence

Landfill Cap

Extent Landfill Waste Excavation South Property

Inferred Groundwater Flow Direction

Groundwater Elevation Contour (ft. NAVD88)
Dashed where Inferred

Subject Property

Forested Area

Topography Contours 5 ft

Topography Contours 1 ft

Mason County Tax Parcel

Notes:
- *All site feature locations are approximate.*
- *Topographic contours from PLS Survey October 2017.*
- *Aerial imagery from July 2023 Google Satellite Imagery.*

N

0 100 200
Feet

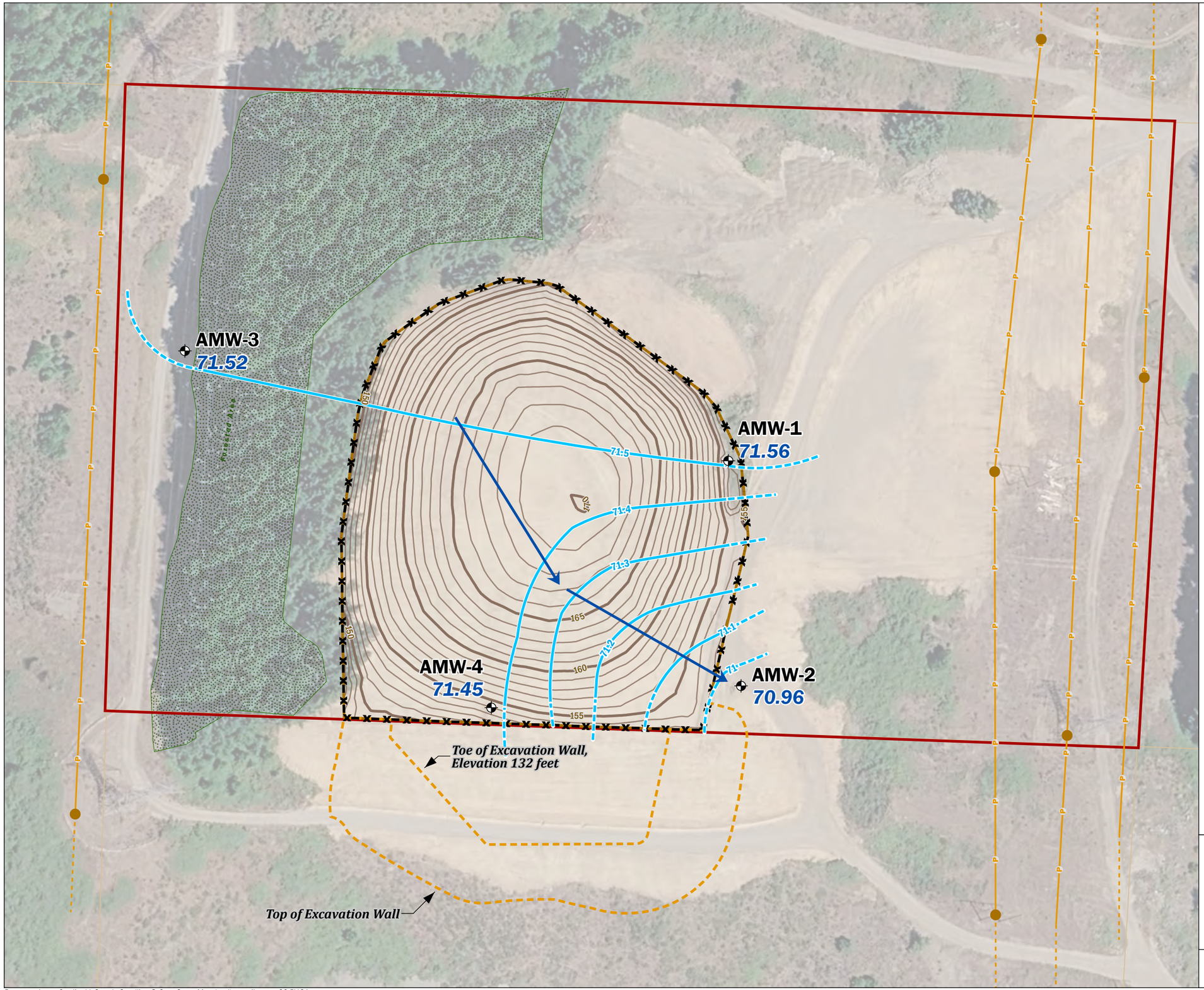
Groundwater Elevation Contours August 2025

Annual Groundwater Monitoring Report
Shelton C Street Landfill
Shelton, Washington

Geosyntec consultants	Aug-2026	BY: RWN / HMD	FIGURE NO. 2
	PROJECT NO. AS150074	REVISED BY: ---/---	

Basemap Layer Credits || Google Satellite: © OpenStreetMap (and) contributors, CC-BY-SA

GIS Path: G:\projects\Shelton\CStreetLandfill_150074\Shelton\CStreetLandfill_150074.aprx || Coordinate System: NAD 1983 StatePlane Washington South FIPS 4602 Feet || Date Saved: 4/10/2026 || User: haley.duran || Print Date: 4/10/2026



Compliance Groundwater Monitoring Well

Transmission Tower

Transmission Line

Chain Link Fence

Landfill Cap

Extent Landfill Waste Excavation South Property

Inferred Groundwater Flow Direction

Groundwater Elevation Contour (ft. NAVD88)
Dashed where Inferred

Subject Property

Forested Area

Topography Contours 1 ft

Topography Contours 5 ft

Mason County Tax Parcel

Notes:
- All site feature locations are approximate.
- Topographic contours from PLS Survey October 2017.
- Aerial imagery from July 2023 Google Satellite Imagery.

N

0 100 200
Feet

Groundwater Elevation Contours
March 2026

Annual Groundwater Monitoring Report
Shelton C Street Landfill
Shelton, Washington

Geosyntec consultants	Aug-2026	BY: RWN / HMD	FIGURE NO. 3
	PROJECT NO. AS150074	REVISED BY: ---/---	

Basemap Layer Credits || Google Satellite: © OpenStreetMap (and) contributors, CC-BY-SA

GIS Path: G:\projects\Shelton\CStreetLandfill_150074\Shelton\CStreetLandfill_150074.aprx || Coordinate System: NAD 1983 StatePlane Washington South FIPS 4602 Feet || Date Saved: 4/10/2026 || User: haley.duran || Print Date: 4/10/2026

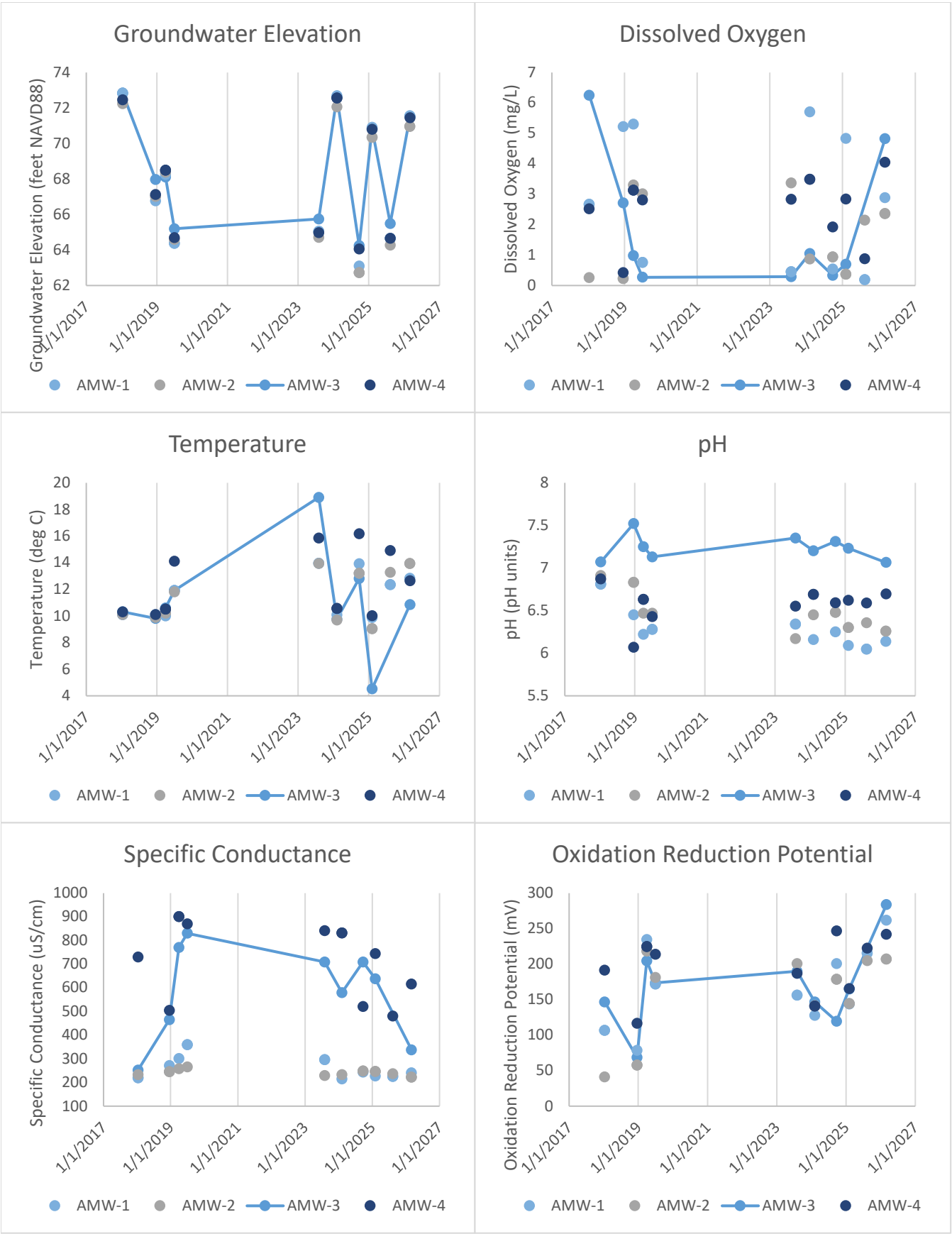
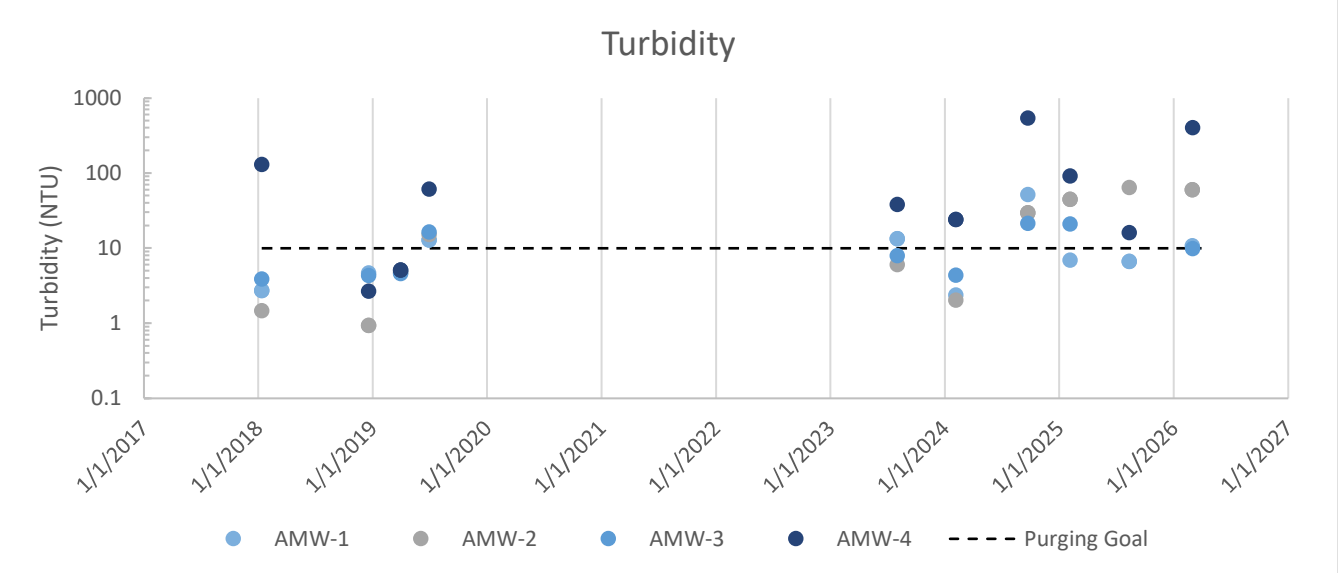
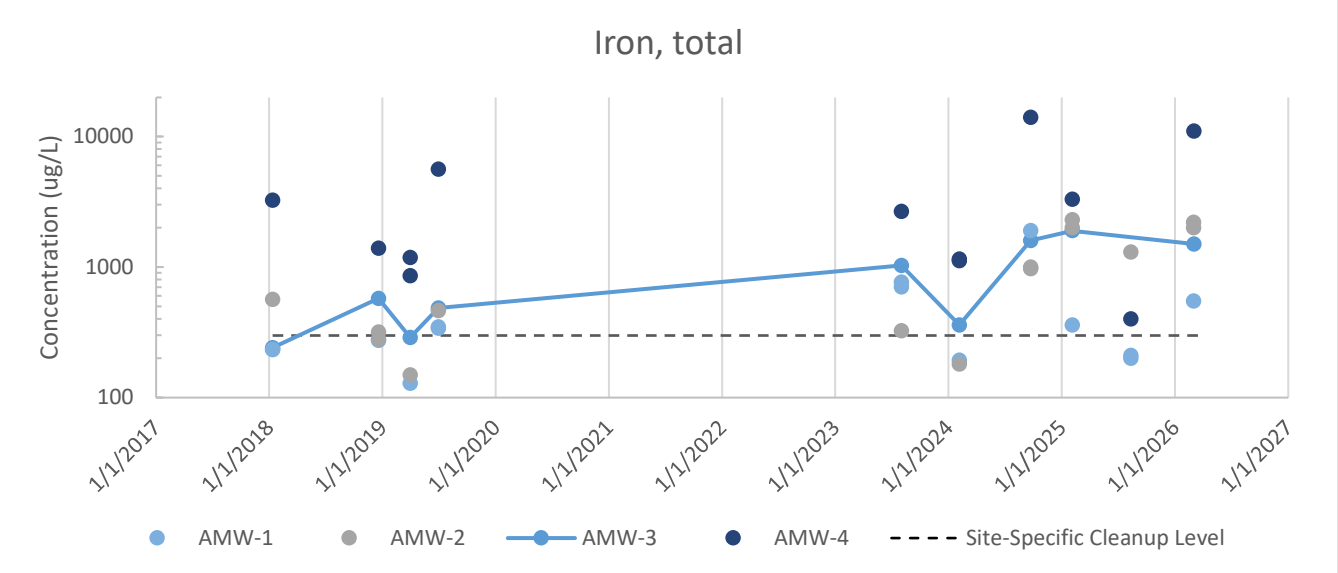


Figure 4: Time-series Charts of Groundwater Field Parameters





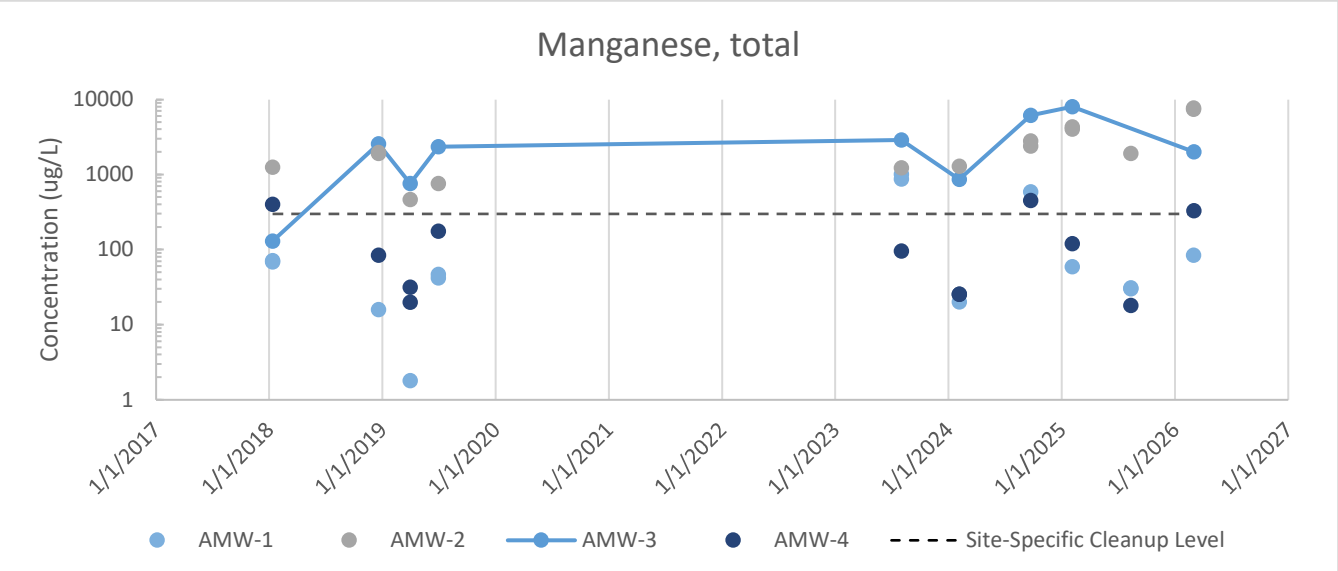


Figure 5: Time-series Charts of Groundwater Secondary Contaminants

APPENDIX A
Laboratory Reports

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

August 25, 2025

Peter Bannister, Project Manager
Geosyntec Consultants
801 5th Ave, Suite 2200
Seattle, WA 98104

Dear Mr Bannister:

Included are the results from the testing of material submitted on August 15, 2025 from the C Street Landfill W0-C01-AS150074C, F&BI 508258 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Risi Naa, Aspect Data
GSY0825R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 15, 2025 by Friedman & Bruya, Inc. from the Geosyntec Consultants C Street Landfill W0-C01-AS150074C, F&BI 508258 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Geosyntec Consultants
508258 -01	AMW-4-081225
508258 -02	AMW-2-081225
508258 -03	AMW-1-081225
508258 -04	AMW-5-081225

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-4-081225	Client:	Geosyntec Consultants
Date Received:	08/15/25	Project:	C Street Landfill W0-C01-AS150074C
Date Extracted:	08/18/25	Lab ID:	508258-01 x5
Date Analyzed:	08/19/25	Data File:	508258-01 x5.217
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	400
Manganese	18

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-2-081225	Client:	Geosyntec Consultants
Date Received:	08/15/25	Project:	C Street Landfill W0-C01-AS150074C
Date Extracted:	08/18/25	Lab ID:	508258-02 x10
Date Analyzed:	08/20/25	Data File:	508258-02 x10.163
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	1,300

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-2-081225	Client:	Geosyntec Consultants
Date Received:	08/15/25	Project:	C Street Landfill W0-C01-AS150074C
Date Extracted:	08/18/25	Lab ID:	508258-02 x200
Date Analyzed:	08/19/25	Data File:	508258-02 x200.218
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Manganese	1,900

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-1-081225	Client:	Geosyntec Consultants
Date Received:	08/15/25	Project:	C Street Landfill W0-C01-AS150074C
Date Extracted:	08/18/25	Lab ID:	508258-03 x2
Date Analyzed:	08/19/25	Data File:	508258-03 x2.223
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	200
Manganese	31

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-5-081225	Client:	Geosyntec Consultants
Date Received:	08/15/25	Project:	C Street Landfill W0-C01-AS150074C
Date Extracted:	08/18/25	Lab ID:	508258-04 x2
Date Analyzed:	08/19/25	Data File:	508258-04 x2.224
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	210
Manganese	30

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	Method Blank	Client:	Geosyntec Consultants
Date Received:	Not Applicable	Project:	C Street Landfill W0-C01-AS150074C
Date Extracted:	08/18/25	Lab ID:	I5-712 mb
Date Analyzed:	08/18/25	Data File:	I5-712 mb.187
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Date of Report: 08/25/25
Date Received: 08/15/25
Project: C Street Landfill W0-C01-AS150074C, F&BI 508258

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 508261-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	131	86 b	82 b	70-130	5 b
Manganese	ug/L (ppb)	20	15.0	93 b	98 b	70-130	5 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	94	85-115
Manganese	ug/L (ppb)	20	98	85-115

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

508258

SAMPLE CHAIN OF CUSTODY

8/15/25 KZ

Page # 1 of 1

Report To Peter Bannister, Risi Naa

Company Aspect Consulting / Geosyntec Consultants

Address 801 5th Ave Suite 2200

City, State, ZIP Seattle, WA 98104

Phone (206)939-0783 Email Risi.Naa ; Peter.Bannister @Geosyntec.com

SAMPLERS (signature)

PROJECT NAME: C Street Landfill

PO #: WO-C01-AS150074C

REMARKS

INVOICE TO: Aspect / Geosyntec

TURNAROUND TIME

- [x] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL

- [ ] Dispose after 30 days
- [ ] Archive Samples
- [ ] Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Total Fe EPA 200.7	Total Mn EPA 200.7			Notes
AMW-4-081225	01	08/12/25	1610	Ground Water	1								X	X			
AMW-2-081225	02	08/12/25	1245		1								X	X			
AMW-1-081225	03	08/12/25	1420		1								X	X			Turbidity = 69.1 NTU
AMW-5-081225	04	08/12/25	1200	↓	1								X	X			
							Samples received at 2 °C										

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Amy Tice	Aspect / Geosyntec	8/15/25	1006
Received by:	JINH	FBI	8-15-25	1086
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 508258 CLIENT Aspect / Geosyntec INITIALS/ DATE: AP 8/15/25

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 2 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☑ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/Date: JS 8/15/25
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 0 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters** _____ Number of unused TO17 tubes _____
**Fill out Green manifolds billing sheet

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Vineta Mills
Eric Young

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

March 11, 2026

Risi Naa, Project Manager
Geosyntec Consultants
801 5th Ave, Suite 2200
Seattle, WA 98104

Dear Mr Naa:

Included are the results from the testing of material submitted on March 4, 2026 from the C Street Landfill WA-AS1500746-4833, F&BI 603076 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Aspect Data
GSY0311R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 4, 2026 by Friedman & Bruya, Inc. from the Geosyntec Consultants C Street Landfill WA-AS1500746-4833, F&BI 603076 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Geosyntec Consultants
603076 -01	AMW-1-030226
603076 -02	AMW-2-030226
603076 -03	AMW-3-030326
603076 -04	AMW-4-030326
603076 -05	AMW-5-030226

All quality control requirements were acceptable.

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-1-030226	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-01 x10
Date Analyzed:	03/06/26	Data File:	603076-01 x10.221
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	550
Manganese	84

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-2-030226	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-02 x10
Date Analyzed:	03/06/26	Data File:	603076-02 x10.222
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	2,200

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-2-030226	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-02 x200
Date Analyzed:	03/10/26	Data File:	603076-02 x200.203
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Manganese	7,400

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-3-030326	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-03 x10
Date Analyzed:	03/06/26	Data File:	603076-03 x10.223
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	1,500

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-3-030326	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-03 x200
Date Analyzed:	03/10/26	Data File:	603076-03 x200.204
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Manganese	2,000

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-4-030326	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-04 x10
Date Analyzed:	03/06/26	Data File:	603076-04 x10.224
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Manganese	330

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-4-030326	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-04 x100
Date Analyzed:	03/11/26	Data File:	603076-04 x100.058
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	11,000

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-5-030226	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-05 x10
Date Analyzed:	03/06/26	Data File:	603076-05 x10.225
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	2,000

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	AMW-5-030226	Client:	Geosyntec Consultants
Date Received:	03/04/26	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	603076-05 x400
Date Analyzed:	03/11/26	Data File:	603076-05 x400.071
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Manganese	7,700

Analysis For Total Metals By EPA Method 200.8

Client Sample ID:	Method Blank	Client:	Geosyntec Consultants
Date Received:	Not Applicable	Project:	C Street Landfill
Date Extracted:	03/06/26	Lab ID:	I6-239 mb
Date Analyzed:	03/06/26	Data File:	I6-239 mb.092
Matrix:	Water	Instrument:	ICPMS3
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Date of Report: 03/11/26
Date Received: 03/04/26
Project: C Street Landfill WA-AS1500746-4833, F&BI 603076

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 603092-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	1,210	68 b	152 b	70-130	76 b
Manganese	ug/L (ppb)	20	97.8	120 b	127 b	70-130	6 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	93	85-115
Manganese	ug/L (ppb)	20	97	85-115

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported between the method detection limit and the lowest calibration point. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

603076

SAMPLE CHAIN OF CUSTODY

03/04/26

Page # 1 of 1

#L2

Report To Risi Naa

Company Geosyntec Consultants

Address 801 5th Ave, Suite 2200

City, State, ZIP Seattle, WA 98104

Phone (206) 939-0783 Email Risi.Naa@geosyntec.com

SAMPLERS (*signature*) Aidan Houlgate

PROJECT NAME: C Street Landfill

PO #: WO-AS1500741-4833

REMARKS: Reporting Limits 150 µg/L for Total Fe; 25 µg/L for Total Mn

Project specific RLs? - (Yes) / No

INVOICE TO: Geosyntec

TURNAROUND TIME
- [x] Standard turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Archive samples
- [ ] Other
- Default: Dispose after 30 days

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Total Fe, EPA 200.8	Total Mn, EPA 200.8			Notes
AMW-1-030226	01	03/02/26	1615	Ground Water	1								X	X			Turbidity = 10.8 NTU
AMW-2-030226	02	03/02/26	1503	↓	1								X	X			Turbidity = 59.8 NTU
AMW-3-030326	03	03/03/26	0913		1								X	X			Turbidity = 9.8 NTU
AMW-4-030326	04	03/03/26	1235		1								X	X			Turbidity = 400 NTU
AMW-5-030226	05	03/02/26	1200		1								X	X			Turbidity = 59.8 NTU
													Samples received at 4 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Aidan Houlgate	Aidan Houlgate	Geosyntec	03/04/26	1010
Received by:	VINH	PBI	3-4-26	14:00
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
5500 4th Ave S.
Seattle WA 98108
(206) 285-8282
office@friedmanandbruya.com

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 603076 CLIENT GTC I INITIALS/ DATE: VV 3-4-26

If custody seals are present on cooler, are they intact? ☐ NA ☑ YES ☐ NO

Cooler/Sample temperature 4 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☑ YES ☐ NO

How did samples arrive?
☐ Over the Counter ☑ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: NP 3/4
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 → 2 days

Are the samples clearly identified? (explain "no" answer below) ☑ YES ☐ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled	☑ Yes ☐ No	☐ Not on COC/label
Time Sampled	☑ Yes ☐ No	☐ Not on COC/label
# of Containers	☑ Yes ☐ No	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters** _____ **Number of unused TO17 tubes** _____
**Fill out Green manifolds billing sheet

eurofins | Environment Testing

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Ali Cochrane
Aspect Consulting
710 Second Avenue
Suite 550
Seattle, Washington 98104

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JOB DESCRIPTION

C Street Landfill

JOB NUMBER

320-124344-1

Eurofins Sacramento
880 Riverside Parkway
West Sacramento CA 95605

See page two for job notes and contact information.

myEOL

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 Environment Testing Northern California, LLC Project Manager.

Authorization



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Authorized for release by
Laura Turpen, Project Manager I
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(916)374-4414

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Definitions/Glossary

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Qualifiers

LCMS

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job Narrative
320-124344-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/15/2025 9:50 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 time was 1.0°C.

PFAS
Method 1633_Final: The following samples in preparation batch 320-870479 were discolored prior to extraction: AMW-2-081225 (320-124344-2), AMW-1-081225 (320-124344-3) and AMW-5-081225 (320-124344-4).

Method 1633_Final: The matrix spike (MS) recoveries for preparation batch 320-870479 and analytical batch 320-870705 were outside control limits for one or more analytes. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Detection Summary

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Client Sample ID: AMW-4-081225 — Lab Sample ID: 320-124344-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.3	J	2.9	0.72	ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA)	0.93	J	1.4	0.36	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	0.62	J	1.4	0.36	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.96	J	1.4	0.36	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	8.9		1.4	0.36	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	0.47	J	1.4	0.36	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.1	J	1.4	0.36	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	21		1.4	0.36	ng/L	1		1633	Total/NA

Client Sample ID: AMW-2-081225 — Lab Sample ID: 320-124344-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.61	J	1.4	0.35	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.37	J	1.4	0.35	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	16		1.4	0.35	ng/L	1		1633	Total/NA

Client Sample ID: AMW-1-081225 — Lab Sample ID: 320-124344-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	3.8		1.4	0.36	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.0		1.4	0.36	ng/L	1		1633	Total/NA

Client Sample ID: AMW-5-081225 — Lab Sample ID: 320-124344-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	3.9		1.4	0.35	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.9		1.4	0.35	ng/L	1		1633	Total/NA

Client Sample ID: AMW-7-081225 — Lab Sample ID: 320-124344-5

No Detections.

Client Sample ID: AMW-6-081225 — Lab Sample ID: 320-124344-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Client Sample ID: AMW-4-081225
Date Collected: 08/12/25 16:10
Date Received: 08/15/25 09:50

Lab Sample ID: 320-124344-1
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.3**	**J**	2.9	0.72	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluoropentanoic acid (PFPeA)	**0.93**	**J**	1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorohexanoic acid (PFHxA)	**0.62**	**J**	1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluoroheptanoic acid (PFHpA)	**0.96**	**J**	1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorooctanoic acid (PFOA)	**8.9**		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorononanoic acid (PFNA)	**0.47**	**J**	1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorodecanoic acid (PFDA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluoroundecanoic acid (PFUnA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorododecanoic acid (PFDoA)	ND		1.4	0.40	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.4	0.42	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.4	0.59	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.4	0.39	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorohexanesulfonic acid (PFHxS)	**1.1**	**J**	1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorooctanesulfonic acid (PFOS)	**21**		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorononanesulfonic acid (PFNS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.4	0.38	ng/L		08/18/25 19:53	08/19/25 17:56	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 17:56	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 17:56	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.2	1.8	ng/L		08/18/25 19:53	08/19/25 17:56	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.2	1.8	ng/L		08/18/25 19:53	08/19/25 17:56	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.28	ng/L		08/18/25 19:53	08/19/25 17:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.4	0.52	ng/L		08/18/25 19:53	08/19/25 17:56	1

Client Sample ID: AMW-4-081225

Lab Sample ID: 320-124344-1

Date Collected: 08/12/25 16:10

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.4	0.42	ng/L		08/18/25 19:53	08/19/25 17:56	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 17:56	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 17:56	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.2	1.8	ng/L		08/18/25 19:53	08/19/25 17:56	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.2	1.8	ng/L		08/18/25 19:53	08/19/25 17:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98.2*		*5 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C5 PFPeA	*82.8*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C5 PFHxA	*94.5*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C4 PFHpA	*92.2*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C8 PFOA	*106*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C9 PFNA	*96.2*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C6 PFDA	*98.3*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C7 PFUnA	*95.4*		*30 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C2 PFDoA	*91.5*		*10 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C2 PFTeDA	*77.6*		*10 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C3 PFBS	*108*		*40 - 135*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C3 PFHxS	*112*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C8 PFOS	*104*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C8 FOSA	*86.8*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
d3-NMeFOSAA	*95.4*		*40 - 170*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
d5-NEtFOSAA	*94.6*		*25 - 135*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C2 4:2 FTS	*121*		*40 - 200*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C2 6:2 FTS	*96.0*		*40 - 200*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C2 8:2 FTS	*102*		*40 - 300*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
13C3 HFPO-DA	*86.0*		*40 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
d7-N-MeFOSE-M	*67.6*		*10 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
d9-N-EtFOSE-M	*70.5*		*10 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
d5-NEtPFOSA	*64.2*		*10 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*
d3-NMePFOSA	*65.0*		*10 - 130*	*08/18/25 19:53*	*08/19/25 17:56*	*1*

Client Sample ID: AMW-2-081225

Lab Sample ID: 320-124344-2

Date Collected: 08/12/25 12:45

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluoropentanoic acid (PFPeA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorohexanoic acid (PFHxA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluoroheptanoic acid (PFHpA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorooctanoic acid (PFOA)	**0.61**	**J**	1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorononanoic acid (PFNA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorodecanoic acid (PFDA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Client Sample ID: AMW-2-081225
Date Collected: 08/12/25 12:45
Date Received: 08/15/25 09:50

Lab Sample ID: 320-124344-2
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorododecanoic acid (PFDoA)	ND		1.4	0.39	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.4	0.41	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.4	0.57	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.4	0.38	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorohexanesulfonic acid (PFHxS)	**0.37**	**J**	1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorooctanesulfonic acid (PFOS)	**16**		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorononanesulfonic acid (PFNS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.4	0.37	ng/L		08/18/25 19:53	08/19/25 18:12	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:12	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:12	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.1	1.8	ng/L		08/18/25 19:53	08/19/25 18:12	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.1	1.8	ng/L		08/18/25 19:53	08/19/25 18:12	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.28	ng/L		08/18/25 19:53	08/19/25 18:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.4	0.51	ng/L		08/18/25 19:53	08/19/25 18:12	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.4	0.41	ng/L		08/18/25 19:53	08/19/25 18:12	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:12	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:12	1

Client Sample ID: AMW-2-081225

Lab Sample ID: 320-124344-2

Date Collected: 08/12/25 12:45

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.1	1.8	ng/L		08/18/25 19:53	08/19/25 18:12	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.1	1.8	ng/L		08/18/25 19:53	08/19/25 18:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93.1*		*5 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C5 PFPeA	*102*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C5 PFHxA	*97.1*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C4 PFHpA	*89.4*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C8 PFOA	*104*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C9 PFNA	*102*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C6 PFDA	*101*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C7 PFUnA	*107*		*30 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C2 PFDoA	*94.2*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C2 PFTeDA	*74.3*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C3 PFBS	*103*		*40 - 135*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C3 PFHxS	*111*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C8 PFOS	*91.7*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C8 FOSA	*78.9*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
d3-NMeFOSAA	*86.3*		*40 - 170*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
d5-NEtFOSAA	*88.9*		*25 - 135*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C2 4:2 FTS	*109*		*40 - 200*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C2 6:2 FTS	*99.1*		*40 - 200*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C2 8:2 FTS	*98.9*		*40 - 300*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
13C3 HFPO-DA	*92.4*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
d7-N-MeFOSE-M	*59.6*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
d9-N-EtFOSE-M	*60.4*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
d5-NEtPFOSA	*54.4*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*
d3-NMePFOSA	*56.7*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:12*	*1*

Client Sample ID: AMW-1-081225

Lab Sample ID: 320-124344-3

Date Collected: 08/12/25 14:20

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluoropentanoic acid (PFPeA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorohexanoic acid (PFHxA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluoroheptanoic acid (PFHpA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorooctanoic acid (PFOA)	**3.8**		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorononanoic acid (PFNA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorodecanoic acid (PFDA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluoroundecanoic acid (PFUnA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorododecanoic acid (PFDoA)	ND		1.4	0.40	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.4	0.42	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.4	0.58	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.4	0.39	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1

Client Sample ID: AMW-1-081225
Date Collected: 08/12/25 14:20
Date Received: 08/15/25 09:50

Lab Sample ID: 320-124344-3
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorooctanesulfonic acid (PFOS)	**5.0**		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorononanesulfonic acid (PFNS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.4	0.38	ng/L		08/18/25 19:53	08/19/25 18:29	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 18:29	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 18:29	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.2	1.8	ng/L		08/18/25 19:53	08/19/25 18:29	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.2	1.8	ng/L		08/18/25 19:53	08/19/25 18:29	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.28	ng/L		08/18/25 19:53	08/19/25 18:29	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.4	0.52	ng/L		08/18/25 19:53	08/19/25 18:29	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.4	0.42	ng/L		08/18/25 19:53	08/19/25 18:29	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.4	0.36	ng/L		08/18/25 19:53	08/19/25 18:29	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		2.9	0.72	ng/L		08/18/25 19:53	08/19/25 18:29	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.2	1.8	ng/L		08/18/25 19:53	08/19/25 18:29	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.2	1.8	ng/L		08/18/25 19:53	08/19/25 18:29	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*95.9*		*5 - 130*	*08/18/25 19:53*	*08/19/25 18:29*	*1*
13C5 PFPeA	*87.4*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:29*	*1*
13C5 PFHxA	*99.7*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:29*	*1*
13C4 PFHpA	*87.6*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:29*	*1*

Client Sample ID: AMW-1-081225

Lab Sample ID: 320-124344-3

Date Collected: 08/12/25 14:20

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	99.3		40 - 130	08/18/25 19:53	08/19/25 18:29	1
13C9 PFNA	96.0		40 - 130	08/18/25 19:53	08/19/25 18:29	1
13C6 PFDA	100		40 - 130	08/18/25 19:53	08/19/25 18:29	1
13C7 PFUnA	92.2		30 - 130	08/18/25 19:53	08/19/25 18:29	1
13C2 PFDoA	89.5		10 - 130	08/18/25 19:53	08/19/25 18:29	1
13C2 PFTeDA	68.8		10 - 130	08/18/25 19:53	08/19/25 18:29	1
13C3 PFBS	108		40 - 135	08/18/25 19:53	08/19/25 18:29	1
13C3 PFHxS	113		40 - 130	08/18/25 19:53	08/19/25 18:29	1
13C8 PFOS	101		40 - 130	08/18/25 19:53	08/19/25 18:29	1
13C8 FOSA	84.8		40 - 130	08/18/25 19:53	08/19/25 18:29	1
d3-NMeFOSAA	88.0		40 - 170	08/18/25 19:53	08/19/25 18:29	1
d5-NEtFOSAA	93.1		25 - 135	08/18/25 19:53	08/19/25 18:29	1
13C2 4:2 FTS	141		40 - 200	08/18/25 19:53	08/19/25 18:29	1
13C2 6:2 FTS	112		40 - 200	08/18/25 19:53	08/19/25 18:29	1
13C2 8:2 FTS	98.1		40 - 300	08/18/25 19:53	08/19/25 18:29	1
13C3 HFPO-DA	88.0		40 - 130	08/18/25 19:53	08/19/25 18:29	1
d7-N-MeFOSE-M	68.7		10 - 130	08/18/25 19:53	08/19/25 18:29	1
d9-N-EtFOSE-M	68.0		10 - 130	08/18/25 19:53	08/19/25 18:29	1
d5-NEtPFOSA	57.7		10 - 130	08/18/25 19:53	08/19/25 18:29	1
d3-NMePFOSA	64.4		10 - 130	08/18/25 19:53	08/19/25 18:29	1

Client Sample ID: AMW-5-081225

Lab Sample ID: 320-124344-4

Date Collected: 08/12/25 12:00

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluoropentanoic acid (PFPeA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorohexanoic acid (PFHxA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluoroheptanoic acid (PFHpA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorooctanoic acid (PFOA)	**3.9**		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorononanoic acid (PFNA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorodecanoic acid (PFDA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluoroundecanoic acid (PFUnA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorododecanoic acid (PFDoA)	ND		1.4	0.39	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.4	0.41	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.4	0.57	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.4	0.38	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorooctanesulfonic acid (PFOS)	**4.9**		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorononanesulfonic acid (PFNS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.4	0.38	ng/L		08/18/25 19:53	08/19/25 18:45	1

Client Sample ID: AMW-5-081225
Date Collected: 08/12/25 12:00
Date Received: 08/15/25 09:50

Lab Sample ID: 320-124344-4
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:45	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:45	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.1	1.8	ng/L		08/18/25 19:53	08/19/25 18:45	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.1	1.8	ng/L		08/18/25 19:53	08/19/25 18:45	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.28	ng/L		08/18/25 19:53	08/19/25 18:45	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.4	0.51	ng/L		08/18/25 19:53	08/19/25 18:45	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.4	0.41	ng/L		08/18/25 19:53	08/19/25 18:45	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.4	0.35	ng/L		08/18/25 19:53	08/19/25 18:45	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		2.8	0.71	ng/L		08/18/25 19:53	08/19/25 18:45	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.1	1.8	ng/L		08/18/25 19:53	08/19/25 18:45	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.1	1.8	ng/L		08/18/25 19:53	08/19/25 18:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*99.5*		*5 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C5 PFPeA	*98.9*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C5 PFHxA	*105*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C4 PFHpA	*99.6*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C8 PFOA	*97.3*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C9 PFNA	*93.1*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C6 PFDA	*92.6*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C7 PFUnA	*85.3*		*30 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C2 PFDoA	*83.6*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C2 PFTeDA	*56.4*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C3 PFBS	*93.0*		*40 - 135*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C3 PFHxS	*103*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*

Client Sample ID: AMW-5-081225

Lab Sample ID: 320-124344-4

Date Collected: 08/12/25 12:00

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C8 PFOS	*92.6*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C8 FOSA	*72.0*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
d3-NMeFOSAA	*78.5*		*40 - 170*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
d5-NEtFOSAA	*78.9*		*25 - 135*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C2 4:2 FTS	*108*		*40 - 200*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C2 6:2 FTS	*98.8*		*40 - 200*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C2 8:2 FTS	*87.5*		*40 - 300*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
13C3 HFPO-DA	*94.8*		*40 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
d7-N-MeFOSE-M	*26.4*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
d9-N-EtFOSE-M	*15.2*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
d5-NEtPFOSA	*50.2*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*
d3-NMePFOSA	*54.3*		*10 - 130*	*08/18/25 19:53*	*08/19/25 18:45*	*1*

Client Sample ID: AMW-7-081225

Lab Sample ID: 320-124344-5

Date Collected: 08/12/25 18:10

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.9	0.74	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluoropentanoic acid (PFPeA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorohexanoic acid (PFHxA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluoroheptanoic acid (PFHpA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorooctanoic acid (PFOA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorononanoic acid (PFNA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorodecanoic acid (PFDA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluoroundecanoic acid (PFUnA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorododecanoic acid (PFDoA)	ND		1.5	0.40	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.5	0.43	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.5	0.60	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.40	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorononanesulfonic acid (PFNS)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.5	0.39	ng/L		08/18/25 19:53	08/19/25 19:02	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		2.9	0.74	ng/L		08/18/25 19:53	08/19/25 19:02	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		2.9	0.74	ng/L		08/18/25 19:53	08/19/25 19:02	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		2.9	0.74	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1

Client Sample ID: AMW-7-081225
Date Collected: 08/12/25 18:10
Date Received: 08/15/25 09:50

Lab Sample ID: 320-124344-5
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.4	1.8	ng/L		08/18/25 19:53	08/19/25 19:02	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.4	1.8	ng/L		08/18/25 19:53	08/19/25 19:02	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.29	ng/L		08/18/25 19:53	08/19/25 19:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.5	0.53	ng/L		08/18/25 19:53	08/19/25 19:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.5	0.43	ng/L		08/18/25 19:53	08/19/25 19:02	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.5	0.37	ng/L		08/18/25 19:53	08/19/25 19:02	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		2.9	0.74	ng/L		08/18/25 19:53	08/19/25 19:02	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.4	1.8	ng/L		08/18/25 19:53	08/19/25 19:02	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.4	1.8	ng/L		08/18/25 19:53	08/19/25 19:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*97.8*		*5 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C5 PFPeA	*81.1*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C5 PFHxA	*98.4*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C4 PFHpA	*86.0*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C8 PFOA	*100*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C9 PFNA	*102*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C6 PFDA	*95.0*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C7 PFUnA	*104*		*30 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C2 PFDoA	*98.8*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C2 PFTeDA	*92.7*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C3 PFBS	*102*		*40 - 135*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C3 PFHxS	*109*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C8 PFOS	*102*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C8 FOSA	*82.1*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
d3-NMeFOSAA	*87.6*		*40 - 170*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
d5-NEtFOSAA	*92.3*		*25 - 135*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C2 4:2 FTS	*109*		*40 - 200*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C2 6:2 FTS	*104*		*40 - 200*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C2 8:2 FTS	*97.3*		*40 - 300*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
13C3 HFPO-DA	*88.5*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
d7-N-MeFOSE-M	*71.8*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*
d9-N-EtFOSE-M	*76.3*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:02*	*1*

Client Sample ID: AMW-7-081225

Lab Sample ID: 320-124344-5

Date Collected: 08/12/25 18:10

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtPFOSA	64.7		10 - 130	08/18/25 19:53	08/19/25 19:02	1
d3-NMePFOSA	66.0		10 - 130	08/18/25 19:53	08/19/25 19:02	1

Client Sample ID: AMW-6-081225

Lab Sample ID: 320-124344-6

Date Collected: 08/12/25 18:20

Matrix: Water

Date Received: 08/15/25 09:50

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		3.0	0.76	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluoropentanoic acid (PFPeA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorohexanoic acid (PFHxA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluoroheptanoic acid (PFHpA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorooctanoic acid (PFOA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorononanoic acid (PFNA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorodecanoic acid (PFDA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluoroundecanoic acid (PFUnA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorododecanoic acid (PFDoA)	ND		1.5	0.42	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.5	0.44	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.5	0.62	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.41	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorononanesulfonic acid (PFNS)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.5	0.40	ng/L		08/18/25 19:53	08/19/25 19:18	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.0	0.76	ng/L		08/18/25 19:53	08/19/25 19:18	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.0	0.76	ng/L		08/18/25 19:53	08/19/25 19:18	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.0	0.76	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.6	1.9	ng/L		08/18/25 19:53	08/19/25 19:18	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.6	1.9	ng/L		08/18/25 19:53	08/19/25 19:18	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.30	ng/L		08/18/25 19:53	08/19/25 19:18	1

Client Sample ID: AMW-6-081225
Date Collected: 08/12/25 18:20
Date Received: 08/15/25 09:50

Lab Sample ID: 320-124344-6
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.5	0.55	ng/L		08/18/25 19:53	08/19/25 19:18	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.5	0.44	ng/L		08/18/25 19:53	08/19/25 19:18	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.5	0.38	ng/L		08/18/25 19:53	08/19/25 19:18	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.0	0.76	ng/L		08/18/25 19:53	08/19/25 19:18	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.6	1.9	ng/L		08/18/25 19:53	08/19/25 19:18	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.6	1.9	ng/L		08/18/25 19:53	08/19/25 19:18	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*90.9*		*5 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C5 PFPeA	*98.1*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C5 PFHxA	*99.1*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C4 PFHpA	*102*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C8 PFOA	*97.2*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C9 PFNA	*95.9*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C6 PFDA	*107*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C7 PFUnA	*108*		*30 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C2 PFDoA	*110*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C2 PFTeDA	*79.9*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C3 PFBS	*89.8*		*40 - 135*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C3 PFHxS	*98.7*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C8 PFOS	*103*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C8 FOSA	*91.9*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
d3-NMeFOSAA	*102*		*40 - 170*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
d5-NEtFOSAA	*105*		*25 - 135*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C2 4:2 FTS	*116*		*40 - 200*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C2 6:2 FTS	*110*		*40 - 200*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C2 8:2 FTS	*98.7*		*40 - 300*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
13C3 HFPO-DA	*97.9*		*40 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
d7-N-MeFOSE-M	*77.0*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
d9-N-EtFOSE-M	*79.4*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
d5-NEtPFOSA	*65.2*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*
d3-NMePFOSA	*70.4*		*10 - 130*	*08/18/25 19:53*	*08/19/25 19:18*	*1*

Isotope Dilution Summary

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (5-130)	PFPeA (40-130)	13C5PHA (40-130)	C4PFHA (40-130)	C8PFOA (40-130)	C9PFNA (40-130)	C6PFDA (40-130)	13C7PUA (30-130)
320-124344-1	AMW-4-081225	98.2	82.8	94.5	92.2	106	96.2	98.3	95.4
320-124344-2	AMW-2-081225	93.1	102	97.1	89.4	104	102	101	107
320-124344-3	AMW-1-081225	95.9	87.4	99.7	87.6	99.3	96.0	100	92.2
320-124344-4	AMW-5-081225	99.5	98.9	105	99.6	97.3	93.1	92.6	85.3
320-124344-5	AMW-7-081225	97.8	81.1	98.4	86.0	100	102	95.0	104
320-124344-6	AMW-6-081225	90.9	98.1	99.1	102	97.2	95.9	107	108
380-164957-E-11-C MS	Matrix Spike	94.1	95.3	96.5	105	98.7	96.2	98.1	103
380-164957-E-11-D MSD	Matrix Spike Duplicate	92.4	105	102	106	102	97.7	101	99.2
LCS 320-870479/3-A	Lab Control Sample	97.6	101	101	92.5	104	95.0	101	85.5
LLCS 320-870479/2-A	Lab Control Sample	96.4	108	104	101	111	97.2	103	95.3
MB 320-870479/1-A	Method Blank	96.2	114	105	101	110	94.8	100	86.4

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (10-130)	PFTDA (10-130)	C3PFBS (40-135)	C3PFHS (40-130)	C8PFOS (40-130)	PFOSA (40-130)	d3NMFOS (40-170)	d5NEFOS (25-135)
320-124344-1	AMW-4-081225	91.5	77.6	108	112	104	86.8	95.4	94.6
320-124344-2	AMW-2-081225	94.2	74.3	103	111	91.7	78.9	86.3	88.9
320-124344-3	AMW-1-081225	89.5	68.8	108	113	101	84.8	88.0	93.1
320-124344-4	AMW-5-081225	83.6	56.4	93.0	103	92.6	72.0	78.5	78.9
320-124344-5	AMW-7-081225	98.8	92.7	102	109	102	82.1	87.6	92.3
320-124344-6	AMW-6-081225	110	79.9	89.8	98.7	103	91.9	102	105
380-164957-E-11-C MS	Matrix Spike	101	85.3	104	111	101	92.7	99.2	98.0
380-164957-E-11-D MSD	Matrix Spike Duplicate	98.4	90.0	96.7	105	94.0	89.1	92.4	96.2
LCS 320-870479/3-A	Lab Control Sample	87.4	89.7	99.8	105	110	83.6	98.8	102
LLCS 320-870479/2-A	Lab Control Sample	100	98.9	97.5	105	107	88.0	95.9	100
MB 320-870479/1-A	Method Blank	95.6	89.0	102	109	109	89.7	97.6	104

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M242FTS (40-200)	M262FTS (40-200)	M282FTS (40-300)	HFPODA (40-130)	NMFM (10-130)	NEFM (10-130)	d5NPFSA (10-130)	d3NMFSA (10-130)
320-124344-1	AMW-4-081225	121	96.0	102	86.0	67.6	70.5	64.2	65.0
320-124344-2	AMW-2-081225	109	99.1	98.9	92.4	59.6	60.4	54.4	56.7
320-124344-3	AMW-1-081225	141	112	98.1	88.0	68.7	68.0	57.7	64.4
320-124344-4	AMW-5-081225	108	98.8	87.5	94.8	26.4	15.2	50.2	54.3
320-124344-5	AMW-7-081225	109	104	97.3	88.5	71.8	76.3	64.7	66.0
320-124344-6	AMW-6-081225	116	110	98.7	97.9	77.0	79.4	65.2	70.4
380-164957-E-11-C MS	Matrix Spike	132	105	89.2	97.9	72.1	73.4	65.8	76.2
380-164957-E-11-D MSD	Matrix Spike Duplicate	118	103	94.1	92.1	72.0	75.0	67.6	67.4
LCS 320-870479/3-A	Lab Control Sample	120	99.9	93.2	80.5	75.4	76.8	61.2	67.9
LLCS 320-870479/2-A	Lab Control Sample	113	90.6	98.7	89.7	76.5	80.7	65.7	70.8
MB 320-870479/1-A	Method Blank	110	93.3	94.9	88.1	80.1	80.5	68.4	72.8

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA

Isotope Dilution Summary

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = 13C2 4:2 FTS
M262FTS = 13C2 6:2 FTS
M282FTS = 13C2 8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 320-870479/1-A
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.0	1.0	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.58	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.81	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.54	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.53	ng/L		08/18/25 19:53	08/19/25 12:12	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		4.0	1.0	ng/L		08/18/25 19:53	08/19/25 12:12	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		4.0	1.0	ng/L		08/18/25 19:53	08/19/25 12:12	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		4.0	1.0	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		10	2.5	ng/L		08/18/25 19:53	08/19/25 12:12	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		10	2.5	ng/L		08/18/25 19:53	08/19/25 12:12	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.5	0.39	ng/L		08/18/25 19:53	08/19/25 12:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		2.0	0.72	ng/L		08/18/25 19:53	08/19/25 12:12	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		2.0	0.58	ng/L		08/18/25 19:53	08/19/25 12:12	1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 320-870479/1-A
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 870479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		2.0	0.50	ng/L		08/18/25 19:53	08/19/25 12:12	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		4.0	1.0	ng/L		08/18/25 19:53	08/19/25 12:12	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		10	2.5	ng/L		08/18/25 19:53	08/19/25 12:12	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		10	2.5	ng/L		08/18/25 19:53	08/19/25 12:12	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*96.2*		*5 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C5 PFPeA	*114*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C5 PFHxA	*105*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C4 PFHpA	*101*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C8 PFOA	*110*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C9 PFNA	*94.8*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C6 PFDA	*100*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C7 PFUnA	*86.4*		*30 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C2 PFDoA	*95.6*		*10 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C2 PFTeDA	*89.0*		*10 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C3 PFBS	*102*		*40 - 135*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C3 PFHxS	*109*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C8 PFOS	*109*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C8 FOSA	*89.7*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
d3-NMeFOSAA	*97.6*		*40 - 170*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
d5-NEtFOSAA	*104*		*25 - 135*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C2 4:2 FTS	*110*		*40 - 200*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C2 6:2 FTS	*93.3*		*40 - 200*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C2 8:2 FTS	*94.9*		*40 - 300*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
13C3 HFPO-DA	*88.1*		*40 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
d7-N-MeFOSE-M	*80.1*		*10 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
d9-N-EtFOSE-M	*80.5*		*10 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
d5-NEtPFOSA	*68.4*		*10 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*
d3-NMePFOSA	*72.8*		*10 - 130*	*08/18/25 19:53*	*08/19/25 12:12*	*1*

Lab Sample ID: LCS 320-870479/3-A
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	82.8		ng/L		103	70 - 140
Perfluoropentanoic acid (PFPeA)	40.0	38.8		ng/L		97	65 - 135
Perfluorohexanoic acid (PFHxA)	40.0	34.3		ng/L		86	70 - 145
Perfluoroheptanoic acid (PFHpA)	40.0	42.0		ng/L		105	70 - 150
Perfluorooctanoic acid (PFOA)	40.0	36.0		ng/L		90	70 - 150
Perfluorononanoic acid (PFNA)	40.0	38.8		ng/L		97	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	36.7		ng/L		92	70 - 140

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-870479/3-A
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	40.0	40.4		ng/L		101	70 - 145
Perfluorododecanoic acid (PFDoA)	40.0	39.5		ng/L		99	70 - 140
Perfluorotridecanoic acid (PFTrDA)	40.0	40.6		ng/L		102	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	40.0	39.6		ng/L		99	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.5	30.0		ng/L		84	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	37.6	37.6		ng/L		100	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	36.5	32.1		ng/L		88	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	38.2	35.1		ng/L		92	70 - 150
Perfluorooctanesulfonic acid (PFOS)	37.2	30.9		ng/L		83	55 - 150
Perfluorononanesulfonic acid (PFNS)	38.5	32.5		ng/L		84	65 - 145
Perfluorodecanesulfonic acid (PFDS)	38.6	29.6		ng/L		77	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	38.8	29.8		ng/L		77	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	75.0	66.0		ng/L		88	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	76.2	75.1		ng/L		99	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.8	76.2		ng/L		99	60 - 150
Perfluorooctanesulfonamide (PFOSA)	40.0	41.3		ng/L		103	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	42.8		ng/L		107	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	40.0	43.6		ng/L		109	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	39.3		ng/L		98	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	37.6		ng/L		94	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	200	202		ng/L		101	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	200	179		ng/L		89	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	29.9		ng/L		100	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	48.3		ng/L		128	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	40.0	41.7		ng/L		104	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.0	35.1		ng/L		88	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40.0	33.2		ng/L		83	50 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-870479/3-A
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	37.4	38.0		ng/L		102	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	37.8	39.9		ng/L		106	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	35.7	30.6		ng/L		86	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	80.0	85.9		ng/L		107	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	200	193		ng/L		97	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	200	177		ng/L		88	50 - 145

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*97.6*		*5 - 130*
13C5 PFPeA	*101*		*40 - 130*
13C5 PFHxA	*101*		*40 - 130*
13C4 PFHpA	*92.5*		*40 - 130*
13C8 PFOA	*104*		*40 - 130*
13C9 PFNA	*95.0*		*40 - 130*
13C6 PFDA	*101*		*40 - 130*
13C7 PFUnA	*85.5*		*30 - 130*
13C2 PFDoA	*87.4*		*10 - 130*
13C2 PFTeDA	*89.7*		*10 - 130*
13C3 PFBS	*99.8*		*40 - 135*
13C3 PFHxS	*105*		*40 - 130*
13C8 PFOS	*110*		*40 - 130*
13C8 FOSA	*83.6*		*40 - 130*
d3-NMeFOSAA	*98.8*		*40 - 170*
d5-NEtFOSAA	*102*		*25 - 135*
13C2 4:2 FTS	*120*		*40 - 200*
13C2 6:2 FTS	*99.9*		*40 - 200*
13C2 8:2 FTS	*93.2*		*40 - 300*
13C3 HFPO-DA	*80.5*		*40 - 130*
d7-N-MeFOSE-M	*75.4*		*10 - 130*
d9-N-EtFOSE-M	*76.8*		*10 - 130*
d5-NEtPFOSA	*61.2*		*10 - 130*
d3-NMePFOSA	*67.9*		*10 - 130*

Lab Sample ID: LLCS 320-870479/2-A
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	8.00	9.10		ng/L		114	70 - 140
Perfluoropentanoic acid (PFPeA)	4.00	4.51		ng/L		113	65 - 135
Perfluorohexanoic acid (PFHxA)	4.00	4.26		ng/L		106	70 - 145
Perfluoroheptanoic acid (PFHpA)	4.00	4.08		ng/L		102	70 - 150
Perfluorooctanoic acid (PFOA)	4.00	3.94		ng/L		98	70 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-870479/2-A
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorononanoic acid (PFNA)	4.00	4.12		ng/L		103	70 - 150
Perfluorodecanoic acid (PFDA)	4.00	3.90		ng/L		98	70 - 140
Perfluoroundecanoic acid (PFUnA)	4.00	4.18		ng/L		104	70 - 145
Perfluorododecanoic acid (PFDoA)	4.00	4.17		ng/L		104	70 - 140
Perfluorotridecanoic acid (PFTrDA)	4.00	4.26		ng/L		106	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	4.00	4.37		ng/L		109	60 - 140
Perfluorobutanesulfonic acid (PFBS)	3.55	3.31		ng/L		93	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	3.76	3.93		ng/L		104	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	3.65	3.47		ng/L		95	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.82	3.95		ng/L		104	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.72	3.74		ng/L		101	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.85	3.14		ng/L		82	65 - 145
Perfluorodecanesulfonic acid (PFDS)	3.86	3.36		ng/L		87	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.88	3.46		ng/L		89	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	7.50	6.77		ng/L		90	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	7.62	8.86		ng/L		116	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.68	7.83		ng/L		102	60 - 150
Perfluorooctanesulfonamide (PFOSA)	4.00	4.21		ng/L		105	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	4.00	4.61		ng/L		115	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	4.00	4.66		ng/L		116	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	4.00	4.16		ng/L		104	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	4.00	4.01		ng/L		100	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	20.0	20.5		ng/L		102	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	20.0	18.9		ng/L		95	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	3.07		ng/L		102	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.78	4.94		ng/L		131	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.00	4.35		ng/L		109	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.00	3.60		ng/L		90	60 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-870479/2-A
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.00	4.46		ng/L		112	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	3.74	4.33		ng/L		116	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	3.78	4.47		ng/L		118	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	3.57	3.12		ng/L		87	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	8.00	8.99		ng/L		112	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	20.0	19.6		ng/L		98	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	20.0	20.1		ng/L		101	50 - 145

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*96.4*		*5 - 130*
13C5 PFPeA	*108*		*40 - 130*
13C5 PFHxA	*104*		*40 - 130*
13C4 PFHpA	*101*		*40 - 130*
13C8 PFOA	*111*		*40 - 130*
13C9 PFNA	*97.2*		*40 - 130*
13C6 PFDA	*103*		*40 - 130*
13C7 PFUnA	*95.3*		*30 - 130*
13C2 PFDoA	*100*		*10 - 130*
13C2 PFTeDA	*98.9*		*10 - 130*
13C3 PFBS	*97.5*		*40 - 135*
13C3 PFHxS	*105*		*40 - 130*
13C8 PFOS	*107*		*40 - 130*
13C8 FOSA	*88.0*		*40 - 130*
d3-NMeFOSAA	*95.9*		*40 - 170*
d5-NEtFOSAA	*100*		*25 - 135*
13C2 4:2 FTS	*113*		*40 - 200*
13C2 6:2 FTS	*90.6*		*40 - 200*
13C2 8:2 FTS	*98.7*		*40 - 300*
13C3 HFPO-DA	*89.7*		*40 - 130*
d7-N-MeFOSE-M	*76.5*		*10 - 130*
d9-N-EtFOSE-M	*80.7*		*10 - 130*
d5-NEtPFOSA	*65.7*		*10 - 130*
d3-NMePFOSA	*70.8*		*10 - 130*

Lab Sample ID: 380-164957-E-11-C MS
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.5	J	62.8	75.4		ng/L		116	70 - 140
Perfluoropentanoic acid (PFPeA)	3.4		31.4	44.9		ng/L		132	65 - 135
Perfluorohexanoic acid (PFHxA)	1.6		31.4	33.9		ng/L		103	70 - 145

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 380-164957-E-11-C MS
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	0.92	J	31.4	34.5		ng/L		107	70 - 150
Perfluorooctanoic acid (PFOA)	0.94	J	31.4	34.8		ng/L		108	70 - 150
Perfluorononanoic acid (PFNA)	ND		31.4	32.3		ng/L		103	70 - 150
Perfluorodecanoic acid (PFDA)	ND		31.4	33.8		ng/L		108	70 - 140
Perfluoroundecanoic acid (PFUnA)	ND		31.4	32.9		ng/L		105	70 - 145
Perfluorododecanoic acid (PFDoA)	ND		31.4	33.2		ng/L		106	70 - 140
Perfluorotridecanoic acid (PFTrDA)	ND		31.4	33.6		ng/L		107	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	ND		31.4	36.0		ng/L		115	60 - 140
Perfluorobutanesulfonic acid (PFBS)	0.77	J	27.9	26.5		ng/L		92	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	0.47	J	29.5	29.2		ng/L		97	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	2.1		28.6	30.5		ng/L		99	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	ND		30.0	32.5		ng/L		108	70 - 150
Perfluorooctanesulfonic acid (PFOS)	0.56	J I	29.2	31.8		ng/L		107	55 - 150
Perfluorononanesulfonic acid (PFNS)	ND		30.2	30.5		ng/L		101	65 - 145
Perfluorodecanesulfonic acid (PFDS)	ND		30.3	26.5		ng/L		87	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	ND		30.5	26.3		ng/L		86	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		58.9	58.1		ng/L		99	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		59.8	64.8		ng/L		108	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		60.3	66.4		ng/L		110	60 - 150
Perfluorooctanesulfonamide (PFOSA)	ND		31.4	34.2		ng/L		109	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		31.4	34.0		ng/L		108	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		31.4	36.3		ng/L		115	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		31.4	32.7		ng/L		104	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		31.4	30.9		ng/L		98	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		157	161		ng/L		103	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		157	156		ng/L		99	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		23.6	24.9		ng/L		106	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		29.7	39.0		ng/L		131	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		31.4	36.7		ng/L		117	55 - 140

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 380-164957-E-11-C MS
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		31.4	34.8		ng/L		111	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		31.4	29.8		ng/L		95	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		29.3	34.5		ng/L		118	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		29.6	28.6		ng/L		97	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		28.0	31.1		ng/L		111	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND	F1	62.8	82.3	F1	ng/L		131	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		157	183		ng/L		116	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		157	182		ng/L		116	50 - 145

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*94.1*		*5 - 130*
13C5 PFPeA	*95.3*		*40 - 130*
13C5 PFHxA	*96.5*		*40 - 130*
13C4 PFHpA	*105*		*40 - 130*
13C8 PFOA	*98.7*		*40 - 130*
13C9 PFNA	*96.2*		*40 - 130*
13C6 PFDA	*98.1*		*40 - 130*
13C7 PFUnA	*103*		*30 - 130*
13C2 PFDoA	*101*		*10 - 130*
13C2 PFTeDA	*85.3*		*10 - 130*
13C3 PFBS	*104*		*40 - 135*
13C3 PFHxS	*111*		*40 - 130*
13C8 PFOS	*101*		*40 - 130*
13C8 FOSA	*92.7*		*40 - 130*
d3-NMeFOSAA	*99.2*		*40 - 170*
d5-NEtFOSAA	*98.0*		*25 - 135*
13C2 4:2 FTS	*132*		*40 - 200*
13C2 6:2 FTS	*105*		*40 - 200*
13C2 8:2 FTS	*89.2*		*40 - 300*
13C3 HFPO-DA	*97.9*		*40 - 130*
d7-N-MeFOSE-M	*72.1*		*10 - 130*
d9-N-EtFOSE-M	*73.4*		*10 - 130*
d5-NEtPFOSA	*65.8*		*10 - 130*
d3-NMePFOSA	*76.2*		*10 - 130*

Lab Sample ID: 380-164957-E-11-D MSD
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	2.5	J	65.3	81.1		ng/L		120	70 - 140	7	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 380-164957-E-11-D MSD
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoropentanoic acid (PFPeA)	3.4		32.6	38.9		ng/L		109	65 - 135	14	30
Perfluorohexanoic acid (PFHxA)	1.6		32.6	31.6		ng/L		92	70 - 145	7	30
Perfluoroheptanoic acid (PFHpA)	0.92	J	32.6	31.5		ng/L		94	70 - 150	9	30
Perfluorooctanoic acid (PFOA)	0.94	J	32.6	32.2		ng/L		96	70 - 150	8	30
Perfluorononanoic acid (PFNA)	ND		32.6	33.7		ng/L		103	70 - 150	4	30
Perfluorodecanoic acid (PFDA)	ND		32.6	32.8		ng/L		100	70 - 140	3	30
Perfluoroundecanoic acid (PFUnA)	ND		32.6	33.0		ng/L		101	70 - 145	0	30
Perfluorododecanoic acid (PFDoA)	ND		32.6	32.9		ng/L		101	70 - 140	1	30
Perfluorotridecanoic acid (PFTrDA)	ND		32.6	34.4		ng/L		105	65 - 140	2	30
Perfluorotetradecanoic acid (PFTeDA)	ND		32.6	36.7		ng/L		112	60 - 140	2	30
Perfluorobutanesulfonic acid (PFBS)	0.77	J	29.0	30.8		ng/L		103	60 - 145	15	30
Perfluoropentanesulfonic acid (PFPeS)	0.47	J	30.7	31.1		ng/L		100	65 - 140	6	30
Perfluorohexanesulfonic acid (PFHxS)	2.1		29.8	32.0		ng/L		100	65 - 145	5	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		31.1	34.2		ng/L		110	70 - 150	5	30
Perfluorooctanesulfonic acid (PFOS)	0.56	J I	30.4	30.6		ng/L		99	55 - 150	4	30
Perfluorononanesulfonic acid (PFNS)	ND		31.4	32.1		ng/L		102	65 - 145	5	30
Perfluorodecanesulfonic acid (PFDS)	ND		31.5	30.2		ng/L		96	60 - 145	13	30
Perfluorododecanesulfonic acid (PFDoS)	ND		31.7	28.0		ng/L		88	50 - 145	6	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		61.2	57.7		ng/L		94	70 - 145	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		62.1	68.0		ng/L		109	65 - 155	5	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		62.7	70.5		ng/L		113	60 - 150	6	30
Perfluorooctanesulfonamide (PFOSA)	ND		32.6	34.4		ng/L		106	70 - 145	1	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		32.6	37.2		ng/L		114	60 - 150	9	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		32.6	34.3		ng/L		105	65 - 145	6	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		32.6	31.3		ng/L		96	50 - 140	5	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		32.6	30.4		ng/L		93	70 - 145	2	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		163	171		ng/L		105	70 - 145	6	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		163	166		ng/L		102	70 - 135	6	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		24.5	26.2		ng/L		107	70 - 140	5	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		30.9	38.5		ng/L		125	65 - 145	1	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 380-164957-E-11-D MSD
Matrix: Water
Analysis Batch: 870705

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 870479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		32.6	36.7		ng/L		112	55 - 140	0	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		32.6	31.2		ng/L		95	60 - 150	11	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		32.6	25.0		ng/L		77	50 - 150	17	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		30.5	34.9		ng/L		115	70 - 155	1	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		30.8	32.1		ng/L		104	55 - 160	11	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		29.1	29.9		ng/L		103	70 - 140	4	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND	F1	65.3	73.3		ng/L		112	65 - 130	12	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		163	181		ng/L		111	70 - 135	1	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		163	171		ng/L		105	50 - 145	6	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*92.4*		*5 - 130*
13C5 PFPeA	*105*		*40 - 130*
13C5 PFHxA	*102*		*40 - 130*
13C4 PFHpA	*106*		*40 - 130*
13C8 PFOA	*102*		*40 - 130*
13C9 PFNA	*97.7*		*40 - 130*
13C6 PFDA	*101*		*40 - 130*
13C7 PFUnA	*99.2*		*30 - 130*
13C2 PFDoA	*98.4*		*10 - 130*
13C2 PFTeDA	*90.0*		*10 - 130*
13C3 PFBS	*96.7*		*40 - 135*
13C3 PFHxS	*105*		*40 - 130*
13C8 PFOS	*94.0*		*40 - 130*
13C8 FOSA	*89.1*		*40 - 130*
d3-NMeFOSAA	*92.4*		*40 - 170*
d5-NEtFOSAA	*96.2*		*25 - 135*
13C2 4:2 FTS	*118*		*40 - 200*
13C2 6:2 FTS	*103*		*40 - 200*
13C2 8:2 FTS	*94.1*		*40 - 300*
13C3 HFPO-DA	*92.1*		*40 - 130*
d7-N-MeFOSE-M	*72.0*		*10 - 130*
d9-N-EtFOSE-M	*75.0*		*10 - 130*
d5-NEtPFOSA	*67.6*		*10 - 130*
d3-NMePFOSA	*67.4*		*10 - 130*

QC Association Summary

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

LCMS

Prep Batch: 870479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-124344-1	AMW-4-081225	Total/NA	Water	1633	
320-124344-2	AMW-2-081225	Total/NA	Water	1633	
320-124344-3	AMW-1-081225	Total/NA	Water	1633	
320-124344-4	AMW-5-081225	Total/NA	Water	1633	
320-124344-5	AMW-7-081225	Total/NA	Water	1633	
320-124344-6	AMW-6-081225	Total/NA	Water	1633	
MB 320-870479/1-A	Method Blank	Total/NA	Water	1633	
LCS 320-870479/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 320-870479/2-A	Lab Control Sample	Total/NA	Water	1633	
380-164957-E-11-C MS	Matrix Spike	Total/NA	Water	1633	
380-164957-E-11-D MSD	Matrix Spike Duplicate	Total/NA	Water	1633	

Analysis Batch: 870705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-124344-1	AMW-4-081225	Total/NA	Water	1633	870479
320-124344-2	AMW-2-081225	Total/NA	Water	1633	870479
320-124344-3	AMW-1-081225	Total/NA	Water	1633	870479
320-124344-4	AMW-5-081225	Total/NA	Water	1633	870479
320-124344-5	AMW-7-081225	Total/NA	Water	1633	870479
320-124344-6	AMW-6-081225	Total/NA	Water	1633	870479
MB 320-870479/1-A	Method Blank	Total/NA	Water	1633	870479
LCS 320-870479/3-A	Lab Control Sample	Total/NA	Water	1633	870479
LLCS 320-870479/2-A	Lab Control Sample	Total/NA	Water	1633	870479
380-164957-E-11-C MS	Matrix Spike	Total/NA	Water	1633	870479
380-164957-E-11-D MSD	Matrix Spike Duplicate	Total/NA	Water	1633	870479

Lab Chronicle

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Client Sample ID: AMW-4-081225
Lab Sample ID: 320-124344-1
Date Collected: 08/12/25 16:10
Matrix: Water
Date Received: 08/15/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			172.6 mL	5.0 mL	870479	08/18/25 19:53	CJS	EET SAC
Total/NA	Analysis	1633		1			870705	08/19/25 17:56	S1M	EET SAC

Client Sample ID: AMW-2-081225
Lab Sample ID: 320-124344-2
Date Collected: 08/12/25 12:45
Matrix: Water
Date Received: 08/15/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			176.7 mL	5.0 mL	870479	08/18/25 19:53	CJS	EET SAC
Total/NA	Analysis	1633		1			870705	08/19/25 18:12	S1M	EET SAC

Client Sample ID: AMW-1-081225
Lab Sample ID: 320-124344-3
Date Collected: 08/12/25 14:20
Matrix: Water
Date Received: 08/15/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			174 mL	5.0 mL	870479	08/18/25 19:53	CJS	EET SAC
Total/NA	Analysis	1633		1			870705	08/19/25 18:29	S1M	EET SAC

Client Sample ID: AMW-5-081225
Lab Sample ID: 320-124344-4
Date Collected: 08/12/25 12:00
Matrix: Water
Date Received: 08/15/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			176.3 mL	5.0 mL	870479	08/18/25 19:53	CJS	EET SAC
Total/NA	Analysis	1633		1			870705	08/19/25 18:45	S1M	EET SAC

Client Sample ID: AMW-7-081225
Lab Sample ID: 320-124344-5
Date Collected: 08/12/25 18:10
Matrix: Water
Date Received: 08/15/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			170 mL	5.0 mL	870479	08/18/25 19:53	CJS	EET SAC
Total/NA	Analysis	1633		1			870705	08/19/25 19:02	S1M	EET SAC

Client Sample ID: AMW-6-081225
Lab Sample ID: 320-124344-6
Date Collected: 08/12/25 18:20
Matrix: Water
Date Received: 08/15/25 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			164.4 mL	5.0 mL	870479	08/18/25 19:53	CJS	EET SAC
Total/NA	Analysis	1633		1			870705	08/19/25 19:18	S1M	EET SAC

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

Accreditation/Certification Summary

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C581	05-05-26

Method Summary

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Method	Method Description	Protocol	Laboratory
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET SAC
1633	Solid-Phase Extraction (SPE)	EPA	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: Aspect Consulting
Project/Site: C Street Landfill

Job ID: 320-124344-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
320-124344-1	AMW-4-081225	Water	08/12/25 16:10	08/15/25 09:50	Washington
320-124344-2	AMW-2-081225	Water	08/12/25 12:45	08/15/25 09:50	Washington
320-124344-3	AMW-1-081225	Water	08/12/25 14:20	08/15/25 09:50	Washington
320-124344-4	AMW-5-081225	Water	08/12/25 12:00	08/15/25 09:50	Washington
320-124344-5	AMW-7-081225	Water	08/12/25 18:10	08/15/25 09:50	Washington
320-124344-6	AMW-6-081225	Water	08/12/25 18:20	08/15/25 09:50	Washington

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Aidan Hourigate Risi Naa	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: Risi Naa, Peter Bannister	Phone: (206) 939-0783	E-Mail:	State of Origin:	Page: Page 1 of 1
Company: Geosyntec Consultants	PWSID:			Job #:
Address: 801 5th Avenue, Suite 2200	Due Date Requested:			
City: Seattle	TAT Requested (days): Standard / 10			
State, Zip: WA, 98104	Compliance Project: Δ Yes Δ No			
Phone: (206) 939-0783	PO #:			
Email: Risi Naa, Peter Bannister@geosyntec.com	WO #: WO-AS150074C-11824			
Project Name: C Street Groundwater Monitoring	Project #: AS150074C			
Site: Shelton, Washington	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFAS - 40 Standard Analytes (LC/MS)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		N	N		X	
AMW-4-081225	08/12/25	1610	G	W	N	N	X	2	
AMW-2-081225	08/12/25	1245	G	W	N	N	X	2	69 NTU field measurement
AMW-1-081225	08/12/25	1420	G	W	N	N	X	2	
AMW-5-081225	08/12/25	1200	G	W	N	N	X	2	
AMW-7-081225	08/12/25	1810	G	W	N	N	X	2	
AMW-6-081225	08/12/25	1820	G	W	N	N	X	2	
Temperature Blank								1	

320-124344 Chain of Custody

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

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

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

Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Aidan Hourigate	Date/Time: 8/13/25 1600	Company: Geosyntec	Received by:	Date/Time: 8/15/25 930	Company: EFI Sac
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Cooler Temperature(s) °C and Other Remarks: 1.0

Ver: 01/16/2019

eurofins Environment Testing	Document Title: Sample Receiving Notes		
	Eurofins Document Reference : S-SR-FRM72109	Revision: 3	Historical Reference: QA-812
	Effective date : 18 Jul 2025		Issued by: XE8X

Loc 320

Job: 124344

Tracking # : 8835 5329 7220

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

GSL / OnTrac / Goldstreak / USPS / Other_____

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

Therm. ID: L10 Corr. Factor: (+ / -) _____°C

Ice ✓ Wet_____ Gel _____ Other _____

Cooler Custody Seal: 7728092

Cooler ID: _____

Temp Observed: 1.0 °C Corrected: 1.0 °C

From: Temp Blank ☑ Sandwich ☐ Sidewall ☐

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

Initials: JF Date: 8/15/25

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

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

Initials: JF Date: 8/15/25

Notes:_____

Trizma Lot #(s): _____

Ammonium Acetate Lot #(s): _____

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

Initials: JF Date: 8/15/25

ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Wendy Key
Geosyntec Consultants Inc
801 5th Ave
Suite 2200
Seattle, Washington 98104

Generated 3/12/2026 2:37:15 PM

JOB DESCRIPTION

C Street Landfill

JOB NUMBER

320-130404-1

Eurofins Sacramento
880 Riverside Parkway
West Sacramento CA 95605

See page two for job notes and contact information.

my EOL

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 Environment Testing Northern California, LLC Project Manager.

Authorization



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Authorized for release by
Laura Turpen, Project Manager I
Laura.Turpen@et.eurofinsus.com
(916)374-4414

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Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 320-130404-1 — Eurofins Sacramento

Job Narrative
320-130404-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 3/5/2026 9:10 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 time was 1.2°C.

PFAS
Method 1633: Due to the excess amount of sediment, the following sample was fortified with Isotope Dilution Analyte (IDA) then centrifuged and decanted into a new container: AMW-4-030326 (320-130404-4). The sediment in the centrifuge tubes were rinsed with methanol and the methanol was combined with the original aqueous fraction to generate a combined extract to be used for the analysis.

Method 1633: Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following sample: (LLCS 320-905815/2-A). Quantitation by isotope dilution generally precludes any adverse effect on data quality due to elevated IDA recoveries.

Method 1633: The following continuing calibration blank (CCB) was flagged for Isotope Dilution Analyte (IDA) recovery above the method recommended limit: (CCB 320-905885/35). The purpose of the CCB is to test for instrument contamination. As the CCB was non-detect for all native analytes, there is no adverse impact on data quality; therefore, the data have been reported.

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

Detection Summary

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Client Sample ID: AMW-1-030226 — Lab Sample ID: 320-130404-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	0.37	J	1.4	0.36	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.7		1.4	0.36	ng/L	1		1633	Total/NA

Client Sample ID: AMW-2-030226 — Lab Sample ID: 320-130404-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	0.77	J	1.5	0.37	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	11		1.5	0.37	ng/L	1		1633	Total/NA
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	1.8	J	3.0	0.75	ng/L	1		1633	Total/NA

Client Sample ID: AMW-3-030326 — Lab Sample ID: 320-130404-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	0.74	J	1.6	0.39	ng/L	1		1633	Total/NA

Client Sample ID: AMW-4-030326 — Lab Sample ID: 320-130404-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	1.5	J	3.0	0.74	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	0.71	J	1.5	0.37	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	1.2	J	1.5	0.37	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	18		1.5	0.37	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	0.87	J	1.5	0.37	ng/L	1		1633	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.44	J	1.5	0.37	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.4	J	1.5	0.37	ng/L	1		1633	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.62	J	1.5	0.37	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	46		1.5	0.37	ng/L	1		1633	Total/NA
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.1	J	3.0	0.74	ng/L	1		1633	Total/NA

Client Sample ID: AMW-5-030226 — Lab Sample ID: 320-130404-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	0.44	J	1.5	0.38	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	0.60	J	1.5	0.38	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	0.69	J	1.5	0.38	ng/L	1		1633	Total/NA
Perfluorooctanesulfonic acid (PFOS)	12		1.5	0.38	ng/L	1		1633	Total/NA
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	4.1		3.0	0.75	ng/L	1		1633	Total/NA

Client Sample ID: AMW-6-030326 — Lab Sample ID: 320-130404-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	0.60	J	1.4	0.35	ng/L	1		1633	Total/NA
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.0	J	2.8	0.70	ng/L	1		1633	Total/NA

Client Sample ID: AMW-7-030326 — Lab Sample ID: 320-130404-7

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Sacramento

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Client Sample ID: AMW-1-030226
Date Collected: 03/02/26 16:15
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-1
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.9	0.72	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluoropentanoic acid (PFPeA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorohexanoic acid (PFHxA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluoroheptanoic acid (PFHpA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorooctanoic acid (PFOA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorononanoic acid (PFNA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorodecanoic acid (PFDA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluoroundecanoic acid (PFUnA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorododecanoic acid (PFDoA)	ND		1.4	0.40	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.4	0.42	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.4	0.58	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.4	0.39	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorohexanesulfonic acid (PFHxS)	**0.37**	**J**	1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorooctanesulfonic acid (PFOS)	**1.7**		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorononanesulfonic acid (PFNS)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.4	0.38	ng/L		03/10/26 20:13	03/11/26 14:16	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		2.9	0.72	ng/L		03/10/26 20:13	03/11/26 14:16	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		2.9	0.72	ng/L		03/10/26 20:13	03/11/26 14:16	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		2.9	0.72	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.2	1.8	ng/L		03/10/26 20:13	03/11/26 14:16	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.2	1.8	ng/L		03/10/26 20:13	03/11/26 14:16	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.28	ng/L		03/10/26 20:13	03/11/26 14:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.4	0.52	ng/L		03/10/26 20:13	03/11/26 14:16	1

Client Sample ID: AMW-1-030226

Date Collected: 03/02/26 16:15
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-1
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.4	0.42	ng/L		03/10/26 20:13	03/11/26 14:16	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.4	0.36	ng/L		03/10/26 20:13	03/11/26 14:16	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		2.9	0.72	ng/L		03/10/26 20:13	03/11/26 14:16	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.2	1.8	ng/L		03/10/26 20:13	03/11/26 14:16	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.2	1.8	ng/L		03/10/26 20:13	03/11/26 14:16	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*111*		*5 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C5 PFPeA	*107*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C5 PFHxA	*102*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C4 PFHpA	*103*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C8 PFOA	*94.5*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C9 PFNA	*105*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C6 PFDA	*101*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C7 PFUnA	*116*		*30 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C2 PFDoA	*107*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C2 PFTeDA	*101*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C3 PFBS	*108*		*40 - 135*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C3 PFHxS	*109*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C8 PFOS	*106*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C8 FOSA	*97.1*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
d3-NMeFOSAA	*120*		*40 - 170*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
d5-NEtFOSAA	*103*		*25 - 135*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C2 4:2 FTS	*108*		*40 - 200*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C2 6:2 FTS	*127*		*40 - 200*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C2 8:2 FTS	*105*		*40 - 300*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
13C3 HFPO-DA	*113*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
d7-N-MeFOSE-M	*83.1*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
d9-N-EtFOSE-M	*86.3*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
d5-NEtPFOSA	*86.5*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*
d3-NMePFOSA	*82.3*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:16*	*1*

Client Sample ID: AMW-2-030226

Date Collected: 03/02/26 15:03
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-2
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluoropentanoic acid (PFPeA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorohexanoic acid (PFHxA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluoroheptanoic acid (PFHpA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorooctanoic acid (PFOA)	**0.77**	**J**	1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorononanoic acid (PFNA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorodecanoic acid (PFDA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1

Client Sample ID: AMW-2-030226
Date Collected: 03/02/26 15:03
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-2
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.5	0.41	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.5	0.43	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.5	0.61	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.40	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorooctanesulfonic acid (PFOS)	**11**		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorononanesulfonic acid (PFNS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.5	0.40	ng/L		03/10/26 20:13	03/11/26 14:32	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 14:32	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	**1.8**	**J**	3.0	0.75	ng/L		03/10/26 20:13	03/11/26 14:32	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 14:32	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 14:32	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.29	ng/L		03/10/26 20:13	03/11/26 14:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.5	0.54	ng/L		03/10/26 20:13	03/11/26 14:32	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.5	0.43	ng/L		03/10/26 20:13	03/11/26 14:32	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 14:32	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 14:32	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 14:32	1

Client Sample ID: AMW-2-030226

Lab Sample ID: 320-130404-2

Date Collected: 03/02/26 15:03

Matrix: Water

Date Received: 03/05/26 09:10

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 14:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*101*		*5 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C5 PFPeA	*105*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C5 PFHxA	*113*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C4 PFHpA	*89.1*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C8 PFOA	*98.9*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C9 PFNA	*102*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C6 PFDA	*104*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C7 PFUnA	*103*		*30 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C2 PFDoA	*111*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C2 PFTeDA	*103*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C3 PFBS	*114*		*40 - 135*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C3 PFHxS	*110*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C8 PFOS	*98.8*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C8 FOSA	*86.6*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
d3-NMeFOSAA	*123*		*40 - 170*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
d5-NEtFOSAA	*106*		*25 - 135*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C2 4:2 FTS	*107*		*40 - 200*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C2 6:2 FTS	*129*		*40 - 200*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C2 8:2 FTS	*131*		*40 - 300*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
13C3 HFPO-DA	*107*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
d7-N-MeFOSE-M	*80.6*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
d9-N-EtFOSE-M	*77.9*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
d5-NEtPFOSA	*81.6*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*
d3-NMePFOSA	*76.8*		*10 - 130*	*03/10/26 20:13*	*03/11/26 14:32*	*1*

Client Sample ID: AMW-3-030326

Lab Sample ID: 320-130404-3

Date Collected: 03/03/26 09:13

Matrix: Water

Date Received: 03/05/26 09:10

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		3.1	0.79	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.43	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.6	0.46	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.6	0.64	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.42	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1

Client Sample ID: AMW-3-030326
Date Collected: 03/03/26 09:13
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-3
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorooctanesulfonic acid (PFOS)	**0.74**	**J**	1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorononanesulfonic acid (PFNS)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.6	0.42	ng/L		03/10/26 20:13	03/11/26 14:49	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.1	0.79	ng/L		03/10/26 20:13	03/11/26 14:49	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.1	0.79	ng/L		03/10/26 20:13	03/11/26 14:49	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.1	0.79	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.9	2.0	ng/L		03/10/26 20:13	03/11/26 14:49	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.9	2.0	ng/L		03/10/26 20:13	03/11/26 14:49	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.2	0.31	ng/L		03/10/26 20:13	03/11/26 14:49	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.6	0.57	ng/L		03/10/26 20:13	03/11/26 14:49	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.6	0.46	ng/L		03/10/26 20:13	03/11/26 14:49	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.6	0.39	ng/L		03/10/26 20:13	03/11/26 14:49	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.1	0.79	ng/L		03/10/26 20:13	03/11/26 14:49	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.9	2.0	ng/L		03/10/26 20:13	03/11/26 14:49	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.9	2.0	ng/L		03/10/26 20:13	03/11/26 14:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*111*		*5 - 130*	*03/10/26 20:13*	*03/11/26 14:49*	*1*
13C5 PFPeA	*93.4*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:49*	*1*
13C5 PFHxA	*100*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:49*	*1*
13C4 PFHpA	*87.3*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:49*	*1*
13C8 PFOA	*94.9*		*40 - 130*	*03/10/26 20:13*	*03/11/26 14:49*	*1*

Client Sample ID: AMW-3-030326

Lab Sample ID: 320-130404-3

Date Collected: 03/03/26 09:13

Matrix: Water

Date Received: 03/05/26 09:10

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C9 PFNA	103		40 - 130	03/10/26 20:13	03/11/26 14:49	1
13C6 PFDA	94.7		40 - 130	03/10/26 20:13	03/11/26 14:49	1
13C7 PFUnA	103		30 - 130	03/10/26 20:13	03/11/26 14:49	1
13C2 PFDoA	98.9		10 - 130	03/10/26 20:13	03/11/26 14:49	1
13C2 PFTeDA	99.1		10 - 130	03/10/26 20:13	03/11/26 14:49	1
13C3 PFBS	107		40 - 135	03/10/26 20:13	03/11/26 14:49	1
13C3 PFHxS	107		40 - 130	03/10/26 20:13	03/11/26 14:49	1
13C8 PFOS	105		40 - 130	03/10/26 20:13	03/11/26 14:49	1
13C8 FOSA	95.6		40 - 130	03/10/26 20:13	03/11/26 14:49	1
d3-NMeFOSAA	123		40 - 170	03/10/26 20:13	03/11/26 14:49	1
d5-NEtFOSAA	99.7		25 - 135	03/10/26 20:13	03/11/26 14:49	1
13C2 4:2 FTS	122		40 - 200	03/10/26 20:13	03/11/26 14:49	1
13C2 6:2 FTS	122		40 - 200	03/10/26 20:13	03/11/26 14:49	1
13C2 8:2 FTS	116		40 - 300	03/10/26 20:13	03/11/26 14:49	1
13C3 HFPO-DA	94.2		40 - 130	03/10/26 20:13	03/11/26 14:49	1
d7-N-MeFOSE-M	88.7		10 - 130	03/10/26 20:13	03/11/26 14:49	1
d9-N-EtFOSE-M	83.2		10 - 130	03/10/26 20:13	03/11/26 14:49	1
d5-NEtPFOSA	83.0		10 - 130	03/10/26 20:13	03/11/26 14:49	1
d3-NMePFOSA	79.0		10 - 130	03/10/26 20:13	03/11/26 14:49	1

Client Sample ID: AMW-4-030326

Lab Sample ID: 320-130404-4

Date Collected: 03/03/26 12:35

Matrix: Water

Date Received: 03/05/26 09:10

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.5**	**J**	3.0	0.74	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluoropentanoic acid (PFPeA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorohexanoic acid (PFHxA)	**0.71**	**J**	1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluoroheptanoic acid (PFHpA)	**1.2**	**J**	1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorooctanoic acid (PFOA)	**18**		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorononanoic acid (PFNA)	**0.87**	**J**	1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorodecanoic acid (PFDA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluoroundecanoic acid (PFUnA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorododecanoic acid (PFDoA)	ND		1.5	0.41	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.5	0.43	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.5	0.60	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.40	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluoropentanesulfonic acid (PFPeS)	**0.44**	**J**	1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorohexanesulfonic acid (PFHxS)	**1.4**	**J**	1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.62**	**J**	1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorooctanesulfonic acid (PFOS)	**46**		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorononanesulfonic acid (PFNS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.5	0.39	ng/L		03/10/26 20:13	03/11/26 15:05	1

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Client Sample ID: AMW-4-030326
Date Collected: 03/03/26 12:35
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-4
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.0	0.74	ng/L		03/10/26 20:13	03/11/26 15:05	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	**2.1**	**J**	3.0	0.74	ng/L		03/10/26 20:13	03/11/26 15:05	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.0	0.74	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.4	1.9	ng/L		03/10/26 20:13	03/11/26 15:05	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.4	1.9	ng/L		03/10/26 20:13	03/11/26 15:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.29	ng/L		03/10/26 20:13	03/11/26 15:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.5	0.53	ng/L		03/10/26 20:13	03/11/26 15:05	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.5	0.43	ng/L		03/10/26 20:13	03/11/26 15:05	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:05	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.0	0.74	ng/L		03/10/26 20:13	03/11/26 15:05	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.4	1.9	ng/L		03/10/26 20:13	03/11/26 15:05	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.4	1.9	ng/L		03/10/26 20:13	03/11/26 15:05	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*5 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C5 PFPeA	*107*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C5 PFHxA	*103*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C4 PFHpA	*104*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C8 PFOA	*101*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C9 PFNA	*99.8*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C6 PFDA	*102*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C7 PFUnA	*109*		*30 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C2 PFDoA	*109*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C2 PFTeDA	*47.3*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C3 PFBS	*110*		*40 - 135*	*03/10/26 20:13*	*03/11/26 15:05*	*1*
13C3 PFHxS	*111*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:05*	*1*

Client Sample ID: AMW-4-030326

Lab Sample ID: 320-130404-4

Date Collected: 03/03/26 12:35

Matrix: Water

Date Received: 03/05/26 09:10

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	108		40 - 130	03/10/26 20:13	03/11/26 15:05	1
13C8 FOSA	86.3		40 - 130	03/10/26 20:13	03/11/26 15:05	1
d3-NMeFOSAA	115		40 - 170	03/10/26 20:13	03/11/26 15:05	1
d5-NEtFOSAA	101		25 - 135	03/10/26 20:13	03/11/26 15:05	1
13C2 4:2 FTS	137		40 - 200	03/10/26 20:13	03/11/26 15:05	1
13C2 6:2 FTS	147		40 - 200	03/10/26 20:13	03/11/26 15:05	1
13C2 8:2 FTS	136		40 - 300	03/10/26 20:13	03/11/26 15:05	1
13C3 HFPO-DA	113		40 - 130	03/10/26 20:13	03/11/26 15:05	1
d7-N-MeFOSE-M	58.2		10 - 130	03/10/26 20:13	03/11/26 15:05	1
d9-N-EtFOSE-M	45.9		10 - 130	03/10/26 20:13	03/11/26 15:05	1
d5-NEtPFOSA	46.5		10 - 130	03/10/26 20:13	03/11/26 15:05	1
d3-NMePFOSA	55.9		10 - 130	03/10/26 20:13	03/11/26 15:05	1

Client Sample ID: AMW-5-030226

Lab Sample ID: 320-130404-5

Date Collected: 03/02/26 12:00

Matrix: Water

Date Received: 03/05/26 09:10

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluoropentanoic acid (PFPeA)	**0.44**	**J**	1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorohexanoic acid (PFHxA)	**0.60**	**J**	1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluoroheptanoic acid (PFHpA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorooctanoic acid (PFOA)	**0.69**	**J**	1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorononanoic acid (PFNA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorodecanoic acid (PFDA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.5	0.41	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.5	0.44	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.5	0.61	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.40	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorooctanesulfonic acid (PFOS)	**12**		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorononanesulfonic acid (PFNS)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.5	0.40	ng/L		03/10/26 20:13	03/11/26 15:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:22	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	**4.1**		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Client Sample ID: AMW-5-030226
Date Collected: 03/02/26 12:00
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-5
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 15:22	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 15:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.29	ng/L		03/10/26 20:13	03/11/26 15:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.5	0.54	ng/L		03/10/26 20:13	03/11/26 15:22	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.5	0.44	ng/L		03/10/26 20:13	03/11/26 15:22	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.5	0.38	ng/L		03/10/26 20:13	03/11/26 15:22	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:22	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 15:22	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 15:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*93.9*		*5 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C5 PFPeA	*110*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C5 PFHxA	*108*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C4 PFHpA	*114*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C8 PFOA	*97.8*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C9 PFNA	*104*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C6 PFDA	*102*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C7 PFUnA	*123*		*30 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C2 PFDoA	*110*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C2 PFTeDA	*104*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C3 PFBS	*111*		*40 - 135*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C3 PFHxS	*108*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C8 PFOS	*103*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C8 FOSA	*93.2*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
d3-NMeFOSAA	*121*		*40 - 170*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
d5-NEtFOSAA	*110*		*25 - 135*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C2 4:2 FTS	*127*		*40 - 200*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C2 6:2 FTS	*116*		*40 - 200*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C2 8:2 FTS	*119*		*40 - 300*	*03/10/26 20:13*	*03/11/26 15:22*	*1*
13C3 HFPO-DA	*110*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:22*	*1*

Client Sample ID: AMW-5-030226

Lab Sample ID: 320-130404-5

Date Collected: 03/02/26 12:00

Matrix: Water

Date Received: 03/05/26 09:10

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d7-N-MeFOSE-M	79.8		10 - 130	03/10/26 20:13	03/11/26 15:22	1
d9-N-EtFOSE-M	74.8		10 - 130	03/10/26 20:13	03/11/26 15:22	1
d5-NEtPFOSA	77.0		10 - 130	03/10/26 20:13	03/11/26 15:22	1
d3-NMePFOSA	78.1		10 - 130	03/10/26 20:13	03/11/26 15:22	1

Client Sample ID: AMW-6-030326

Lab Sample ID: 320-130404-6

Date Collected: 03/03/26 13:30

Matrix: Water

Date Received: 03/05/26 09:10

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		2.8	0.70	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluoropentanoic acid (PFPeA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorohexanoic acid (PFHxA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluoroheptanoic acid (PFHpA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorooctanoic acid (PFOA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorononanoic acid (PFNA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorodecanoic acid (PFDA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluoroundecanoic acid (PFUnA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorododecanoic acid (PFDoA)	ND		1.4	0.39	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.4	0.41	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.4	0.57	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.4	0.38	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorooctanesulfonic acid (PFOS)	**0.60**	**J**	1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorononanesulfonic acid (PFNS)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.4	0.37	ng/L		03/10/26 20:13	03/11/26 15:38	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		2.8	0.70	ng/L		03/10/26 20:13	03/11/26 15:38	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	**2.0**	**J**	2.8	0.70	ng/L		03/10/26 20:13	03/11/26 15:38	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		2.8	0.70	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.0	1.8	ng/L		03/10/26 20:13	03/11/26 15:38	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.0	1.8	ng/L		03/10/26 20:13	03/11/26 15:38	1

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Client Sample ID: AMW-6-030326
Date Collected: 03/03/26 13:30
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-6
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.27	ng/L		03/10/26 20:13	03/11/26 15:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.4	0.51	ng/L		03/10/26 20:13	03/11/26 15:38	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.4	0.41	ng/L		03/10/26 20:13	03/11/26 15:38	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.4	0.35	ng/L		03/10/26 20:13	03/11/26 15:38	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		2.8	0.70	ng/L		03/10/26 20:13	03/11/26 15:38	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.0	1.8	ng/L		03/10/26 20:13	03/11/26 15:38	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.0	1.8	ng/L		03/10/26 20:13	03/11/26 15:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*109*		*5 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C5 PFPeA	*96.9*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C5 PFHxA	*105*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C4 PFHpA	*102*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C8 PFOA	*87.5*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C9 PFNA	*96.7*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C6 PFDA	*88.1*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C7 PFUnA	*92.7*		*30 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C2 PFDoA	*91.2*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C2 PFTeDA	*82.1*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C3 PFBS	*107*		*40 - 135*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C3 PFHxS	*99.9*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C8 PFOS	*92.9*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C8 FOSA	*82.0*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
d3-NMeFOSAA	*106*		*40 - 170*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
d5-NEtFOSAA	*86.2*		*25 - 135*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C2 4:2 FTS	*107*		*40 - 200*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C2 6:2 FTS	*120*		*40 - 200*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C2 8:2 FTS	*117*		*40 - 300*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
13C3 HFPO-DA	*107*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
d7-N-MeFOSE-M	*77.9*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
d9-N-EtFOSE-M	*72.4*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
d5-NEtPFOSA	*74.5*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*
d3-NMePFOSA	*74.0*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:38*	*1*

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Client Sample ID: AMW-7-030326
Date Collected: 03/03/26 13:35
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-7
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluoropentanoic acid (PFPeA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorohexanoic acid (PFHxA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluoroheptanoic acid (PFHpA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorooctanoic acid (PFOA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorononanoic acid (PFNA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorodecanoic acid (PFDA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluoroundecanoic acid (PFUnA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorododecanoic acid (PFDoA)	ND		1.5	0.41	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorotridecanoic acid (PFTrDA)	ND		1.5	0.43	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorotetradecanoic acid (PFTeDA)	ND		1.5	0.61	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.5	0.40	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluoropentanesulfonic acid (PFPeS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorononanesulfonic acid (PFNS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.5	0.40	ng/L		03/10/26 20:13	03/11/26 15:55	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:55	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:55	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 15:55	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 15:55	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.1	0.29	ng/L		03/10/26 20:13	03/11/26 15:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		1.5	0.54	ng/L		03/10/26 20:13	03/11/26 15:55	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		1.5	0.43	ng/L		03/10/26 20:13	03/11/26 15:55	1

Client Sample ID: AMW-7-030326
Date Collected: 03/03/26 13:35
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-7
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		1.5	0.37	ng/L		03/10/26 20:13	03/11/26 15:55	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		3.0	0.75	ng/L		03/10/26 20:13	03/11/26 15:55	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 15:55	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		7.5	1.9	ng/L		03/10/26 20:13	03/11/26 15:55	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*110*		*5 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C5 PFPeA	*103*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C5 PFHxA	*106*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C4 PFHpA	*104*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C8 PFOA	*93.0*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C9 PFNA	*101*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C6 PFDA	*92.9*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C7 PFUnA	*98.8*		*30 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C2 PFDoA	*93.4*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C2 PFTeDA	*87.4*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C3 PFBS	*93.8*		*40 - 135*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C3 PFHxS	*102*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C8 PFOS	*108*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C8 FOSA	*89.8*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
d3-NMeFOSAA	*110*		*40 - 170*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
d5-NEtFOSAA	*93.8*		*25 - 135*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C2 4:2 FTS	*108*		*40 - 200*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C2 6:2 FTS	*139*		*40 - 200*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C2 8:2 FTS	*116*		*40 - 300*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
13C3 HFPO-DA	*109*		*40 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
d7-N-MeFOSE-M	*85.9*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
d9-N-EtFOSE-M	*80.7*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
d5-NEtPFOSA	*79.0*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*
d3-NMePFOSA	*76.6*		*10 - 130*	*03/10/26 20:13*	*03/11/26 15:55*	*1*

Isotope Dilution Summary

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (5-130)	PFPeA (40-130)	13C5PHA (40-130)	C4PFHA (40-130)	C8PFOA (40-130)	C9PFNA (40-130)	C6PFDA (40-130)	13C7PUA (30-130)
320-129899-A-2-E MS	Matrix Spike	104	113	123	110	98.1	105	103	98.6
320-129899-A-2-F MSD	Matrix Spike Duplicate	102	112	103	117	90.5	102	93.2	90.2
320-130404-1	AMW-1-030226	111	107	102	103	94.5	105	101	116
320-130404-2	AMW-2-030226	101	105	113	89.1	98.9	102	104	103
320-130404-3	AMW-3-030326	111	93.4	100	87.3	94.9	103	94.7	103
320-130404-4	AMW-4-030326	103	107	103	104	101	99.8	102	109
320-130404-5	AMW-5-030226	93.9	110	108	114	97.8	104	102	123
320-130404-6	AMW-6-030326	109	96.9	105	102	87.5	96.7	88.1	92.7
320-130404-7	AMW-7-030326	110	103	106	104	93.0	101	92.9	98.8
LCS 320-905815/3-A	Lab Control Sample	101	106	116	104	98.1	105	96.3	107
LLCS 320-905815/2-A	Lab Control Sample	101	117	101	108	104	103	117	131 *5+
MB 320-905815/1-A	Method Blank	103	122	103	112	85.4	102	90.2	103

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoA (10-130)	PFTDA (10-130)	C3PFBS (40-135)	C3PFHS (40-130)	C8PFOS (40-130)	PFOSA (40-130)	d3NMFOS (40-170)	d5NEFOS (25-135)
320-129899-A-2-E MS	Matrix Spike	106	114	109	107	107	97.5	120	103
320-129899-A-2-F MSD	Matrix Spike Duplicate	95.3	104	105	108	106	92.0	110	97.8
320-130404-1	AMW-1-030226	107	101	108	109	106	97.1	120	103
320-130404-2	AMW-2-030226	111	103	114	110	98.8	86.6	123	106
320-130404-3	AMW-3-030326	98.9	99.1	107	107	105	95.6	123	99.7
320-130404-4	AMW-4-030326	109	47.3	110	111	108	86.3	115	101
320-130404-5	AMW-5-030226	110	104	111	108	103	93.2	121	110
320-130404-6	AMW-6-030326	91.2	82.1	107	99.9	92.9	82.0	106	86.2
320-130404-7	AMW-7-030326	93.4	87.4	93.8	102	108	89.8	110	93.8
LCS 320-905815/3-A	Lab Control Sample	97.3	112	107	109	102	91.2	114	94.1
LLCS 320-905815/2-A	Lab Control Sample	124	142 *5+	113	119	119	95.7	122	100
MB 320-905815/1-A	Method Blank	110	115	108	105	105	91.0	107	100

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M242FTS (40-200)	M262FTS (40-200)	M282FTS (40-300)	HFPODA (40-130)	NMFM (10-130)	NEFM (10-130)	d5NPFSA (10-130)	d3NMFSA (10-130)
320-129899-A-2-E MS	Matrix Spike	131	124	115	111	93.6	83.5	84.4	85.1
320-129899-A-2-F MSD	Matrix Spike Duplicate	124	117	102	108	81.4	76.2	83.3	82.2
320-130404-1	AMW-1-030226	108	127	105	113	83.1	86.3	86.5	82.3
320-130404-2	AMW-2-030226	107	129	131	107	80.6	77.9	81.6	76.8
320-130404-3	AMW-3-030326	122	122	116	94.2	88.7	83.2	83.0	79.0
320-130404-4	AMW-4-030326	137	147	136	113	58.2	45.9	46.5	55.9
320-130404-5	AMW-5-030226	127	116	119	110	79.8	74.8	77.0	78.1
320-130404-6	AMW-6-030326	107	120	117	107	77.9	72.4	74.5	74.0
320-130404-7	AMW-7-030326	108	139	116	109	85.9	80.7	79.0	76.6
LCS 320-905815/3-A	Lab Control Sample	107	142	119	110	86.7	83.4	75.1	72.7
LLCS 320-905815/2-A	Lab Control Sample	122	140	124	114	96.3	86.2	81.3	79.4
MB 320-905815/1-A	Method Blank	130	130	129	110	84.7	80.3	74.0	72.7

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA

Isotope Dilution Summary

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = 13C2 4:2 FTS
M262FTS = 13C2 6:2 FTS
M282FTS = 13C2 8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 320-905815/1-A
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 905815

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.0	1.0	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorotridecanoic acid (PFTrDA)	ND		2.0	0.58	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorotetradecanoic acid (PFTeDA)	ND		2.0	0.81	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.54	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluoropentanesulfonic acid (PFPeS)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorononanesulfonic acid (PFNS)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.53	ng/L		03/10/26 20:13	03/11/26 10:59	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		4.0	1.0	ng/L		03/10/26 20:13	03/11/26 10:59	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		4.0	1.0	ng/L		03/10/26 20:13	03/11/26 10:59	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		4.0	1.0	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		10	2.5	ng/L		03/10/26 20:13	03/11/26 10:59	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		10	2.5	ng/L		03/10/26 20:13	03/11/26 10:59	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.5	0.39	ng/L		03/10/26 20:13	03/11/26 10:59	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		2.0	0.72	ng/L		03/10/26 20:13	03/11/26 10:59	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		2.0	0.58	ng/L		03/10/26 20:13	03/11/26 10:59	1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 320-905815/1-A
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 905815

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		2.0	0.50	ng/L		03/10/26 20:13	03/11/26 10:59	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		4.0	1.0	ng/L		03/10/26 20:13	03/11/26 10:59	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		10	2.5	ng/L		03/10/26 20:13	03/11/26 10:59	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		10	2.5	ng/L		03/10/26 20:13	03/11/26 10:59	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*103*		*5 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C5 PFPeA	*122*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C5 PFHxA	*103*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C4 PFHpA	*112*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C8 PFOA	*85.4*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C9 PFNA	*102*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C6 PFDA	*90.2*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C7 PFUnA	*103*		*30 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C2 PFDoA	*110*		*10 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C2 PFTeDA	*115*		*10 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C3 PFBS	*108*		*40 - 135*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C3 PFHxS	*105*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C8 PFOS	*105*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C8 FOSA	*91.0*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
d3-NMeFOSAA	*107*		*40 - 170*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
d5-NEtFOSAA	*100*		*25 - 135*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C2 4:2 FTS	*130*		*40 - 200*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C2 6:2 FTS	*130*		*40 - 200*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C2 8:2 FTS	*129*		*40 - 300*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
13C3 HFPO-DA	*110*		*40 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
d7-N-MeFOSE-M	*84.7*		*10 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
d9-N-EtFOSE-M	*80.3*		*10 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
d5-NEtPFOSA	*74.0*		*10 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*
d3-NMePFOSA	*72.7*		*10 - 130*	*03/10/26 20:13*	*03/11/26 10:59*	*1*

Lab Sample ID: LCS 320-905815/3-A
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	82.8		ng/L		104	70 - 140
Perfluoropentanoic acid (PFPeA)	40.0	48.8		ng/L		122	65 - 135
Perfluorohexanoic acid (PFHxA)	40.0	36.0		ng/L		90	70 - 145
Perfluoroheptanoic acid (PFHpA)	40.0	41.3		ng/L		103	70 - 150
Perfluorooctanoic acid (PFOA)	40.0	48.4		ng/L		121	70 - 150
Perfluorononanoic acid (PFNA)	40.0	42.2		ng/L		106	70 - 150
Perfluorodecanoic acid (PFDA)	40.0	49.0		ng/L		123	70 - 140

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-905815/3-A
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	40.0	41.5		ng/L		104	70 - 145
Perfluorododecanoic acid (PFDoA)	40.0	44.5		ng/L		111	70 - 140
Perfluorotridecanoic acid (PFTrDA)	40.0	42.1		ng/L		105	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	40.0	38.4		ng/L		96	60 - 140
Perfluorobutanesulfonic acid (PFBS)	35.5	35.8		ng/L		101	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	37.6	43.3		ng/L		115	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	36.5	35.0		ng/L		96	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	38.2	41.3		ng/L		108	70 - 150
Perfluorooctanesulfonic acid (PFOS)	37.2	35.9		ng/L		97	55 - 150
Perfluorononanesulfonic acid (PFNS)	38.5	39.3		ng/L		102	65 - 145
Perfluorodecanesulfonic acid (PFDS)	38.6	38.9		ng/L		101	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	38.8	40.4		ng/L		104	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	75.0	75.0		ng/L		100	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	76.2	66.3		ng/L		87	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	76.8	75.1		ng/L		98	60 - 150
Perfluorooctanesulfonamide (PFOSA)	40.0	40.3		ng/L		101	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	40.0	43.5		ng/L		109	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	40.0	41.1		ng/L		103	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	38.6		ng/L		97	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	43.3		ng/L		108	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	200	201		ng/L		100	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	200	229		ng/L		114	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	30.0	29.0		ng/L		97	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.8	36.1		ng/L		95	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	40.0	45.5		ng/L		114	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.0	40.2		ng/L		101	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	40.0	36.7		ng/L		92	50 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 320-905815/3-A
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	37.4	38.2		ng/L		102	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	37.8	39.9		ng/L		106	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	35.7	33.7		ng/L		95	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	80.0	86.2		ng/L		108	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	200	165		ng/L		83	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	200	162		ng/L		81	50 - 145

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*101*		*5 - 130*
13C5 PFPeA	*106*		*40 - 130*
13C5 PFHxA	*116*		*40 - 130*
13C4 PFHpA	*104*		*40 - 130*
13C8 PFOA	*98.1*		*40 - 130*
13C9 PFNA	*105*		*40 - 130*
13C6 PFDA	*96.3*		*40 - 130*
13C7 PFUnA	*107*		*30 - 130*
13C2 PFDoA	*97.3*		*10 - 130*
13C2 PFTeDA	*112*		*10 - 130*
13C3 PFBS	*107*		*40 - 135*
13C3 PFHxS	*109*		*40 - 130*
13C8 PFOS	*102*		*40 - 130*
13C8 FOSA	*91.2*		*40 - 130*
d3-NMeFOSAA	*114*		*40 - 170*
d5-NEtFOSAA	*94.1*		*25 - 135*
13C2 4:2 FTS	*107*		*40 - 200*
13C2 6:2 FTS	*142*		*40 - 200*
13C2 8:2 FTS	*119*		*40 - 300*
13C3 HFPO-DA	*110*		*40 - 130*
d7-N-MeFOSE-M	*86.7*		*10 - 130*
d9-N-EtFOSE-M	*83.4*		*10 - 130*
d5-NEtPFOSA	*75.1*		*10 - 130*
d3-NMePFOSA	*72.7*		*10 - 130*

Lab Sample ID: LLCS 320-905815/2-A
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	8.00	9.04		ng/L		113	70 - 140
Perfluoropentanoic acid (PFPeA)	4.00	4.85		ng/L		121	65 - 135
Perfluorohexanoic acid (PFHxA)	4.00	4.67		ng/L		117	70 - 145
Perfluoroheptanoic acid (PFHpA)	4.00	4.24		ng/L		106	70 - 150
Perfluorooctanoic acid (PFOA)	4.00	4.58		ng/L		115	70 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-905815/2-A
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorononanoic acid (PFNA)	4.00	4.25		ng/L		106	70 - 150
Perfluorodecanoic acid (PFDA)	4.00	5.01		ng/L		125	70 - 140
Perfluoroundecanoic acid (PFUnA)	4.00	4.25		ng/L		106	70 - 145
Perfluorododecanoic acid (PFDoA)	4.00	4.35		ng/L		109	70 - 140
Perfluorotridecanoic acid (PFTrDA)	4.00	4.04		ng/L		101	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	4.00	3.44		ng/L		86	60 - 140
Perfluorobutanesulfonic acid (PFBS)	3.55	3.51		ng/L		99	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	3.76	3.83		ng/L		102	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	3.65	3.20		ng/L		88	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	3.82	3.49		ng/L		92	70 - 150
Perfluorooctanesulfonic acid (PFOS)	3.72	3.59		ng/L		97	55 - 150
Perfluorononanesulfonic acid (PFNS)	3.85	3.78		ng/L		98	65 - 145
Perfluorodecanesulfonic acid (PFDS)	3.86	3.50		ng/L		91	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	3.88	3.71		ng/L		96	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	7.50	7.39		ng/L		98	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	7.62	6.48		ng/L		85	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	7.68	8.13		ng/L		106	60 - 150
Perfluorooctanesulfonamide (PFOSA)	4.00	4.07		ng/L		102	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	4.00	4.22		ng/L		105	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	4.00	4.03		ng/L		101	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	4.00	4.02		ng/L		100	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	4.00	4.62		ng/L		115	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	20.0	20.0		ng/L		100	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	20.0	22.9		ng/L		114	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	3.00	2.67		ng/L		89	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3.78	3.20		ng/L		85	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.00	4.30		ng/L		108	55 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.00	3.72		ng/L		93	60 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 320-905815/2-A
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.00	3.86		ng/L		96	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	3.74	3.58		ng/L		96	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	3.78	3.65		ng/L		97	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	3.57	3.91		ng/L		110	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	8.00	7.30		ng/L		91	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	20.0	19.2		ng/L		96	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	20.0	17.0		ng/L		85	50 - 145

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*101*		*5 - 130*
13C5 PFPeA	*117*		*40 - 130*
13C5 PFHxA	*101*		*40 - 130*
13C4 PFHpA	*108*		*40 - 130*
13C8 PFOA	*104*		*40 - 130*
13C9 PFNA	*103*		*40 - 130*
13C6 PFDA	*117*		*40 - 130*
13C7 PFUnA	*131*	*5+	*30 - 130*
13C2 PFDoA	*124*		*10 - 130*
13C2 PFTeDA	*142*	*5+	*10 - 130*
13C3 PFBS	*113*		*40 - 135*
13C3 PFHxS	*119*		*40 - 130*
13C8 PFOS	*119*		*40 - 130*
13C8 FOSA	*95.7*		*40 - 130*
d3-NMeFOSAA	*122*		*40 - 170*
d5-NEtFOSAA	*100*		*25 - 135*
13C2 4:2 FTS	*122*		*40 - 200*
13C2 6:2 FTS	*140*		*40 - 200*
13C2 8:2 FTS	*124*		*40 - 300*
13C3 HFPO-DA	*114*		*40 - 130*
d7-N-MeFOSE-M	*96.3*		*10 - 130*
d9-N-EtFOSE-M	*86.2*		*10 - 130*
d5-NEtPFOSA	*81.3*		*10 - 130*
d3-NMePFOSA	*79.4*		*10 - 130*

Lab Sample ID: 320-129899-A-2-E MS
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	64		72.5	133		ng/L		95	70 - 140
Perfluoropentanoic acid (PFPeA)	ND		36.3	44.0		ng/L		121	65 - 135
Perfluorohexanoic acid (PFHxA)	ND		36.3	29.1		ng/L		80	70 - 145

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 320-129899-A-2-E MS
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	ND		36.3	33.8		ng/L		93	70 - 150
Perfluorooctanoic acid (PFOA)	ND		36.3	40.1		ng/L		111	70 - 150
Perfluorononanoic acid (PFNA)	ND		36.3	38.9		ng/L		107	70 - 150
Perfluorodecanoic acid (PFDA)	ND		36.3	37.8		ng/L		104	70 - 140
Perfluoroundecanoic acid (PFUnA)	ND		36.3	38.3		ng/L		106	70 - 145
Perfluorododecanoic acid (PFDoA)	ND		36.3	38.4		ng/L		106	70 - 140
Perfluorotridecanoic acid (PFTrDA)	ND		36.3	34.5		ng/L		95	65 - 140
Perfluorotetradecanoic acid (PFTeDA)	ND		36.3	35.0		ng/L		96	60 - 140
Perfluorobutanesulfonic acid (PFBS)	ND		32.2	32.0		ng/L		99	60 - 145
Perfluoropentanesulfonic acid (PFPeS)	ND		34.1	41.5		ng/L		122	65 - 140
Perfluorohexanesulfonic acid (PFHxS)	ND		33.1	34.3		ng/L		104	65 - 145
Perfluoroheptanesulfonic acid (PFHpS)	ND		34.6	37.7		ng/L		109	70 - 150
Perfluorooctanesulfonic acid (PFOS)	ND		33.7	33.5		ng/L		99	55 - 150
Perfluorononanesulfonic acid (PFNS)	ND		34.9	37.0		ng/L		106	65 - 145
Perfluorodecanesulfonic acid (PFDS)	ND		35.0	34.6		ng/L		99	60 - 145
Perfluorododecanesulfonic acid (PFDoS)	ND		35.2	37.6		ng/L		107	50 - 145
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		68.0	58.3		ng/L		86	70 - 145
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		69.0	72.3		ng/L		105	65 - 155
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		69.6	74.3		ng/L		107	60 - 150
Perfluorooctanesulfonamide (PFOSA)	ND		36.3	39.2		ng/L		108	70 - 145
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		36.3	37.4		ng/L		103	60 - 150
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		36.3	36.6		ng/L		101	65 - 145
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		36.3	37.7		ng/L		104	50 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		36.3	38.6		ng/L		106	70 - 145
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		181	185		ng/L		102	70 - 145
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		181	222		ng/L		123	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		27.2	25.4		ng/L		93	70 - 140
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		34.3	34.7		ng/L		101	65 - 145
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		36.3	41.1		ng/L		113	55 - 140

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 320-129899-A-2-E MS
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		36.3	32.1		ng/L		88	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		36.3	36.1		ng/L		100	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		33.9	34.4		ng/L		102	70 - 155
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		34.2	38.0		ng/L		111	55 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		32.3	30.1		ng/L		93	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		72.5	72.0		ng/L		99	65 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		181	153		ng/L		85	70 - 135
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		181	145		ng/L		80	50 - 145

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*104*		*5 - 130*
13C5 PFPeA	*113*		*40 - 130*
13C5 PFHxA	*123*		*40 - 130*
13C4 PFHpA	*110*		*40 - 130*
13C8 PFOA	*98.1*		*40 - 130*
13C9 PFNA	*105*		*40 - 130*
13C6 PFDA	*103*		*40 - 130*
13C7 PFUnA	*98.6*		*30 - 130*
13C2 PFDoA	*106*		*10 - 130*
13C2 PFTeDA	*114*		*10 - 130*
13C3 PFBS	*109*		*40 - 135*
13C3 PFHxS	*107*		*40 - 130*
13C8 PFOS	*107*		*40 - 130*
13C8 FOSA	*97.5*		*40 - 130*
d3-NMeFOSAA	*120*		*40 - 170*
d5-NEtFOSAA	*103*		*25 - 135*
13C2 4:2 FTS	*131*		*40 - 200*
13C2 6:2 FTS	*124*		*40 - 200*
13C2 8:2 FTS	*115*		*40 - 300*
13C3 HFPO-DA	*111*		*40 - 130*
d7-N-MeFOSE-M	*93.6*		*10 - 130*
d9-N-EtFOSE-M	*83.5*		*10 - 130*
d5-NEtPFOSA	*84.4*		*10 - 130*
d3-NMePFOSA	*85.1*		*10 - 130*

Lab Sample ID: 320-129899-A-2-F MSD
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	64		68.7	132		ng/L		99	70 - 140	0	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 320-129899-A-2-F MSD
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoropentanoic acid (PFPeA)	ND		34.4	41.2		ng/L		120	65 - 135	7	30
Perfluorohexanoic acid (PFHxA)	ND		34.4	33.1		ng/L		96	70 - 145	13	30
Perfluoroheptanoic acid (PFHpA)	ND		34.4	34.5		ng/L		100	70 - 150	2	30
Perfluorooctanoic acid (PFOA)	ND		34.4	39.2		ng/L		114	70 - 150	2	30
Perfluorononanoic acid (PFNA)	ND		34.4	34.3		ng/L		100	70 - 150	13	30
Perfluorodecanoic acid (PFDA)	ND		34.4	43.3		ng/L		126	70 - 140	13	30
Perfluoroundecanoic acid (PFUnA)	ND		34.4	38.9		ng/L		113	70 - 145	2	30
Perfluorododecanoic acid (PFDoA)	ND		34.4	35.7		ng/L		104	70 - 140	7	30
Perfluorotridecanoic acid (PFTrDA)	ND		34.4	33.4		ng/L		97	65 - 140	3	30
Perfluorotetradecanoic acid (PFTeDA)	ND		34.4	31.9		ng/L		93	60 - 140	9	30
Perfluorobutanesulfonic acid (PFBS)	ND		30.5	30.4		ng/L		100	60 - 145	5	30
Perfluoropentanesulfonic acid (PFPeS)	ND		32.3	38.1		ng/L		118	65 - 140	8	30
Perfluorohexanesulfonic acid (PFHxS)	ND		31.3	29.6		ng/L		94	65 - 145	15	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		32.8	32.7		ng/L		100	70 - 150	14	30
Perfluorooctanesulfonic acid (PFOS)	ND		32.0	31.7		ng/L		99	55 - 150	6	30
Perfluorononanesulfonic acid (PFNS)	ND		33.1	30.9		ng/L		93	65 - 145	18	30
Perfluorodecanesulfonic acid (PFDS)	ND		33.1	30.4		ng/L		92	60 - 145	13	30
Perfluorododecanesulfonic acid (PFDoS)	ND		33.3	33.0		ng/L		99	50 - 145	13	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		64.5	58.3		ng/L		91	70 - 145	0	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		65.4	60.7		ng/L		93	65 - 155	17	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		66.0	67.5		ng/L		102	60 - 150	10	30
Perfluorooctanesulfonamide (PFOSA)	ND		34.4	35.9		ng/L		104	70 - 145	9	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		34.4	35.1		ng/L		102	60 - 150	6	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		34.4	33.8		ng/L		98	65 - 145	8	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		34.4	33.6		ng/L		98	50 - 140	12	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		34.4	36.2		ng/L		105	70 - 145	6	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		172	175		ng/L		102	70 - 145	6	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		172	197		ng/L		115	70 - 135	12	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		25.8	23.9		ng/L		93	70 - 140	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		32.5	31.6		ng/L		97	65 - 145	10	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 320-129899-A-2-F MSD
Matrix: Water
Analysis Batch: 905885

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 905815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		34.4	33.0		ng/L		96	55 - 140	22	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		34.4	34.8		ng/L		101	60 - 150	8	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		34.4	30.3		ng/L		88	50 - 150	18	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		32.1	30.1		ng/L		94	70 - 155	13	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		32.4	31.7		ng/L		98	55 - 160	18	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		30.7	32.9		ng/L		107	70 - 140	9	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		68.7	67.9		ng/L		99	65 - 130	6	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		172	160		ng/L		93	70 - 135	4	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		172	152		ng/L		88	50 - 145	4	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*102*		*5 - 130*
13C5 PFPeA	*112*		*40 - 130*
13C5 PFHxA	*103*		*40 - 130*
13C4 PFHpA	*117*		*40 - 130*
13C8 PFOA	*90.5*		*40 - 130*
13C9 PFNA	*102*		*40 - 130*
13C6 PFDA	*93.2*		*40 - 130*
13C7 PFUnA	*90.2*		*30 - 130*
13C2 PFDoA	*95.3*		*10 - 130*
13C2 PFTeDA	*104*		*10 - 130*
13C3 PFBS	*105*		*40 - 135*
13C3 PFHxS	*108*		*40 - 130*
13C8 PFOS	*106*		*40 - 130*
13C8 FOSA	*92.0*		*40 - 130*
d3-NMeFOSAA	*110*		*40 - 170*
d5-NEtFOSAA	*97.8*		*25 - 135*
13C2 4:2 FTS	*124*		*40 - 200*
13C2 6:2 FTS	*117*		*40 - 200*
13C2 8:2 FTS	*102*		*40 - 300*
13C3 HFPO-DA	*108*		*40 - 130*
d7-N-MeFOSE-M	*81.4*		*10 - 130*
d9-N-EtFOSE-M	*76.2*		*10 - 130*
d5-NEtPFOSA	*83.3*		*10 - 130*
d3-NMePFOSA	*82.2*		*10 - 130*

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

LCMS

Prep Batch: 905815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-130404-1	AMW-1-030226	Total/NA	Water	1633	
320-130404-2	AMW-2-030226	Total/NA	Water	1633	
320-130404-3	AMW-3-030326	Total/NA	Water	1633	
320-130404-4	AMW-4-030326	Total/NA	Water	1633	
320-130404-5	AMW-5-030226	Total/NA	Water	1633	
320-130404-6	AMW-6-030326	Total/NA	Water	1633	
320-130404-7	AMW-7-030326	Total/NA	Water	1633	
MB 320-905815/1-A	Method Blank	Total/NA	Water	1633	
LCS 320-905815/3-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 320-905815/2-A	Lab Control Sample	Total/NA	Water	1633	
320-129899-A-2-E MS	Matrix Spike	Total/NA	Water	1633	
320-129899-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Water	1633	

Analysis Batch: 905885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-130404-1	AMW-1-030226	Total/NA	Water	1633	905815
320-130404-2	AMW-2-030226	Total/NA	Water	1633	905815
320-130404-3	AMW-3-030326	Total/NA	Water	1633	905815
320-130404-4	AMW-4-030326	Total/NA	Water	1633	905815
320-130404-5	AMW-5-030226	Total/NA	Water	1633	905815
320-130404-6	AMW-6-030326	Total/NA	Water	1633	905815
320-130404-7	AMW-7-030326	Total/NA	Water	1633	905815
MB 320-905815/1-A	Method Blank	Total/NA	Water	1633	905815
LCS 320-905815/3-A	Lab Control Sample	Total/NA	Water	1633	905815
LLCS 320-905815/2-A	Lab Control Sample	Total/NA	Water	1633	905815
320-129899-A-2-E MS	Matrix Spike	Total/NA	Water	1633	905815
320-129899-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Water	1633	905815

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Client Sample ID: AMW-1-030226
Lab Sample ID: 320-130404-1
Date Collected: 03/02/26 16:15
Matrix: Water
Date Received: 03/05/26 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			173.5 mL	5.0 mL	905815	03/10/26 20:13	CJS	EET SAC
Total/NA	Analysis	1633		1			905885	03/11/26 14:16	EMF	EET SAC

Client Sample ID: AMW-2-030226
Lab Sample ID: 320-130404-2
Date Collected: 03/02/26 15:03
Matrix: Water
Date Received: 03/05/26 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			167.3 mL	5.0 mL	905815	03/10/26 20:13	CJS	EET SAC
Total/NA	Analysis	1633		1			905885	03/11/26 14:32	EMF	EET SAC

Client Sample ID: AMW-3-030326
Lab Sample ID: 320-130404-3
Date Collected: 03/03/26 09:13
Matrix: Water
Date Received: 03/05/26 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			159 mL	5.0 mL	905815	03/10/26 20:13	CJS	EET SAC
Total/NA	Analysis	1633		1			905885	03/11/26 14:49	EMF	EET SAC

Client Sample ID: AMW-4-030326
Lab Sample ID: 320-130404-4
Date Collected: 03/03/26 12:35
Matrix: Water
Date Received: 03/05/26 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			168.6 mL	5.0 mL	905815	03/10/26 20:13	CJS	EET SAC
Total/NA	Analysis	1633		1			905885	03/11/26 15:05	EMF	EET SAC

Client Sample ID: AMW-5-030226
Lab Sample ID: 320-130404-5
Date Collected: 03/02/26 12:00
Matrix: Water
Date Received: 03/05/26 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			166.4 mL	5.0 mL	905815	03/10/26 20:13	CJS	EET SAC
Total/NA	Analysis	1633		1			905885	03/11/26 15:22	EMF	EET SAC

Client Sample ID: AMW-6-030326
Lab Sample ID: 320-130404-6
Date Collected: 03/03/26 13:30
Matrix: Water
Date Received: 03/05/26 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			177.6 mL	5.0 mL	905815	03/10/26 20:13	CJS	EET SAC
Total/NA	Analysis	1633		1			905885	03/11/26 15:38	EMF	EET SAC

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Client Sample ID: AMW-7-030326

Date Collected: 03/03/26 13:35
Date Received: 03/05/26 09:10

Lab Sample ID: 320-130404-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633			167.2 mL	5.0 mL	905815	03/10/26 20:13	CJS	EET SAC
Total/NA	Analysis	1633		1			905885	03/11/26 15:55	EMF	EET SAC

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: C Street Landfill

Job ID: 320-130404-1

Laboratory: Eurofins Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Washington	State	C581	05-05-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1633	1633	Water	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
1633	1633	Water	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)
1633	1633	Water	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)
1633	1633	Water	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)
1633	1633	Water	3-Perfluoroheptylpropanoic acid (7:3 FTCA)
1633	1633	Water	3-Perfluoropentylpropanoic acid (5:3 FTCA)
1633	1633	Water	3-Perfluoropropylpropanoic acid (3:3 FTCA)
1633	1633	Water	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
1633	1633	Water	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)
1633	1633	Water	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)
1633	1633	Water	N-ethylperfluorooctane sulfonamide (NEtFOSA)
1633	1633	Water	N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)
1633	1633	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
1633	1633	Water	N-methylperfluorooctane sulfonamide (NMeFOSA)
1633	1633	Water	N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)
1633	1633	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
1633	1633	Water	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
1633	1633	Water	Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
1633	1633	Water	Perfluoro-3-methoxypropanoic acid (PFMPA)
1633	1633	Water	Perfluoro-4-methoxybutanoic acid (PFMBA)
1633	1633	Water	Perfluorobutanesulfonic acid (PFBS)
1633	1633	Water	Perfluorobutanoic acid (PFBA)
1633	1633	Water	Perfluorodecanesulfonic acid (PFDS)
1633	1633	Water	Perfluorodecanoic acid (PFDA)
1633	1633	Water	Perfluorododecanesulfonic acid (PFDoS)
1633	1633	Water	Perfluorododecanoic acid (PFDoA)
1633	1633	Water	Perfluoroheptanesulfonic acid (PFHpS)
1633	1633	Water	Perfluoroheptanoic acid (PFHpA)
1633	1633	Water	Perfluorohexanesulfonic acid (PFHxS)
1633	1633	Water	Perfluorohexanoic acid (PFHxA)

Laboratory: Eurofins Sacramento (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
1633	1633	Water	Perfluorononanesulfonic acid (PFNS)
1633	1633	Water	Perfluorononanoic acid (PFNA)
1633	1633	Water	Perfluorooctanesulfonamide (PFOSA)
1633	1633	Water	Perfluorooctanesulfonic acid (PFOS)
1633	1633	Water	Perfluorooctanoic acid (PFOA)
1633	1633	Water	Perfluoropentanesulfonic acid (PFPeS)
1633	1633	Water	Perfluoropentanoic acid (PFPeA)
1633	1633	Water	Perfluorotetradecanoic acid (PFTeDA)
1633	1633	Water	Perfluorotridecanoic acid (PFTrDA)
1633	1633	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: C Street Landfill

Job ID: 320-130404-1

Method	Method Description	Protocol	Laboratory
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	EET SAC
1633	Solid-Phase Extraction (SPE)	EPA	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

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: C Street Landfill

Job ID: 320-130404-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
320-130404-1	AMW-1-030226	Water	03/02/26 16:15	03/05/26 09:10	Washington
320-130404-2	AMW-2-030226	Water	03/02/26 15:03	03/05/26 09:10	Washington
320-130404-3	AMW-3-030326	Water	03/03/26 09:13	03/05/26 09:10	Washington
320-130404-4	AMW-4-030326	Water	03/03/26 12:35	03/05/26 09:10	Washington
320-130404-5	AMW-5-030226	Water	03/02/26 12:00	03/05/26 09:10	Washington
320-130404-6	AMW-6-030326	Water	03/03/26 13:30	03/05/26 09:10	Washington
320-130404-7	AMW-7-030326	Water	03/03/26 13:35	03/05/26 09:10	Washington

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone (916) 373-5600

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Aidan Hoolgate	Lab PM:	Carrier Tracking No(s):	COC No
Client Contact: Ris. Naa	Phone: (206) 939-0783	E-Mail:	State of Origin:	Page: Page 1 of 1
Company: Geosyntec Consultants	PWSID:	Analysis Requested		Job #:
Address: 801 5th Ave, Suite 2200	Due Date Requested:			Preservation Codes.
City: Seattle	TAT Requested (days): Standard / 10			A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
State Zip: WA, 98104	Compliance Project: Δ Yes Δ No			
Phone: (206) 939-0783	PO #:			Other:
Email: Ris.Naa@geosyntec.com	WO #: WO-C01-26005446-11824			
Project Name: C Street Groundwater Monitori...	Project #: 26005446			
Site: Shelton, Washington	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFAS EPA 1633 (40 Analytes)	Total Number of containers	Special Instructions/Note
			Preservation Code.						
AMW-1-030226	03/02/26	1615	G	W	N	N	X	2	
AMW-2-030226	03/02/26	1503	G	W	N	N	X	2	Turbidity = 59.8 NTU
AMW-3-030326	03/03/26	0913	G	W	N	N	X	2	
AMW-4-030326	03/03/26	1235	G	W	N	N	X	2	Turbidity = 400 NTU
AMW-5-030226	03/02/26	1200	G	W	N	N	X	2	Turbidity = 59.8 NTU
AMW-6-030326	03/03/26	1330	G	W	N	N	X	2	
AMW-7-030326	03/03/26	1335	G	W	N	N	X	2	
Temperature Blank								1	

320-130404 Chain of Custody

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

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

Deliverable Requested I II, III IV Other (specify)

Special Instructions/QC Requirements.

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	03/04/26 0950	Geosyntec	[signature]	3/5/26 900	EE/Sac
2						
3				[signature]		

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:
		1.2

Ver: 01/16/2019

eurofins Environment Testing	Document Title: Sample Receiving Notes		
	Eurofins Document Reference : S-SR-FRM72109	Revision: 3	Historical Reference: QA-812
	Effective date : 18 Jul 2025		Issued by: XE8X

Loc 320
130404

Job._____

Tracking # 8892 9400 9779

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

GSL / OnTrac / Goldstreak / USPS / Other_____

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

Therm. ID L16 Corr Factor (+ / -) ____ °C

Ice ✓ Wet____ Gel ____ Other ____

Cooler Custody Seal 2956883

Cooler ID ____

Temp Observed 1.2 °C Corrected 1.2 °C

From Temp Blank ☑ Sandwich ☐ Sidewall ☐

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

Initials JF Date 3/5/26

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

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

Initials JF Date 3/5/26

Notes._____

Trizma Lot #(s) _____

Ammonium
Acetate Lot #(s) _____

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

Initials JF Date 3/5/26

APPENDIX B
City of Shelton Water Service Area Map

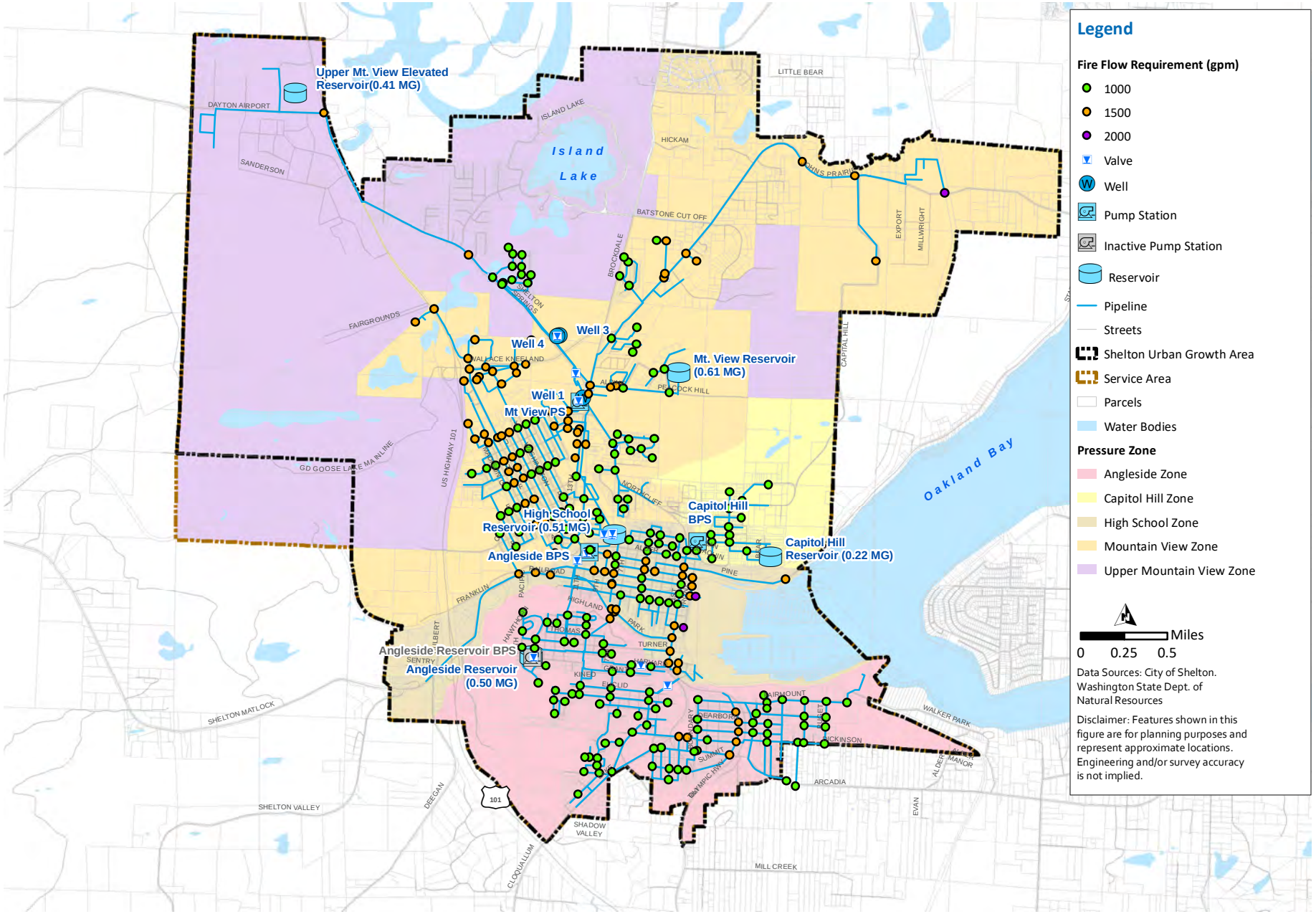
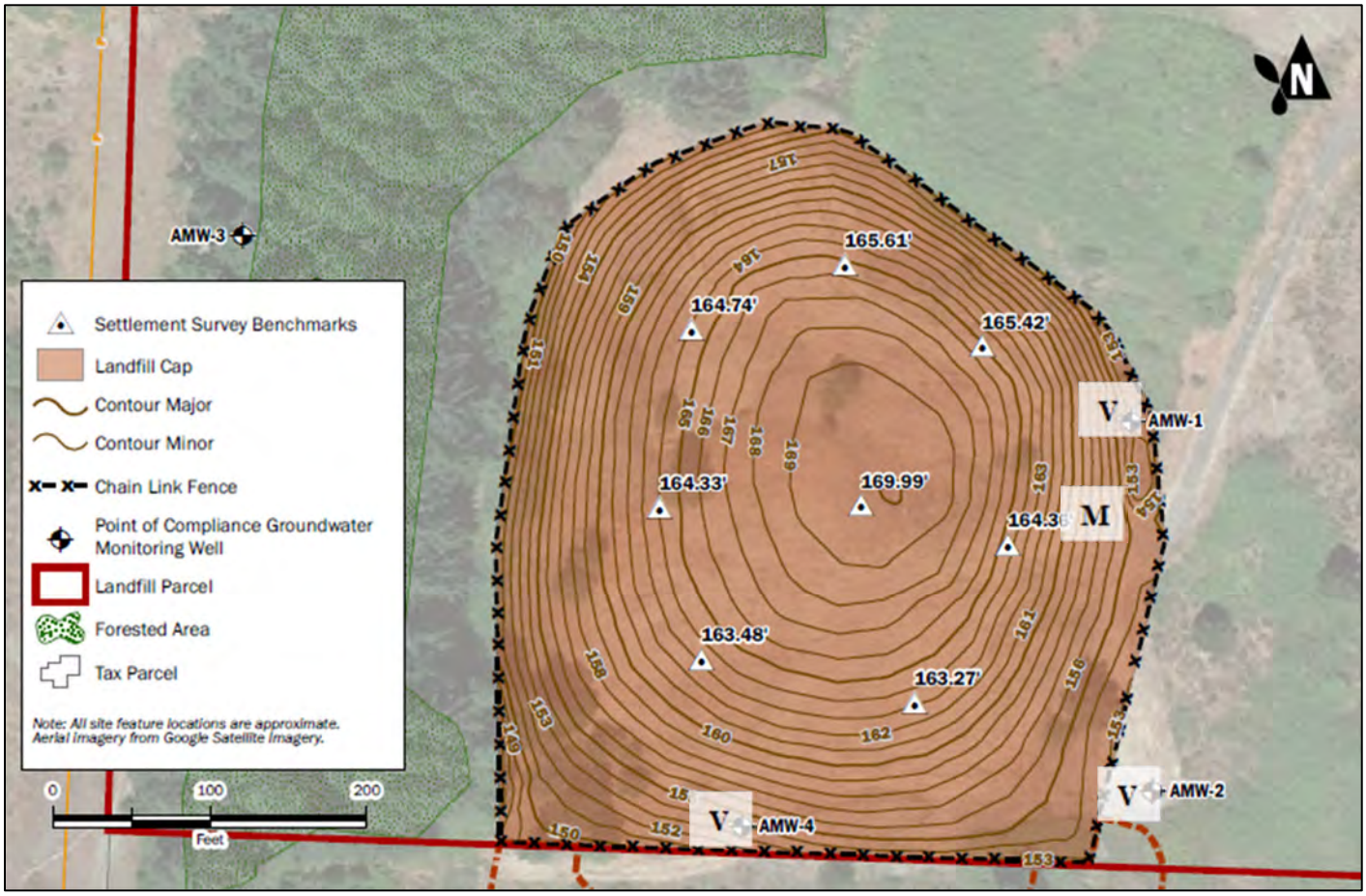


Figure ES.7 Fire Flow Requirements

APPENDIX C
Annual Visual Inspection Photograph Log

SITE PLAN of the Shelton C Street Landfill:



Markups on the Site Plan indicate the following:

- **V** indicates location where vegetation maintenance is required
- **M** indicates location where topsoil maintenance is required
- **R** indicates location where repairs of erosion or cracks are required
- **F** indicates location where fencing repairs are required
- **P** indicates location where ponding is observed
- **SF** indicates location where slope failure is observed
- **X** indicates a survey benchmark or groundwater monitoring well where damage is observed

GEOSYNTEC CONSULTANTS

Photographic Record

Client: City of Shelton	**Project Number:** 26005446
Site Name: Shelton C Street Landfill	**Site Location:** Shelton C Street Landfill, Shelton, Washington

Photograph 1

Date: 6/25/2026

Direction: Looking East

Comments: AMW-1



GEOSYNTEC CONSULTANTS

Photographic Record

Client: City of Shelton	**Project Number:** 26005446
Site Name: Shelton C Street Landfill	**Site Location:** Shelton C Street Landfill, Shelton, Washington

Photograph 2

Date: 6/25/2026

Direction: Looking East

Comments: AMW-2



GEOSYNTEC CONSULTANTS

Photographic Record

Client: City of Shelton	**Project Number:** 26005446
Site Name: Shelton C Street Landfill	**Site Location:** Shelton C Street Landfill, Shelton, Washington

Photograph 3

Date: 6/25/2026

Direction: Looking East

Comments: AMW-3



GEOSYNTEC CONSULTANTS

Photographic Record

Client: City of Shelton	**Project Number:** 26005446
Site Name: Shelton C Street Landfill	**Site Location:** Shelton C Street Landfill, Shelton, Washington

Photograph 4

Date: 6/25/2026

Direction: Looking West

Comments: AMW-4



GEOSYNTEC CONSULTANTS

Photographic Record

Client: City of Shelton	**Project Number:** 26005446
Site Name: Shelton C Street Landfill	**Site Location:** Shelton C Street Landfill, Shelton, Washington

Photograph 5 **Date:** 6/25/2026 **Direction:** Looking East/Southeast **Comments:** Landfill Cap	

Photograph 6 **Date:** 6/25/2026 **Direction:** Looking North/Northwest **Comments:** Landfill Cap	

GEOSYNTEC CONSULTANTS

Photographic Record

Client: City of Shelton	**Project Number:** 26005446
Site Name: Shelton C Street Landfill	**Site Location:** Shelton C Street Landfill, Shelton, Washington

Photograph 7

Date: 6/25/2026

Direction: Looking West

Comments: Landfill Cap



Photograph 8

Date: 6/25/2026

Direction: Looking South

Comments: Landfill Cap with AMW-4 in the background. Long, uncut grass in the foreground.



GEOSYNTEC CONSULTANTS

Photographic Record

Client: City of Shelton	**Project Number:** 26005446
Site Name: Shelton C Street Landfill	**Site Location:** Shelton C Street Landfill, Shelton, Washington

Photograph 9 **Date:** 6/25/2026 **Direction:** Looking Southeast **Comments:** Landfill Cap with Car rut indentations near the entrance gate.	

Photograph 10 **Date:** 6/25/2026 **Direction:** Looking West **Comments:** High-up overview of Landfill Cap.	

GEOSYNTEC CONSULTANTS

Photographic Record

Client: City of Shelton	**Project Number:** 26005446
Site Name: Shelton C Street Landfill	**Site Location:** Shelton C Street Landfill, Shelton, Washington

Photograph 11

Date: 6/25/2026

Direction: Looking West

Comments: Restricted area sign on entrance gate.



APPENDIX D
Annual Topographic Survey Report

Apex Job No.	36650
Project Name:	Shelton Landfill Vertical Settlement Monitoring
Report Date:	June 25, 2026
Note 1:	Vertical settlement points are rebar with control cap and 4' lath
Note 2:	Subsequent re-measurements will be compared against the baseline elevations indicated below to determine the extent of settlement, if any.

SETTLEMENT POINT NUMBER	LOCATION	INITIAL BASELINE ELEVATIONS 6/26/23	REMEASURED ELEVATION	ELEVATION DIFFERENCE FROM INITIAL	REMEASURED ELEVATION	ELEVATION DIFFERENCE FROM INITIAL	REMEASURED ELEVATION	ELEVATION DIFFERENCE FROM INITIAL
			6/27/2024		6/13/2025		6/25/2026	
1	SEE EXHIBIT MAP	169.99	169.85	-0.14	169.79	-0.20	169.77	-0.22
2		165.42	165.37	-0.05	165.35	-0.07	165.34	-0.08
3		164.36	164.28	-0.08	164.25	-0.11	164.24	-0.12
4		163.27	163.19	-0.08	163.16	-0.11	163.15	-0.12
5		163.48	163.36	-0.12	163.33	-0.15	163.31	-0.17
6		164.33	164.17	-0.16	164.12	-0.21	164.09	-0.24
7		164.74	164.56	-0.18	164.50	-0.24	164.47	-0.27
8		165.61	165.51	-0.10	165.49	-0.13	165.47	-0.15



SHELTON LANDFILL SETTLEMENT MONITORING EXHIBIT

NORTH

GRAPHIC SCALE

100 0 50 100

(IN FEET)
1 inch = 100ft.

VERTICAL DATUM

NAVD 88 BASED ON RTK GPS MEASUREMENTS CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK.

Aug. 16, 2023

KURT A. PARCHER
STATE OF WASHINGTON
49286
REGISTERED
PROFESSIONAL LAND SURVEYOR

JOB-NO-36650

Apex Engineering LLC
2601 South 35th Street, Suite 200
Tacoma, Washington 98409-7479
(253) 473-4494 FAX: (253) 473-0599
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C:\Users\PLS\Desktop\PROJECTS\APEX Jobs\36650 - Shelton Landfill Addnl Topo\36650-SV Topo.dwg

APPENDIX E
Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND GUIDELINES FOR USE

This Report and Project-Specific Factors

Geosyntec Consultants considered a number of unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you
- Not prepared for the specific purpose identified in the Agreement
- Not prepared for the specific real property assessed
- Completed before important changes occurred concerning the subject property, project or governmental regulatory actions

Geoscience Interpretations

The geoscience practices (geotechnical engineering, geology, and environmental science) require interpretation of spatial information that can make them less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Use Guidelines" apply to your project or site, you should contact Geosyntec.

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual limitations. Within the limitations of scope, schedule, and budget, our services have been executed in accordance with our Agreement with the Client and recognized geoscience practices in the same locality and involving similar conditions at the time this report was prepared.

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope instability, or groundwater fluctuations. If any of the described events may have occurred following the issuance of the report, you should contact Geosyntec so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Discipline-Specific Reports Are Not Interchangeable

The equipment, techniques, and personnel used to perform a geotechnical or geologic study differ significantly from those used to perform an environmental study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions, or recommendations (e.g., about the likelihood of encountering underground storage tanks or regulated contaminants). Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

We appreciate the opportunity to perform these services. If you have any questions please contact the Geosyntec Project Manager for this project.